THE UNIVERSITY OF
CHICAGO

THE COLLEGE
CATALOG 2018 - 2019
INTRODUCTION

EDUCATIONAL OBJECTIVES AND ENROLLMENT

The College residential and curricular experience is predicated on the community that students build by attending classes together and by learning from faculty and each other in academic and social settings. We believe that successful education at the college level depends to a large extent on regular attendance at classes and laboratories, and therefore it is the expectation of the College that students will attend all classes for which they have registered. Nevertheless, it is up to the individual department, faculty member, or instructor to set the attendance policy for their individual courses.

All students enroll in the general education curriculum, designed with the expectation that in the first two years of study a student will complete general education requirements and introductory courses in a major. The final two years of enrollment are devoted to advanced work in the major and elective courses that build on the foundation laid in the first two years.

In order to engage in this structured plan, students must register full time (with three or four courses) in each quarter of the standard academic year (autumn, winter, spring) for the first two years. Full-time registration allows for completion of the general education requirements and introductory courses to the major, and enables students to participate fully in the intellectual life of the College. As young scholars, students test their understanding and perspective across all disciplines in conversation with peers. The community that develops in College Housing and in cocurricular student life builds on students’ common experiences in learning and in exploring beyond the classroom. Further, the elements of the general education curriculum provide cross-disciplinary perspectives on enduring questions and create the habits of mind that prepare students for advanced studies.

NON-DISCRIMINATION STATEMENT

In keeping with its long-standing traditions and policies, the University of Chicago considers students, employees, applicants for admission or employment, and those seeking access to University programs on the basis of individual merit. The University does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law (including Title IX of the Education Amendments of 1972). For additional information regarding the University of Chicago’s Policy on Harassment, Discrimination, and Sexual Misconduct, please see: http://harassmentpolicy.uchicago.edu/page/policy.

The University official responsible for coordinating compliance with this Notice of Nondiscrimination is Bridget Collier, Associate Provost and Director of the Office for Equal Opportunity Programs. Ms. Collier also serves as the University’s Title IX Coordinator, Affirmative Action Officer, and Section 504/ADA Coordinator. You may contact Ms. Collier by emailing bcollier@uchicago.edu, by calling 773.702.5671, or by writing to Bridget Collier, Office of the Provost, The University of Chicago, 5801 S. Ellis Ave., Suite 427, Chicago, IL 60637.

GENERAL INFORMATION

The University of Chicago is accredited by the Higher Learning Commission of the North Central Association.

The content of this catalog is accurate as of April 10, 2018. It is subject to change.
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The University of Chicago College curriculum has three components: general education requirements (1500 units), a major (900–1900 units), and electives (800–1800 units). A minimum of 4200 units of credit (forty-two 100-unit courses) is required for the undergraduate degree. Of all credits earned, at least 3800 must be earned via course enrollment, as opposed to credit earned via examination.

Students choose courses across the curriculum in consultation with College advisers and faculty counselors. Courses valued at less than 100 units may not be used to satisfy degree requirements.

**General Education**

General education requirements are designed to teach the skills of critical inquiry, argumentation, and analytical thinking in both quantitative and qualitative settings. These requirements are largely completed with integrated, often interdisciplinary, sequences comprised of two or three courses. (Note: The courses designed to satisfy these requirements cannot be replaced by other courses, except in the sciences, as indicated. Substitutes for general education courses are rarely approved (1) to accommodate a second major or a minor, or (2) to avoid curricular and scheduling conflicts that result from postponing general education requirements until a student's third or fourth year.)

Meant to be a foundation for later study at the College, the general education requirements are a quintessential element of the University of Chicago experience and should be completed by the end of the second year. Most general education requirements are completed with sequences comprised of two or three courses.

These requirements are completed with 1500 units of credit (fifteen 100-unit courses) spread over seven areas of study. These seven general education requirements fall into three broad categories. Students must also satisfy a language competence requirement, which is outlined below.

1. Humanities, Civilization Studies, and the Arts (total: 600 units/6 quarter courses)

Students take a total of six quarter courses in this category, distributed in the following way: at least two quarters in the humanities, at least two quarters in civilization studies, and at least one quarter in the arts. The remaining (sixth) course may be taken in any one of these categories. Each of these requirements has its own detailed page under the heading "The Curriculum" in this catalog.

An essential component of general education is learning how to appreciate and analyze texts intellectually, historically, and aesthetically. Through this general education requirement, students learn how to interpret literary, philosophical, and historical texts in depth; how to identify significant intellectual problems posed by those texts; and how to discuss and write about them perceptively and persuasively. They also learn how to study a visual or performing art form and how to study texts and art forms within a specific cultural and chronological frame.

2. Natural Sciences (Biological Sciences and Physical Sciences) and Mathematical Sciences (total: 600 units/6 quarter courses)

Students take a total of six quarter courses in this category, distributed in the following way: at least two quarters of physical sciences, at least two quarters of biological sciences, and at least one in mathematical sciences. The remaining (sixth) course may be taken in any one of these categories, unless calculus is being used to satisfy the requirement in mathematical sciences. In that case, the student must take two calculus courses for the general education requirement. In general, be aware that a student's major and/or preparation for the health professions may dictate which of the available options the student should select.

Courses and sequences in the natural sciences are designed to explore significant features of the natural universe and to examine the exciting process of scientific inquiry. These courses consider the powers and limitations of diverse forms of scientific observation, scientific reasoning, and natural laws. Courses in the mathematical sciences develop the powers of formal reasoning through use of precise artificial languages found in mathematics, computer science, statistics, or formal logic.

Each of these requirements has its own detailed page under the heading "The Curriculum" in this catalog.

3. Social Sciences (total: 300 units/3 quarter courses)

Each of these year-long (three-quarter) social sciences sequences introduces fundamental questions and theories from the social sciences and shows how they enhance our understanding of important issues facing the world. Some sequences focus on classic texts, others on substantive fields of inquiry or research methodologies, but all explore how the social sciences formulate questions and inquire into the nature of social life through acts of imagination as well as through systematic analysis. The social sciences general education curriculum requires active engagement in small seminars, close reading, and analytic writing; some sequences may also include lectures.

Courses must be taken in sequence. Once students begin a sequence, they are expected to remain in the same sequence. NOTE: Students registered in any of the social sciences sequences must attend the first and second
class sessions or their registration will be dropped. This requirement has its own detailed page under the heading "The Curriculum" in this catalog.

**MAJOR PROGRAMS**

More than a set of course credits, a sound major is an effort to understand the methods and experience of a discipline or interdisciplinary field. Majors complement the breadth of the University of Chicago general education requirements with an opportunity to come to grips with the depth of knowledge and the complexities of developing knowledge in a particular area of inquiry. Majors range from nine to nineteen courses, though the majority of them require between ten and fourteen courses. Each major is described in detail in the Programs of Study section of the catalog.

More than half of the requirements for a major must be met by registering for courses bearing University of Chicago course numbers. Courses used to meet general education requirements cannot also be counted toward a major.

Students officially declare a major through the student portal (my.uchicago.edu), but they should meet with their College adviser and with the director of undergraduate studies in the department as part of that process. Students may declare a major starting in their second year; unless otherwise specified by the department, the deadline for declaring a major is Spring Quarter of a student’s third year.

The following major programs are available in the:

- **Biological Sciences Collegiate Division (BSCD)**
  - Biological Sciences
  - Neuroscience

- **Humanities Collegiate Division (HCD)**
  - Art History
  - Cinema and Media Studies
  - Classical Studies
  - Comparative Literature
  - Creative Writing
  - East Asian Languages and Civilizations
  - English Language and Literature
  - Gender and Sexuality Studies
  - Germanic Studies
  - Interdisciplinary Studies in the Humanities
  - Jewish Studies
  - Linguistics
  - Medieval Studies
  - Music
  - Near Eastern Languages and Civilizations
  - Philosophy (Options: Philosophy; Philosophy and Allied Fields)
  - Romance Languages and Literatures
  - Russian and East European Studies
  - South Asian Languages and Civilizations
  - Theater and Performance Studies
  - Visual Arts

- **New Collegiate Division (NCD)**
  - Fundamentals: Issues and Texts
  - Law, Letters, and Society
  - Religious Studies
  - Tutorial Studies

- **Physical Sciences Collegiate Division (PSCD)**
  - Astrophysics
  - Biological Chemistry
  - Chemistry
  - Computational and Applied Mathematics
  - Computer Science
  - Environmental Science
  - Geophysical Sciences
  - Mathematics (Options: Applied Mathematics; Mathematics; Mathematics with Specialization in Economics)
  - Molecular Engineering
  - Physics (Options: Physics; Physics with Specialization in Astrophysics)
  - Statistics

- **Social Sciences Collegiate Division (SSCD)**
  - Anthropology
Comparative Human Development  
Comparative Race and Ethnic Studies  
Economics  
Environmental and Urban Studies  
Geographical Sciences  
Global Studies  
History  
History, Philosophy, and Social Studies of Science and Medicine  
Latin American and Caribbean Studies  
Political Science  
Psychology  
Public Policy Studies  
Sociology

**Electives**

The number of courses required for a major primarily determines the number of general electives required for an individual student. A student needs at least forty-two 100-unit courses to graduate: fifteen toward general education and twenty-seven more split between the major and electives. Programs that specify thirteen courses require fourteen electives; twelve-course majors require fifteen electives, and so on.

Additionally, the amount of credit by examination (e.g., AP, IB, placement credit, etc.) may also impact the number of electives required. For students matriculating in Autumn 2017 or later, of the 4200 units required to graduate, at least 3800 units must be completed via course enrollment, i.e., not credit by examination. For example, a student who satisfies more than 400 units of general education or major requirements through examination may increase the number of electives required.

Elective courses may be taken in any subject matter or discipline, including the same discipline as the student’s major. They provide students the opportunity to shape their studies toward their distinctive curiosities and interests. At their broadest, they provide an opportunity to explore freely across the richness of opportunities for learning at the University of Chicago.

Courses taken in exploration of alternative majors and in study abroad programs, as well as course requirements completed by examination, are often included in electives. Some students also choose to use groups of electives to create minors or second majors. These options, though suitable ways to formalize students’ interests outside their major, should not be undertaken in the mistaken belief that they necessarily enhance a student’s transcript. Courses taken as electives should not displace courses in, and should not displace attention to, the student’s general education program and major.

Credit for language courses, whether it is earned by course registration or petition, is usually counted toward electives, unless a major requires or permits language courses for credit as part of the major. Courses used to satisfy the language competence requirement ordinarily contribute to the elective totals.

**Minor Programs**

Some majors offer minors to students in other fields of study, and a few programs offer minors only. A minor requires five to seven courses, all of which count toward the student’s general elective totals. Courses in a minor cannot be (1) double counted with the student’s major(s) or with other minors, or (2) counted toward general education requirements. Courses in a minor must be taken for quality grades, and more than half of the requirements for a minor must be met by registering for courses bearing University of Chicago course numbers. For specific requirements, see the descriptions of the programs listed below that appear elsewhere in this catalog.

Students can indicate their interest in a minor via the student portal (my.uchicago.edu), but can only officially declare a minor by meeting with the director of undergraduate studies in the department and with their College adviser. Students submit to their College adviser the director’s approval for the minor on a form obtained from the adviser. The deadline for declaring a minor is Spring Quarter of a student’s third year.

Minor programs are offered in the following areas:

- Architectural Studies (from Art History)
- Art History
- Astronomy and Astrophysics
- Biological Sciences
- Chemistry
- Cinema and Media Studies
- Classical Studies
- Comparative Race and Ethnic Studies
- Computational Neuroscience (from Biological Sciences)
- Computer Science
- Digital Studies of Language, Culture, and History
- East Asian Languages and Civilizations
- English and Creative Writing
- Environmental and Urban Studies
Gender and Sexuality Studies
Germanic Studies
History
History, Philosophy, and Social Studies of Science and Medicine
Human Rights
Jewish Studies
Latin American and Caribbean Studies
Linguistics
Mathematics
Media Arts and Design
Medieval Studies
Molecular Engineering
Molecular Engineering Technology and Innovation
Music
Near Eastern Languages and Civilizations
Neuroscience
Norwegian Studies
Philosophy
Physics
Religious Studies
Renaissance Studies
Romance Languages and Literatures
Russian and East European Studies
South Asian Languages and Civilizations
Statistics
Theater and Performance Studies
Visual Arts

While not a minor, the Dougan Scholars Certificate Program (http://www.chicagobooth.edu/programs/full-time/admissions/early-career-candidates/dougan-scholars-program) is a selective program for undergraduate students offered by the Booth School of Business. The Chicago Studies Program (http://chicagostudies.uchicago.edu) also offers a certificate for students who complete a series of courses and cocurricular activities related to the city of Chicago.

LANGUAGE COMPETENCE

Students in the College are required to possess understanding of more than one culture and to demonstrate competence in a language other than English. The language competence requirement must be met by demonstrating linguistic proficiency equivalent to one year of college-level study. For information about which languages are currently being taught and which may be used to meet the language competence requirement, visit humanities.uchicago.edu/about/languages-uchicago.

Students who matriculate in or after September 2009 may meet the language competence requirement in one of the following ways:

• passing a College-administered competency examination. The language competency exams are given each Winter Quarter; students can sign up through their advisers. To qualify for the competency exam, students must have placed into the second year of that language or completed an approved beginning-level sequence at another institution with a C or above (see Transfer Credit rules);
• completing (with a quality grade) the third course of a first-year language sequence or a higher-level course offered at the University of Chicago;
• receiving a score of 5 on an AP examination in Chinese, French, German, Italian, Japanese, Latin, or Spanish, or a score of 5 or above on an IB Higher Level (HL) exam in a foreign language;
• placing into 10300 or higher in a foreign language offered at the University of Chicago, then participating in one of the College’s study abroad programs (visit study-abroad.uchicago.edu for more information) where that language is spoken and completing (with a quality grade) a language course at the intermediate or advanced level;
• participating in a College-approved one-quarter intensive foreign language study abroad program and completing all required courses with a quality grade (visit study-abroad.uchicago.edu for more information);
• passing one of the College’s Practical or Advanced Language Proficiency assessments in a foreign language. File the Language Petition (https://college.uchicago.edu/advising/forms-and-petitions), using the second option, to complete the requirement; or
• taking approved intermediate-level (or above) courses at another institution and passing with a B or above. (See Transfer Credit rules.)

Students who are foreign nationals may meet the language competence requirement if their formal schooling experience in a country other than the United States enables them to demonstrate the criteria of cultural understanding and language competence described above. They must submit a petition (https://
The Curriculum

college.uchicago.edu/advising/forms-and-petitions) to Catherine Baumann (Cobb 214, 773.702.8008, ccbauman@uchicago.edu). Supporting documentation must also be provided; the requirement is not automatically waived.

NOTE: Students are strongly urged to complete the language competence requirement in their first two years in the College. Students who wish to establish language proficiency via summer course work should see the Summer Language Institute (https://summerlanguages.uchicago.edu)'s offerings.

After meeting the language competence requirement, students may work toward Practical and Advanced Foreign Language Proficiency Certificates. More information can be found here (https://languageassessment.uchicago.edu/page/foreign-language-proficiency-certificates). (http://college.uchicago.edu/academics-advising/academic-opportunities/advanced-language-proficiency)

PETITIONS

Any student who wishes to appeal for special consideration under a College regulation or an interpretation thereof may file a petition (http://college.uchicago.edu/sites/college.uchicago.edu/files/GeneralPetition.pdf) with the Dean of Students in the College. Students are encouraged to speak to their adviser for more information.

Physical Education

Physical education is not required for an undergraduate degree. However, students are encouraged to pursue physical fitness as part of their College experience. For further information on fitness opportunities, visit athletics.uchicago.edu.

Archived Catalogs

Students fulfill requirements that are in place when they enter the College. For more information on the requirements for students who entered the College between 1995 and 2017, refer to the appropriate archived editions of the College Course Catalog (collegecatalog.uchicago.edu/archives).
For a century the College of the University of Chicago has been an innovative leader in liberal education in the United States. Since the 1930s the curriculum of the College has varied in its details, but its intellectual foundations have been constant.

Undergraduate education at Chicago begins with a common core curriculum, conducted from the standpoint of multiple disciplines but beholden to none, which provides opportunities for critical inquiry and the discovery of knowledge. Chicago’s long-standing commitment to a rigorous core of general education for first- and second-year students emphasizes the unique value of studying original texts and of formulating original problems based on the study of those texts. The objective of our faculty-taught general education courses—which constitute the major component of the first two years in the College—is not to transfer information, but to raise fundamental questions and to encourage those habits of mind and those critical, analytical, and writing skills that are most urgent to a well-informed member of civil society.

Just as general education provides a foundation for addressing key intellectual questions, the major program of study insists upon depth of knowledge and sophistication in a defined field—whether a traditional academic discipline, an interdisciplinary program, or, in unusual cases, a program of the student’s own design undertaken in conjunction with a tutor. Majors afford students invaluable opportunities to develop and defend complex arguments by means of extended scholarly research.

The curriculum, however, extends beyond the general education requirements and the major. The faculty has always believed that maturity and independence of mind are enhanced by exploration in intellectual universes outside or transcending required programs of study. Electives—that is, courses drawn from other majors, independent research projects, programs of overseas study, and advanced training in a second language—provide a breadth and a balance that is critical to a true liberal education. Hence the Chicago curriculum allows up to one-third of a student’s academic work to consist of electives that will build upon the work of our general education courses, but do so on more advanced and more focused levels.

Many national figures in higher education have been identified with Chicago’s undergraduate curriculum—including William Rainey Harper, Robert Maynard Hutchins, and Edward Levi—but learning at Chicago has never been the province of one person or one vision. Rather, the curriculum devoted to “the knowledge most worth having,” and the critical cast of mind that it develops, has been the product of generations of collegial debate and constant re-examination, processes which are themselves a part of the intellectual adventure to which the curriculum is devoted.
ACADEMIC REGULATIONS AND PROCEDURES

Because students are held responsible for this information, they are encouraged to discuss any questions they have with their College advisers. For a general overview, students are urged to review the Policies and Regulations (http://registrar.uchicago.edu/policies-regulations) page published by the University Registrar. The following pages describe some of the College’s regulations and procedures in greater detail.

- Academic and Enrollment Statuses
- Course and Grade Policies
- Registration
- Academic Advising
- Academic Integrity
ACADEMIC AND ENROLLMENT STATUSES

ACADEMIC PROBATION AND SUSPENSION

In each quarter of registration, students must complete, by the end of the quarter, 300 units of course credit with passing grades and with a minimum GPA of 2.0. Incompletes are not considered sufficient for course completion.

A student who fails to meet this minimum requirement will ordinarily be placed on academic probation for the following quarter. Academic probation is a formal sanction but is not permanently notated on the official transcript.

Students on academic probation are expected to complete, by the end of the quarter, 300 units of course credit with passing grades in the next quarter of registration and with a minimum GPA of 2.0. Please note that Incompletes are not sufficient for course completion. Students on academic probation who meet those minimum expectations will be returned to good standing at the end of the quarter. Any student who fails to meet the minimum requirements while on probation will ordinarily be asked to leave the College for a period of time, usually at least one year.

If any student fails to complete, by the end of a quarter, a minimum of 300 units of course work and also fails to attain a GPA minimum of 2.0 in the same quarter, the student may be immediately suspended regardless of whether the preceding quarter was satisfactory.

NOTE: Students on financial aid who fail to meet the completion rate (70 percent of registered courses) and GPA requirements and/or fail to complete their degree within 150% of the program timeframe may jeopardize their financial aid packages.

For the purpose of determining eligibility to participate in varsity sports, all students eligible to register are considered to be in good standing.

EXTENDED ENROLLMENT STATUS

Students who (1) have satisfied their course requirements for graduation and (2) are within their 12 quarters of enrollment but (3) still have outstanding work to complete, namely BA theses or Incompletes, may request to spend their final quarter of enrollment in “Extended” status. Students must make the request with their College adviser prior to the end of the first week of the quarter during which the student intends to be on Extended Enrollment Status. Students in Extended Enrollment Status do not register for courses but retain many privileges afforded to students. Students should ask their College adviser about administrative fees associated with this status.

Students in Extended Enrollment Status will be expected to graduate at the end of the Extended quarter. If a student does not graduate at the end of the Extended quarter, the student will be placed in the status of No Further Enrollments Required.

NO FURTHER ENROLLMENTS REQUIRED

Students who have either (a) exceeded their 12 quarters of enrollment but still have work to complete or (b) exceeded their one quarter of Extended Enrollment Status will be placed in a status called No Further Enrollments Required. Students on this status will not pay any fees and will retain access to the Library and University email. Students may remain in this status until they have reached the maximum of eight quarters of leave, cumulative or consecutive, after which they will be administratively withdrawn from the College. However, petitions may be granted to extend a leave for up to 12 cumulative quarters for students as a reasonable accommodation for a disability or otherwise as required by law. Students seeking an exception to the eight-quarter maximum must petition the College Dean of Students no later than the end of the eighth quarter of leave.

LEAVES OF ABSENCE

Students planning a leave should consult with their College adviser and also arrange for an interview with one of the deans in the Office of the Dean of Students. For full tuition refund, a leave of absence must be arranged either at the end of the quarter prior to the leave or by Friday of first week of the quarter that a student is going to be on leave. For the refund schedule, visit bursar.uchicago.edu/tuition-refund-schedule.

In connection with certain leaves (e.g., some medical leaves or leaves taken because of behavioral issues), the dean of students may require, among other things, information from a physician or therapist as a condition for resumption of studies. All conditions are determined on a case-by-case basis.

WITHDRAWING FROM THE COLLEGE

Students who decide not to return to the College must formally withdraw their registration. To do so, students should contact the Office of the Dean of Students in the College. At the time of withdrawal, students are advised of the conditions under which they may resume their studies in the College. For a complete overview of
College policies regarding leaves of absence and withdrawals, visit https://college.uchicago.edu/advising/leave-absence-withdrawal.

**APPLYING TO GRADUATE WITH NON-ACTIVE ENROLLMENT STATUSES**

Students in Extended Enrollment Status or in the status of No Further Enrollments Required, or withdrawn as described above, can apply to graduate provided they have:

1. met all of their remaining graduation requirements and have cleared all restrictions;
2. informed their College advisers; and
3. submitted a College Degree Application Form by the Friday of the first week of the quarter. The College adviser can provide this form.

**TWELFTH GRADE CERTIFICATES**

Students who entered the College before graduation from high school and who expect to qualify for a Twelfth Grade Certificate in the Spring Quarter should file an application with the registrar before the first week of Spring Quarter of their first year. In order to be eligible for the certificate, they must have completed during their first academic year a minimum of nine courses with an overall GPA of 1.75 or higher. Certificates are mailed following the end of Spring Quarter. No certificate is awarded without an application.
GRADING SCALE

The following grades are awarded in undergraduate courses:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A–</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
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<tr>
<td>B–</td>
<td>2.7</td>
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<td>C+</td>
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<tr>
<td>C</td>
<td>2.0</td>
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<tr>
<td>C–</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
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<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
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<tr>
<td>P</td>
<td>N/A (See below)</td>
</tr>
<tr>
<td>W</td>
<td>N/A (See below)</td>
</tr>
<tr>
<td>NGR</td>
<td>N/A (See below)</td>
</tr>
<tr>
<td>I</td>
<td>N/A (See below)</td>
</tr>
</tbody>
</table>

The grades A through F are known as quality grades and carry a specific weight in calculating official grade point averages (GPA). The mark F indicates unsatisfactory work and does not confer credit. A grade of F may not be subsequently changed, except when entered in error by the instructor or the registrar. Be aware that while a D is considered passing, some programs require a higher grade minimum for any course counting in the major or minor.

These averages are regularly calculated to determine Dean's List, academic probation, and general honors. They may influence awards like Phi Beta Kappa and departmental honors. Note that College students who take a course at the University of Chicago Booth School of Business may receive an A+ grade according to the Chicago Booth grade system, but will receive 4.0 grade points in the College grade system for that Chicago Booth course. For College students, other Chicago Booth grades convert to grade points according to the College scale above.

NOTE: Only grades for University of Chicago courses are calculated into a student’s GPA. Grades from courses taken at other institutions do not contribute to the GPA. Grades from off-campus study abroad or domestic programs do not contribute to the GPA unless the courses are listed on the transcript with University of Chicago course numbers.

PASS/FAIL GRADING

Students who wish to receive a passing grade rather than a quality grade have one option open to them: Pass/Fail (P/F). Students considering P/F grading should consult with their College adviser early in the quarter because this option is subject to conditions and restrictions. Whether a course with a grade of P can be counted toward a student's degree depends on how it is to be used in the student's program. All general education courses must be taken for quality grades, and most courses satisfying requirements in the major must be taken for quality grades. However, some majors permit a limited number of P marks. For P/F grading, the student and instructor reach an informal agreement, at the discretion of the instructor and according to departmental policy, before the instructor submits a grade for the course; no action is required by the student's adviser.

The P grade indicates that the student has submitted sufficient evidence to receive a passing grade. As some departments give credit only for a grade of C– or higher, students should establish with the instructor what constitutes passing work. A mark of P may not later be changed to a quality grade, and a quality grade may not be changed to a P. Although the P confers course credit, it is not calculated in the GPA. Students who do not pass a P/F course receive an F, which counts as a zero in the calculation of the GPA. A grade of F may not be subsequently changed, except when entered in error by the instructor or the registrar.

COURSE WITHDRAWALS

The “W” (Withdrawn) grade means that the student has decided after week 3 of the quarter not to complete the work of the course. Students who wish to exercise this option must request a W from their adviser by the Friday of 10th week or the day before the final project/exam is due, whichever is earlier. When made before the deadline, a request for a withdrawal cannot be denied except in cases of academic dishonesty. A withdrawal may not be granted after completion of the course.
Once a student requests a W, it may not subsequently be changed to any other mark. W grades do not confer grade or impact GPA; however, they will count against the completion rate needed to maintain good academic standing.

Students who register for graduate-level courses are subject to the policies governing graduate grading. Students should discuss the implications of these policies with their advisers before registering for courses numbered 30000 and above. NOTE: Grades earned in graduate-level courses contribute to a student’s GPA as indicated earlier in this section.

INCOMPLETES

The mark “I” (Incomplete) is intended for a student who has not completed the requirements of a course before the end of the quarter but who has

1. participated actively in the course,
2. completed the majority of the requirements of the course with work that is of a passing quality, and
3. made satisfactory arrangements with the instructor to complete the remaining work.

The student must submit the request for an Incomplete to the instructor before the end of the course. Approval to complete work late is at the discretion of the instructor and/or according to departmental policy.

Incompletes must be finished within a period of time agreed upon between student and instructor. In the absence of a specified due date, the work must be completed within one year. In the interim, an “I” will appear in place of a grade. When the course is completed, the “I” notation will remain on the academic record alongside the student's final grade, indicating that the work was completed outside the course's standard timeframe. Students with compelling reasons for the Incomplete may petition the Dean of Students in the College to remove the “I” from the transcript.

If the course work has not been completed within the specified time period and an extension has not been granted, the student will receive a W unless the instructor indicates a specific grade on the Incomplete Form.

NGR (NO GRADE)

The mark “NGR” (No Grade) is entered on the student's grade report by the registrar's office when the instructor has failed to submit a final grade for a student. The NGR may be resolved by submission of a final grade or a formal Incomplete Form. If neither has been submitted by Friday of the first week of the following quarter, the NGR will be converted into a W. After this point, students who are otherwise qualified for an Incomplete may petition the Dean of Students in the College for approval to arrange the Incomplete. If the required form has not been submitted by the deadline, a grade of "W" will be entered for the course.

Incompletes must be finished within a period of time agreed upon between student and instructor. In the absence of a specified due date, the work must be completed within one year. In the interim, an “I” will appear in place of a grade. When the course is completed, the “I” notation will remain on the academic record alongside the student's final grade, indicating that the work was completed outside the course's standard timeframe. Students with compelling reasons for the Incomplete may petition the Dean of Students in the College to remove the “I” from the transcript.

If the course work has not been completed within the specified time period and an extension has not been granted, the student will receive a W unless the instructor indicates a specific grade on the Incomplete Form.

ACADEMIC PROBATION

In each quarter of registration, students must complete, by the end of the quarter, 300 units of course credit with passing grades and with a minimum GPA of 2.0. Incompletes are not considered sufficient for course completion. A student who fails to meet this minimum requirement will ordinarily be placed on academic probation for the following quarter. For details and information about implications, please see the "Academic Probation and Suspension" section on the Academic and Enrollment Statuses page.

DEAN'S LIST

Degree-seeking students whose cumulative grade point averages are 3.25 or above for an academic year (in which they have completed a minimum of nine courses with at least seven quality grades) are placed on the Dean's List for that year and their official transcripts are marked accordingly. Students are only considered for Dean's List once all of their grades for the academic year have been recorded. A determination is made each year on the basis of grades available in the registrar's office after July 1. For course work that does not contribute to the GPA, see Grading Scale.

HONORS

For honors within a major, students should refer to that department’s program description for the eligibility requirements. Students are awarded general honors at the time of graduation if their overall GPA is 3.25 or
above. For the purposes of assessing eligibility for honors, major GPA and overall GPA are calculated based on courses taken in all quarters except for the quarter in which the student plans to graduate. For information on course work that does not contribute to the GPA, see Grading Scale.

CLASS ATTENDANCE

It is the expectation of the College that students will attend all classes for which they have registered. Nevertheless, it is up to the individual department, faculty member, or instructor to set the attendance policy for their individual courses. Students should keep in mind that attendance at the first class is required in many courses to confirm enrollment. Many courses will automatically drop students who do not attend the first class meeting or even the entire first week of class meetings. The academic calendar can be found at academic-calendar.uchicago.edu.

COURSE LOAD

A full-time course load is three or four courses per quarter; the tuition is the same in either case. Over the typical four-year program (i.e., twelve quarters), a student who registers for six four-course quarters and six three-course quarters will successfully reach the 4200 units of credit required to graduate.

Students who wish to take a fifth course in a given quarter, pushing them over 400 units of credit, must formally petition (http://college.uchicago.edu/sites/college.uchicago.edu/files/GeneralPetition.pdf) the Dean of Students in the College for permission to do so. To confirm the instructor's willingness to allow a late registration into the course and the student's participation in the course, the petition must include a signed consent form from the instructor. The petition will be considered in week 3 of the quarter.

Although students may progress at varying rates toward the degree, no student may register for more than 12 quarters without the permission of the Dean of Students in the College. No student may register for more than 13 quarters.

REPETITION OF COURSES

When a student repeats a course, both courses appear on the student's transcript and both grades are averaged into the student's GPA. However, only one registration for the course counts toward the total number of credits required for graduation.

In the quarter that a course is repeated, students on financial aid must register for 300 units in addition to the repeated course unless (1) a failing grade was received in a course that a student needs to meet general education requirements or requirements in their major, or (2) the student's major mandates a higher grade than was previously received.

READING PERIOD

Two days of every academic quarter (Thursday and Friday of tenth week) are designated "College Reading and Review Period." Instructors and/or teaching assistants may hold review sessions on these days. However, no new material may be introduced, assignments may not be due, and final examinations may not be given (except as necessary for graduating students) during the reading period. The Reading and Review Period may not be dispensed with by classroom vote.

EXAMINATION SCHEDULE

Students should verify that travel arrangements do not conflict with their final examinations. For the College examination schedule, visit registrar.uchicago.edu/final-exams.
EARNING A DEGREE

REQUIREMENTS FOR THE DEGREE

The College awards the BA or the BS degree to qualified students who are recommended by the faculty. In order to qualify for the degree, students must complete the following:

1. The general education requirements
2. The requirements of a major program
3. The minimum number of electives
4. The language competency requirement
5. Course credit for a minimum of 42 quarter courses (4200 units): This number may be reached in part by examination where appropriate. For students matriculating in Autumn 2017 or later, of the 4200 units, 3800 units of credit must be earned by course enrollment. Course enrollments may include direct enrollment study abroad programs affiliated with the College and approved transfer credit.
6. An overall GPA of 1.75 and a GPA of 2.0 in the major
7. A residency requirement: A student must be in residence at the University of Chicago campus for at least six quarters and must successfully complete a minimum of 1800 units of credit while in residence. NOTE: Certain College-sponsored study abroad programs (chiefly the civilization studies programs) may be used to meet this residency and course requirement.
8. Completion of a degree application prior to the quarter in which the degree is to be received
9. Payment of all outstanding bills and return of all equipment and library books
REGISTRATION

PRE-REGISTRATION

At the end of each quarter, students in residence preregister for the following quarter. Prior to Autumn Quarter, each student must confirm that he or she will be a registered student in Autumn Quarter. To confirm, please go to https://confirm.uchicago.edu.

REGISTRATION CHANGES

Course registration may be changed during the first three weeks of each quarter. A change of registration is any course "drop," any course "add," or any substitution of one course for another. No changes in registration are permitted after Friday of third week without a petition to a dean in the Office of the Dean of Students. For details, visit college.uchicago.edu/academics-advising/course-selection-registration/add/-/drop.

REGISTRATION FOR PROFESSIONAL SCHOOL COURSES

If certain requirements are met, advanced undergraduates may register for up to six courses in the following professional schools at the University of Chicago: the University of Chicago Booth School of Business, the Law School, the School of Social Service Administration, or the Irving B. Harris Graduate School of Public Policy Studies. With the exception of Chicago Booth courses, interested students must petition to the Office of the Dean of Students in the College for approval to register for a professional school course. This petition must be submitted in the quarter prior to the quarter of planned registration. Students interested in Chicago Booth courses must follow their guidelines for registration at https://college.uchicago.edu/advising/chicago-booth-school-business. For more information about requirements and registration procedures, students should consult their College advisers.

NOTE: Professional school courses generally do not substitute for courses in the major; and no more than four can count toward the forty-two courses (4200 units) required in an undergraduate degree program.

RESTRICTIONS

The privilege of registration (as well as the use of University services and facilities) will be denied students who have been placed on restriction. Restriction may result from a student's failure to fulfill financial obligations to the University or to comply with University rules and regulations. Whenever possible, students are warned of an impending restriction and are notified when one has been imposed. Students must clear the restriction with the administrative or academic office which imposed it before they can register for subsequent quarters. For more information, visit registrar.uchicago.edu/page/restrictions-and-enrollment. Restrictions are also listed in the student's account on my.uchicago.edu.
Academic Advising

Office of the Dean of Students in the College

Upon matriculation, every student is assigned to a professional academic adviser on the staff of the dean of students. The primary responsibility of advisers is to support students as they address the range of decisions they will make during college. Advisers help students discover how to pursue their interests within the curricular requirements of the College and plan an appropriate program of study leading to a degree in their selected major. Students should direct questions about courses and programs of study and about University rules and regulations to their College advisers. Advisers are also a good first source of assistance with personal problems. Every effort is made to keep students with the same adviser throughout their time in the College, although for various reasons students are sometimes reassigned to a different adviser within the office.

College advisers can provide students with information about the full range of educational opportunities available in the University community and can assist students in preparing for careers and graduate study. Information about study abroad, fellowships and scholarships, and careers (health professions, law, business) is provided by advisers with expertise in those areas.

Students can view a list of the staff members (http://college.uchicago.edu/about/college-staff-directory) of the office of the dean of students in the College, and the office can be reached by writing collegeadvising@uchicago.edu.

The Collegiate Divisions

The masters of the Collegiate Divisions (Biological Sciences, Humanities, New Collegiate Division, Physical Sciences, Social Sciences) have curricular and staffing responsibilities for their divisions. The senior advisers of the divisions, assisted by faculty committees, rule on interpretations of the general education requirements in response to questions from advisers or students. Lists of the masters and divisional administrators or administrative assistants for all of the Collegiate Divisions are available at college.uchicago.edu/about-college/collegiate-divisions.

Major Programs

Students typically select a major no later than the end of their second year, often sooner. This decision should be discussed with the student’s College Adviser. After students choose a major, they should have regular contact with the appropriate director of undergraduate studies and other counselors in their department. Among the topics that students discuss with counselors are questions about requirements, study and research opportunities, graduate school and career planning, and departmental events, both social and academic. Some programs of study admit students on the basis of an application procedure. Before officially declaring an intent to pursue such a major, a student must receive consent from the department. Contact information is available at the beginning and end of each program of study description in this catalog.

Minor Programs

Students who elect to pursue a minor program should meet with the appropriate director of undergraduate studies to declare their intention. Before the end of Spring Quarter of their third year, students must submit to their College adviser the director’s approval for the minor on a form obtained from the adviser. Students choose courses to meet the requirements of the minor in consultation with the director of undergraduate studies.
As students and faculty of the University of Chicago, we all belong to an academic community with high scholarly standards of which we are justly proud. Our community also holds certain fundamental ethical principles to which we are equally deeply committed. We believe it is contrary to justice, to academic integrity, and to the spirit of intellectual inquiry to submit the statements or ideas or work of others as one’s own. To do so is plagiarism or cheating, offenses punishable under the University’s disciplinary system. Because these offenses undercut the distinctive moral and intellectual character of the University, we take them very seriously; punishments for committing them may range up to permanent expulsion from the University of Chicago. The College, therefore, expects that you will properly acknowledge your use of another’s ideas, whether that use is by direct quotation or by paraphrase, however loose. In particular, if you consult any written source and either directly or indirectly use what you find in that source in your own work, you must identify the author, title, and page number. If you have any doubts about what constitutes “use,” consult your instructor and visit college.uchicago.edu/policies-regulations/academic-integrity-student-conduct.
In order to earn a degree from the College of the University of Chicago, a student must obtain credit for at least forty-two quarter courses (4200 units), distributed among general education requirements, major program requirements, and electives, as described in the section on the curriculum at the front of this publication. For students matriculating in Autumn 2017 or later, of the 4200 units, 3800 units of credit must be earned by course enrollment, i.e., not credit by examination.

All students receive credit toward their degrees by taking courses in the College. In addition, students may receive credit and/or satisfy College requirements in the following ways: by placement test; by Advanced Placement (AP) examinations; by accreditation examination; by International Baccalaureate (IB) Programme; and by credit transferred from another institution. The limits and conditions placed on credit earned in these various ways are explained in the following section and on the Transfer Credit page. A student must be in residence at the University of Chicago for at least six quarters and must successfully complete a minimum of eighteen courses (1800 units) while in residence. More than half of the requirements for a major or minor must be met by registering for courses bearing University of Chicago course numbers.

**Placement Tests**

Placement tests serve to adapt the needs and backgrounds of individual students to the College curriculum. They place entering students at the proper level of study in a given subject. On the one hand, placement tests minimize the repetition of subjects already mastered and, on the other, they reduce the possibility that students might begin their programs with courses for which they are inadequately prepared. Placement tests measure skill in problem solving as well as general knowledge in a subject field. Students who have some background in the areas being tested are urged to review it, but incoming students without such knowledge are not expected to acquire it over the summer preceding entrance.

Placement tests may be taken only at the time of matriculation and each test may be taken only once. Information that describes these tests is sent to incoming first-year and transfer students.

**Chemistry Placement Test**

Students who wish to enroll in chemistry must take the online chemistry placement test along with the Mathematics Placement Test (or they must have earned a score of 5 on the AP Chemistry exam).

**Economics Placement Test**

Students who wish to begin their economics major with ECON 20000 The Elements of Economic Analysis I in their first year must pass the economics placement test or complete ECON 19800 Introduction to Microeconomics. No standardized external exams (IB, AP, A-Levels) will substitute. The placement test will be offered Monday evening of the first week of Autumn Quarter.

**Language Placement Tests**

Language placement tests are required of students who plan to continue in languages studied prior to entrance in the College. Language placement tests determine where a student begins language study; results do not confer credit or satisfy the language competency requirement.

Online placement tests in some languages may be taken the summer before arrival on campus. Students will be given instructions in early July on how to access more information. For placement in languages without an online exam, students meet with a coordinator in the language during Orientation Week.

International students are not permitted to take language placement exams in their native language. Students interested in further study in their native language should consult with the appropriate language coordinator for course recommendations.

Placement tests are not available in languages not taught at the University of Chicago. For additional information, visit humanities.uchicago.edu/about/languages-uchicago.

**Mathematics Placement Test**

Every entering student must take the Mathematics Placement Test. This online test must be taken during the summer before arrival on campus. Scores on the Mathematics Placement Test, combined with a student’s high school record, determine the appropriate beginning mathematics course for each student:

- MATH 11200 Studies In Mathematics I
- MATH 13100 Elem Functions and Calculus I
- MATH 15100 Calculus I
- MATH 15200 Calculus II
- MATH 15300 Calculus III

Students who receive a sufficiently high score on the Mathematics Placement Test may receive an invitation to enroll in MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL). On the basis of placement test
results, students may also be invited to sit the on-campus Higher-Level Mathematics Exam prior to the start of Autumn Quarter, which would allow placement into courses at a higher level than MATH 15300 (see below).

Scores on the Mathematics Placement Test are used to determine placement into PHYS 13100 Mechanics or PHYS 14100 Honors Mechanics.

ACCREDITATION EXAMINATIONS
Credit is available by accreditation examinations, which are optional, to those students who have already studied certain subjects at the college level. See the information below under each subject heading for when these exams are offered. In the case of a course where both experimental and theoretical skills are involved, students may be required to fulfill the laboratory portion along with the rest of the class.

College credit achieved by accreditation examination is entered as units of credit on the student's official academic record. Letter grades are not assigned. An accreditation examination may be taken only once.

Higher-Level Mathematics Exam
Students who have scored at a high level on the online Mathematics Placement Test (described above) will receive an invitation to take the Higher-Level Mathematics Exam, which will be offered prior to the Autumn Quarter. Students planning to continue with higher level mathematics or other disciplines requiring advanced mathematics are urged to take this College-administered accreditation exam. On the basis of this exam, a student may receive placement into:

- MATH 15910 Introduction to Proofs in Analysis
- MATH 19520 Mathematical Methods for Social Sciences
- MATH 19620 Linear Algebra
- MATH 20000 Mathematical Methods for Physical Sciences I

Students may also be invited to begin MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL) or MATH 20700 Honors Analysis in Rn I. Students who are invited to begin Honors Calculus are encouraged to forgo credit in MATH 15100 Calculus I and/or MATH 15200 Calculus II in order to take the full Honors Calculus sequence, MATH 16100-16200-16300 Honors Calculus I-II-III or MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL).

MATHEMATICS CREDIT
Students who place into MATH 15200 Calculus II will earn examination credit for MATH 15100 Calculus I upon completion of MATH 15200. Students who place into MATH 15300 Calculus III will receive examination credit for MATH 15100 and MATH 15200 by completing MATH 15300. Additionally, students who have placement into MATH 15300 but do not intend to take any further calculus courses (e.g., humanities majors, pre-health students) may earn examination credit for MATH 15100 and MATH 15200 by receiving a sufficiently high score on the Higher-Level Mathematics Exam.

CHEMISTRY ACCREDITATION EXAMINATIONS
Students who are exceptionally well prepared in chemistry may earn credit for one or more quarters of chemistry on the basis of AP scores or accreditation examinations. Students who have taken the Advanced Placement (AP) test in chemistry and received a grade of 5 will be given credit for CHEM 11100 Comprehensive General Chemistry I. The Department of Chemistry also administers an accreditation examination in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Students may receive credit for chemistry on the basis of their performance on these examinations. The examination in general chemistry is offered only during Orientation, or at the start of Autumn Quarter by arrangement with Dr. Vera Dragisich, Department of Chemistry, 702.3071. Only incoming students (i.e., first-year and transfer students) are eligible to take these examinations.

Physics Accreditation Examinations
Accreditation examinations are administered for the content of PHYS 12100-12200-12300 General Physics I-II-III and PHYS 14100-14200-14300 Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat. The first examination may be taken by incoming students only at the time of matriculation in the College. Students who pass the first examination (for PHYS 12100 General Physics I or PHYS 14100 Honors Mechanics) will receive credit for the lecture part of the course only and will then be invited to try the next examination of the series. Entering students who have taken AP physics in high school but who do not receive AP credit from the College (and who do not plan to major in physics) may take the PHYS 12100 General Physics I accreditation examination. Students who receive AP credit for PHYS 12100-12200 General Physics I-II but whose planned major requires PHYS 13100-13200 Mechanics; Electricity and Magnetism or PHYS 14100-14200-14300 Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat are eligible to take the PHYS 14100 Honors Mechanics examination. Entering transfer students who choose a major requiring physics but who are not granted transfer credit for a completed calculus-based introductory physics sequence may take one of the accreditation examinations.
NOTE: Accreditation examinations in physics confer credit only for the lecture portion of the courses; additional laboratory work may be required.

ADVANCED PLACEMENT CREDIT

Students who request college credit or fulfillment of College requirements for Advanced Placement (AP) examinations taken in high school (i.e., before a student matriculates in the College) are asked to submit an official report of their scores on the AP tests given by the College Entrance Examination Board. The decision to grant credit is reported at the end of the first year in residence and units of credit awarded appear on the student's official academic record.

While AP scores alone are sometimes used to establish placement or to confer credit, satisfactory performance on the College's own placement tests may supplement AP scores and lead to additional credit.

The following chart shows how AP credit is automatically awarded. For further information on how credit may be used toward individual degree programs, a student should consult his or her College adviser. For more information on how AP credit may be used to meet major requirements, refer to the major requirements listed under “Programs of Study” in this catalog.

NOTE: For students matriculating in Autumn 2017 or later, at least 3800 units of credit must be earned by course enrollment, i.e., not credit by examination. For students matriculating in Autumn 2018 or later, only scores of 5 on approved tests will confer language competency.

Students who matriculated prior to 2017 should refer to the Advanced Placement credit table in the catalog of their year of matriculation for earlier guidelines regarding AP credit. Archived catalogs can be found here (http://collegecatalog.uchicago.edu/thecollege/archives).

<table>
<thead>
<tr>
<th>AP Exam</th>
<th>Score</th>
<th>Credit Awarded 2018-19</th>
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</thead>
<tbody>
<tr>
<td>Art History</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>100 units general education (BIOS 10130)</td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>100 units general education (BIOS 10130)+</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>5</td>
<td>MATH 15100 placement</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>4</td>
<td>MATH 15200 placement</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>5</td>
<td>MATH 15200 placement †</td>
</tr>
<tr>
<td>Chemistry</td>
<td>5</td>
<td>CHEM 11100*</td>
</tr>
<tr>
<td>Economics: Micro AND Macro</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>English Language and Composition</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>English Literature and Composition</td>
<td>5</td>
<td>100 units general elective credit</td>
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<tr>
<td>Government and Politics:</td>
<td>5</td>
<td>100 units general elective credit</td>
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<tr>
<td>Comparative AND U.S.</td>
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<tr>
<td>History: European</td>
<td>5</td>
<td>100 units general elective credit</td>
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<tr>
<td>History: U.S.</td>
<td>5</td>
<td>100 units general elective credit</td>
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<tr>
<td>History: World</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Music Theory</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Physics C: Mechanics AND E&amp;M</td>
<td>5</td>
<td>PHYS 12100-12200 †</td>
</tr>
<tr>
<td>Physics C: Mechanics only</td>
<td>5</td>
<td>PHYS 12100 †</td>
</tr>
<tr>
<td>Physics C: E&amp;M only</td>
<td>5</td>
<td>PHYS 12200 †</td>
</tr>
<tr>
<td>Statistics</td>
<td>5</td>
<td>STAT 22000++</td>
</tr>
<tr>
<td>Studio Art (2-D Design, 3-D Design, or Drawing)</td>
<td>5</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Chinese Language and Culture;</td>
<td>5</td>
<td>Satisfies the Language Competency Requirement</td>
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<tr>
<td>French Language and Culture;</td>
<td></td>
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<tr>
<td>German Language and Culture;</td>
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<tr>
<td>Italian Language and Culture;</td>
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<tr>
<td>Japanese Language and Culture;</td>
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<tr>
<td>Latin (Literature or Vergil);</td>
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<tr>
<td>Spanish Language and Culture;</td>
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<tr>
<td>Spanish Literature and Culture</td>
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</tbody>
</table>

Students may earn any amount of credit from AP exams, placement, accreditation, IB, or other examinations. However, for students matriculating in Autumn 2017 or later, at least 3800 units must be earned through course
enrollment. Students who enrolled prior to Autumn 2017 should consult the catalog of their year of entry for policies regarding the use of AP and examination credit, or speak to their College adviser.

AP Physics or Calculus: Students who register for physics or calculus forgo AP credit for the courses they complete.

† A student who submits a score of 5 on the Calculus BC exam will also receive an invitation to register for MATH 16100 Honors Calculus I.

‡ Students wishing to apply AP credits for “Physics C: Mechanics only” or “Physics C: E&M only” toward the physical sciences general education requirement should plan to complete the requirement with an appropriate course from PHYS 12100-12200 General Physics I-II.

+ A Biological Sciences major requires a “Fundamentals” sequence in general education or an “Advanced Biology Fundamentals” sequence in the major. Students with an AP 4 or 5 who complete three quarters of an “Advanced Biology Fundamentals” sequence are awarded a second AP credit to meet the general education requirement.

* AP Chemistry: Students with a score of 5 may accept credit for CHEM 11100 Comprehensive General Chemistry I, or they can register for CHEM 12100 Honors General Chemistry I or CHEM 12200 Honors General Chemistry II. Students who complete CHEM 11100 Comprehensive General Chemistry I or CHEM 12100 Honors General Chemistry I on campus will forfeit the AP credit.

++ AP Statistics: Will count for general education mathematics credit. May not be used to meet requirements for the statistics major or minor. Students who register and obtain credit for STAT 20000 Elementary Statistics, STAT 22000 Statistical Methods and Applications, or STAT 23400 Statistical Models and Methods forgo AP credit for STAT 22000 Statistical Methods and Applications.

INTERNATIONAL BACCALAUREATE PROGRAMME

Credit earned for courses in the International Baccalaureate (IB) Programme may be applied to certain general education requirements or to electives as described below. Credit will not be granted for other exams. Course credit is only granted for grades of 7 on Higher-Level IB Examinations (HL). The Language Competency Requirement may be satisfied with grades of 5, 6 or 7 on Higher-Level IB Examinations (HL) in languages other than English. Students who receive a 7 on the Higher-Level Calculus exam receive placement into MATH 15200 and an invitation to MATH 16100.

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<thead>
<tr>
<th>IB Examination</th>
<th>Score</th>
<th>Credit Awarded 2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>7 Higher Level</td>
<td>100 units general education (BIOS 10130)</td>
</tr>
<tr>
<td>English</td>
<td>7 Higher Level</td>
<td>100 units general elective credit</td>
</tr>
<tr>
<td>Languages other than</td>
<td>5, 6, or 7 Higher</td>
<td>Satisfies the Language Competency Requirement</td>
</tr>
<tr>
<td></td>
<td>Level</td>
<td></td>
</tr>
</tbody>
</table>

BRITISH A-LEVELS AND OTHER EXAMINATIONS

Students with A-level work in calculus, physics, and chemistry are encouraged to take the College’s placement and/or accreditation examinations prior to matriculation. Credit for A-level work in biology may be awarded by petition to the Senior Adviser in the Biological Sciences Collegiate Division; credit for A-levels in other fields except language may be awarded by petition to the Dean of Students in the College. No credit is given for general education requirements in humanities or social science. Elective credit may be given only for grades of A in the Advanced Test in liberal arts subjects.
Transfer Credit

Transfer credit must be evaluated and approved by the Office of the Dean of Students in the College. If approved, transfer credit is listed on the student’s University of Chicago transcript only as the number of credits approved to transfer. Transfer credit does not count toward the University of Chicago GPA, nor do the grades appear on the University of Chicago transcript. Students participating in University of Chicago–sponsored direct enrollment programs will have their credits vetted by the Study Abroad (https://study-abroad.uchicago.edu) office instead of the College Dean of Students office.

In this section, you will find guidelines for what credit may and may not be accepted by the College, as well as additional restrictions on course work in certain fields. In the subsequent sections are directions for submitting transfer course work for approval, specific rules related to transfer students, and additional restrictions on course work taken prior to matriculation. Course credit approved to transfer will count toward the 3800-unit credit minimum students are required to earn via course enrollment.

Minimum Requirements for Transfer Eligibility

Courses MUST:

• Be taken at an accredited institution that grants bachelor’s degrees, subject to review by the Office of the Dean of Students in the College.
• Confer at least three semester hours or four quarter hours of credit. For institutions without standard credit hours, contact hours (normally a minimum of 30) may be used.
• Be completed with a grade of C or above (not C- or P). Students in science majors must earn at least a B in science courses.
• Not duplicate credit that students will earn or have already earned for college-level course work. (For instance, a student could not take PLSC 28701 Introduction to Political Theory and also transfer in credit for an Introduction to Political Theory course taken elsewhere.)
• Be in liberal arts subjects similar to those offered in the College at the University of Chicago.

Courses in the following categories are NOT eligible for transfer credit:

• Calculus and pre-calculus. (Credit may only be earned via accreditation or AP test prior to matriculation.)
• Any kind of online/distance, tutorial, or independent study course work, including internship credit.
• Professional or technical courses, or course work otherwise unlike University of Chicago liberal arts courses. This includes such areas as: law, civil/mechanical engineering, speech, education, leadership, first-year writing, and undergraduate courses in business. Courses in media production will transfer if there is an equivalent course in the College, as verified by the relevant department.
• Foreign language courses taken before Autumn Quarter 2017. Advanced literature or topics courses taught in a foreign language may qualify. Placement level is determined by exam.

Science course work must follow these additional guidelines:

• Students in any science major must earn at least a B in science courses.
• Courses must have a lab to be considered for the physical sciences general education requirement. At least one course in the biological sciences general education requirement must have a lab component.
• Chemistry course work must be taken at an institution accredited by the American Chemical Society.
• Chemistry majors may only transfer credit for general chemistry. Incoming transfer students may seek to earn credit for organic chemistry via an accreditation exam offered during Orientation Week.
• Physics courses must be calculus-based and include a lab component to be considered as a substitute for General Physics (e.g., PHYS 12100-12200-12300 General Physics I-II-III, PHYS 13100-13200-13300 Mechanics; Electricity and Magnetism; Waves, Optics, and Heat).

Courses petitioned to count for general education credit in the civilization studies or arts requirement must follow these additional guidelines:

• Should fulfill the spirit of the requirement and have similarities to eligible courses offered on campus.
• For the civilization studies requirement, area studies courses in history with an emphasis on primary sources will be favored over courses that focus on political science, anthropology, sociology, etc.
Language course work must follow these additional guidelines:

- Only courses taken in Autumn Quarter 2017 or later are eligible. Courses completed earlier (including Summer Quarter 2017) do not qualify.
- Completion of an approved intermediate- or advanced-level course with a B or above satisfies the language competency requirement.
- Satisfactory completion (grade of C or above) of approved courses equivalent to one year of introductory language study (e.g., GRMN 10100) qualifies the student for the on-campus language competency examination offered in Winter Quarter.
- Students planning or considering additional language study on campus should take the language placement test to confirm placement.
- Students may not duplicate credit, so completing the equivalent of, e.g., SPAN 10300 at another institution and taking SPAN 10300 at the University of Chicago (or vice versa) results in forfeiture of the transfer credit.
- Courses are subject to all other restrictions and guidelines on this page.

Process for Petitioning for Transfer Credit

For students taking courses elsewhere while enrolled in a degree program at UChicago:

Students who wish to take courses at other institutions after they enter the College should carefully read the regulations for transfer credit listed above and discuss their plans in advance with their College advisers. To have non–University of Chicago courses considered for transfer credit, students must follow these steps:

1. Submit a petition (http://petition.uchicago.edu) to the Office of the Dean of Students in the College, including course descriptions and/or syllabi, units of credit, and the name of the institution where courses will be taken. This information should be submitted online well in advance of taking the course. (Students with inactive logins should contact College Advising [collegeadvising@uchicago.edu] for a PDF version of the petition form.)
2. If approved by the College, the student may seek additional approval for use of that pre-evaluated credit toward major/minor/general education requirements. Instructions will be provided if/when the initial petition is approved. Note that approval is not guaranteed and should be sought as early as possible.
3. Have an official transcript sent to their College adviser upon completion of the course work.

Note: Students should petition for approval well in advance of the start date of the desired courses. Students submitting petitions without a sufficient window should not expect to receive a final decision before the courses begin, especially if they hope to use the course toward a particular requirement.

For students participating in a University of Chicago–sponsored direct enrollment program:

These students do not need to petition the College Dean of Students office and should instead speak to their program director in Study Abroad about the appropriate next steps.

For transfer students:

See Transfer Students below.

College Courses Taken Prior to Matriculation

Courses taken during high school:

Students should not petition until they determine (in their second year or later) that they will need the credit. Students may petition earlier if previous course work may serve as a prerequisite for an University of Chicago course. The petition (http://petition.uchicago.edu) must be submitted to the Office of the Dean of Students in the College, including course descriptions and/or syllabi, units of credit, and the name of the institution where courses were taken. These restrictions also apply to courses completed at the University of Chicago prior to matriculation.

To be considered for credit, petitions must comply with the preceding regulations and the following restrictions:

- Courses may not have counted toward high school graduation requirements.
- Credit for science and calculus courses is not accepted; students should take the appropriate placement or accreditation exams at the time of matriculation.
- Approved credit may only be used as general elective credit. Credit will not be awarded for general education requirements or foreign language courses.
- Courses must have been offered to a cohort that included undergraduate students. Courses taught specifically for high school student programs will not transfer.

Undergraduate courses taught in the College at the University of Chicago are exempt from these restrictions.
Courses taken in the summer prior to matriculation:

Admitted students are not allowed to register for University of Chicago courses in the summer prior to matriculation. It is important that admitted students first learn about curricular issues and academic expectations alongside their classmates during Orientation Week.

Admitted students who take college-level courses at another institution may submit a petition (http://petition.uchicago.edu) for transfer credit after matriculation. They should discuss the process with their College adviser during first-year advising meetings. The transfer credit petition will be evaluated based on all of the above criteria. Credit will be awarded for general elective credit only.

**Early College Programs**

Students who have attended what are commonly known as early college programs (i.e., programs in an undergraduate setting attended in lieu of one or more years of high school) will fall into one of two categories:

- **Students who may apply as traditional first-year students.** In this case, any credit earned in the early college program will be subject to the regulations described above in Courses taken during high school, or
- **Students who must apply to the College as transfer students.** If accepted these students will be held to the standards described in the Transfer Students section below. It is essential to note that all students accepted as transfer admits will be subject to the same expectations, including a shorter timeline for completing their college education.

Students from a number of early college programs, including Bard High School Early College and TAMS at North Texas, are considered by the University of Chicago to be first-year applicants, which means their credit will be subject to the Courses taken during high school regulations. Additionally, any courses that were taken to fulfill high school graduation requirements will not be accepted for credit under any circumstances.

Students should contact College Admissions (collegeadmissions@uchicago.edu) for clarification of their entry status.

**Transfer Students**

After admitted transfer students have committed to attending University of Chicago, they receive information from the Admissions Office about how to submit the materials necessary for an evaluation of their previous college course work. Students must also have their previous institution send a final, official transcript to the Admissions Office. These materials should be submitted no later than June 15. **Transfer evaluations cannot be completed before a student has accepted an offer of admission.** Note that transfer credit does not count toward the University of Chicago GPA, nor do the grades appear on the University of Chicago transcript. Students may not receive more than 1200 units of transfer credit for one academic year of work, nor may they receive more than 400 units of credit for one summer of study.

The evaluation of transfer credit is based on the guidelines and restrictions listed in the previous section.

Note the following restrictions in particular:

- Credit for calculus and pre-calculus is not accepted. Credit for calculus will be granted only by College accreditation or AP exam, or on the basis of completion of a higher-level course.
- Depending on the student’s major and on the level of work to be evaluated, credit for some courses in other sciences may also be subject to examination.
- The restrictions on college course work taken during high school (outlined in the previous section) apply to all undergraduate students.
- Completion of an approved beginning-level language sequence at a different institution doesn’t satisfy the language competency requirement; ordinarily, it would qualify the student to take an on-campus competency exam.

**Residency Requirements and Enrollment Limits for Transfer Students**

A transfer student must be in residence as a degree-seeking student in the College for at least six quarters (excluding summers) and successfully complete a minimum of 18 courses (1800 units) while in residence. More than half of the requirements for a major and/or minor must be met by registering for courses bearing University of Chicago course numbers. Course credit approved to transfer will count toward the 3800-unit credit minimum students are required to earn via course enrollment.

The Dean of Students in the College expects all students to complete their degrees in a timely fashion, ordinarily within 12 quarters. This expectation will be tailored for transfer students who enter the College with a substantial number of credits. Based on the transfer evaluation, transfer students will be assigned a time frame in which they are expected to complete their requirements—typically six or nine quarters. Transfer students may petition the Dean of Students in the College for one additional quarter of study if academically necessary for the undergraduate degree. Transfer students may not register beyond their allotted quarters without the permission of the Dean of Students in the College.
After matriculation in the College, transfer students may not earn additional credits from schools other than the University of Chicago. Faculty-led study abroad programs sponsored by the College may be used to meet both the residency and course requirements. Transfer students will be allowed to participate in direct enrollment study abroad programs affiliated with the College, but these courses cannot be used to satisfy the residency requirement.
The general education requirement in the arts provides an introduction to methods for analyzing, comprehending, and appreciating works of dramatic, musical, or visual art by examining their formal vocabularies and how these vocabularies are used to create meaning. This is accomplished either by the intensive study of selected masterpieces or by producing original works.

The courses that satisfy this requirement, listed below, come from a variety of departments and are designed not as specialized introductions to one single field or creative practice, but instead are expressly designed to broadly investigate the arts through study and practice. For that reason, only these courses can be used to satisfy the general education requirement in the arts. *Substitutes, including upper-level electives, will not be approved.*

**General Education Course Options**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH 10100</td>
<td>Introduction to Art</td>
<td>100</td>
</tr>
<tr>
<td>ARTH 14000</td>
<td>Art Surveys</td>
<td>100</td>
</tr>
<tr>
<td>ARTH 17000</td>
<td>Art in Context</td>
<td>100</td>
</tr>
<tr>
<td>ARTV 10100</td>
<td>Visual Language: On Images</td>
<td>100</td>
</tr>
<tr>
<td>ARTV 10200</td>
<td>Visual Language: On Objects</td>
<td>100</td>
</tr>
<tr>
<td>ARTV 10300</td>
<td>Visual Language: On Time and Space</td>
<td>100</td>
</tr>
<tr>
<td>ARTV 16210</td>
<td>Media Art and Design Practice</td>
<td>100</td>
</tr>
<tr>
<td>CMST 14400</td>
<td>Film and the Moving Image</td>
<td>100</td>
</tr>
<tr>
<td>CMST 14500</td>
<td>Topics in Cinema and Media Studies</td>
<td>100</td>
</tr>
<tr>
<td>CRWR 12100</td>
<td>Introduction to Genres or Reading as a Writer</td>
<td>100</td>
</tr>
<tr>
<td>CRWR 18200</td>
<td>Poetry and the Human III</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10100</td>
<td>Introduction to Western Art Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10200</td>
<td>Introduction to World Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10300</td>
<td>Introduction to Music: Materials and Design</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10400</td>
<td>Introduction to Music: Analysis and Criticism</td>
<td>100</td>
</tr>
<tr>
<td>TAPS 10100</td>
<td>Drama: Embodiment and Transformation</td>
<td>100</td>
</tr>
<tr>
<td>TAPS 10200</td>
<td>Acting Fundamentals</td>
<td>100</td>
</tr>
<tr>
<td>TAPS 10300</td>
<td>Text and Performance</td>
<td>100</td>
</tr>
<tr>
<td>TAPS 10700</td>
<td>Introduction to Stage Design</td>
<td>100</td>
</tr>
</tbody>
</table>

See the departmental pages under Programs of Study for information on specific course offerings planned for the 2018–19 academic year.

**Notes:**

- CRWR 18200 Poetry and the Human III and ARTV 16210 Media Art and Design Practice are affiliated with HUMA 18000-18100-18200 Poetry and the Human I-II-III and HUMA 16000-16100-16200 Media Aesthetics: Image, Text, Sound I-II-III, respectively. They are offered in Spring Quarter, simultaneous with the third course in the humanities sequence. First-year students satisfying the general education requirement in the humanities with one of those sequences will have priority in enrollment for the associated arts course.
- The departments that offer courses for the general education requirement in the arts may require or encourage students in their major to complete this requirement in a specific way. Be sure to check the department’s page under Programs of Study.
- Students who completed TAPS 28400 History and Theory of Drama I or TAPS 28401 History and Theory of Drama II prior to Autumn 2016 may count those courses toward this general education requirement. However, they are no longer approved for the requirement in the arts.
BIOLOGICAL SCIENCES

All students are required to complete at least two quarters of Biological Sciences course work to satisfy the general education requirement in the biological sciences. The goal is to provide students of all majors and academic interests with a broad foundational understanding of the concepts of biology and a sharper, more targeted examination of one or more specific areas within the discipline. The requirement should be completed by the end of the second year. Students may choose to take BIOS 10130 Core Biology and a topics course or one of three two-quarter sequences. An option is also available for students interested in completing the requirements for medical school but who do not want to major in Biological Sciences.

THE GENERAL EDUCATION REQUIREMENT IN THE BIOLOGICAL SCIENCES

Students choose one of the following options to meet the general education requirement in the biological sciences:

1. a two-quarter general education sequence for non-majors; or
2. The Pre-Med Sequence for non-biology majors (described below, the first two courses of BIOS 20170 through BIOS 20175); or
3. BIOS 20153 Fundamentals of Ecology and Ev and BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced).

Advanced Placement Credit

For students who do not plan to major in the Biological Sciences or prepare for the health professions, a score of 4 or 5 on the AP Biology test confers credit for BIOS 10130 Core Biology. These students meet the general education requirement with either one or two topics courses in the biological sciences, depending on how the requirements in the mathematical and physical sciences are met; students should contact their College adviser for details.

Students with a score of 4 or 5 on the AP Biology test who complete the first three quarters of an Advanced Biology Fundamentals Sequence will be awarded a total of two quarters of credit to be counted toward the general education requirement in the biological sciences.

COURSES FOR NON-BIOLOGY MAJORS

Students choose from the following two options to meet the biological sciences requirement. The requirement should be completed by the end of the second year.

1. Students may choose to take BIOS 10130 Core Biology as their first course. For their second quarter, students choose from a menu of topics courses (BIOS 11000–19999) that are comprehensive reviews of specialized topics in the biological sciences (descriptions follow). Non-majors are encouraged to enroll in additional Biological Sciences courses that cover topics of interest to them.

BIOS 10130. Core Biology. 100 Units.
What is life? How does it work and evolve? This course uses student-centered interactive learning in the lab, assigned readings from both the popular press and primary scientific literature, and directed writing exercises to explore the nature and functions of living organisms, their interactions with each other, and their environment.

Instructor(s): Staff Terms Offered: Autumn, Spring, Winter

Section Descriptions of 10130. Core Biology

A. Neurobiology. This course explores the principles governing the organization, operation, and evolution of living systems by examining these concepts through the lens of neuroscience. Through laboratory investigations, readings from the popular and scientific press, and directed writing exercises, the methods of scientific inquiry and logic of scientific reasoning will be introduced. In this exploration, the following questions will be addressed: How are all living organisms organized and how does that organization contribute to their function? What are the mechanisms by which organisms sense and respond to changes in their environment and engage in functional interactions within that environment? What are the biological and evolutionary mechanisms that underlie natural organismal behaviors including, but not limited to, motivated and circadian-driven behaviors? Both invertebrate and vertebrate model systems will be examined to explore the processes at work in all living systems as well as the mechanisms underlying the formation and maintenance of life's diversity. M. McNulty. Autumn, Spring. L.

B. Microbes and Immunity. These sections cover the most basic concepts in biology, such as life, macromolecules, cells, energy, metabolism, evolution, and genomics, as well as human anatomy and physiology. These particular sections draw examples from microbiology and immunology to tie these basic concepts together.
The impact of our interactions with microorganisms in our evolution is highlighted in many ways. Hands-on laboratories, readings, and discussion sessions complement lectures. B. Fineschi. Autumn, Winter, Spring. L.

C. Basic Biology. What is life? How does it work and evolve? This course uses student-centered interactive learning in the lab, assigned readings from both the popular press and primary scientific literature, and directed writing exercises to explore the nature and functions of living organisms, their evolution, and their interactions with each other. A. Hunter. Autumn, Spring. L.

D. Biotechnology. In the first half of this course, basic biology concepts related to biotechnology are covered. These include lectures on life, cells, macromolecules, metabolism, and genetics, complemented by hands-on laboratories. The second half of the course involves student-led topical research and presentations on various aspects of biotechnology, such as plant biotechnology, animal biotechnology, microbial biotechnology, response to bioterrorism, and examining the consequences of developments in these areas. N. Bhasin. Spring. L.

E. Ecology. Have you wondered how the environment has influenced your anatomy, physiology, and psychology through your lifetime? Each one of us continuously interacts, directly or indirectly, with the rest of the Earth’s biodiversity at different levels, from molecules, cells, organisms, populations, ecosystems, and the whole biosphere. Are we really independent individuals, or do we need a better concept that broadens our understanding of the world we live in? In this course you will examine fundamental biological principles to understand how organisms live and thrive in a complex and intricate network that we call nature. You will develop your own criteria based on evidence obtained through hypothesis testing and identification of legitimate sources of information. O. Pineda. Autumn, Winter. L.

F. Ecology and Evolution. This course focuses on the interaction of organisms with their environment and evolutionary processes that lead to diversity and adaptation. We will examine biological processes at the cellular and organismal levels across a wide range of organisms, considering their ecological similarities and differences in an evolutionary framework. Population and ecosystem levels will be examined to promote understanding of the importance of diversity in ecosystem health and the impacts of an ever increasing human population. E. Larsen. Winter. L.

Topics Courses for Non-Majors

The courses that follow have a prerequisite of BIOS 10130 Core Biology, or a score of 4 or 5 on the AP Biology test. Attendance is required at the first class to confirm enrollment. Students who choose to complete only one general education course in the mathematical sciences may take a second topics course as part of the general education requirements.
BIOS 11125. Life Through a Genomic Lens. 100 Units.
The implications of the double helical structure of DNA triggered a revolution in cell biology. More recently, the technology to sequence vast stretches of DNA has offered new vistas in fields ranging from human origins to the study of biodiversity. This course considers a set of these issues, including the impact of a DNA perspective on the legal system, on medicine, and on conservation biology.
Instructor(s): A. Turkewitz, M. Nobrega Terms Offered: Winter
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Equivalent Course(s): ENST 12402

BIOS 11140. Biotechnology for the 21st Century. 100 Units.
This course is designed to provide a stimulating introduction to the world of biotechnology. Starting with an overview of the basic concepts of molecular biology and genetics that serve as a foundation for biotechnology, the course will segue into the various applied fields of biotechnology. Topics will include microbial biotechnology, agricultural biotechnology, biofuels, cloning, bioremediation, medical biotechnology, DNA fingerprinting and forensics. The goal of this course is to provide the Biology non-majors with an appreciation of important biotechnology breakthroughs and the associated bioethics issues.
Instructor(s): N. Bhasin Terms Offered: Autumn,Winter
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 12114. Nutritional Science. 100 Units.
This course examines the underlying biological mechanisms of nutrient utilization in humans and the scientific basis for setting human nutritional requirements. The relationships between food choices and human health are also explored. Students consider how to assess the validity of scientific research that provides the basis for advice about how to eat healthfully. Class assignments are designed to help students apply their knowledge by critiquing their nutritional lifestyle, nutritional health claims, and/or current nutrition policy issues.
Instructor(s): P. Strielemann Terms Offered: Autumn,Spring,Summer
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Note(s): Credit may not be earned for both BIOS 12114 and BIOS 10501

BIOS 12115. Responses of Cardiopulmonary System to Stress. 100 Units.
This course is designed to provide students an overview of basic concepts involved in the functioning of cardiopulmonary vascular systems. Special emphasis will be given to different regulatory mechanisms working at the cell, tissue and organ levels to control the systems functioning during stress conditions. We also discuss recent topics related to molecular basis of adaptation and drugs designed to treat mal-adaptive changes taking place in the heart and lungs (vessels) subjected to various-types of pathological stresses. Instructors, who are both actively engaged in research to understand molecular basis of cardiopulmonary vascular diseases, take this course beyond the knowledge of standard textbook content.
Instructor(s): M. Gupta, Y. Fang Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 12116. The Human Body in Health and Disease. 100 Units.
This course is designed to provide an overview of physiological organ systems under different states of health and disease. A comprehensive tour through the human body will take students through the anatomy and functioning of several systems including, but not limited to, the cardiovascular, respiratory, nervous, renal, gastrointestinal, and immune systems. We will examine each of these systems under normal conditions and from the perspective of disease. A variety of pathological conditions including diabetes, heart and kidney diseases, neurodegenerative conditions, and autoimmune diseases, will be covered with an emphasis on how many diseases involve multiple organ systems.
Instructor(s): M. McNulty Terms Offered: Winter
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 12117. The 3.5 Billion Year History of the Human Body. 100 Units.
This course looks at the structure, function, and deep history of the human body. Each major organ and system of the body is explored from perspectives of anatomy, paleontology, and developmental genetics to reveal the deep history of the body and our connections to the rest of life on the planet.
Instructor(s): N. Shubin Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 13111. Natural History of North American Deserts. 100 Units.
This lecture course focuses on the ecological communities of the Southwest, primarily on the four subdivisions of the North American Desert, the Chihuahuan, Sonoran, Mohave, and Great Basin Deserts. Lecture topics include climate change and the impact on the flora and fauna of the region; adaptations to arid landscapes; evolutionary, ecological, and conservation issues in the arid Southwest, especially relating to isolated mountain ranges; human impacts on the biota, land, and water; and how geological and climatic forces shape deserts.
Instructor(s): E. Larsen Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 13112. Natural History of North American Deserts; Field School. 100 Units.
This lecture/lab course is the same course as BIOS 13111, but includes a lab section preparatory to a two-week field course in the desert ecosystems of the American Southwest.
BIOS 10405. Pharmacological Perspectives in Cell and Molecular Biology. 100 Units.
This course introduces concepts related to the use, pharmacodynamic properties, manner in which drugs act at the molecular and/or cellular level, and their effects at the organismal level.
Instructor(s): R. Zaragoza Terms Offered: Autumn
Prerequisite(s): NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition. This course MUST be followed by the second course in the sequence.

BIOS 10451. Pharmacological Perspectives II. 100 Units.
Must new taken in sequence with BIOS 10450. The goal of this course is to learn the pharmacological principles by which drugs act, at the molecular and cellular level, to affect an organ/organ systems of the human body. The pharmacodynamics, pharmacokinetic, pharmaotherapeutics and toxicology of a number of drugs are discussed. Drugs currently in the media, how these drugs affect different systems ranging from cardiovascular to the central nervous system, and the fundamental basis for the use of drugs are covered.
Instructor(s): R. Zaragoza Terms Offered: Winter
Prerequisite(s): BIOS 10450. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 10500. Metabolism and Exercise. 100 Units.
Must be taken in sequence with BIOS 10501. This course examines the flow of energy through the human body-from what we eat to what we can do. Basic physiology, metabolism, and exercise concepts are covered from cells to systems. Students should be prepared to alter their diet and/or physical activity. This course is intended to be followed by BIOS 10501 (Metabolism and Nutrition). Prerequisite(s): This course MUST be followed by the second course in the sequence. NO BIOLOGICAL SCIENCES MAJORS, except by petition.
Instructor(s): J. Kennedy Terms Offered: Autumn
Prerequisite(s): This course MUST be followed by the second course in the sequence. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

BIOS 10501. Metabolism and Nutrition. 100 Units.
Must be taken in sequence with BIOS 10500. Taking a scientific approach to nutrition, this course covers nutritional requirements and why they are required for human health by exploring their function at the cellular and molecular level. Basic physiology concepts related to nutritional health are covered, including digestive physiology and some aspects of endocrinology. As a continuation of the exercise concepts covered in BIOS 10501, the relationship between exercise and nutrition is considered. Students complete a dietary analysis of their food intake to critique their individual nutritional health.
Instructor(s): P. Strieleman Terms Offered: Winter
Prerequisite(s): BIOS 10500. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Note(s): Credit may not be earned for both BIOS 10501 and BIOS 12114.

BIOS 10602. Multiscale Modeling of Biological Systems I. 100 Units.
This two-sequence course is intended for students with strong quantitative background, such as those majoring in physical sciences or economics. Modern biology generates massive amounts of data; this course is devoted to biological information and the models and computational techniques used to make sense of it. The first course in the sequence begins with the organization of life at the molecular level, and builds a physical understanding to the structure of macromolecules such as DNA, RNA and proteins. Students learn about biological databases, algorithms for sequence alignment and phylogenetic tree building, Students will also be introduced to basics of high performance computation and its application to the field of bioinformatics. They will learn how to use our in-house supercomputer to process and analyze next generation gene sequencing data in order to identify disease-relevant variants. Students implement computational algorithms using R and Unix.
Instructor(s): E. Haddadian Terms Offered: Autumn, L.
Prerequisite(s): MATH 13300/15300/16300 or equivalent placement. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition. This course MUST be followed by the second course in the sequence.

BIOS 10603. Multiscale Modeling of Biological Systems II. 100 Units.
Must be taken in sequence with BIOS 10602. Major Advances in understanding how life works at the molecular level have revolutionized biology. The second course in the sequence is dedicated to the study of how large molecules, such as proteins, DNA, carbohydrates, and phospholipids, perform their functions. The course will begin with a solid grounding in molecular chemistry and the forces that govern interactions between atoms and molecules. This is followed by an overview of structure and function of macromolecules, in particular of proteins and enzymes. The students will learn how to visualize macromolecules and measure their basic properties and to model their physical movements by means of molecular dynamic simulations running at university’s super computer facility. The course will then proceed to describe how interactions of these molecules produce functioning organelles and cells, and how molecular mishaps can lead to disease.
Instructor(s): E. Haddadian Terms Offered: Winter, L.
Prerequisite(s): BIOS 10602 or consent of instructor. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
CIVILIZATION STUDIES

Civilization studies provide an in-depth examination of the development and accomplishments of one of the world’s great civilizations through direct encounters with significant and exemplary documents and monuments. These sequences complement the literary and philosophical study of texts central to the humanities sequences, as well as the study of synchronous social theories that shape basic questions in the social science sequences. Their approach stresses the grounding of events and ideas in historical context and the interplay of events, institutions, ideas, and cultural expressions in social change. The courses emphasize texts rather than surveys as a way of getting at the ideas, cultural patterns, and social pressures that frame the understanding of events and institutions within a civilization. And they seek to explore a civilization as an integrated entity, capable of developing and evolving meanings that inform the lives of its citizens.

Unless otherwise specified, courses should be taken in sequence. Note the prerequisites, if any, included in the course description of each sequence. Some civilization sequences are two-quarter sequences; others are three-quarter sequences. Students may meet a two-quarter civilization requirement with two courses from a three-quarter sequence.

Because civilization studies sequences offer an integrated, coherent approach to the study of a civilization, students cannot change sequences. Students can neither combine courses from a civilization sequence with a freestanding course nor combine various freestanding courses to create a civilization studies sequence. Students who wish to use such combinations are seldom granted approval to their petitions, including petitions from students with curricular and scheduling conflicts who have postponed meeting the civilization studies requirement until their third or fourth year in the College.

CIVILIZATION STUDIES COURSES ON CAMPUS

CRES 24001-24002-24003. Colonizations I-II-III.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world.

CRES 24001. Colonizations I. 100 Units.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world. Themes of slavery, colonization, and the making of the Atlantic world are covered in the first quarter. Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24001, SOSC 24001, HIST 18301

CRES 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24002, SOSC 24002, HIST 18302

CRES 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): HIST 18303, SOSC 24003, ANTH 24003, SALC 20702

CRES 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24002, SOSC 24002, HIST 18302
CRES 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent
nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be
taken in any sequence.
Equivalent Course(s): HIST 18303, SOSC 24003, ANTH 24003, SALC 20702

EALC 10800-10900-11000. Introduction to the Civilizations of East Asia I-II-III.
This sequence meets the general education requirement in civilization studies. This is a sequence on the
civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies
from the Middle Ages to the present.

EALC 10800. Intro To East Asian Civilization I. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the
civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): G. Alitto Terms Offered: Autumn Summer
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15100, CRES 10800, SOSC 23500

EALC 10900. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter
sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these
cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, CRES 10900, SOSC 23600

EALC 11000. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the
civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, CRES 11000, SOSC 23700

EALC 10900. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter
sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, CRES 10900, SOSC 23600

EALC 11000. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the
civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies
from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, CRES 11000, SOSC 23700

GNSE 15002-15003. Gender and Sexuality in World Civilizations I-II.
This two-quarter sequence aims to expand students' exposure to an array of texts—theoretical, historical,
religious, literary, visual—that address the fundamental place of gender and sexuality in the social, political, and
cultural creations of different civilizations. This sequence meets the general education requirement in civilization studies.
GNSE 15002. Gender and Sexuality in World Civilizations I. 100 Units.
The first quarter offers a theoretical framing unit that introduces concepts in feminist, gender, and queer theory, as well as two thematic clusters, "Kinship" and "Creativity and Cultural Knowledge." The "Kinship" cluster includes readings on such topics as marriage, sex and anti-sex, love and anti-love, and reproduction. The "Creativity and Cultural Knowledge" cluster addresses the themes of authorship and authority, fighting and constructing the canon, and the debates over the influence of "difference" on cultural forms.
Instructor(s): Staff Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies.

GNSE 15003. Gender and Sexuality in World Civilizations II. 100 Units.
Three thematic clusters make up the second quarter. "Politics" focuses on texts related to activism/movement politics and women's rights as human rights and the question of universalism. "Religion" contextualizes gender and sexuality through examinations of a variety of religious laws and teachings, religious practices, and religious communities. "Economics" looks at slavery, domestic service, prostitution as labor, consumption, and the gendering of labor in contemporary capitalism.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): GNSE 15002
Note(s): This sequence meets the general education requirement in civilization studies.

HIPS 17300–17310, HIPS 17400–17410, and HIPS 17500–17510 Science, Culture, and Society in Western Civilization
These courses focus on the origins and development of science in the West. They aim to trace the evolution of the biological, psychological, natural, and mathematical sciences as they emerge from the culture and social matrix of their periods and, in turn, affect culture and social. In order to satisfy the general education requirement in civilization studies, students must take a course in two or three of the following chronological periods: ancient (numbered HIPS 17300-17310), early modern (HIPS 17400-17410), and modern (HIPS 17500-17510). Taking these courses in sequence is recommended but not required. Only one course per category may count toward the requirement unless special approval is granted.

HIST 10101-10102-10103. Introduction to African Civilization I-II-III.
Introduction to African Civilization introduces students to African history in a three-quarter sequence. Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.

HIST 10101. Introduction to African Civilization I. 100 Units.
Part one of the sequence takes a historical approach. We consider how different types of historical evidence—documentary, oral, and material—can be used to investigate processes of change and transformation in Africa from the early Iron Age through the emergence of the Atlantic world in the fifteenth century. We will investigate state formation in comparative perspective and examine case studies from the Swahili coast, the empires of Ghana and Mali, and Great Zimbabwe. The course also examines the diffusion of Islam, European contact, and the trans-Atlantic slave trade.
Instructor(s): E. Osborn Terms Offered: Autumn
Equivalent Course(s): CRES 20701, ANTH 20701
HIST 10102. Introduction to African Civilization II. 100 Units.
The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers’ policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*.
Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): CRES 20802, ANTH 20702, CHDV 21401

HIST 10103. Introduction to African Civilization III. 100 Units.
Part Three investigates the long nineteenth century. It considers the Egyptian conquest of Sudan, Omani colonialism on the Swahili coast, and Islamic reform movements across the Sahara. It will also explore connections between the end of the transatlantic slave trade and the formal colonization of the African continent.
Instructor(s): K. Hickerson Terms Offered: Spring
Equivalent Course(s): ANTH 20703, CRES 20703

HIST 10102. Introduction to African Civilization II. 100 Units.
The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers’ policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*. Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): CRES 20802, ANTH 20702, CHDV 21401

HIST 13001-13002-13003. History of European Civilization I-II-III.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by “Europe” and “civilization.” Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
HIST 13001. History of European Civilization I. 100 Units.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by "Europe" and "civilization." Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
Instructor(s): J. Niermeier-Dohoney, A. Palmer, Staff Terms Offered: Autumn Winter
Prerequisite(s): Students must take a minimum of two quarters of Civ. to fulfill general education requirement; register for same section each quarter.

HIST 13002. History of European Civilization II. 100 Units.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by "Europe" and "civilization." Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
Instructor(s): J. Goldstein, A. Goff, S. Pincus, Staff Terms Offered: Spring Winter
Prerequisite(s): Students must take a minimum of two quarters of Civ. to fulfill general education requirement; register for same section each quarter.

HIST 13003. History of European Civilization III. 100 Units.
The two-quarter History of European Civilization sequence may be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. Topics in this third quarter of the sequence may include women in European history, religion and society, Church and State, the Enlightenment, the transformation of the Roman World, or other focused topics on cultural, economic, social, political, or religious aspects of European history. The spring 2019 topics will be "The Crusades: History and Imagination" (section 2) and "Crossing the Channel: England and France" (section 4). Refer to https://history.uchicago.edu/content/spring-2019-college-courses for course descriptions.
Instructor(s): A. Locking Terms Offered: Spring
Prerequisite(s): HIST 13001 and HIST 13002
Note(s): Students who plan to complete a three-quarter sequence register for HIST 13003 in Spring Quarter after completing HIST 13001-13002. Students may not combine HIST 13003 with one other quarter of European Civilization to construct a two-quarter sequence.

HIST 13001-13200-13300. History of Western Civilization I-II-III.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.
HIST 13100. Western Civilization-1. 100 Units.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.
Instructor(s): K. Weintraub, Autumn; J. Boyer, Summer Terms Offered: Autumn,Summer
Prerequisite(s): These courses must be taken in sequence.

HIST 13200. Western Civilization-2. 100 Units.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.
Instructor(s): K. Weintraub, Winter, Summer Terms Offered: Summer, Winter
Prerequisite(s): These courses must be taken in sequence.

HIST 13300. History of Western Civilization III. 100 Units.
This third course of the History of Western Civilization undertakes a detailed study of the French Revolution and charts the rise of liberal, anti-liberal, and post-liberal states and societies in nineteenth- and twentieth-century European history. The sequence closes with an appraisal of the condition of European politics, culture, and society at the end of the twentieth century.
Instructor(s): K. Weintraub, Spring; D. Koehler, Summer Terms Offered: Spring, Summer
Prerequisite(s): These courses must be taken in sequence.

HIST 13500-13600-13700. America in World Civilization I-II-III.
The America in World Civilization sequence is nothing like your high school history class, for here we examine America as a contested idea and a contested place by reading and writing about a wide array of primary sources. In the process, students gain a new sense of historical awareness and of the making of America. The course is designed both for history majors and non-majors who want to deepen their understanding of the nation’s history, encounter some enlightening and provocative voices from the past, and develop the qualitative methodology of historical thinking. It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III). This sequence meets the general education requirement in civilization studies.

HIST 13500. America In World Civilization I. 100 Units.
America in World Civilization I examines foundational texts and moments in American culture, society, and politics, from early European incursions into the New World through the early republic of the United States, roughly 1500-1800. We will examine encounters between Native Americans and representatives of imperial powers (Spain, France, and England) as well as the rise of African slavery in North America before 1700. We will consider the development of Anglo-American society and government in the eighteenth century, focusing especially on the causes and consequences of the American Revolution.
Instructor(s): E. Cook, M. Krueger, A. Lippert, A. Rowe, E. Slaughter Terms Offered: Autumn
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13600. America in World Civilization II. 100 Units.
The nineteenth-century segment of America in World Civilizations asks: What happens when democracy confronts inequality? We focus on themes that include indigenous-US relations; religious revivalism and reform; slavery, the Civil War, and emancipation; the intersection between women’s rights and antislavery; the development of industrial capitalism; urbanism and social inequality.
Instructor(s): J. Dailey, J. Levy, A. Lippert, R. Rubin Terms Offered: Winter
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).
HIST 13700. America in World Civilization-III. 100 Units.
What conditions have shaped inclusion and exclusion from the category "American" in the twentieth
century? Who has claimed rights, citizenship, and protection, and under what conditions? The third quarter
of America in World Civilization focuses on multiple definitions of Americanism in a period characterized
by empire, transnational formations, and America's role in the world. We explore the construction of social
order in a multicultural society; culture in the shadow of war; the politics of race, ethnicity, and gender;
the rise and fall of new social movements on the left and the right; the emergence of the carceral state and
militarization of civil space; and the role of climate change and the apocalyptic in shaping imagined futures.
Instructor(s): K. Belew & J. Dailey Terms Offered: Spring
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–
13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13900-14000. Introduction to Russian Civilization I-II.
This two-quarter sequence, which meets the general education requirement in civilization studies, provides an
interdisciplinary introduction to Russian civilization. The first quarter covers the ninth century to the 1870s; the
second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—
from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution
of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed
include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change
and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems
of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): E. Gilburd, W. Nickell Terms Offered: Autumn
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24000, REES 26011

HIST 14000. Intro Russian Civilization-2. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-
Soviet period. Working closely with a variety of primary sources-from oral legends to film and music,
from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the
centuries and through radically different political regimes. Topics to be discussed include the influence of
Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in
political, intellectual, and cultural life; the relationship between center and periphery; systems of social and
political legitimation; and symbols and practices of collective identity.
Instructor(s): R. Bird, E. Gilburd Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24100, REES 26012

HIST 16700-16800-16900. Ancient Mediterranean World I-II-III.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter
or Winter-Spring). This sequence meets the general education requirement in civilization studies. This sequence
surveys the social, economic, and political history of Greece to the death of Alexander the Great (323 BC), the
Roman Republic (509 to 27 BC), and late antiquity (27 BC to the fifth century AD).
HIST 16700. Anc Mediterr World-1: Greece. 100 Units.
This course surveys the social, economic, and political history of Greece from prehistory to the Hellenistic period. The main topics considered include the development of the institutions of the Greek city-state, the Persian Wars and the rivalry of Athens and Sparta, the social and economic consequences of the Peloponnesian War, and the eclipse and defeat of the city-states by the Macedonians.
Instructor(s): J. Hall, Staff Terms Offered: Autumn
Equivalent Course(s): CLCV 20700

HIST 16800. Anc Mediterr World-2: Rome. 100 Units.
This quarter surveys the social, economic, and political history of Rome, from its prehistoric beginnings in the twelfth century BCE to the end of the Severan dynasty in 235 CE. Throughout, the focus is upon the dynamism and adaptability of Roman society, as it moved from a monarchy to a republic to an empire, and the implications of these political changes for structures of competition and cooperation within the community.
Instructor(s): C. Ando, Staff Terms Offered: Winter Note(s): This sequence meets the general education requirement in civilization studies.
Instructor(s): C. Ando, M. Andrews, Staff Terms Offered: Winter
Equivalent Course(s): CLCV 20800

HIST 16900. Ancient Mediterranean World III. 100 Units.
This course will survey the social, political, and cultural history of the late antique Mediterranean from Constantine I to Charlemagne. Through close reading and discussion of primary sources, we will examine (among other topics) the rise and spread of Christianity and Islam, changing conceptions of Roman identity, and the inheritance of the classical world, as well as some implications of these topics for subsequent European history.
Instructor(s): R. Payne, staff Terms Offered: Spring
Equivalent Course(s): CLCV 20900

HMRT 10100-10200. Human Rights in World Civilizations I-II.
This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

HMRT 10100. Human Rights in World Civilizations I. 100 Units.
The first quarter begins with a set of conceptual problems and optics designed to introduce students to the critical study of human rights, opening up questions of the universal, human dignity, and the political along with the practices of witness and testimony. It is followed by two thematic clusters. "Anti-Slavery, Humanitarianism, and Rights" focuses on the late eighteenth and early nineteenth centuries to historicize notions of dignity, sympathy, and witness. "Declarations as a Human Rights Genre" examines revolutionary eighteenth-century rights declarations in France, the United States, and Haiti against the aspirations of the 1948 UN Universal Declaration of Human Rights.
Instructor(s): J. Ransmeier, B. Laurence, Staff Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.

HMRT 10200. Human Rights in World Civilizations II. 100 Units.
Four thematic clusters structure the second quarter. "Migration, Minorities, and Refugees" examines minority rights, the evolution of legal norms around refugees, and human trafficking. "Late Twentieth Century Human Rights Talk" explores the contestations between rights claims in the political-civil and socio-economic spheres, calls for sexual rights, and cultural representations of human rights abuses. "Global Justice" considers forms of international criminal law, transitional justice, and distributive justice. "Indigenous Rights as Human Rights" takes up the relatively new domain of the rights of indigenous peoples and how they relate to contemporary human rights practice.
Instructor(s): B. Laurence, E. Osborn, Staff Terms Offered: Winter
Prerequisite(s): HMRT 10100
Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.

HMRT 10200. Human Rights in World Civilizations II. 100 Units.
Four thematic clusters structure the second quarter. "Migration, Minorities, and Refugees" examines minority rights, the evolution of legal norms around refugees, and human trafficking. "Late Twentieth Century Human Rights Talk" explores the contestations between rights claims in the political-civil and socio-economic spheres, calls for sexual rights, and cultural representations of human rights abuses. "Global Justice" considers forms of international criminal law, transitional justice, and distributive justice. "Indigenous Rights as Human Rights" takes up the relatively new domain of the rights of indigenous peoples and how they relate to contemporary human rights practice.
Instructor(s): B. Laurence, E. Osborn, Staff Terms Offered: Winter
Prerequisite(s): HMRT 10100
Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.
JWSC 12000-12001. Jewish Civilization I-II.

Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary—students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. Note: Jewish Studies revised its civilization studies courses for academic year 2018–19. Students who began the requirement prior to Autumn Quarter 2018, under the previous course options, may complete it with those courses that remain available, or they may combine them with the new course options. However, students must have at least one course on the ancient/medieval period (JWSC 20120-20199 or JWSC 12000 Jewish Civilization I: Ancient Beginnings to Early Medieval Period) and at least one on the modern period (JWSC 20220-20299 or JWSC 12001 Jewish Civilization II: Late Medieval to Modern Period). Students who begin the requirement in Autumn Quarter 2018 or later may only use the new sequence to meet the general studies requirement in civilization studies.

JWSC 12000. Jewish Civilization I: Ancient Beginnings to Early Medieval Period. 100 Units.

Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary—students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Autumn course will deal with antiquity to the early medieval periods. Its readings will include works from the Bible, the Dead Sea Scrolls, Philo, Josephus, the Rabbis, Yehudah Halevy, and Maimonides. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.

Instructor(s): Chavel
Terms Offered: Autumn
Equivalent Course(s): RLST 22010, NEHC 22010

JWSC 12001. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.

Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary—students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelssohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.

Instructor(s): Rokem
Terms Offered: Winter
Equivalent Course(s): RLST 22011, NEHC 22011

JWSC 12001. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.

Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary—students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelssohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.

Instructor(s): Rokem
Terms Offered: Winter
Equivalent Course(s): RLST 22011, NEHC 22011

LACS 16100-16200-16300. Introduction to Latin American Civilization I-II-III.

Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).
LACS 16100. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): CRES 16101, SOSC 26100, LACS 34600, ANTH 23101, HIST 36101, HIST 16101

LACS 16200. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, HIST 16102, LACS 34700, ANTH 23102, HIST 36102, CRES 16102

LACS 16300. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, ANTH 23103, HIST 16103, SOSC 26300, CRES 16103

LACS 16200. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, HIST 16102, LACS 34700, ANTH 23102, HIST 36102, CRES 16102

LACS 16300. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, ANTH 23103, HIST 16103, SOSC 26300, CRES 16103

MUSI 12100-12200. Music in Western Civilization I-II.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.

MUSI 12100. Music In Western Civilization I: To 1750. 100 Units.
Instructor(s): A. Robertson Terms Offered: Winter
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21100, HIST 12700

MUSI 12200. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21200, HIST 12800
MUSI 12200. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections. Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts. Equivalent Course(s): SOSC 21200, HIST 12800

NEHC 20001-20002-20003. Ancient Near Eastern History and Society I-II-III.
This sequence meets the general education requirement for civilization studies.

NEHC 20001. Ancient Near Eastern History and Society I: Egypt. 100 Units.
This course surveys the political, social, and economic history of ancient Egypt from pre-dynastic times (ca. 3400 B.C.) until the advent of Islam in the seventh century of our era. Equivalent Course(s): NEHC 30001

NEHC 20002. Ancient Near Eastern History and Society II. 100 Units.
This course introduces students to the history of ancient Anatolia and its neighbors from the first historical texts around 2000 BCE to the arrival of Alexander the Great. Some of the famous ancient Near Eastern civilizations that we encounter include the Assyrians, Hittites, Phrygians, Lydians, Persians, and Israelites. We will focus on the information provided by inscriptions - especially political and socioeconomic history - as well as the relevant archaeological and art historical records. No prior knowledge of Anatolian or Near Eastern history is required. Instructor(s): James Osborne Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. Equivalent Course(s): NEHC 30002

NEHC 20003. Ancient Near Eastern History and Society III. 100 Units.
This course provides an introduction to the social, political, and cultural history of Mesopotamia, from the origins of writing and cities in Sumer (ca. 3200 B.C.), through the great empires of Assyria, Babylon, and Persia. Instructor(s): Herve Reculeau Terms Offered: Spring
Equivalent Course(s): NEHC 30003

NEHC 20002. Ancient Near Eastern History and Society II. 100 Units.
This course introduces students to the history of ancient Anatolia and its neighbors from the first historical texts around 2000 BCE to the arrival of Alexander the Great. Some of the famous ancient Near Eastern civilizations that we encounter include the Assyrians, Hittites, Phrygians, Lydians, Persians, and Israelites. We will focus on the information provided by inscriptions - especially political and socioeconomic history - as well as the relevant archaeological and art historical records. No prior knowledge of Anatolian or Near Eastern history is required. Instructor(s): James Osborne Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. Equivalent Course(s): NEHC 30002

NEHC 20003. Ancient Near Eastern History and Society III. 100 Units.
This course provides an introduction to the social, political, and cultural history of Mesopotamia, from the origins of writing and cities in Sumer (ca. 3200 B.C.), through the great empires of Assyria, Babylon, and Persia. Instructor(s): Herve Reculeau Terms Offered: Spring
Equivalent Course(s): NEHC 30003

NEHC 20004-20005-20006. Ancient Near Eastern Thought and Literature I-II-III.
This sequence surveys the thought and literature of the Near East. Each course in the sequence focuses on a particular culture or civilization. Texts in English. This sequence meets the general education requirement in civilization studies. Taking these courses in sequence is not required.
NEHC 20004. Ancient Near Eastern Thought and Literature I: Mesopotamian Literature. 100 Units.
This course takes as its topic the literary tradition surrounding Gilgamesh, the legendary king of the Mesopotamian city-state of Uruk. The course will focus on the Babylonian Epic of Gilgamesh and its Sumerian forerunners, and their cultural and historical contexts. We will also read a number of Sumerian and Akkadian compositions that are thematically related to the Gilgamesh tradition, including Atrahasis, the Sumerian Flood story, and the Epics of Enmerkar and Lugalbanda, also of first dynasty of Uruk.
Instructor(s): Susanne Paulus Terms Offered: Winter
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 30004

NEHC 20005. Ancient Near Eastern Thought & Literature-2: Anatolian Lit. 100 Units.
This course will provide an overview of Anatolian/Hittite literature, as "defined" by the Hittites themselves, in the wider historical-cultural context of the Ancient Near East. In the course of discussions, we will try to answer some important questions about Hittite inscriptions, such as: why were they written down, why were they kept, for whom were they intended, and what do the answers to these questions (apart from the primary content of the texts themselves) tell us about Hittite society?
Instructor(s): H. Haroutunian Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 30005

NEHC 20006. Ancient Near Eastern Thought & Literature-3. 100 Units.
This course employs English translations of ancient Egyptian literary texts to explore the genres, conventions and techniques of ancient Egyptian literature. Discussions of texts examine how the ancient Egyptians conceptualized and constructed their equivalent of literature, as well as the fuzzy boundaries and subtle interplay between autobiography, history, myth and fiction.
Instructor(s): Brian Muhs Terms Offered: Autumn
Equivalent Course(s): EGPT 30006, EGPT 20006, NEHC 30006

NEHC 20005. Ancient Near Eastern Thought & Literature-2: Anatolian Lit. 100 Units.
This course will provide an overview of Anatolian/Hittite literature, as "defined" by the Hittites themselves, in the wider historical-cultural context of the Ancient Near East. In the course of discussions, we will try to answer some important questions about Hittite inscriptions, such as: why were they written down, why were they kept, for whom were they intended, and what do the answers to these questions (apart from the primary content of the texts themselves) tell us about Hittite society?
Instructor(s): H. Haroutunian Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 30005

NEHC 20006. Ancient Near Eastern Thought & Literature-3. 100 Units.
This course employs English translations of ancient Egyptian literary texts to explore the genres, conventions and techniques of ancient Egyptian literature. Discussions of texts examine how the ancient Egyptians conceptualized and constructed their equivalent of literature, as well as the fuzzy boundaries and subtle interplay between autobiography, history, myth and fiction.
Instructor(s): Brian Muhs Terms Offered: Autumn
Equivalent Course(s): EGPT 30006, EGPT 20006, NEHC 30006

NEHC 20011-20012-20013. Ancient Empires I-II-III.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered. Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.

NEHC 20011. Ancient Empires I. 100 Units.
The first course of this three-course sequence focuses on the Hittite Empire.
Instructor(s): H. Haroutunian Terms Offered: Autumn
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): CLCV 25700, HIST 15602
NEHC 20012. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, HIST 15603

NEHC 20013. Ancient Empires-3: The Roman Empire, Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, CLCV 25900, HIST 15604

NEHC 20012. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, HIST 15603

NEHC 20013. Ancient Empires-3: The Roman Empire, Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, CLCV 25900, HIST 15604

NEHC 20416-20417-20418. Semitic Languages, Cultures, and Civilizations I-II-III.
This sequence meets the general education requirement in civilization studies.

NEHC 20416. Semitic Languages, Cultures, and Civilizations I. 100 Units.
This course looks at the attestations of Semitic, the development of the language family and its individual languages, the connection of language spread and political expansions with the development of empires and nation states (which can lead to the development of different language strata), the interplay of linguistic innovation and archaism in connection with innovative centers and peripheries, and the connection and development of language and writing.
Terms Offered: TBD
Equivalent Course(s): NEHC 30416, HIST 15702

NEHC 20417. Semitic Languages, Cultures, and Civilizations II. 100 Units.
This course explores various peoples of the ancient Near East from the third through the first millennium BC. The shared characteristic of those peoples is their use of Semitic languages. The focus is on major cultural traditions that later become of interest for the modern Middle East and for the Western world. This course provides a background to understand contemporary problems in a historical context. This includes a close examination and discussion of representative ancient sources, as well as readings in modern scholarship to help us think of interpretative frameworks and questions. Ancient sources include literary, historical, and legal documents. Texts in English.
Terms Offered: TBD
Note(s): Not open to first-year students
Equivalent Course(s): NEHC 30417, HIST 15703
NEHC 20418. Semitic Languages, Cultures, and Civilizations III. 100 Units.
The course studies how various groups in the Middle East imagined the ancient Semitic heritage of the region. We examine how Semitic languages (in particular, Arabic and Hebrew) came to be regarded as the national markers of the peoples of the Middle East. We likewise explore the ways in which archeologists, historians, novelists, and artists emphasized the connectivity between past and present, and the channels through which their new ideas were transmitted. The class thus highlights phenomena like nationalism, reform, and literary and print capitalism (in both Hebrew and Arabic) as experienced in the Middle East.
Terms Offered: TBD
Note(s): Not open to first-year students
Equivalent Course(s): HIST 15704, NEHC 30418, JWSC 21100

NEHC 20417. Semitic Languages, Cultures, and Civilizations II. 100 Units.
This course explores various peoples of the ancient Near East from the third through the first millennium BC. The shared characteristic of those peoples is their use of Semitic languages. The focus is on major cultural traditions that later become of interest for the modern Middle East and for the Western world. This course provides a background to understand contemporary problems in a historical context. This includes a close examination and discussion of representative ancient sources, as well as readings in modern scholarship to help us think of interpretative frameworks and questions. Ancient sources include literary, historical, and legal documents. Texts in English.
Terms Offered: TBD
Note(s): Not open to first-year students
Equivalent Course(s): NEHC 30417, HIST 15703

NEHC 20418. Semitic Languages, Cultures, and Civilizations III. 100 Units.
The course studies how various groups in the Middle East imagined the ancient Semitic heritage of the region.
Terms Offered: TBD
Note(s): Not open to first-year students
Equivalent Course(s): HIST 15704, NEHC 30418, JWSC 21100

NEHC 20501-20502-20503. Islamic History and Society I-II-III.
This sequence meets the general education requirement in civilization studies. This sequence surveys the main trends in the political history of the Islamic world, with some attention to economic, social, and intellectual history. Taking these courses in sequence is recommended but not required.

NEHC 20501. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.
This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): HIST 35704, ISLM 30500, NEHC 30501, CMES 30501, RLST 20501, HIST 25704

NEHC 20502. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, HIST 25804, NEHC 30502, ISLM 30600, CMES 30502

NEHC 20503. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): HIST 25904, NEHC 30503, HIST 35904
NEHC 20502. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, HIST 25804, NEHC 30502, ISLM 30600, CMES 30502

NEHC 20503. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): HIST 25904, NEHC 30503, HIST 35904

NEHC 20601-20602-20603. Islamic Thought and Literature I-II-III.
This sequence explores the thought and literature of the Islamic world from the coming of Islam in the seventh century C.E. through the development and spread of its civilization in the medieval period and into the modern world. Including historical framework to establish chronology and geography, the course focuses on key aspects of Islamic intellectual history: scripture, law, theology, philosophy, literature, mysticism, political thought, historical writing, and archaeology. In addition to lectures and secondary background readings, students read and discuss samples of key primary texts, with a view to exploring Islamic civilization in the direct voices of the people who participated in creating it. All readings are in English translation. No prior background in the subject is required. This course sequence meets the general education requirement in civilization studies. Taking these courses in sequence is recommended but not required.

NEHC 20601. Islamic Thought and Literature I. 100 Units.
This course covers the period from ca. 600 to 950, concentrating on the career of the Prophet Muhammad; Qur'an and Hadith; the Caliphate; the development of Islamic legal, theological, philosophical, and mystical discourses; sectarian movements; and Arabic literature.
Instructor(s): T. Qutbuddin Terms Offered: Autumn
Equivalent Course(s): NEHC 30601, CMES 30601, RLST 20401, HIST 25610, SOSC 22000, ISLM 30601, HIST 35610

NEHC 20602. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the "gunpowder empires" (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

NEHC 20603. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Spring
Equivalent Course(s): SOSC 22200, HIST 25616, RLST 20403, ISLM 30603, NEHC 30603, HIST 35616

NEHC 20602. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the "gunpowder empires" (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602
NEHC 20603. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Spring
Equivalent Course(s): SOSC 22200, HIST 25616, RLST 20403, ISLM 30603, NEHC 30603, HIST 35616

SALC 20100-20200. Introduction to the Civilizations of South Asia I-II.
This sequence introduces core themes in the formation of culture and society in South Asia from the early modern period until the present. This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

SALC 20100. Introduction to the Civilizations of South Asia I. 100 Units.
The first quarter focuses on Islam in South Asia, Hindu-Muslim interaction, Mughal political and literary traditions, and South Asia’s early encounters with Europe.
Instructor(s): M. Alam Terms Offered: Winter
Equivalent Course(s): SOSC 23000, HIST 10800, ANTH 24101

SALC 20200. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SOSC 23100, HIST 10900, ANTH 24102

SALC 20200. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SOSC 23100, HIST 10900, ANTH 24102

CIVILIZATION STUDIES ABROAD PROGRAMS
Students may also complete their civilization studies requirement by participating in one of the College’s Study Abroad programs. For more information about these programs, consult the Study Abroad section of this catalog or visit study-abroad.uchicago.edu.
All first-year students take a Humanities sequence that engages them in the pleasure and challenge of humanistic works through the close reading of literary, historical, and philosophical texts. These are not survey courses; rather, they work to establish methods for appreciating and analyzing the meaning and power of exemplary texts. The class discussions and the writing assignments are based on textual analysis. In combination with these courses, students are required to take a zero-unit seminar (HUMA 19100 Humanities Writing Seminars) that introduces the analysis and practice of expert academic writing.

All HUMA 10000-level sequences that meet general education requirements, listed below, are available as either a two-quarter sequence (Autumn, Winter) or as a three-quarter sequence (Autumn, Winter, Spring). Once students begin a sequence, they are expected to remain in the same sequence. Students are expected to complete this foundational requirement in their first year. NOTE: Students registered in any of the sequences below must attend the first and second class sessions or their registration will be dropped.

The sequences that complete the general education requirements in Humanities are listed here. Descriptions of individual courses are below.

HUMA 11000-11100-11200. Readings in World Literature I-II-III. 300 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Selected readings may include: Homer’s "Odyssey," the "Epic of Gilgamesh," the ancient Indian "Mahabharata," Saint Augustine’s "Confessions," Vladimir Nabokov’s "Speak, Memory: An Autobiography Revisited," and Wole Soyinka’s "Ake: The Years of Childhood." Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 11100. Readings in World Literature II. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence.

HUMA 11000. Readings in World Literature I. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence.

HUMA 11100. Readings in World Literature II. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 11000
Note(s): These courses must be taken in sequence.
HUMA 11200. Readings in World Literature III. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 11100
Note(s): These courses must be taken in sequence.

HUMA 11100. Readings in World Literature II. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 11000
Note(s): These courses must be taken in sequence.

HUMA 11200. Readings in World Literature III. 100 Units.
This sequence examines the relationship between the individual and society in a rich and exciting selection of literary texts from across the globe. We address the challenges faced by readers confronting foreign literatures, reading across time and cultures, and reading texts in translation. We focus on two major literary themes and genres: Epic Poetry (Autumn Quarter) and Autobiography (Winter Quarter). Students wishing to take the third quarter of this sequence in the Spring Quarter choose among a selection of topics.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 11100
Note(s): These courses must be taken in sequence.

HUMA 11500-11600-11700. Philosophical Perspectives I-II-III.
This sequence considers philosophy in two lights: as an ongoing series of arguments addressed to certain fundamental questions about the place of human beings in the world and as a historically situated discipline interacting with and responding to developments in other areas of thought and culture. Readings tend to divide between works of philosophy and contemporaneous works of literature, but they may also include texts of scientific, religious, or legal practice.

HUMA 11500. Philosophical Perspectives I. 100 Units.
In Autumn Quarter, we explore fundamental ethical questions concerning virtue, the good life, the role of the individual in society as they were formulated by ancient Greek writers and philosophers. Our focus is on Plato, Aristotle, and the Greek dramatists.
Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 11600. Philosophical Perspectives II. 100 Units.
Winter Quarter explores metaphysical and epistemological questions as they arise in seminal writings of the sixteenth and seventeenth centuries. Skeptical arguments about the possibility of various kinds of knowledge and of freedom are a focus. Authors tend to include Descartes, Hume, Voltaire, Newton, and others.
Terms Offered: Winter
Prerequisite(s): HUMA 11500
Note(s): These courses must be taken in sequence.

HUMA 11700. Philosophical Perspectives III. 100 Units.
In Spring Quarter we discuss questions having to do with agency and morality, considered from the vantage point of Enlightenment and post-Enlightenment thought. Authors include Hume and Kant.
Terms Offered: Spring
Prerequisite(s): HUMA 11600
Note(s): These courses must be taken in sequence.

HUMA 11600. Philosophical Perspectives II. 100 Units.
Winter Quarter explores metaphysical and epistemological questions as they arise in seminal writings of the sixteenth and seventeenth centuries. Skeptical arguments about the possibility of various kinds of knowledge and of freedom are a focus. Authors tend to include Descartes, Hume, Voltaire, Newton, and others.
Terms Offered: Winter
Prerequisite(s): HUMA 11500
Note(s): These courses must be taken in sequence.
HUMA 11700. Philosophical Perspectives III. 100 Units.
In Spring Quarter we discuss questions having to do with agency and morality, considered from the vantage point of Enlightenment and post-Enlightenment thought. Authors include Hume and Kant.
Terms Offered: Spring
Prerequisite(s): HUMA 11600
Note(s): These courses must be taken in sequence.

HUMA 12050-12150-12250. Greece and Rome: Texts, Traditions, Transformations I-II-III.
This sequence takes the view that traditions are not normative but formative: less stable, pre-given structures than self-constituting and self-questioning bodies in perennial transformation. In that light, it offers a grounding in some major texts of the Classical Greek and Latin traditions (read in English translation) as well as their reception at pivotal moments in modernity. These are texts that have sustained a community of reading and commentary, debate and critique, ever since their inception, and which continue to resonate through our institutions and values today. In our encounter with them, we will develop the tools to follow our curiosity and read in inquiring and original ways, as well as to defend our readings with respect to the texts. Each quarter is devoted to one or two genres and each includes Greek, Roman, and modern texts that build on each other.

Autumn opens with the epic. Winter sees us delve into the paired genres of tragedy and history, examining how each tries to explain and evaluate societies through distinct modes of narrative and speech. Spring alternates between comedy as a vehicle for subverting, defending, or reconciling ourselves to social norms and the subject of love in philosophical and literary perspectives.

HUMA 12050. Greece and Rome: Texts, Traditions, Transformations I. 100 Units.
Autumn Quarter examines the epic tradition with a focus on warfare, foundation, and the social order. Readings cover Homer’s Iliad, Vergil’s Aeneid, and Dante’s Inferno.
Instructor(s): Staff
Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 12150. Greece and Rome: Texts, Traditions, Transformations II. 100 Units.
The Winter Quarter focuses on how tragedy and history confront familial, social, and external conflict in different genres. Readings cover Aeschylus, “Oresteia,” selections from the histories of Herodotus, Livy, and Tacitus, tragedies by Seneca, and several of Shakespeare’s history plays.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): HUMA 12050
Note(s): These courses must be taken in sequence.

HUMA 12250. Greece and Rome: Texts, Traditions, Transformations III. 100 Units.
Spring Quarter picks up comedy from Dante’s Divina Commedia—the Inferno was read in the Autumn—and explores the genre head-on with readings from Aristophanes, Plautus, and Shakespeare that treat social integration with a lighter touch than do the texts from Autumn and Winter.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): HUMA 12150
Note(s): These courses must be taken in sequence.

HUMA 12150. Greece and Rome: Texts, Traditions, Transformations II. 100 Units.
The Winter Quarter focuses on how tragedy and history confront familial, social, and external conflict in different genres. Readings cover Aeschylus, “Oresteia,” selections from the histories of Herodotus, Livy, and Tacitus, tragedies by Seneca, and several of Shakespeare’s history plays.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): HUMA 12050
Note(s): These courses must be taken in sequence.

HUMA 12250. Greece and Rome: Texts, Traditions, Transformations III. 100 Units.
Spring Quarter picks up comedy from Dante’s Divina Commedia—the Inferno was read in the Autumn—and explores the genre head-on with readings from Aristophanes, Plautus, and Shakespeare that treat social integration with a lighter touch than do the texts from Autumn and Winter.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): HUMA 12150
Note(s): These courses must be taken in sequence.
HUMA 12300-12400-12500. Human Being and Citizen I-II-III.
Socrates asks, "Who is a knower of such excellence, of a human being and of a citizen?" We are all concerned to discover what it means to be an excellent human being and an excellent citizen, and to learn what a just community is. This sequence explores these and related matters, and helps us to examine critically our opinions about them. To this end, we read and discuss seminal works of the Western tradition, selected both because they illuminate the central questions and because, read together, they form a compelling record of human inquiry. Insofar as they force us to consider different and competing ways of asking and answering questions about human and civic excellence, it is impossible for us to approach these writings as detached spectators. Instead, we come to realize our own indebtedness to our predecessors and are inspired to continue their task of inquiry. In addition to providing a deeper appreciation of who we are as human beings and citizens, this sequence aims to cultivate the liberating skills of careful reading, writing, speaking, and listening. 2017–18 readings for this general education sequence consisted of philosophical and literary texts from Ancient Greece to the twentieth century, organized around the themes of "Human Being" and "Citizen."

HUMA 12300. Human Being and Citizen I. 100 Units.
Socrates asks, "Who is a knower of such excellence, of a human being and of a citizen?" We are all concerned to discover what it means to be an excellent human being and an excellent citizen, and to learn what a just community is. This course explores these and related matters, and helps us to examine critically our opinions about them.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 12400. Human Being and Citizen II. 100 Units.
Readings in the Autumn Quarter included Genesis, Plato (Euthyphro and Apology), and Homer (Iliad). The Winter Quarter focused on Aristotle's Nicomachean Ethics, Augustine's Confessions, and Dante's Inferno. The texts for the Spring Quarter were Shakespeare's The Tempest, Kant's "What Is Enlightenment?" and Groundwork of the Metaphysics of Morals, No Name in the Street by James Baldwin, and Virginia Woolf's To the Lighthouse.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 12300
Note(s): These courses must be taken in sequence.

HUMA 12500. Human Being and Citizen III. 100 Units.
Socrates asks, "Who is a knower of such excellence, of a human being and of a citizen?" We are all concerned to discover what it means to be an excellent human being and an excellent citizen, and to learn what a just community is. This course explores these and related matters, and helps us to examine critically our opinions about them.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 12400
Note(s): These courses must be taken in sequence.

HUMA 12400. Human Being and Citizen II. 100 Units.
Readings in the Autumn Quarter included Genesis, Plato (Euthyphro and Apology), and Homer (Iliad). The Winter Quarter focused on Aristotle's Nicomachean Ethics, Augustine's Confessions, and Dante's Inferno. The texts for the Spring Quarter were Shakespeare's The Tempest, Kant's "What Is Enlightenment?" and Groundwork of the Metaphysics of Morals, No Name in the Street by James Baldwin, and Virginia Woolf's To the Lighthouse.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 12300
Note(s): These courses must be taken in sequence.

HUMA 12500. Human Being and Citizen III. 100 Units.
Socrates asks, "Who is a knower of such excellence, of a human being and of a citizen?" We are all concerned to discover what it means to be an excellent human being and an excellent citizen, and to learn what a just community is. This course explores these and related matters, and helps us to examine critically our opinions about them.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 12400
Note(s): These courses must be taken in sequence.
HUMA 13500-13600-13700. Introduction to the Humanities I-II-III.
This sequence emphasizes writing, both as an object of study and as a practice. As we study the texts of the course, we pay special attention to questions about how they function as instances of writing: How does the writing of a text shape the way that we understand it? How does writing shape our sense of what we are doing in the humanities? Such questions about writing will lead to similar questions about language in general: How is our understanding shaped by the language we use? In the Autumn Quarter, we’ll ask these questions within classical and familiar norms for using language to argue, to analyze, to be accurate, to be logical, and so on. In Winter and Spring Quarters, we’ll move to challenges, and radical criticisms, of these familiar ideas. As to practice: The writing workload of the course is significant. Students will write at least one writing assignment each week, and we discuss these assignments in small writing workshops. This is not a course in remedial writing; rather it is a course for students who are particularly interested in writing or who want to become particularly proficient writers. Readings for the course are selected not thematically or chronologically, but to serve the focus on writing.

HUMA 13500. Introduction to the Humanities I. 100 Units.
In the Autumn Quarter, we read two of Plato’s Dialogues, the Declaration of Independence, selections from History of the Peloponnesian War, and a Shakespeare play.
Terms Offered: Autumn. Sequence not offered every year.
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 13600. Introduction to the Humanities II. 100 Units.
In the Winter Quarter, we read Descartes’ Meditations, Conrad’s Heart of Darkness, further selections from The Peloponnesian War, Woolf’s The Waves, and Nietzsche’s Beyond Good and Evil.
Terms Offered: Winter. Sequence not offered every year.
Prerequisite(s): HUMA 13500
Note(s): These courses must be taken in sequence.

HUMA 13700. Introduction to the Humanities III. 100 Units.
In the Spring Quarter, we read Plato’s Phaedrus with Derrida’s “Pharmakon,” Harriet Jacobs’s Incidents in the Life of a Slave Girl, still more selections from The Peloponnesian War, an experimental feminist essay, and Alison Bechdel’s Fun Home.
Terms Offered: Spring. Sequence not offered every year.
Prerequisite(s): HUMA 13600
Note(s): These courses must be taken in sequence.

HUMA 13600. Introduction to the Humanities II. 100 Units.
In the Winter Quarter, we read Descartes’ Meditations, Conrad’s Heart of Darkness, further selections from The Peloponnesian War, Woolf’s The Waves, and Nietzsche’s Beyond Good and Evil.
Terms Offered: Winter. Sequence not offered every year.
Prerequisite(s): HUMA 13500
Note(s): These courses must be taken in sequence.

HUMA 13700. Introduction to the Humanities III. 100 Units.
In the Spring Quarter, we read Plato’s Phaedrus with Derrida’s “Pharmakon,” Harriet Jacobs’s Incidents in the Life of a Slave Girl, still more selections from The Peloponnesian War, an experimental feminist essay, and Alison Bechdel’s Fun Home.
Terms Offered: Spring. Sequence not offered every year.
Prerequisite(s): HUMA 13600
Note(s): These courses must be taken in sequence.

HUMA 14000-14100-14200. Reading Cultures: Collection, Travel, Exchange I-II-III.
This sequence is devoted to the cultivation of the art of interpretation through the close reading of objects across a broad range of times and places, from the Homeric epic to contemporary film, folk tale to museum. In each case the goal is to work outward from the textual details—construing the term text generously so as to include any form of cultural production—and develop insight into the local emergence and global circulation of objects of interpretation. In the process the sequence explores questions about memory, home, and belonging; about the various historical forms of cultural production, from epic to folk tale, music, film, and novels; about the challenges of translation to responsible interpretation; about texts as formative sources of human community, inter-personal obligation, and transcendence; about hybridity and the legacy of colonialism; and, of course, about the role of humanistic inquiry in addressing all these questions. The year is divided into three conceptual themes that allow us to explore the above questions: collection, travel, and exchange. Readings in the past have included Homer, “The Odyssey”; “The Arabian Nights”; Ovid, “Metamorphoses”; Balzac, “Père Goriot”; Harriet Jacobs, “Incidents in the Life of a Slave Girl”; Pu Songling, “Strange Tales from a Chinese Studio”; Charlie Chaplin, “Modern Times”; Zora Neale Hurston, “Of Mules and Men”; T. S. Eliot, “The Waste Land”; museum visits; graphic novels; music, visual art, and cultural criticism.
HUMA 14000. Reading Cultures: Collection, Travel, Exchange I. 100 Units.
This sequence is devoted to the cultivation of the art of interpretation through the close reading of objects across a broad range of times and places, from the Homeric epic to contemporary film, folk tale to museum. In each case the goal is to work outward from the textual details-construing the term text generously so as to include any form of cultural production-and develop insight into the local emergence and global circulation of objects of interpretation.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 14100. Reading Cultures: Collection, Travel, Exchange II. 100 Units.
This sequence is devoted to the cultivation of the art of interpretation through the close reading of objects across a broad range of times and places, from the Homeric epic to contemporary film, folk tale to museum. In each case the goal is to work outward from the textual details-construing the term text generously so as to include any form of cultural production-and develop insight into the local emergence and global circulation of objects of interpretation.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 14000
Note(s): These courses must be taken in sequence.

HUMA 14200. Reading Cultures: Collection, Travel, Exchange III. 100 Units.
This sequence is devoted to the cultivation of the art of interpretation through the close reading of objects across a broad range of times and places, from the Homeric epic to contemporary film, folk tale to museum. In each case the goal is to work outward from the textual details-construing the term text generously so as to include any form of cultural production-and develop insight into the local emergence and global circulation of objects of interpretation.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 14100
Note(s): These courses must be taken in sequence.

HUMA 16000-16100-16200. Media Aesthetics: Image, Text, Sound I-II-III.
This sequence examines a question central to humanistic thought across cultures and historical periods: How do different kinds of media allow us to perceive and represent our world? We study how painting, photography, writing, film, song, and other media have allowed for new forms of knowledge, expression, and experience—but have also been seen as ethically dangerous or politically disruptive. The sequence traces philosophical and aesthetic debates about media from antiquity to the present in various cultural contexts; we examine discussions of image, text, and sound in Plato, Shakespeare, Nietzsche, W. E. B. Du Bois, Alfred Hitchcock, Toni Morrison, and recent critical theory. Throughout, we develop attention to the “aesthetics” of media by closely studying how specific aspects of complex works of art and literature lead audiences to think and feel in particular ways.

HUMA 16000. Media Aesthetics: Image, Text, Sound I. 100 Units.
Autumn Quarter focuses on images, imitation, and seeing. Images may seem to simply reflect the real, but they just as often distort or distance viewers from it. We explore the strangeness of images through Diego Velasquez’s Las Meninas, Plato’s Republic, Hitchcock’s Vertigo, and Toni Morrison’s The Bluest Eye.
Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.
HUMA 16100. Media Aesthetics: Image, Text, Sound II. 100 Units.
Winter Quarter focuses on writing, reading, and signs. Language is an extraordinarily flexible medium for representing events and experiences—but it also raises distinctive challenges of interpretation, decoding, and translation. We examine some of these challenges through Plato’s Phaedrus, Shakespeare’s Hamlet, Theresa Hak Kyung Cha’s Dictee, and Alison Bechdel’s Fun Home.
Terms Offered: Winter
Prerequisite(s): HUMA 16000
Note(s): These courses must be taken in sequence.

HUMA 16200. Media Aesthetics: Image, Text, Sound III. 100 Units.
Spring Quarter focuses on sound, music, and listening. How do sounds or noises become meaningful? Why are music and voice so effective at expressing desire, suffering, or even overwhelming the intellect? We explore these and other questions through William Blake’s Songs of Innocence and Experience, W.E.B. Du Bois’s The Souls of Black Folk, Nietzsche’s The Birth of Tragedy, contemporary albums, and sound art.
Terms Offered: Spring
Prerequisite(s): HUMA 16100
Note(s): These courses must be taken in sequence. For the option of taking the third quarter of Media Aesthetics as the Art-Music-Drama General Education requirement, see ARTV 16210.

HUMA 17000-17100-17200. Language and the Human I-II-III.
Language is at the center of what it means to be human and is instrumental in most humanistic pursuits. With it, we understand others, describe, plan, narrate, learn, persuade, argue, reason, and think. This course aims to provoke us to critically examine common assumptions that determine our understanding of language—and more specifically, the ways we, as speakers or writers, use it to communicate meaning.

HUMA 17000. Language and the Human I. 100 Units.
The Autumn Quarter of this sequence explores fundamental questions about the nature of language, concentrating on the conventional character of language as a system, and language in the individual. We discuss: the properties of human languages (spoken and signed) as systems of communication distinct from other forms (including animal and artificial systems), whether some languages are more primitive than others, how language is acquired, used, changes, and evolves, what it means to be bilingual. Typical texts used include Plato’s Cratylus, parts of Finnegans Wake, Locke, Truffaut’s L’enfant sauvage, Turing.
Terms Offered: Autumn
Note(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

HUMA 17100. Language and the Human II. 100 Units.
The Winter Quarter is generally devoted to examining how language mediates between the individual and society; its origin, spread, evolution, and development, and its role in power, identity, culture, nationalism, thought, and persuasion, as well as its use in naming, politeness, irony, and metaphor. Further examined are the nature of translation, writing systems, language and artificial intelligence, invented languages, and to what extent language shapes or influences perception of the world and cognition. Readings typically from Whorf, Orwell, Grice, and others.
Terms Offered: Winter
Prerequisite(s): HUMA 17000
Note(s): These courses must be taken in sequence.
HUMA 17200. Language and the Human III. 100 Units.
The topics addressed in the Spring Quarter vary from year to year: We may look at language and poetry, the nature of metaphor, rhetorical force of language. These questions are examined through classic and contemporary primary and secondary literature, with readings which may be drawn from literary, linguistic, philological, and philosophical traditions (in varying years, from parts of the Bible, Beowulf, Chaucer, Descartes, and Rousseau to Borges, Chomsky, and others).
Terms Offered: Spring
Prerequisite(s): HUMA 17100
Note(s): These courses must be taken in sequence.

HUMA 17100. Language and the Human II. 100 Units.
The Winter Quarter is generally devoted to examining how language mediates between the individual and society, its origin, spread, evolution, and development, and its role in power, identity, culture, nationalism, thought, and persuasion, as well as its use in naming, politeness, irony, and metaphor. Further examined are the nature of translation, writing systems, language and artificial intelligence, invented languages, and to what extent language shapes or influences perception of the world and cognition. Readings typically from Whorf, Orwell, Grice, and others.
Terms Offered: Winter
Prerequisite(s): HUMA 17000
Note(s): These courses must be taken in sequence.

HUMA 18000-18100-18200. Poetry and the Human I-II-III.
What is poetry and why do we do it? This three-quarter sequence examines the practice of poetry as a form of communication, linguistic innovation, and embodied presence. How is poetry as language and action different from other forms of activity? What is the role of poetry in society, in regard to memory, performance, storytelling, and history; ritual and creation; knowledge and formation of selfhood; institution and revolution? This sequence addresses these questions in the poetry of different eras and peoples, including works of Homer, Sappho, Catullus, poets from the T'ang period in China, Rumi, Ki no Tsurayuki, John Donne, Louis Zukofsky, Dahlia Ravikovich, Anne Carson, N. Scott Momaday, Claudia Rankine, and others. It provides students with skills in the close reading of texts and performance and a grasp of the literary, philosophical, and theoretical questions that underpin the humanities. In the spring, students may take a third quarter of Humanities or shift into a related Arts general education course (CRWR 18200).

HUMA 18000. Poetry and the Human I. 100 Units.
In Autumn (form/formation/transformation), we closely analyze poetry to understand its distinctive qualities, looking at questions of form and rhythm, translation and adaptation, and experimentation with genre. We also explore argumentation, criticism, and the role of poetry in mapping creation through practices of language, image, and sound.
Instructor(s): Staff Terms Offered: Autumn
Note(s): These courses must be taken in sequence

HUMA 18100. Poetry and the Human II. 100 Units.
In Winter (crisis/performance/politics), we turn to questions of social rupture, breakdown, and reformation as we consider the ways that poetry revolts, reflects, and rebuilds in political crises. We will also look at poetry in performance, and performance as poetry, to consider how poetry is practiced in non-textual media such as spoken word, film, and dance.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 18000
Note(s): These courses must be taken in sequence

HUMA 18200. Poetry and the Human III. 100 Units.
In the Spring Humanities course (object/event/narrative), we consider the poem first as an object that expresses the processes of writing and the materiality of the body, then as a staged and sonic event, and finally as a way of shaping a life or of conceiving an afterlife. Note: CRWR 18200 may also be taken as the third quarter of Poetry & the Human, and is counted towards the Art-Music-Drama core requirement.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 18100
Note(s): These courses must be taken in sequence
HUMA 18100. Poetry and the Human II. 100 Units.
In Winter (crisis/performance/politics), we turn to questions of social rupture, breakdown, and reformation as we consider the ways that poetry revolts, reflects, and rebuilds in political crises. We will also look at poetry in performance, and performance as poetry, to consider how poetry is practiced in non-textual media such as spoken word, film, and dance.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HUMA 18000
Note(s): These courses must be taken in sequence

HUMA 18200. Poetry and the Human III. 100 Units.
In the Spring Humanities course (object/event/narrative), we consider the poem first as an object that expresses the processes of writing and the materiality of the body, then as a staged and sonic event, and finally as a way of shaping a life or of conceiving an afterlife. Note: CRWR 18200 may also be taken as the third quarter of Poetry & the Human, and is counted towards the Art-Music-Drama core requirement.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): HUMA 18100
Note(s): These courses must be taken in sequence

WRITING SEMINARS
HUMA 19100. Humanities Writing Seminars. 000 Units.
These seminars introduce students to the analysis and practice of expert academic writing. Experts must meet many familiar standards for successful writing: clear style, logical organization, and persuasive argument. But because they work with specialized knowledge, experts also face particular writing difficulties: they must be clear about complexities and specific about abstractions; they must use uncomplicated organization for very complicated ideas; they must create straightforward logic for intricate arguments; they must be concise but not incomplete, direct but not simplistic; they must clarify the obscure but not repeat the obvious; and they must anticipate the demands of aggressively skeptical readers. The seminars do not repeat or extend the substantive discussion of the Humanities class; they use the discussions and assignments from those classes as a tool for the advanced study of writing. We study various methods not only for the construction of sophisticated and well-structured arguments but also for understanding the complications and limits of those arguments. These seminars also address issues of readership and communication within expert communities. As students present papers in the seminars, we can use the reactions of the audience to introduce the techniques experts can use to transform a text from one that serves the writer to one that serves the readers.
Terms Offered: Autumn, Winter, Spring
Note(s): These seminars are available only in combination with either a two- or a three-quarter general education sequence in the Humanities.

COLLEGIATE COURSES
The 20000-level Collegiate courses in Humanities seek to extend humanistic inquiry beyond the scope of the general education requirements. A few of them also serve as parts of special degree programs. All of these courses are open as electives to students from any Collegiate Division.

Course Descriptions for Collegiate Courses
HUMA 02980. Practicum. 25 Units.
This course is for students who secure a summer internship. For details, visit careeradvancement.uchicago.edu/jobs-internships-research/internships-for-credit. Students write a short paper (two to three pages) and give an oral presentation reflecting on their internship experience.
Instructor(s): D. Spatz Terms Offered: Summer
Note(s): Must be taken for P/F grading; students who fail to complete the course requirements will receive an F on their transcript (no W will be granted). Students receive 025 units of credit at completion of course. Course meets once in Spring Quarter and once in Autumn Quarter. Course fee $150; students in need of financial aid should contact Jay Ellison at 702.8609.
Equivalent Course(s): SOSC 02980

HUMA 20710-20711-20712-20713. At the Piano I-II-III-IV.
Keyboard Studies for Non-Music Majors

HUMA 20710. At the Piano-I: Keyboard Studies for Non-Music Majors. 100 Units.
Keyboard Studies for Non-Music Majors
Instructor(s): C. Bohlman Terms Offered: TBD

HUMA 20711. At the Piano II: Keyboard Studies for Non-Music Majors. 100 Units.
Keyboard Studies for Non-Music Majors
Instructor(s): C. Bohlman Terms Offered: TBD
Prerequisite(s): HUMA 20710 or consent of instructor
HUMA 20712. At the Piano III: Keyboard Studies for Non-Music Majors. 100 Units.
Keyboard Studies for non-Music majors
Instructor(s): C. Bohlman Terms Offered: TBD
Prerequisite(s): HUMA 20710 or consent of instructor.

HUMA 20713. At the Piano IV: Keyboard Studies for Non-Music Majors. 100 Units.
Keyboard Studies for non-Music majors
Instructor(s): C. Bohlman Terms Offered: TBD
Prerequisite(s): HUMA 20710 or consent of instructor.

HUMA 20711. At the Piano II: Keyboard Studies for Non-Music Majors. 100 Units.
Keyboard Studies for Non-Music Majors
Instructor(s): C. Bohlman Terms Offered: TBD
Prerequisite(s): HUMA 20710 or consent of instructor

HUMA 25202. Media Ecology: Embodiment & Software. 100 Units.
Media ecology examines how the structure and content of our media environments-online and offline, in words, images, sounds, and textures-affect human perception, understanding, feeling, and value; or alternatively, media ecology investigates the massive and dynamic interrelation of processes and objects, beings and things, patterns and matter. At stake are issues about agency-human or material-and about determinism-how does society or culture interact with or shape its technologies, or vice versa? This course investigates theories of media ecology by exploring systems of meanings that humans embody (cultural, social, ecological) in conjunction with the emerging field of software studies about the cultural, political, social, and aesthetic impacts of software (e.g., code, interaction, interface). In our actual and virtual environments, how do we understand performing our multiple human embodiments in relation to other bodies (organism or machine) in pursuit of social or political goals?
Instructor(s): M. Browning Terms Offered: Autumn
Note(s): Not offered 2018-19
Equivalent Course(s): LLSO 27801, TAPS 28452, HIPS 25203, CMST 25204, MAAD 25204

HUMA 25206. Digital Culture: Artificial Intelligence, Algorithms, and the Web. 100 Units.
In contrast to print culture and electronic culture, yet embedded in them, contemporary digital culture engages us in human-computer systems empowered as media for mobile communication in the global network society. In our conjoined online and offline environments, we inhabit human-computer hybrids in which (for instance) we learn, imagine, communicate, pay attention, and experience affect. How can we understand and critique our theories, concepts, practices, and technologies of intelligence and information in relation to the capacities of these digital machines with which we co-evolve? For exploring this question, our case studies include comparing artificial and natural intelligences, as well as examining algorithms and their socio-political impacts, in current web functionalities such as search (Google) and social media (Facebook, Twitter).
Instructor(s): Browning, Margot Terms Offered: Autumn
Equivalent Course(s): HIPS 25206, LLSO 25206

HUMA 29700. Reading Course. 100 Units.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and senior adviser.
Note(s): Students are required to submit the College Reading and Research Course Form.
The courses that satisfy the general education requirement in the mathematical sciences present broadly applicable techniques for formulating, analyzing, and solving problems, and for evaluating proposed solutions. Options to complete this requirement include some Computer Science, Statistics, and Mathematics offerings, including calculus.

Students may select from the following lists of courses.

**NON-CALCULUS COURSES**

All non-calculus options may be taken individually or, when available, as a sequence. These courses may also be combined to fulfill 200 units of general education requirements (i.e., MATH 11200 and STAT 20000). Students who satisfy the requirement with something other than calculus will take 100 or 200 units of approved non-calculus course work. If only 100 units are used for the mathematical sciences requirement, an additional 100 units will be taken in either the physical or biological sciences categories (for a total of 300 units).

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 10200</td>
<td>Introduction to Programming for the World Wide Web II</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 11000-11100</td>
<td>Multimedia Programming as an Interdisciplinary Art I-II</td>
<td>200</td>
</tr>
<tr>
<td>CMSC 15100-15200</td>
<td>Introduction to Computer Science I-II</td>
<td>200</td>
</tr>
<tr>
<td>CMSC 16100-16200</td>
<td>Honors Introduction to Computer Science I-II</td>
<td>200</td>
</tr>
<tr>
<td>MATH 11200-11300</td>
<td>Studies in Mathematics I-II</td>
<td>200</td>
</tr>
<tr>
<td>One of the following courses:</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>STAT 20000</td>
<td>Elementary Statistics</td>
<td></td>
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<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications</td>
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^ Credit may be granted by examination.

# Statistics AP credit may not be used in combination with a calculus course, with STAT 20000 (http://collegecatalog.uchicago.edu/search/?P=STAT%2020000) Elementary Statistics, or with STAT 22000 (http://collegecatalog.uchicago.edu/search/?P=STAT%2022000) Statistical Methods and Applications. Students may not receive credit for both STAT 20000 and STAT 22000.

**CALCULUS SEQUENCES**

Students must meet the mathematical sciences requirement with the first two quarters of a calculus sequence if they are preparing for the health professions or if they anticipate majors in the Physical or Biological Sciences, Economics, Psychology, or Public Policy Studies. Other restrictions may apply. Students should consult their College adviser or departmental counselor about course choices. Those who take calculus must earn credit for the first two quarters of a calculus sequence (200 units).

Information regarding calculus placement can be found on the Examination Credit page.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II ^</td>
<td>200</td>
</tr>
<tr>
<td>MATH 16110 &amp; MATH 16210</td>
<td>Honors Calculus I (IBL) and Honors Calculus II (IBL)</td>
<td>200</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td>200</td>
</tr>
</tbody>
</table>

^ Credit may be granted by examination.
General education courses in the Physical Sciences benefit from a rich tradition of scientific discovery at the University of Chicago. The late University of Chicago professor and Nobel laureate Subrahmanyan Chandrasekhar, who predicted the existence of black holes based on theoretical considerations, described well the importance of science in our lives when he said, "Science is a perception of the world around us. Science is a place where what you find in nature pleases you."

Under the designation PHSC, the Physical Sciences Collegiate Division offers several sequences of courses from the Astronomy and Astrophysics, Chemistry, Geophysical Sciences, and Physics departments, tailored to provide an interesting and useful education for non-scientists in their goal of satisfying their general education requirement in the physical sciences. The goal of general education in the physical sciences is to engage in the student the ability to understand and assess our understanding of the physical world. One can argue that the fundamental tenet of liberal education at the University of Chicago is to cultivate an appreciation for critical inquiry and the basis for judgement. The physical sciences contribute to this mission in teaching the principles of experimentation, observation, and the principles of scientific inquiry. Chemistry and physics are advanced through laboratory experiments that study the structure of nature and build models which we extrapolate from those observations. Astronomy and geophysical sciences develop methods to make inferences about the world around us based on observations which cannot always be recreated in a laboratory.

While the Mathematics, Statistics, and Computer Science Departments do not offer PHSC courses, these subjects are strongly connected to the physical sciences. Mathematics is the language of science and the only known way to make quantitative assessments about the experiments. Statistics teaches us how to interpret experimental results and how to assess a level of confidence in the conclusions derived from them, while computer science enables us to analyze large and complex data and simulate physical processes whose properties cannot be determined mathematically. The techniques developed and applied to scientific inquiry provide valuable tools to the basis of inquiry in any field, and indeed in our lives in general.

Students are required to take at least two courses in the physical sciences to satisfy the general education requirement. This requirement may be met by taking an introductory sequence in Chemistry, Geosciences, or Physics, or by taking any acceptable pairing of Physical Sciences (PHSC) courses, which generally have a broader focus than the disciplinary sequences. It is strongly recommended that the general education sequence in the physical sciences be completed in the first two years.

**GENERAL EDUCATION SEQUENCES FOR SCIENCE MAJORS**

The following introductory sequences may be used to satisfy the general education requirement in the physical sciences for all students, although these tend to be taken by sciences majors or by students who have a particular need for science (namely, premeds). The sequences are:

- CHEM 10100-CHEM 10200
- CHEM 11100-CHEM 11200*
- CHEM 12100-CHEM 12200
- GEOS 13100-GEOS 13200
- PHYS 12100-PHYS 12200*#
- PHYS 13100-PHYS 13200
- PHYS 14100-PHYS 14200*

*For information, see the Placement Tests and Advanced Placement Credit sections elsewhere in this catalog.
#PHYS 12100 has the prerequisite of CHEM 11300 or CHEM 12300.

**PHYSICAL SCIENCES COURSES FOR NON-SCIENCE MAJORS**

There are several sequences in the physical sciences, each of which introduces a different discipline and different aspects of scientific knowledge. Physical Sciences (PHSC) courses fall mainly into four general categories that we might conveniently label as "Physics," "Astronomy and Astrophysics," "Geosciences," and "Chemistry." As a general rule, courses from two different categories may not be combined to satisfy the two-quarter general education requirement in the physical sciences. It is strongly recommended that the general education sequence in the physical sciences be completed in the first two years. Some PHSC courses restrict registration for students beyond the second year.

Students who seek to deviate from the combinations identified here must submit a petition to the master of the Physical Sciences Collegiate Division, Harper Memorial Library 235 (HM 235).

The PHSC courses in the Physics category are PHSC 11100-11200 Modern Physics I-II, PHSC 11300 Everyday Physics, and PHSC 11400-11500 Life in the Universe I-II; PHSC 11600 Physics for Future Presidents:
Fundamental Concepts and Applications, and PHSC 11700 Physics for Future Presidents: Energy and Sustainability. The approved sequences among these courses are listed below. Other sequences are not permitted.

PHSC 11100-PHSC 11200
PHSC 11100-PHSC 11300
PHSC 11400
PHSC 11600-11700 Physics for Future Presidents: Energy and Sustainability; Physics for Future Presidents: Fundamental Concepts and Applications

Students wishing to take a three-quarter Physical Sciences sequence may take PHSC 11100-11200-11300, although at present only one of PHSC 11200 and PHSC 11300 is offered in any given year. Students wishing to take a three quarter Physical Sciences sequence may also combine PHSC 11600-11700 with any other Physical Sciences core courses except PHSC 11100.

The PHSC courses in the Geosciences category are PHSC 10100 Origin and Evolution of the Solar System and the Earth, PHSC 10800 Earth as a Planet: Exploring Our Place in the Universe, PHSC 11000 Environmental History of the Earth, PHSC 13400 Global Warming: Understanding the Forecast, and PHSC 13600 Natural Hazards. The only approved sequences among these courses are listed below. The courses in these sequences can be taken in any order. Under no circumstances may a student get credit for both PHSC 10100 and PHSC 10800.

Below is a summary of approved courses:

PHSC 10100-PHSC 11000
PHSC 10100-PHSC 13400
PHSC 10800-PHSC 11000
PHSC 10800-PHSC 13400
PHSC 11000-PHSC 13400
PHSC 11000-PHSC 13600
PHSC 12300-PHSC 13400
PHSC 13400-PHSC 13600

There is one sequence of PHSC courses with a focus on Chemistry, PHSC 12300 Chemistry for an Alternative Energy Economy, PHSC 12400 The Chemistry of Big Problems, and PHSC 12500 Molecular Mechanisms of Human Disease. PHSC 12300 may also be paired with PHSC 13400 Global Warming: Understanding the Forecast.

PHSC 12300-PHSC 12400
PHSC 12300-PHSC 12500
PHSC 12400-PHSC 12500
PHSC 12300-PHSC 13400

Beginning in the 2017–18 academic year, a 5 on the AP Chemistry exam conferred credit for CHEM 11100. Students who have credit for CHEM 11100 by either taking the course or by AP credit and do not wish to take CHEM 11200 or 12200 may complete the general education requirement with either of the following three courses offered by the Department of Chemistry:

PHSC 12300
PHSC 12400
PHSC 12500

Two sequences are available that pair Geosciences and Astronomy and Astrophysics courses. The approved sequences are PHSC 10800 Earth as a Planet: Exploring Our Place in the Universe + PHSC 12720 Exoplanets, and PHSC 10100 The Origin and Evolution of the Solar System and the Earth + PHSC 12720 Exoplanets.

PHSC 10100-PHSC 12720
PHSC 10800-PHSC 12720

Students who wish to take a three-quarter sequence may enroll accordingly: PHSC 12700 Stars (Autumn Quarter) + PHSC 10100 The Origin and Evolution of the Solar System and the Earth (Winter Quarter) + PHSC 12720 Exoplanets (Spring Quarter).

PHSC 12700-PHSC 10100-PHSC 12720
The on-campus PHSC courses in the Astronomy and Astrophysics category are PHSC 12600 Matter, Energy, Space, and Time, PHSC 12610 Black Holes, PHSC 12620 The Big Bang, PHSC 12700 Stars, PHSC 12710 Galaxies, and PHSC 12720 Exoplanets. PHSC 12600-12610-12620 is a logical progression that applies physical principles based on terrestrial experiments to the cosmos at large. Similarly, PHSC 12700-12710-12720 is a logical progression that concerns observed properties of important classes of astronomical objects. Thus, a two-quarter sequence can be built most naturally from 12600 + 12610 or 12600 + 12620, and similarly from 12700 + 12710, 12700 + 12720 or 12710 + 12720. It is also possible to make two-quarter sequences from 12600 + 12710 (galaxies are an example of structure that evolved from early conditions), from 12700 + 12610 (black holes are an end state of stellar evolution), and from PHSC 12600 + 12700.

PHSC 12600 must be taken as the prerequisite before PHSC 12610 or PHSC 12620. Either PHSC 12700 or PHSC 12710 can be taken as the prerequisite before PHSC 12720. Three-quarter sequences may be created by adding any third of the six courses, subject to prerequisite restrictions. The approved sequences among these courses are:

- PHSC 12600-PHSC 12610
- PHSC 12600-PHSC 12620
- PHSC 12600-PHSC 12700
- PHSC 12600-PHSC 12710
- PHSC 12700-PHSC 12610
- PHSC 12700-PHSC 12620
- PHSC 12700-PHSC 12710
- PHSC 12710-PHSC 12620

Every Spring Quarter a three-course Astronomy program (http://study-abroad.uchicago.edu/programs/paris-astronomy) is offered in Paris, composed from the PHSC courses numbered in the 12600s and 12700s that are offered on campus. The Astronomy program in Paris satisfies the general education requirement in the physical sciences.

PHSC 11900 and PHSC 12000 were offered for the last time in academic year 2014–15. PHSC 11902 was offered for the last time in summer 2015. Students who have taken PHSC 11900 or PHSC 11902 may complete their general education requirement by taking PHSC 12600, PHSC 12620*, PHSC 12710, or PHSC 12720. Students who have taken PHSC 12000 may complete their general education requirement by taking PHSC 12600, PHSC 12610, PHSC 12700, or PHSC 12720**. For students who do not have a preference for a particular course, suggested pairings are PHSC 11900 with PHSC 12600 and PHSC 12000 with PHSC 12600 or 12700. Please note: PHSC 11900 may not be combined with PHSC 12610 or PHSC 12700, and PHSC 12000 may not be combined with PHSC 12620 or PHSC 12710.

* Discouraged because PHSC 11900 may not provide adequate preparation for PHSC 12620.

** Discouraged because PHSC 12000 may not provide adequate preparation for PHSC 12720.

PHSC course electives that fit into the Astronomy and Astrophysics category are numbered in the 18000s. These courses may only be used as a third physical sciences general education course and may be combined with any acceptable two-quarter sequence, including those outside of the Astronomy and Astrophysics category.

Note on General Education in the Sciences:
Along with one of these two-quarter sequences, students must register for at least two quarters of an approved biological sciences sequence and at least one quarter of an approved mathematical science. A sixth quarter must be taken in any one of the three areas: physical sciences, biological sciences, or mathematical sciences. (If the mathematical sciences requirement is met by taking calculus, two quarters must be taken.)

General Education Courses

PHSC 10100. Origin and Evolution of the Solar System and the Earth. 100 Units.
This course examines the physical and chemical origins of planetary systems, the role of meteorite studies in this context, and a comparison of the Earth with neighboring planets. It then turns to chemical and physical processes that lead to internal differentiation of the Earth. Further topics include the thermal balance at the Earth's surface (glaciation and the greenhouse effect), and the role of liquid water in controlling crustal geology and evolution. (L)
Instructor(s): A. Davis Terms Offered: Winter
PHSC 10800. Earth as a Planet: Exploring Our Place in the Universe. 100 Units.
This course explores the diversity of bodies in our Solar System, and the physical and chemical processes that have shaped them over their histories. We will also discuss how these studies have carried us away from an Earth-centered view of the universe to one where Earth is just one of billions of planets that exist in our galaxy. Topics to be covered include: early observations of the Solar System and the laws of planetary motion, the formation and evolution of the Moon, the structure and geophysical evolution of the planets, and the search for habitable environments outside of Earth. (L)
Instructor(s): F. Ciesla Terms Offered: Autumn

PHSC 11000. Environmental History of the Earth. 100 Units.
This course considers how physical and biological processes determine environmental conditions at the surface of the Earth, and how environments have changed over the 4.5 billion-year history of Earth. Topics include the methods of historical inference in geology; major transitions in the history of life, including the origin of life, the evolution of oxygen-producing photosynthesis, the origin of animals, and the series of massive extinctions that have repeatedly re-set ecosystems both on land and in the sea; and ecosystem evolution, including the environmental effects of human evolution. Labs involve hands-on study of rock and fossil specimens, and analysis and interpretation of datasets drawn from the scientific literature and/or faculty research programs.
Instructor(s): M. Webster; S. Kidwell Terms Offered: Spring

PHSC 11100. Modern Physics I: Modern Physics in the Everyday World. 100 Units.
This course will introduce key concepts in classical and quantum physics and will relate them to things we encounter everyday, such as lasers, microwaves, and magnetic levitation. It will also discuss some of the recent developments in chaos, nanotechnology, and quantum computing, and how they will change the world we live in. (L)
Terms Offered: Winter
Note(s): Must be taken with either PHSC 11200 or PHSC 11300

PHSC 11200. Modern Physics II: Paradoxes in Modern Physics. 100 Units.
Physics advancements are often the result of conflict between, on the one hand, existing ideas and speculations, and on the other, observations and measurements. In this course, we explore historical and modern paradoxes in physics including quantum phenomena, elementary particle physics, and others. We match common sense and sensibility with scientific abstraction to broaden our understanding of the physical world.
Terms Offered: Winter
Prerequisite(s): PHSC 11100
Note(s): Must be taken with PHSC 11100

PHSC 11300. Everyday Physics. 100 Units.
This course will be a walking tour through various topics in physics. It is not organized in the traditional way (mechanics, heat, electromagnetism, quantum mechanics, and relativity) but rather will look at real-world phenomena and try to figure out what is going on. Relying somewhat on knowledge gained in PHSC 11100, we will ask questions about the world around us. No formulas will be used. Questions might include, "Which draws more water from Lake Michigan, evaporation or the city of Chicago?" and "How does my cellphone work and what can I do to improve its reception?" The course will also address more substantial topics such as measuring the density of air, figuring out whether airplanes should be able to fly, estimating the density of the Sun, and determining the size of molecules. (L)
Terms Offered: TBD
Prerequisite(s): PHSC 11100 or consent of instructor

PHSC 12300. Chemistry for an Alternative Energy Economy. 100 Units.
This course will cover the chemistry of alternative energy technologies and the potential for science to provide climate change solutions. Topics will include both non-renewable energy sources (fossil fuels and nuclear) and renewable energy sources, including electricity production (photovoltaics, solar thermal, wind, hydro and geothermal, fuel production (solar and biofuels), and energy storage (batteries and fuel cells). We will also touch on climate change mitigation approaches (carbon capture and geoengineering). Discussion of these topics will be enriched by an understanding of the basic chemical principles behind energy production and conversion. Students will gain an appreciation of the pivotal role chemistry can play in an alternative energy economy and a foundation to better understand energy issues. The lab component will provide experiential support of the lecture material through hands on experiments and exploratory projects. (L)
Instructor(s): Jessica Swanson Terms Offered: Autumn. This course will be offered in the Autumn quarter.
Prerequisite(s): No formal prerequisite but some previous background in Chemistry is recommended.
Note(s): Note(s): In order to satisfy the general education requirements in the physical sciences PHSC 12300 may be combined with PHSC 12400 The Chemistry of Big Problems, PHSC 12500 Molecular Mechanisms of Human Disease, PHSC 13400 Global Warming. If a student does not wish to continue with CHEM 10100 Introductory General Chemistry, CHEM 11100 Comprehensive General Chemistry, or CHEM 12100 Honors General Chemistry, they may take PHSC 12300 as the second course.
PHSC 12400. The Chemistry of Big Problems. 100 Units.
This course will discuss the chemistry of big problems that impact human life and society, such as the future accessibility of personal genetic sequence information, genetically modified organisms, or plastics and polymers and alternative sources of energy. We will use each of these topics as a window to grasp the underlying chemistry, reaction mechanisms, analytical methods, and quantitative chemical principles applied to major scientific issues that impact the world around us. Relevant examples will be considered in a discussion-oriented format to bring out chemical and analytical principles associated with big problems. The course will have a classroom lecture component as well as a laboratory component. The laboratory component will involve case studies and problem solving by application of analytical principles and independent work or teams of students. (L) 
Instructor(s): Y. Krishnan Terms Offered: Winter
Prerequisite(s): Some previous background in Chemistry is recommended.
Note(s): In order to satisfy the general education requirements in the physical sciences PHSC 12400 may be combined with PHSC 12300 Chemistry for an Alternative Energy Source or PHSC 12500 Molecular Mechanisms of Human Disease. If a student does not wish to continue with CHEM 10100 Introductory General Chemistry, CHEM 11100 Comprehensive General Chemistry, or CHEM 12100 Honors General Chemistry sequence, they may take PHSC 12400 as the second course.

PHSC 12500. Molecular Mechanisms of Human Disease. 100 Units.
This course will examine the molecular basis for a few specific instances of human disease. We will use each of these molecular case studies as a vehicle to demonstrate quantitative chemical principles such as thermodynamics, chemical equilibrium, chemical kinetics, diffusive dynamics, and DNA damage and repair. The goal of the course will be to use well-understood biological and medical examples to illustrate chemical principles and to give students a toolbox and techniques to understand molecular systems more broadly. The course will have a classroom lecture component as well as a laboratory component. The laboratory component will involve specific case studies and mechanistic proposals that represent exploratory independent work by teams of students. (L)
Instructor(s): G. Engel Terms Offered: Spring
Prerequisite(s): Some previous background in Chemistry recommended
Note(s): In order to satisfy the general education requirements in the physical sciences PHSC 12500 may be combined with PHSC 123 Chemistry for an Alternative Energy Source or PHSC 12400 The Chemistry of Big Problems, If a student does not wish to continue with CHEM 10100 Introductory General Chemistry, CHEM 11100 Comprehensive General Chemistry, or CHEM 12100 Honors General Chemistry sequence, they may take PHSC 12500 as the second course.

PHSC 12600. Matter, Energy, Space, and Time. 100 Units.
A comprehensive survey of how the physical world works, and how matter, energy, space, and time evolved from the beginning to the present. A brief survey of the historical development of mathematics, physics, and astronomy leads to a conceptual survey of the modern theory of the physical universe: space and time in relativity; the quantum theory of matter and energy; and the evolution of cosmic structure and composition. The major theme of this course is the understanding of all nature, from the prosaic to the exotic, using powerful quantitative theory grounded in precise experiments. Although quantitative analysis will be an important part of the course, students will not be expected to employ mathematics beyond algebra. (L) 
Instructor(s): Stephan Meyer Terms Offered: Autumn
Equivalent Course(s): ASTR 12600

PHSC 12610. Black Holes. 100 Units.
Black Holes are the most exotic, extreme and paradoxical systems in the universe. They are the densest concentrations of energy, yet they convert all matter that falls in to pure space-time curvature; they radiate more power than anything else, even though most of their radiation is not even made of light; they are mathematically the most perfectly understood of any physical structure, but their enigmatic behavior is still the subject of a violent disagreement among experts that highlights our ignorance of how quantum physics relates to gravity. This course will survey the physics of space and time, the nature of black holes, their effects on surrounding matter and light, the astrophysical contexts in which they are observed, frontier areas of research as quantum gravity and gravitational waves, and the importance of space-time physics to everyday needs such as navigation and energy. The modern theory of space and time, as well as black holes, will be placed in historical context, with special attention to the work of Albert Einstein. Experimental exercises will include direct measurement of the speed of light and gravitational mass, and experience with interferometry. Quantitative analysis will be an important part of the course, but mathematics beyond algebra will not be required. (L)
Instructor(s): Craig Hogan Terms Offered: Winter
Prerequisite(s): PHSC 12600 or PHSC 12700
Equivalent Course(s): ASTR 12610
PHSC 12620. The Big Bang. 100 Units.
The Big Bang model describes the Universe on the largest scales and its evolution from the earliest observationally accessible times through the formation of the complex world we live in today. This powerful framework allows us to interpret a wide range of observations and to make detailed and precise predictions for new experiments. The key motivating observations include the expansion of the Universe and how it has changed with time; the existence of radiation indicating a hot and dense early phase; the abundance of the light elements; and how matter is organized over a wide range of physical scales. The model naturally incorporates dark matter and dark energy, two surprising and poorly understood components that govern the growth of structure over time. The course will explore the history of scientific cosmology and the evidence for the Big Bang model, its consequences for the earliest moments after the Big Bang, and its predictions for the eventual fate of the Universe. Labs will include a hands-on measurement of the relic cosmic microwave background radiation from the early universe and the use of astronomical data to verify key discoveries in the history of Big Bang cosmology. Quantitative analysis will be an important part of the course, but prior experience with mathematics beyond algebra will not be required. (L)
Instructor(s): Dan Hooper Terms Offered: Spring
Prerequisite(s): PHSC 12600
Equivalent Course(s): ASTR 12620

PHSC 12700. Stars. 100 Units.
Elements such as carbon and oxygen are created in fusion reactions at high temperatures and pressures in the deep interiors of stars, conditions that naturally arise in stars like the Sun. This course will outline the physical principles at work and the history of the development of the key ideas: how nuclear physics and the theory of stellar interiors account for how stars shine, why they live for such long times, and how the heavy elements in their cores are dispersed to form a new generation of stars. Gravity assembles stars out of more diffuse material, a process that includes the formation of planetary systems. The course shows how, taken together, these physical processes naturally lead to the ingredients necessary for the emergence of life, namely elements like carbon, nitrogen, and oxygen, and planets in stable orbits around long-lived stars. The course features quantitative analysis of data; any tools needed beyond pre-calculus algebra will be taught as part of the course. (L)
Instructor(s): Daniel Fabrycky Terms Offered: Autumn
Equivalent Course(s): ASTR 12700

PHSC 12710. Galaxies. 100 Units.
Galaxies have been called “island universes,” places where stars are concentrated, where they are born, and where they die. The study of galaxies reaches back to the Renaissance; Galileo Galilei first pointed a telescope skyward in 1610 and confirmed a then 2000 year-old Greek conjecture about the nature of our own galaxy—the Milky Way. This course will use extensive modern observational data from a wide range of telescopes to trace the modern picture for the formation and evolution of galaxies and the stars in them. Galaxies will then be used as markers of yet larger scale structures, in order to explore the influence of gravity over cosmic time. The object of study in this course is galaxies, and the narrative arc traced through that extensive data and understanding will highlight our profound discovery that most of the mass in galaxies (and the Universe as a whole) is in fact an exotic form of matter-dark matter—that we cannot directly see. Quantitative analysis will be an important part of the course in both laboratory work and lectures, but mathematics beyond algebra and some geometric understanding will not be required. This course will feature several observationally-oriented labs that will allow students to directly experience how some of the modern understanding of galaxies has arisen. (L)
Instructor(s): Michael Gladders Terms Offered: Winter
Prerequisite(s): PHSC 12600 or PHSC 12700. PHSC 12710 can be taken as the first course in a sequence combined with PHSC 12720.
Equivalent Course(s): ASTR 12710

PHSC 12720. Exoplanets. 100 Units.
The past two decades have witnessed the discovery of planets in orbit around other stars and the characterization of extra-Solar (exo-) planetary systems. We are now able to place our Solar System into the context of other worlds and a surprising conclusion that most planetary systems look nothing like our own. A challenging next step is to find planets as small as the Earth in orbit around stars like the Sun. The architecture of planetary systems reflects the formation of the parent star and its protoplanetary disk, and how these have changed with time. This course will review the techniques for discovery of planets around other stars, what we have learned so far about exoplanetary systems, and the driving questions for the future, including the quest for habitable environments elsewhere. Although quantitative analysis will be an important part of the course, students will not be expected to employ mathematics beyond algebra. (L)
Instructor(s): Leslie Rogers Terms Offered: Spring
Prerequisite(s): PHSC 10800, PHSC 10100, PHSC 12700 or PHSC 12710.
Equivalent Course(s): ASTR 12720
PHSC 13400. Global Warming: Understanding the Forecast. 100 Units.
This course presents the science behind the forecast of global warming to enable the student to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, including comparisons with Venus and Mars; an overview of the carbon cycle in its role as a global thermostat; predictions and reliability of climate model forecasts of the greenhouse world. This course is part of the College Course Cluster program, Climate Change, Culture, and Society. (L)
Instructor(s): D. MacAyeal, D. Abbot Terms Offered: Autumn Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): GEOS 13400, ENSC 13400, ENST 12300

PHSC 13500. Chemistry & The Atmosphere. 100 Units.
Not offered in 2018-19
Terms Offered: Not offered 2015-16
Equivalent Course(s): ENST 12100

PHSC 13600. Natural Hazards. 100 Units.
This course presents the current understanding of high-impact weather and geologic events and an introduction to risk assessment and mitigation. Topics include an overview of geography, statistics, and societal impacts of the world’s natural hazards; physics and forecasts of hurricanes, extratropical cyclones, tornadoes, earthquakes, tsunamis, volcanic eruptions, droughts, floods, wildfires, and landslides; climate change and weather events; quantifying risks; and successful examples of community- and national-level disaster prevention programs. (L)
Instructor(s): N. Nakamura Terms Offered: Winter

Elective Courses
Any of the following can be used only as a third course in physical sciences to meet the general education requirement (of six courses total in the biological, physical, and mathematical sciences).

PHSC 18100. The Milky Way. 100 Units.
Within a largely empty universe, we live in a vast stellar “island” that we call the Milky Way. As we survey the stellar and interstellar components of the Milky Way-the distribution and motions of stars and interstellar gas, and how these dynamic, ever-changing components interact with each other during their life cycles inside the Milky Way-we will follow the path of ancient astronomers, wonder at their mistakes and prejudices, and form our own understanding.
Instructor(s): Nickolay Gnedin Terms Offered: Spring
Prerequisite(s): Any two-course 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Equivalent Course(s): ASTR 18100

PHSC 18200. The Origin and Evolution of the Universe. 100 Units.
This course provides a comprehensive introduction to modern cosmology for students wishing to delve deeper into the subject than PHSC 12620 (which is not a prerequisite) but at a similar mathematical level. It will discuss how the fundamental laws of physics allow us to understand the origin, evolution, and large-scale structure of the universe. After a brief review of the history of cosmology, the course will cover the expansion of the universe, Newtonian cosmology, Einstein’s Special and General Relativity, black holes, dark matter, dark energy, the Cosmic Microwave Background radiation, Big Bang nucleosynthesis, the early universe, primordial inflation, the origin and evolution of large-scale structure in the universe, and cosmic surveys that are probing inflation and cosmic acceleration.
Instructor(s): TBD Terms Offered: TBD
Prerequisite(s): Any two-course 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Equivalent Course(s): ASTR 18200

PHSC 18300. Searching Between the Stars. 100 Units.
With the advent of modern observational techniques (e.g., radio, satellite astronomy), it has become possible to study free atoms, molecules, and dust in the vast space between the stars. The observation of interstellar matter provides information on the physical and chemical conditions of space and on the formation and evolution of stars.
Prerequisite(s): Any two-course 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Note(s): Not offered in 2018-2019.
Equivalent Course(s): ASTR 18300
PHSC 18800. Philosophical Problems in Cosmology. 100 Units.
In this course, we will undertake a comparison of the philosophical underpinnings of the Aristotelian and Copernican cosmologies, including a comparison of mechanistic and teleological approaches to the natural world. The epistemological foundations of the scientific method, in particular as applied to cosmology (from Galileo to the modern context) will be examined, as will positivist vs. realistic outlooks on cosmology. (For example, what does science say—or not say—about the inside of a black hole, or the space beyond the Hubble horizon?) We will ponder questions such as: Do the epistemological foundations of science require us to be able to repeat relevant experiments? If so, does this disqualify cosmology as a science? If not, why? Might our universe be part of a computer simulation? What information could possibly convince us that this is true or false?
Instructor(s): Dan Hooper
Terms Offered: TBD
Prerequisite(s): Any two-course 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Equivalent Course(s): ASTR 18800, HIPS 18800
The distinguished American sociologist, David Riesman, who played a major role in the creation of the general education program in the social sciences at Chicago, once observed that it was only with a “marvelous hubris” that students were encouraged to range over such “large territory” in the social sciences. Indeed, since the 1940s, yearlong sequences designed to introduce students to different types of social scientific data and different forms of social sciences inquiry have become a permanent feature of the Chicago curriculum. Although considerable variety manifests itself in the way the social sciences courses in general education are organized, most of the sequences are informed, as Robert Redfield once suggested, by an attempt “to communicate the historical development of contemporary society” and by an effort “to convey some understanding of the scientific spirit as applied to social problems and the capacity to address oneself in that spirit to such a problem.” By training students in the analysis of social phenomena through the development and use of interdisciplinary and comparative concepts, the courses also try to determine the characteristics common among many societies, thus enabling the individual to use both reason and special knowledge to confront rapid social change in the global world of the late twentieth century.

All three courses in a SOSC sequence must be taken in order. Once students begin a sequence, they are expected to remain in the same sequence. NOTE: Students registered in any of the sequences below must attend the first and second class sessions or their registration will be dropped.

Please note: The Power, Identity, and Resistance sequence changed order and numbering in 2017–18. Students who need only one of these courses should consult with their College adviser to confirm they are taking the correct one.

Please note: The Self, Culture, and Society sequence changed order and numbering in 2018–19. Students who need only one of these courses should consult with their College adviser to confirm they are taking the correct one.

**SOSC 11400-11500-11600. Power, Identity, Resistance I-II-III.**

“Power, Identity, and Resistance” examines multiple and interrelated aspects of power, from the roles of economic markets and political states to the social structures that determine individual, class, and gender inequalities.

SOSC 11400. Power, Identity, Resistance I. 100 Units.
The first quarter of this sequence focuses on key texts for liberal political and state conceptions. We explore the distinctively modern liberal claim that society or groups of associated individuals make states for their own protection and the governance of their affairs. We interrogate authors on questions concerning individuality, liberty, equality, the limitation of state power, the importance of political stability, the value of democratic participation in governance, the role that organized society plays in political life, and the degree to which social and political relations vary historically—among other issues. We address both defenders and critics of the liberal conception of liberty and the state. Texts vary by year. Typical authors assigned include some combination of Machiavelli, Hobbes, Locke, Montesquieu, Rousseau, Burke, Constant, Smith, Wollstonecraft, Paine, Hegel, Tocqueville, Mill, Marx, Du Bois, Durkheim, Weber, Dewey, Schmitt, Arendt, Polanyi, Hayek, Foucault.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.
SOSC 11500. Power, Identity, Resistance II. 100 Units.
Winter Quarter focuses on the work of central figures in modern political economy and social theory. The course highlights the organization of economic process and the ways in which it relates to social and political relations and institutions. The central questions are these: How historically distinctive is the modern form of capitalist economy? Do human beings "naturally" act in certain ways in the economy and society? To what degree can we rely on individual self-control? Is inequality an inevitable outcome of capitalist economic development? What is the role of power in economic life? How should we think about the relationship between political power and economic practice? Readings vary by year. Typical texts include some combination of Aristotle, Mandeville, Rousseau, Smith, Marx, Mill, Durkheim, Weber, Polanyi, Hayek, Keynes, Foucault, Marshall, Roepke, Friedman, Stiglitz, Krugman.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 11400. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 11600. Power, Identity, Resistance III. 100 Units.
Spring Quarter analyzes the way in which selected themes from the first two quarters work themselves out in the history of the nineteenth, twentieth, and twenty-first centuries. Broadly, we consider the scope of liberal claims about rights, liberty, and resistance, and we explore themes like identity, equality, democracy, and human beings' relationship to nature. In the past, the course has also included explorations of colonialism, racial and gender equality, and different forms of violence. Themes and readings vary by year. Texts used previously include: Smith, Kant, Hegel, Herder, Fichte, Marx, Emerson, Thoreau, Whitman, Nietzsche, Freud, Lenin, Luxemburg, Trotsky, Sorel, Dewey, Hayek, Polanyi, Keynes, Fanon, Cesaire, DuBois, Arendt, Martin Luther King Jr., Malcolm X, Foucault, de Beauvoir, and Butler.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 11500. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 11500. Power, Identity, Resistance II. 100 Units.
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Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 11400. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

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Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 11500. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

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Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 11400. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

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Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 11500. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

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Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 11400. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 11600. Power, Identity, Resistance III. 100 Units.
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Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 11500. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 12400-12500-12600. Self, Culture, and Society I-II-III.
“Self, Culture, and Society” introduces students to a broad range of social scientific theories and methodologies that deepen their understanding of basic problems of cultural, social, and historical existence. The sequence starts with the conceptual foundations of political economy and theories of capitalism and meaning in modern society. Students then consider the cultural and social constitution of the self, foregrounding the exploration of sexuality, gender, and race. Finally, students critically examine dominant discourses of science, individuality, and alterity, keeping an eye towards the application of social theory to contemporary concerns.
SOSC 12400. Self, Culture, and Society I. 100 Units.
The social theories of Ibn Khaldun, Smith, Marx, and Weber, supplemented by historical and ethnographic works, serve as points of departure for considering the characterizing features of the modern world. Particular emphasis is given to socioeconomic structure, theories of historical change, possibilities for individual freedom, the meaning of work, and globalization.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 12500. Self, Culture, and Society II. 100 Units.
In Winter Quarter, students tackle questions about the construction of self and society. The works of Durkheim, Freud, de Beauvoir, Fanon, and others inform investigation of symbolic representation, the strength of social forces, the unconscious, culture, ethics and violence, sexuality, gender, and race.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): SOSC 12400. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 12600. Self, Culture, and Society III. 100 Units.
In Spring Quarter, students consider contemporary issues and social science approaches to them. Beginning with post-modern, post-colonial, and other critiques of sciences of self, culture, and society (as articulated by Kuhn, Foucault, and Said), the course investigates how new theories arise and new problems are addressed, how new perspectives (more global, more inclusive) test and challenge, and how social scientists change, renew, and improve their insights. The quarter focuses on topics of contemporary concern, including the human impact on the environment, feminism outside the West, and the rise of global cities.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): SOSC 12500. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13100-13200-13300. Social Science Inquiry I-II-III.
“Social Science Inquiry” explores classic and contemporary points of view about ways of gathering, analyzing, and interpreting information about public policy issues. The course aims to provide the student with an introduction to the philosophy of social science inquiry, a sense of how that inquiry is conducted, and an understanding of how policy implications can be drawn responsibly from evidence provided by empirical social science. The sequence’s objective is to convey both the promise and the pitfalls of social science and a sense of its uses and abuses. During the 2018–19 academic year, two sections within the “Social Science Inquiry” sequence will each offer a different topical focus: one section on formal theory (“Social Science Inquiry: Formal Theory” SOSC 13110-13210-13310) and one section on spatial analysis (“Social Science Inquiry: Spatial Analysis” 13120-13220-13320).

SOSC 13100. Social Science Inquiry I. 100 Units.
The Autumn Quarter starts by introducing students to the various ways that social scientists think about the world. Examples include theoretical models from Milton Friedman, Thomas Schelling, and John Nash; path-breaking experiments from Stanley Milgram and Daniel Kahneman; and quantitative research on topics ranging from voting to gun violence to baby names. Through these works, students will learn how researchers theorize about social phenomena.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.
SOSC 13200. Social Science Inquiry II. 100 Units.
In the Winter Quarter, students will be introduced to social science research tools. They will learn how to collect data, conduct experiments, and make causal inferences from statistics. Using the General Social Survey, the National Election Studies, and other surveys, students will gain hands-on experience working with large data sets.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13300. Social Science Inquiry III. 100 Units.
In the Spring Quarter, students will conduct their own substantial research project. Students will learn how to translate their ideas into research questions, their theories into testable hypotheses, and their findings into meaningful conclusions. By year’s end, students will develop a critical perspective on many perennial social questions and, ultimately, acquire “quantitative literacy,” essential skills in an increasingly data-driven world.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13200. Social Science Inquiry II. 100 Units.
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Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13300. Social Science Inquiry III. 100 Units.
In the Spring Quarter, students will conduct their own substantial research project. Students will learn how to translate their ideas into research questions, their theories into testable hypotheses, and their findings into meaningful conclusions. By year’s end, students will develop a critical perspective on many perennial social questions and, ultimately, acquire “quantitative literacy,” essential skills in an increasingly data-driven world.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

Social Science Inquiry: Formal Theory builds on the rich traditions of rational choice scholarship set in place by James Coleman and Gary Becker. Mastering game theoretic and public choice models is an invaluable tool for understanding how interest groups influence politics, how voting takes place in Congress, how matches are made in the dating world, or how neighborhood arrangements are coordinated. More broadly, applications of formal theory to social science include explaining how peace negotiations occur between governments and rebels in the aftermath of civil war, how trade unionists bargain over wages with employers, and even the decisions of autocrats to step down from power and allow for free elections. SSI-Formal Theory will introduce students to the systematic study of social, political, and economic interactions, where the optimal course of one person’s action depends on the options and preferences of other people involved in the interaction. Students will learn how to model strategic situations in the language of mathematics and how to make equilibrium predictions.

SOSC 13110. Social Science Inquiry: Formal Theory I. 100 Units.
Social Science Inquiry: Formal Theory I introduces students to deductive reasoning and teaches them primitives of rational choice—players, strategies and preferences.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13210. Social Science Inquiry: Formal Theory II. 100 Units.
Social Science Inquiry: Formal Theory II covers two basic equilibrium concepts: Nash, and Subgame Perfect Nash.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13110. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13310. Social Science Inquiry: Formal Theory III. 100 Units.
Social Science Inquiry: Formal Theory III covers games of incomplete information, including Bayesian Nash and Perfect Bayesian Nash equilibrium.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13210. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.
SOSC 13210. Social Science Inquiry: Formal Theory II. 100 Units.
Social Science Inquiry: Formal Theory II covers two basic equilibrium concepts: Nash, and Subgame Perfect Nash.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13110. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13310. Social Science Inquiry: Formal Theory III. 100 Units.
Social Science Inquiry: Formal Theory III covers games of incomplete information, including Bayesian Nash and Perfect Bayesian Nash equilibrium.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13210. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13120-13220-13320. Social Science Inquiry: Spatial Analysis.
Social Science Inquiry: Spatial Analysis deals with the fundamental role of space, place, location, distance, and interaction—crucial to tackling many research questions in the social sciences. This sequence of three courses explores the fundamentals of spatial analysis, a collection of quantitative methods in which space is explicitly accounted for. The three courses explore different concepts of space; how it is measured, represented, and accounted for in social science methodology; and how spatial problems are solved (spatial reasoning).

SOSC 13120. Social Science Inquiry: Spatial Analysis I. 100 Units.
This course explores the concept of spatial thinking and how it has been incorporated in research in the social sciences. Fundamental notions related to space, such as location, distance, spatial interaction, among others are explored in classic readings in quantitative geography, as well as in several recent examples of research papers in urban studies, sociology, political science, criminology, public health, and economics.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13220. Social Science Inquiry: Spatial Analysis II. 100 Units.
This second course in the sequence covers basic principles of spatial analysis, geographic information science and spatial statistics. A range of methods for spatial data exploration and analysis are covered. A heavy emphasis is on carrying out the analysis by means of the open source statistical software R and its many spatial packages.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13120. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13320. Social Science Inquiry: Spatial Analysis III. 100 Units.
In this third course of the spatial analysis sequence, the concepts and methods covered so far are applied to an actual research problem that deals with an issue where the role of space is important. The focus is on formulating a research question, collecting and analyzing data and communicating the results.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13220. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13220. Social Science Inquiry: Spatial Analysis II. 100 Units.
This second course in the sequence covers basic principles of spatial analysis, geographic information science and spatial statistics. A range of methods for spatial data exploration and analysis are covered. A heavy emphasis is on carrying out the analysis by means of the open source statistical software R and its many spatial packages.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 13120. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 13320. Social Science Inquiry: Spatial Analysis III. 100 Units.
In this third course of the spatial analysis sequence, the concepts and methods covered so far are applied to an actual research problem that deals with an issue where the role of space is important. The focus is on formulating a research question, collecting and analyzing data and communicating the results.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 13220. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 14100-14200-14300. Mind I-II-III.
“Mind” explores subjective experience and behavior through the lens of underlying mental processes, biological mechanisms, and social context. Drawing from research in the social sciences and beyond, the course broadly considers how empirical approaches can shape our understanding of long-standing questions about human experience. Each quarter of Mind is taught by a different group of faculty, and the material in each quarter is arranged into a broad theme that makes connections across quarters. These themes vary from year to year.
SOSC 14100. Mind I. 100 Units.
The first quarter of Mind builds an intellectual framework for understanding the mental and behavioral phenomena of animals, connecting philosophical and historical foundations to the modern scientific literature. What is the difference between the subjective and the objective? How do the mind and body relate to each other? How do nature and nurture impact behavior? These are some of the broad questions that are addressed.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 14200. Mind II. 100 Units.
The second quarter of Mind explores the concept of "mechanism," or different kinds of causal models and theories that are used to explain mental phenomena from different levels of scientific analysis (e.g., biological, cognitive). Focusing on empirical literature, this quarter's emphasis on mechanism builds upon the intellectual foundations established in Autumn Quarter.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 14100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 14300. Mind III. 100 Units.
The third quarter of Mind explores the effects of different kinds of context on mental phenomena and mechanisms, including developmental, social, and cultural contexts. Focusing on empirical literature, this quarter highlights the impact of basic research on some of the big problems that face humans and society.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 14200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 14200. Mind II. 100 Units.
The second quarter of Mind explores the concept of "mechanism," or different kinds of causal models and theories that are used to explain mental phenomena from different levels of scientific analysis (e.g., biological, cognitive). Focusing on empirical literature, this quarter's emphasis on mechanism builds upon the intellectual foundations established in Autumn Quarter.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 14100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 14300. Mind III. 100 Units.
The third quarter of Mind explores the effects of different kinds of context on mental phenomena and mechanisms, including developmental, social, and cultural contexts. Focusing on empirical literature, this quarter highlights the impact of basic research on some of the big problems that face humans and society.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 14200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 15100-15200-15300. Classics of Social and Political Thought I-II-III.
"Classics of Social and Political Thought" reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life.
SOSC 15100. Classics of Social and Political Thought I. 100 Units.
"Classics of Social and Political Thought" reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.
SOSC 15200. Classics of Social and Political Thought II. 100 Units.
‘Classics of Social and Political Thought’ reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life. In recent years, thinkers read in the Winter Quarter have included Hobbes, Locke, and Rousseau.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 15100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 15300. Classics of Social and Political Thought III. 100 Units.
‘Classics of Social and Political Thought’ reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life. In recent years, thinkers read in the Spring Quarter have included J.S. Mill, Tocqueville, Marx, Nietzsche, W.E.B. Du Bois, and Simone de Beauvoir.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 15200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 15200. Classics of Social and Political Thought II. 100 Units.
‘Classics of Social and Political Thought’ reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life. In recent years, thinkers read in the Winter Quarter have included Hobbes, Locke, and Rousseau.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SOSC 15100. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 15300. Classics of Social and Political Thought III. 100 Units.
‘Classics of Social and Political Thought’ reads classic texts from Plato and Aristotle to Nietzsche and DuBois in order to investigate criteria for understanding and judging political, social, and economic institutions. What is justice? What makes a good society? This sequence examines such problems as the conflicts between individual interest and common good; between morality, religion, and politics; and between liberty and equality. We examine alternative conceptions of society, law, authority, consent, and dissent that underlie continuing controversies in contemporary political life. In recent years, thinkers read in the Spring Quarter have included J.S. Mill, Tocqueville, Marx, Nietzsche, W.E.B. Du Bois, and Simone de Beauvoir.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SOSC 15200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

SOSC 16100-16200-16300. Global Society I-II-III.
Global Society is organized around three essential areas for making sense of a globalized world: social thought, population, and social change. The sequence is designed to cultivate an understanding of social science research that extends beyond experiences and processes that are particular to Western civilizations. The curriculum will expose students to a long-standing, globally expansive canon within the social sciences and teach students to distinguish cultural particulars from universal concerns.
SOSC 16100. Global Society I. 100 Units.
The first quarter of Global Society addresses social thought from a global perspective by first considering
some classic works from the Western tradition and then reading major statements about society from the
classical traditions of others cultures including: Latin America, Islam, East Asia, and Africa. In Global
Society, students read these statements simultaneously as theoretical treatises, as empirical approaches,
and as normative prescriptions for the social world. This three-pronged approach enables us to disentangle
differences in empirical perception from differences in values and to assess how, in combination, these
color our own inevitably particular judgments of world events. The course opens a set of themes that will
run through the entire sequence: individual-and-society, tradition-and-change, sources of social values,
difference and particularity. The pedagogical emphasis is on close reading, discussion, and analytic writing.
Possible readings include: Thomas More, J. J. Rousseau, D. F. Sarmiento, Ali Shariati, Raden Ayu Kartini, and
Léopold Sédar Senghor
Instructor(s): A. Abbott Terms Offered: Autumn
Prerequisite(s): These courses must be taken in sequence. Students registered in this sequence must attend
the first and second class sessions or their registration will be dropped.

SOSC 16200. Global Society II. 100 Units.
The second quarter of Global Society is built around the theme of population and is designed as a hybrid
course that brings together a) an intellectual history of population thought and census-taking and b) a
practical introduction to basic demographic tools and contemporary debates about population. Students
will engage Malthus, his detractors, and new incarnations of Malthusian thought in detail. Questions
considered will include: What is a population? What is at stake when we count? How many people can this
earth support? What are the implications of population shifts for individual life chances? For social values
and patterns of difference? Students will learn how to construct basic period lifetables, how to compare
populations and sub-populations using basic standardization techniques, and how to analyze generations
and cohorts in context. At the same time, since population issues like reproduction, migration, and mortality
are simultaneously philosophical, political, and empirical matters, students will connect these practical and
empirical analyses to political and value debates about the causes and consequences of population change.
Possible texts include: Graunt, Petty, Malthus, Nehru, Wu Ta-k’un, and contemporary instantiations.
Instructor(s): J. Trinitapoli Terms Offered: Winter
Prerequisite(s): SOSC 16100. These courses must be taken in sequence. Students registered in this sequence must attend
the first and second class sessions or their registration will be dropped.

SOSC 16300. Global Society III. 100 Units.
This third part of the sequence marries themes that emerge from Global Social Thought and Population,
with an emphasis on social change and development during twentieth and twenty-first centuries. From the
perspective of Global Society, "change" and "development" encompass everything from micro-level changes
in gender relations to macro-level shifts in the global economy. With new theoretical and empirical tools
from parts 1 & 2 of the sequence, students will engage the empirical, the theoretical, and the normative
aspects of defining and evaluating long-run and short-run social change. Using global and comparative
lenses, we examine forms of state repression, civil resistance, religious transformations, technological and
economic changes, and the effects of these large social patterns on individual persons. Students will write
about the relationship of individuals to broad forces of social change, connecting themes from the first
and second quarters. The sequence concludes with a set of writing workshops designed to guide students
through the steps of producing a capstone sequence paper. Using the skills and tools they've acquired
throughout the sequence, students will analyze the relationship of a particular cohort (anchored in a time,
place) to social change, with a focus on the empirical, normative, and theoretical stakes, their causes and
consequences. Possible texts include: Geertz, DuBois, Srinivas, and contemporary instantiations.
Instructor(s): K. Hoang Terms Offered: Spring
Prerequisite(s): SOSC 16200. These courses must be taken in sequence. Students registered in this sequence must attend
the first and second class sessions or their registration will be dropped.

SOSC 16200. Global Society II. 100 Units.
The second quarter of Global Society is built around the theme of population and is designed as a hybrid
course that brings together a) an intellectual history of population thought and census-taking and b) a practical
introduction to basic demographic tools and contemporary debates about population. Students will engage
Malthus, his detractors, and new incarnations of Malthusian thought in detail. Questions considered will include:
What is a population? What is at stake when we count? How many people can this earth support? What are
the implications of population shifts for individual life chances? For social values and patterns of difference?
Students will learn how to construct basic period lifetables, how to compare populations and sub-populations
using basic standardization techniques, and how to analyze generations and cohorts in context. At the same time,
since population issues like reproduction, migration, and mortality are simultaneously philosophical, political,
and empirical matters, students will connect these practical and empirical analyses to political and value debates
about the causes and consequences of population change. Possible texts include: Graunt, Petty, Malthus, Nehru,
Wu Ta-k’un, and contemporary instantiations.
Instructor(s): J. Trinitapoli Terms Offered: Winter
Prerequisite(s): SOSC 16100. These courses must be taken in sequence. Students registered in this sequence must attend
the first and second class sessions or their registration will be dropped.
SOSC 16300. Global Society III. 100 Units.
This third part of the sequence marries themes that emerge from Global Social Thought and Population, with an emphasis on social change and development during twentieth and twenty-first centuries. From the perspective of Global Society, "change" and "development" encompass everything from micro-level changes in gender relations to macro-level shifts in the global economy. With new theoretical and empirical tools from parts 1 & 2 of the sequence, students will engage the empirical, the theoretical, and the normative aspects of defining and evaluating long-run and short-run social change. Using global and comparative lenses, we examine forms of state repression, civil resistance, religious transformations, technological and economic changes, and the effects of these large social patterns on individual persons. Students will write about the relationship of individuals to broad forces of social change, connecting themes from the first and second quarters. The sequence concludes with a set of writing workshops designed to guide students through the steps of producing a capstone sequence paper. Using the skills and tools they've acquired throughout the sequence, students will analyze the relationship of a particular cohort (anchored in a time, place) to social change, with a focus on the empirical, normative, and theoretical stakes, their causes and consequences. Possible texts include: Geertz, DuBois, Srinivas, and contemporary instantiations.
Instructor(s): K. Hoang Terms Offered: Spring
Prerequisite(s): SOSC 16200. These courses must be taken in sequence. Students registered in this sequence must attend the first and second class sessions or their registration will be dropped.

COLLEGIATE COURSES
SOSC 02980. Practicum. 25 Units.
This course is for students who secure a summer internship. For details, visit careeradvancement.uchicago.edu/jobs-internships-research/internships-for-credit. Students write a short paper (two to three pages) and give an oral presentation reflecting on their internship experience.
Instructor(s): D. Spatz Terms Offered: Summer
Note(s): Must be taken for P/F grading; students who fail to complete the course requirements will receive an F on their transcript (no W will be granted). Students receive 025 units of credit at completion of course. Course meets once in Spring Quarter and once in Autumn Quarter. Course fee $150; students in need of financial aid should contact Jay Ellison at 702.8609.
Equivalent Course(s): HUMA 02980

SOSC 21100-21200. Music in Western Civilization I-II.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.

SOSC 21100. Music In Western Civilization I: To 1750. 100 Units.
Instructor(s): A. Robertson Terms Offered: Winter
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): MUSI 12100, HIST 12700

SOSC 21200. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): MUSI 12200, HIST 12800

SOSC 22000-22100-22200. Islamic Thought and Literature I-II-III.
This sequence meets the general education requirement in civilization studies. Taking these courses in sequence is recommended but not required.
SOSC 22000. Islamic Thought and Literature I. 100 Units.
This course covers the period from ca. 600 to 950, concentrating on the career of the Prophet Muhammad; Qur'an and Hadith; the Caliphate; the development of Islamic legal, theological, philosophical, and mystical discourses; sectarian movements; and Arabic literature.
Instructor(s): T. Qutbuddin Terms Offered: Autumn
Equivalent Course(s): NEHC 20601, NEHC 30601, CMES 30601, RLST 20401, HIST 25610, ISLM 30601, HIST 35610

SOSC 22100. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the ‘gunpowder empires’ (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, NEHC 20602, HIST 35615, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

SOSC 22200. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Spring
Equivalent Course(s): HIST 25616, RLST 20403, ISLM 30603, NEHC 30603, NEHC 20603, HIST 35616

SOSC 23000-23100. Introduction to the Civilizations of South Asia I-II.
This sequence introduces core themes in the formation of culture and society in South Asia from the early modern period until the present. This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

SOSC 23000. Introduction to the Civilizations of South Asia I. 100 Units.
The first quarter focuses on Islam in South Asia, Hindu-Muslim interaction, Mughal political and literary traditions, and South Asia’s early encounters with Europe.
Instructor(s): M. Alam Terms Offered: Winter
Equivalent Course(s): SALC 20100, HIST 10800, ANTH 24101

SOSC 23100. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SALC 20200, HIST 10900, ANTH 24102

SOSC 23500-23600-23700. Introduction to the Civilizations of East Asia I-II-III.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.

SOSC 23500. Intro To East Asian Civilization I. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): G. Alitto Terms Offered: Autumn Summer
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15100, CRES 10800, EALC 10800
SOSC 23600. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar
Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, CRES 10900, EALC 10900

SOSC 23700. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): K. H. Choi
Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, CRES 11000, EALC 11000

SOSC 23600. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar
Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, CRES 10900, EALC 10900

SOSC 23700. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): K. H. Choi
Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, CRES 11000, EALC 11000

SOSC 24000-24100. Introduction to Russian Civilization I-II.
This two-quarter sequence, which meets the general education requirement in civilization studies, provides an interdisciplinary introduction to Russian civilization. The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music; from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.

SOSC 24000. Intro to Russian Civilization-1. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music; from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): E. Gilburd, W. Nickell
Terms Offered: Autumn
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): REES 26011, HIST 13900
SOSC 24100. Intro Russian Civilization-2. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-
Soviet period. Working closely with a variety of primary sources-from oral legends to film and music,
from political treatises to literary masterpieces-we will track the evolution of Russian civilization over the
centuries and through radically different political regimes. Topics to be discussed include the influence of
Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in
political, intellectual, and cultural life; the relationship between center and periphery; systems of social and
political legitimation; and symbols and practices of collective identity.
Instructor(s): R. Bird, E. Gilburd Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): REES 26012, HIST 14000

SOSC 24001-24002-24003. Colonizations I-II-III.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence
approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We
explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as
resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of
the modern world.

SOSC 24001. Colonizations I. 100 Units.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence
approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We
explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as
resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of
the modern world. Themes of slavery, colonization, and the making of the Atlantic world are covered in the first quarter. Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies. This course is offered
every year. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24001, CRES 24001, HIST 18301

SOSC 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be
taken in any sequence.
Equivalent Course(s): ANTH 24002, HIST 18302, CRES 24002

SOSC 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly
independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be
taken in any sequence.
Equivalent Course(s): CRES 24003, HIST 18303, ANTH 24003, SALC 20702

SOSC 25090. Anthropology of Olympic Sport. 100 Units.
If cultural differences are as powerful as Anthropology has conventionally stressed, how is it possible that
over 200 national and innumerable sub-national and transnational cultural formations have found common
cause in the modern Olympic Games? This course explores, theoretically and historically, the emergence of the
Olympic Games as the liturgy of the world system of nation states and the current dialectic between the Olympic
Movement and the Olympic Sports Industry. Extensive reading and an independent research paper will be
required.
Equivalent Course(s): MAPS 47501, ANTH 20420, ANTH 30420

SOSC 25100. Urban Structure and Process. 100 Units.
This course reviews competing theories of urban development, especially their ability to explain the changing
nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging
metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past American
experience as a way of developing urban policy both in this country and elsewhere.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): SOCI 20104, CRES 20104, SOCI 30104, GEOG 22700, GEOG 32700

SOSC 26100-26200-26300. Introduction to Latin American Civilization I-II-III.
Taking these courses in sequence is not required. This sequence meets the general education requirement in
civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin
America (e.g., Mexico, Central and South America, and the Caribbean Islands).
SOSC 26100. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): CRES 16101, LACS 16100, LACS 34600, ANTH 23101, HIST 36101, HIST 16101

SOSC 26200. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): HIST 16102, LACS 34700, ANTH 23102, LACS 16200, HIST 36102, CRES 16102

SOSC 26300. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, ANTH 23103, HIST 16103, CRES 16103

SOSC 26004. History of City Planning. 100 Units.
This lecture-based course provides a broad survey of the history of city planning. It focuses on the normative: the endeavor to control and design the physical fabric of cities. What are the different ways cities have been envisioned and planned and to what effect? What are the competing theories of good city design that underlie city plans, and how do these plans interrelate to the social, political, cultural, and economic forces shaping cities? The course explores city planning’s successes and failures, its tangible effect on urban pattern and form, and the extent to which city planning ideals have changed over time. Though the emphasis is on city planning’s history, current debates about city planning within the context of the history of the profession will also be engaged. Emphasis will be on U.S. and European city planning experience, although global practices will also be surveyed.
Instructor(s): E. Talen Terms Offered: Spring
Equivalent Course(s): ENST 26004, SOSC 36004, PBPL 26004, GEOG 26200

SOSC 29700. Rdgs: Social Sciences. 100 Units.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and senior adviser
Note(s): Students are required to submit the College Reading and Research Course Form.

SOSC 29900.BA Paper in Russian Civilization. 100 Units.
This is a reading and research course for independent study related to BA research and BA paper preparation.
Instructor(s): Staff Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of instructor and undergraduate program chair
Note(s): Students are required to submit the College Reading and Research Course Form.

SOSC 34500-34600. Anthropology of Museums I-II.
Anthropology of Museums

SOSC 34500. Anthropology Of Museums-1. 100 Units.
Using anthropological theories and methodology as a conceptual framework, this seminar will explore the organizational and ideological aspects of museum culture(s). The course includes visits to museums with guest museum professionals as guides into the culture of museums.
Equivalent Course(s): ANTH 34501, CHDV 34501, ANTH 24510, MAPH 34400, MAPS 34500

SOSC 34600. Anthropology Of Museum-2. 100 Units.
Using anthropological theories and methodology as a conceptual framework, this seminar will explore the organizational and ideological aspects of museum culture(s). The course includes visits to museums with guest museum professionals as guides into the culture of museums.
Instructor(s): M. Fred Terms Offered: Autumn, Winter
Prerequisite(s): Advanced standing and consent of instructor
Note(s): CHDV Distribution: C
Equivalent Course(s): ANTH 24511, ANTH 34502, CHDV 38102, MAPS 34600

SOSC 34600. Anthropology Of Museum-2. 100 Units.
Using anthropological theories and methodology as a conceptual framework, this seminar will explore the organizational and ideological aspects of museum culture(s). The course includes visits to museums with guest museum professionals as guides into the culture of museums.
Instructor(s): M. Fred Terms Offered: Autumn, Winter
Prerequisite(s): Advanced standing and consent of instructor
Note(s): CHDV Distribution: C
Equivalent Course(s): ANTH 24511, ANTH 34502, CHDV 38102, MAPS 34600
COLLEGIATE COURSES IN CIVILIZATION STUDIES ABROAD

For more information about collegiate courses offered through Study Abroad, consult the Study Abroad section of this catalog or visit study-abroad.uchicago.edu.
The programs of study, known as majors, include a narrative description and a summary of course requirements. Students should read the complete narrative descriptions because the summary eliminates essential information. An explanation of the components of each course entry follows.

Course Numbering
Unless an exception is noted, course numbering typically follows standard guidelines. Courses numbered 10000 are general education and introductory courses. Courses numbered 20000 are intermediate, advanced, or upper-level courses that are open only to undergraduates. Courses numbered 30000 and above are graduate courses that are available only to undergraduate students who obtain the consent of the instructor. Undergraduates registered for 30000-level courses will be held to graduate-level requirements. When a course is cross listed between the College (10000- to 20000-level courses) and graduate divisions or professional schools (courses numbered 30000 and above), College students may only register for the undergraduate number. Higher-numbered courses within each of these categories do not indicate increasing levels of difficulty.

In some departments, students with advanced standing and consent of instructor may register for higher-level courses. Except for language instruction courses, these courses are not listed in this catalog; students should contact individual departments for further information.

A number shown, for example, as 211xx, indicates that it is a course within the series 21100 through 21199; any information that describes 211xx applies to the entire range of courses available within the series.

Course Description
A narrative description follows the course number and title. Unless otherwise designated, courses are taught on campus.

"L" at the end of the course description indicates that the course has a laboratory requirement. Courses with laboratories do not yield extra credit.

Units
A student receives 100 units of course credit for most undergraduate courses. The appropriate unit value is listed next to the course title in the catalog and in the course details at Class Search (http://registrar.uchicago.edu/classes).

Term Offered
Courses may be offered in Summer, Autumn, Winter, or Spring Quarter, or in multiple quarters. If a course is not offered in the current academic year but will be offered at a future time, that information appears in this field.

Instructor
For faculty contact information, visit the University of Chicago online directory at directory.uchicago.edu. Many departmental websites include additional information about the research and scholarly interests of faculty members.

Equivalent Courses
Because of the interdisciplinary nature of the College, many courses are cross listed in multiple programs of study. For example, CMST 10100 Introduction to Film Analysis is cross listed among Art History, Cinema and Media Studies, English Language and Literature, and Visual Arts.

Prerequisites
A course may have one or more prerequisites for registration. Before registering for MATH 21100 Basic Numerical Analysis, for example, a student must first have completed MATH 20000 Mathematical Methods for Physical Sciences I or MATH 20400 Analysis in Rn II. Another example: Some courses require students to be in their third or fourth year in the College.

Notes
The Notes field contains additional information that may be of use to students, for instance, that the course meets a general education requirement or that the course is required for students in a certain major. Certain courses, especially those that meet general education requirements, have mandatory attendance for the first class meeting; otherwise the student’s registration will be dropped. Students are advised to pay close attention to these notes.

For More Information
For further specifics on quarterly course offerings, consult the Class Search at my.uchicago.edu. Some historic course offerings can be found at timeschedules.uchicago.edu. For further information about areas...
of study, consult the College (http://college.uchicago.edu) website and the program websites linked on the individual program of study pages in this catalog.
ANTHROPOLOGY

Department Website: http://anthropology.uchicago.edu

PROGRAM OF STUDY

Anthropology encompasses a variety of historical and comparative approaches to human cultural and biological diversity, ranging from the study of human evolution to the study of cultures as systems of meaningful symbols. Faculty in the Department of Anthropology specialize in sociocultural, linguistic, archaeological, and biological anthropological approaches. They take up questions of anatomy, ecology, and genomics, as well as psychological, economic, philosophical, and historical issues, often in comparative perspective. Anthropology can lead (through graduate study) to careers in research and teaching in university and museum settings. More often it provides a background for further work in other disciplines of the social sciences, humanities, and biological sciences, as well as for professional careers in government, non-governmental work, business, law, medicine, social services, and other fields.

For more information, see the Department of Anthropology website (http://anthropology.uchicago.edu).

PROGRAM REQUIREMENTS

The BA program in anthropology consists of twelve courses, of which at least ten are typically chosen from those listed or cross-listed as Department of Anthropology courses. The requirements for the major are:

1. ANTH 21107 Anthropological Theory
2. One Methods course (ANTH 21420 Ethnographic Methods, ANTH 28400 Bioarchaeology and the Human Skeleton, ANTH 29500 Archaeology Laboratory Practicum, or an approved alternative in archaeological, linguistic, or biological anthropology)
3. One Discovering Anthropology course. Designated courses will be added to a list each term. Descriptions will be available on the Department of Anthropology (http://anthropology.uchicago.edu) website.
4. Seven electives in Anthropology
5. Two electives from Anthropology or from a related discipline, with approval from the director of undergraduate studies. To seek approval of non-departmental courses, submit a completed Course Petition Form (available in Haskell 119) and syllabus for the course(s) to the director of undergraduate studies. Ideally this petition should be submitted before the end of the second week of the quarter in which the student is enrolled in the course, but petitions may also be submitted for courses that have already been completed.

Students are encouraged to construct individual programs; and, in so doing, they should consult periodically with the preceptor and the director of undergraduate studies. We strongly urge students who are majoring in anthropology to complete several introductory courses before enrolling in upper-level courses. Anthropology provides a broad view of the human career and condition. Students may select courses widely across all four subfields (sociocultural, linguistic, archaeological, and biological anthropology) within the major, or may focus their work within or across any of the subfields.

Students should confer with the director of undergraduate studies before declaring a major in anthropology and must obtain the endorsement of the director of undergraduate studies on the Student Program Form before graduating with a major in anthropology. Students should submit a copy of the approved form to their College adviser.

Students interested in the Anthropology major should endeavor to complete the three required courses (Theory, Methods, and Discovering Anthropology) by the end of their third year. When possible, completion of those courses by the end of second year is recommended as they provide foundational concepts that facilitate understanding of higher level course work.

Note: These requirements are in effect starting with the graduating Class of 2018. Students who matriculated prior to Autumn 2014 may adopt the modified requirements if appropriate and should consult with the department to design their program of study.

INTRODUCTORY COURSES AND GENERAL EDUCATION

Courses designated as Discovering Anthropology provide introductions to some of the substantive, methodological, and theoretical issues of sociocultural, archaeological, linguistic, and biological anthropology. These courses do not presume any previous study of anthropology and may be taken in any order. However, students are urged to complete the general education requirement in the social sciences before taking more advanced courses in sociocultural anthropology. SOSC 11400-11500-11600 Power, Identity, Resistance I-II-III or SOSC 12100-12200-12300 Self, Culture, and Society I-II-III are particularly recommended.

Several sequences that satisfy the general education requirement in civilization studies typically feature anthropological approaches and content. These courses are cross-listed with Anthropology and may be used toward the major if they are not used toward the general education requirement: ANTH 20701-20702-20703 Introduction to African Civilization I-II-III, ANTH 23101-23102-23103 Introduction to Latin American
Civilization I-II-III, ANTH 24001-24002-24003 Colonizations I-II-III, and ANTH 24101-24102 Introduction to the Civilizations of South Asia I-II. With prior approval, other civilization courses (if taken in addition to the courses used toward the general education requirement) can be used toward the Anthropology major, in accordance with the individual student’s needs or interests and up to the two-course limit for non-departmental courses.

The director of undergraduate studies may refer students who wish to emphasize archaeological, biological, linguistic, or sociocultural anthropology to faculty in these fields for assistance in the development of their individual programs.

Readings and Research Courses

When desirable for a student’s individual anthropology program and with the approval of the director of undergraduate studies, preferably in advance, a student may also obtain course credit for supervised individual reading or research (ANTH 29700 Readings in Anthropology).

Students electing to write a bachelor’s essay for honors are urged to enroll in ANTH 29910 Bachelor’s Essay Seminar in Winter Quarter of fourth year. They also have the option of taking ANTH 29900 Preparation of Bachelor’s Essay, in which the student does supervised reading or research in preparation for the BA essay, in Autumn Quarter of fourth year. However, students can only use a total of two independent readings or research courses toward the major, chosen from among ANTH 29700, ANTH 29900, ANTH 29910, and BA essay seminars in other departments when required for a joint second major. Additional readings and research courses would count as general elective credits.

Field Courses

Students attending field schools or taking courses offered by other universities can solicit approval to obtain course credit (up to the two-course limit for nondepartmental courses) when appropriate for their individual program of study. Credit from other institutions would first need to be approved by the College (https://college.uchicago.edu/advising/transfer-credit) and then by the director of undergraduate studies, if intended to count toward the major.

SUMMARY OF REQUIREMENTS

Note: These requirements are in effect starting with the graduating Class of 2018. Students who matriculated prior to Autumn 2014 may adopt the modified requirements if appropriate and should consult with the department to design their program of study.

ANTH 21107 Anthropological Theory 100
One Methods course 100
ANTH 21420 Ethnographic Methods
ANTH 28400 Bioarchaeology and the Human Skeleton
ANTH 29500 Archaeology Laboratory Practicum
One Discovering Anthropology course § 100
Seven electives in Anthropology ± 700
Two electives in Anthropology or approved related disciplines ± 200
Total Units 1200

* Students may also seek approval for a relevant methods course in archaeological, linguistic, or biological anthropology.

§ A list of designated Discovering Anthropology courses will be maintained on the Anthropology Department website.

± A maximum of two reading and research courses (chosen from ANTH 29700 Readings in Anthropology, ANTH 29900 Preparation of Bachelor’s Essay, ANTH 29910 Bachelor’s Essay Seminar, and BA courses from other departments) can be used toward the Anthropology major.

GRADUATES

Courses counted toward the major must be taken for quality grades (no P/F grading).

HONORS BA PROCESS

Students who wish to be considered for honors must apply to the director of undergraduate studies before the end of their third year. Eligible candidates must have a GPA of 3.6 or higher in courses in the major and typically a GPA of 3.25 overall. To receive honors, students must develop an extended piece of research via a bachelor’s essay under the approved supervision of a faculty member. BA projects involving alternative media (like film, photography, photo-essay, or art installation) might be acceptable if accompanied by a written text.

To execute a successful BA essay, students should begin considering their research question early on. Students should begin looking for a faculty supervisor in their third year and aim to have a topic identified by the beginning of the fourth year so that they have sufficient time to complete the necessary research and to write the paper. Students writing BA honors papers are strongly urged to enroll in ANTH 29910 Bachelor’s Essay
Seminar in Winter Quarter of their fourth year. If possible, students should also consider starting their research under the independent supervision of their faculty supervisor in Autumn Quarter by registering for ANTH 29900 Preparation of Bachelor’s Essay. Students who take these courses, ANTH 29700 Readings in Anthropology, and/or BA seminars for a second major may only use a maximum of two these courses toward the Anthropology major.

For award of honors, the BA essay must receive a grade of A or A- from the faculty supervisor and from the second reader. Students being recommended for honors must submit two copies of the completed paper to the program administrator no later than fifth week of the quarter of graduation. The faculty supervisor must be chosen from the Anthropology faculty. Affiliated faculty may serve with approval of the director of undergraduate study. The second reader may be any credentialed scholar/scientist approved by the director of undergraduate study.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met. Approval from both program chairs is required. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of their third year, if neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

ANTHROPOLOGY COURSES

**ANTH 19601. Populism and Its Discontents. 100 Units.**

Populism and its Discontents is a reading-based undergraduate discussion seminar. Populism is currently the word on everyone’s lips. But what does it mean? We begin with the ambiguous status of populism in current public debates; populism is at once imagined as the lifeblood of genuine democracy and at the same time as the dark force that threatens democracy from within. Why should this be? Questions to be covered include, but are not limited to, the following: Are there progressive and regressive forms of populism? Does populism look different in today’s social media-saturated world than it did a hundred years ago? Does populism in the Global South force us to reconsider what we think we know about its Euro-American variants? Students will be asked to complete assignments drawing on the assigned readings and audiovisual materials and on contemporary media sources.

Instructor(s): William Mazzarella Terms Offered: Spring, Spring 2019

Prerequisite(s): 3rd or 4th year standing

Note(s): (This is a #3CT Capstone Course.)

**ANTH 20003. Discovering Anthropology: Reading Race. 100 Units.**

Before and since Anthropology became a discrete scientific field of study, questions about the biological reality, potential utility and misuse of the concept of race in Homo sapiens have been debated. We will read and discuss a sample of writings by 18th, 19th, and 20th century and contemporary authors who attempted to define human races and those who have promoted or debunked the utility of the concept of race with special attention to it role in retarding social progress, and the extermination and exploitation of some populations and individuals.

Instructor(s): R. Tuttle Terms Offered: Winter

Equivalent Course(s): ANTH 38305, HIPS 20003, CRES 20003

**ANTH 20009. Embodiment: Governance, Resistance, Ethics. 100 Units.**

What does a study of the body teach us about governance and the experience of being governed? This course approaches bodies from three angles. First, bodies are targets of governance. They are objects to be reformed, regulated, contained, disciplined, educated, incarcerated, treated, trained, and “cared” for. Next, as bodies get targeted for reform, they are also converted into potent sites of resistance and critique. Certain bodies in certain places elicit discomfort, unsettling common ideals of private and public, of developed and backward, of religious and secular, and, with them, dominant understandings of modern citizenship. Finally, bodies in their sensory and affective capacities are also mobilized as resources for crafting belonging beyond the assigned terms of law or the state. Drawing from ethnographic texts and with special emphasis on Latin America, this course introduces students to the anthropology of embodiment as well as related themes of bio-politics, gender, intimacy, political subjectivity, care and self-making, post/colonialism, race, and aesthetics. In so doing, the hope is to generate new ways to make sense of matters near and far-from Lenin’s body to Trump’s hands, reproductive labor to sex work, dirty protest to women’s marches, indigenous eco-rituals to queer intimacies.

Instructor(s): Mareike Winchell Terms Offered: Spring

Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
ANTH 20010. Anthropology of the Future. 100 Units.
Two major subfields of anthropology - archaeology and ethnography - have traditionally been oriented around the human past and the human present. But what about the future? Conceptions of the future and future-oriented behavior have long been understood to be a critical plane of difference between political economies, religions, and cultural groups, yet they have rarely been an explicit focus of study. When we shift the temporal frame to the future, questions that arise include: do all cultures have theories of the future? how much about human societies are intentional? how does ideology shape future possibilities? what role do imagined futures play in political life? We will consider theories of temporality, past futures (Aztec, Polynesian, Italian), and movements such as millenarianism, messianic religions, Marxism, Dadaism, utopian communities, Afro-futurism, transhumanism, and today's neo-futurist movements that deploy radical technology and speculative design in response to looming climate change. We will also explore the intimate relationship between speculative fiction (e.g., Ursula K. LeGuin, Kurt Vonnegut) and anthropology.
Instructor(s): S. Dawdy Terms Offered: Autumn. Autumn 2018
Prerequisite(s): PQ: This course qualifies as a Discovering Anthropology selection for Anthropology majors.

ANTH 20011. Peasants: Anthropology, Rural Life, Capitalism. 100 Units.
Only a few short decades ago, rural societies were at the center of anthropological inquiry and key sources of ethnographic insight. Today, anthropological attentions have redirected toward cityscapes and urban experiences, leading a recent review piece to wonder: "Where have all the peasants gone?" The answer, of course, is nowhere. Peasants may have slipped by the wayside of analysis, but nearly half of the world's population today remains rural, and more than ever, countrysides are acutely affected by the economic transformations reshaping our world and the uncertainties facing our future: the challenges of food security, sustainable living, (agricultural) biotechnology, ecological precariousness, global poverty, and escalating rates of urbanization and urban migration. In a decidedly non-trendy move, then, this course will take the anthropology of peasantry as its focus, and will make the case that small-scale farming communities remain highly relevant sites for diagnosing capitalism's changing conditions and its lived consequences. Our discussions will be at once historical, conceptual, and ethnographic, and will draw on a broad set of case-studies around the globe. We will review classic debates about peasantries in relation to the history of capitalism, and reflect on the analytical possibilities and limitations of the peasant concept.
Instructor(s): Francois Richard Terms Offered: Autumn
Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.

ANTH 20144. London Program: Institution. 100 Units.
In the first part of the course, focusing on William Wordsworth and Samuel Taylor Coleridge's monumental poetic work Lyrical Ballads (1798), we will consider the implications of revolutions abroad and of institutionalizations of arts and culture at home for the rise of modern literary culture in Romantic-era Britain. Wordsworth famously envisioned a new role for the poet as that of a "man speaking to men" who could make "incidents and situations from common life" the proper matter of literature. As he did so, Wordsworth was confronting both the disappointed hope of the "blissful dawn" of the French Revolution and a cultural milieu reshaped by the emergence of institutions like the British Museum (1753), the Royal Academy of Art (1768), and the National Gallery (1824)-all of which continue to define British national culture. In the second part of the course, we will consider analogous developments of the present moment, including the institutionalization of new arts like fashion, to consider where (in what scenes, and in what forms of writing and media) we might look for Lyrical Ballads of our own time. (C, F)

ANTH 20400. Anthropology of Olympic Sport. 100 Units.
If cultural differences are as powerful as Anthropology has conventionally stressed, how is it possible that over 200 national and innumerable sub-national and transnational cultural formations have found common cause in the modern Olympic Games? This course explores, theoretically and historically, the emergence of the Olympic Games as the liturgy of the world system of nation states and the current dialectic between the Olympic Movement and the Olympic Sports Industry. Extensive reading and in independent research paper will be required.
Instructor(s): John MacAlloon Terms Offered: TBD

ANTH 20405. Anthropology of Disability. 100 Units.
This seminar undertakes to explore "disability" from an anthropological perspective that recognizes it as a socially constructed concept with implications for our understanding of fundamental issues about culture, society, and individual differences. We explore a wide range of theoretical, legal, ethical, and policy issues as they relate to the experiences of persons with disabilities, their families, and advocates. The final project is a presentation on the fieldwork.
Instructor(s): M. Fred Terms Offered: Autumn
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HMRT 35210, CHDV 30405, ANTH 30405, MAPS 36900, HMRT 25210, SOS 36900, CHDV 20505
ANTH 20420. Anthropology of Olympic Sport. 100 Units.
If cultural differences are as powerful as Anthropology has conventionally stressed, how is it possible that over 200 national and innumerable sub-national and transnational cultural formations have found common cause in the modern Olympic Games? This course explores, theoretically and historically, the emergence of the Olympic Games as the liturgy of the world system of nation states and the current dialectic between the Olympic Movement and the Olympic Sports Industry. Extensive reading and an independent research paper will be required.
Equivalent Course(s): MAPS 47501, SOSC 25090, ANTH 30420

ANTH 20540. The Chicago Climate Change & Culture Institute-I. 100 Units.
Climate change is arguably the greatest environmental, political and cultural challenge of our times. We are already beginning to feel its impacts in changing weather patterns and rising temperatures. In the years to come, Earth scientists tell us that climate change will impact every human being on the planet. We need to become informed and engaged about what awaits us and what we can do to avoid worst-case scenarios. This 3-week intensive course of study focuses on three key questions: Why did climate change happen? How is it impacting different communities across the world? What can be done to prepare the world for a more environmentally secure future? The 4CI program features lectures by leading experts on climate change from the Social Sciences, Earth Sciences, Humanities, Art and Architecture. Seminar discussions and site visits to a variety of local initiatives working toward clean energy and sustainability goals round out the program. 4CI will give you the answers you want about climate change and the tools you need to start making a positive difference, whether that is on your campus, in your community or at your workplace. The program leverages the intellectual resources of one of the world’s most prestigious research universities and will acquaint you with a city that proudly stands on the cutting edge of sustainable urbanism.
Terms Offered: Summer. Summer 2018
Equivalent Course(s): ANTH 30540, ENST 20540

ANTH 20541. The Chicago Climate Change & Culture Institute-II. 100 Units.
Climate change is arguably the greatest environmental, political and cultural challenge of our times. We are already beginning to feel its impacts in changing weather patterns and rising temperatures. In the years to come, Earth scientists tell us that climate change will impact every human being on the planet. We need to become informed and engaged about what awaits us and what we can do to avoid worst-case scenarios. This 3-week intensive course of study focuses on three key questions: Why did climate change happen? How is it impacting different communities across the world? What can be done to prepare the world for a more environmentally secure future? The 4CI program features lectures by leading experts on climate change from the Social Sciences, Earth Sciences, Humanities, Art and Architecture. Seminar discussions and site visits to a variety of local initiatives working toward clean energy and sustainability goals round out the program. 4CI will give you the answers you want about climate change and the tools you need to start making a positive difference, whether that is on your campus, in your community or at your workplace. The program leverages the intellectual resources of one of the world’s most prestigious research universities and will acquaint you with a city that proudly stands on the cutting edge of sustainable urbanism.
Terms Offered: Summer. Summer 2018.
Equivalent Course(s): ANTH 30541, CRES 20541

ANTH 20701-20702-20703. Introduction to African Civilization I-II-III.
Completion of the general education requirement in social sciences recommended. Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies. African Civilization introduces students to African history and cultures in a three-quarter sequence.

ANTH 20701. Introduction to African Civilization I. 100 Units.
Part one of the sequence takes a historical approach. We consider how different types of historical evidence—documentary, oral, and material—can be used to investigate processes of change and transformation in Africa from the early Iron Age through the emergence of the Atlantic world in the fifteenth century. We will investigate state formation in comparative perspective and examine case studies from the Swahili coast, the empires of Ghana and Mali, and Great Zimbabwe. The course also examines the diffusion of Islam, European contact, and the trans-Atlantic slave trade.
Instructor(s): E. Osborn Terms Offered: Autumn
Equivalent Course(s): CRES 20701, HIST 10101
ANTH 20702. Introduction to African Civilization II. 100 Units.
The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers’ policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*.
Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): CRES 20802, HIST 10102, CHDV 21401

ANTH 20703. Introduction to African Civilization III. 100 Units.
Part Three investigates the long nineteenth century. It considers the Egyptian conquest of Sudan, Omani colonialism on the Swahili coast, and Islamic reform movements across the Sahara. It will also explore connections between the end of the transatlantic slave trade and the formal colonization of the African continent.
Instructor(s): K. Hickerson Terms Offered: Spring
Equivalent Course(s): CRES 20703, HIST 10103

ANTH 21107. Anthropological Theory. 100 Units.
Since its inception as an academically institutionalized discipline, anthropology has always addressed the relation between a self-consciously modernizing West and its various and changing others. Yet it has not always done so with sufficient critical attention to its own concepts and categories—a fact that has led, since at least the 1980s, to considerable debate about the nature of the anthropological enterprise and its epistemological foundations. This course provides a brief critical introduction to the history of anthropological thought over the course of the discipline’s long twentieth century, form the 1880s to the present. Although we focus on the North American and British traditions, we review important strains of French and, to a lesser extent, German social theory in chronicling the emergence and transformation of modern anthropology as an empirically based, but theoretically informed, practice of knowledge production about human sociality and culture.
Instructor(s): S. Palmie Terms Offered: Spring
Equivalent Course(s): ANTH 30000
ANTH 21201. Chicago Blues. 100 Units.
This course is an anthropological and historical exploration of one of the most original and influential American musical genres in its social and cultural context. We examine transformations in the cultural meaning of the blues and its place within broader American cultural currents, the social and economic situation of blues musicians, and the political economy of blues within the wider music industry.
Instructor(s): M. Dietler Terms Offered: Autumn
Note(s): The course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): CRES 21201

ANTH 21303. Making the Natural World: Foundations of Human Ecology. 100 Units.
Humans have “made” the natural world both conceptually, through the creation of various ideas about nature, ecosystem, organism, and ecology, and materially, through millennia of direct action in and on the landscape. Students will consider the conceptual underpinnings of contemporary notions of ecology, environment, and balance through the examination of specific historical trajectories of anthropogenic landscape modification and human society.
Instructor(s): Alison Anastasio Terms Offered: Winter
Note(s): ENST 21201 and 21301 are required of students who are majoring in Environmental Studies and may be taken in any order.
Equivalent Course(s): ENST 21301

ANTH 21306. Explorations in Oral Narrative. 100 Units.
A study of storytelling in non-literate and folk societies, antecedent to the complexities of modern narrativity, itself anchored in and energized by literacy. Despite the impact of literacy on modern minds, this course argues for the persistence of ancient themes, plots, characters, and motifs. A further argument is made for the foundational role of storytelling in the creation of culture and construction of society. The central place of storytelling is shown in the humanistic and social sciences: anthropology, economics, history, philosophy, politics, psychoanalysis. Student storytelling and performance of brief stories is encouraged and discussed in light of the main arguments of the course.
Instructor(s): J. Fernandez Terms Offered: Spring
Note(s): This course qualifies as a "Discovering Anthropology" selection for Anthropology majors.
Equivalent Course(s): ANTH 45301

ANTH 21333. The Lived Body: Anthropology, Materiality, Meaningful Practice. 100 Units.
The body is implicated in all facets of human life. It is at once constraint and enabler, relational and personal, "real" and "imagined." It is both individually performed and socially determined, the site of both domination and resistance. Anthropological theory has moved far from "Cartesian dualism" in which mind and body can and must be separate; this course will travel through ways of understanding bodies that have supplemented or bypassed this idea, or have existed outside of it entirely. We will consider what it means to have a body, to know a body, to be defined by a body—in short, to live a body. This course's topical readings are oriented around the idea that "embodiment" involves both material entities and socially embedded processes. We will consider experience, consciousness, sensation, perception, and affect; we will interrogate processes, functions, and ways of knowing that are often taken for granted; we will prise apart the ways power is inscribed on and with bodies, both internally and externally. To do so, we will balance theory and ethnography in both our consumption and production of scholarly material, including a final "auto-ethnography" in which students adopt a new body practice for the quarter.
Instructor(s): A. Ford Terms Offered: Spring

ANTH 21341. Making Plants Work: Anthropology of Human-Plant Relationships. 100 Units.
Food, drink, fuel, pharmaceuticals, clothing, cosmetics, construction material, furniture... Plants and their byproducts are everywhere we look. How have plants become so ubiquitous to human life? How have plants been used, adapted, processed, and sold over the course of history? How can studying plants and their interactions with humans provide a different perspective on the past, and insight into the future? This course explores how humans have made plants "work," and how these working plants have, in turn, shaped the world in which we live. While often perceived as passive in comparison to human and animal counterparts, plants have played a critical role in shaping global social, economic, ecological, and political dynamics. As desired products, plants have entangled far-flung individuals and societies into complex relationships that reverberate across time and space. This course will survey the history of human-plant interactions through three units: domestication, colonialism, and modern technologies. We will examine a wide range of case studies, in an effort to gain comparative and multivocal understanding of human-plant relationships. In doing so, course materials touch on topics of general anthropological interest: political ecology, agency, social inequality, labor, global processes, the impacts of colonialism, the production of knowledge, and human/non-human relationships.
Instructor(s): Pacyga, Johanna Terms Offered: Spring
ANTH 21342. Welcome to the Good Life: The Black Edition. 100 Units.
What do we mean when we say “the good life”? In the United States, the good life has long been synonymous with the idea of the American dream (the white picket fence, secure union job, stable marriage with 2.5 kids). But over the past several years, this romanticized image has increasingly been thrown into crisis with the rise of a destabilized national economy, political infighting, and in the aftermath of the housing collapse. It seems as though the veil has been lifted and the American Dream has been exposed as a fantasy object, if not a complete impossibility. But for people of color, and black people in particular who have been historically disenfranchised and thus unable to access the housing, education, and medical resources necessary to make the American dream a reality, this fantasy has always already been understood as such. Indeed, black experiences reveal how whiteness as a structural mechanism stands at the foundation of the American Dream.
Instructor(s): Bock, Emily Terms Offered: Spring. Spring 2019

ANTH 21343. Anthropology and/of Tourism: Of Otherness and Encounters. 100 Units.
Travelling as a mode of self-cultivation and world awareness has always captivated our imagination. With increasing ease of travel, tourism is a $2.3 trillion industry, with 1.25 billion annual travelers. How does reading ethnographies of tourism help us examine encounters with others as anthropology’s central prerogative? From Emerson’s quote - is the meaning of an encounter located within us or in the object? Is otherness some inherent quality or a product of specific narratives and practices? Encountering otherness being anthropology’s primary research methodology, can ethnographers be compared to tourists? How is the discipline itself implicated in unequal power relations of cultural encounters? We will read ethnographies covering a range of concerns about tourism - its linkages with colonialism/neo-colonialism, its role in stereotyping indigenous cultures, its impact on the environment, on gender dynamics, on representations of nationhood and on cultivation of bourgeois selfhood. Our aim is to use anthropological insights to appraise the phenomenon of tourism as a whole, identifying its pros and cons; and to also flip this perspective to ask: what insights does tourism give us into encounters and othering as foundational concerns of anthropology?
Instructor(s): Das, Suchismita Terms Offered: Winter. Winter 2019

ANTH 21344. The Meaning of Police. 100 Units.
The purpose of this class is to offer students an intellectual toolkit for thinking critically and engaging politically with contemporary problems of police. It will introduce classical as well as emerging themes, drawing on research from diverse social and geographical locations. We will discuss, among other things, the paradox of legal lawlessness, the relationship between law and the body, and the unstable distinction between public and private violence. Paying attention to classed, sexed, and racialized notions of danger and threat, we will discuss the historical fabrication of criminality as well as the complex legacies of security and protection that underpin practices of criminal punishment. While subjecting policing to an anthropological interrogation-asking what police means for different people in different times and places-we will also consider the uneasy affinity between policemen and ethnographers in order to ask what it can teach us about police, and how it might illuminate our understanding of ethnography.
Instructor(s): Maoz, Eilat Terms Offered: Autumn. Autumn 2018

ANTH 21406. Celebrity and Science in Paleoanthropology. 100 Units.
This seminar explores the balance among research, "showbiz" big business, and politics in the careers of Louis, Mary, and Richard Leakey; Alan Walker; Donald Johanson; Jane Goodall; Dian Fossey; and Biruté Galdikas. Information is gathered from films, taped interviews, autobiographies, biographies, pop publications, instructor’s anecdotes, and samples of scientific writings.
Instructor(s): R. Tuttle Terms Offered: Autumn
Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): ANTH 38300, HIPS 21100

ANTH 21420. Ethnicnographic Methods. 100 Units.
This is a course on how to do ethnographic research. While recent decades have seen scholars rightfully insist on the artistic and inherently personal quality of ‘doing’ and ‘writing’ ethnography, the course aims to illuminate the regulating structures of thought and practice underpinning every piece of original ethnographic work. The course is both a reading and a research workshop. As a reading workshop, it seeks to enable students to read ethnography like ethnographers: identifying and learning from the inner workings of the research project at the heart of each ethnographic text. As a research workshop, the course progressively leads students to construct and implement a research project of their own. Students will methodically enact the physical techniques and analytic practices emerging from their reading of ethnography. Throughout the course, we will grapple with the challenges facing an ethnographic researcher, and identify the building blocks of an ethnographic project. In this effort, we will focus on the posing of a research question; the formulation of conceptual frameworks; constructing a statement of problem; actors and informants; the semiotics and pragmatics of interviewing; analysis of interactions qua participant-observer, and historical approaches in ethnography. Students will also experiment with forms of non-verbal visual representation.
Instructor(s): Escobar Gonzalez, Ines Terms Offered: Spring
Prerequisite(s): Preference given to third-year anthropology majors, others by consent only
ANTH 21428. Apes and Human Evolution. 100 Units.
This course is a critical examination of the ways in which data on the behavior, morphology, and genetics of apes have been used to elucidate human evolution. We emphasize bipedalism, hunting, meat eating, tool behavior, food sharing, cognitive ability, language, self-awareness, and sociability. Visits to local zoos and museums, film screenings, and demonstrations with casts of fossils and skeletons required.
Instructor(s): R. Tuttle Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Equivalent Course(s): HIPS 21428, BIOS 13253, EVOL 38600, ANTH 38600

ANTH 21431. Counting, Calculation and Computation: Anthropologies of Number. 100 Units.
This seminar introduces undergraduates to anthropologies of counting, calculation and computation. The course is split into two parts. In part one (Weeks 1-3), we will explore anthropological and historical approaches to number, mathematics and calculation per se, with the goal of developing an analytical toolset through which we can approach the categories "counting" and "number" more critically and creatively. In part two (Weeks 4-10), we expand on this toolset ethnographically, moving through a series of cases to examine how number, counting and calculation are situated variously in contemporary social life, with powerful ethical, political and even biological effects. We will move through themes including war and genocide, health and the body, human-machine interfaces, "state science", environmental metrics, and software algorithms and "big data". The ultimate objective will be to train students to identify and interrogate some of the myriad ways that number is always-already situated in social life - not coming objectively "from nowhere". At the same time, we will try to firmly root our project in an anthropology of number per se, approaching our ethnographic selections from a footing slightly outside of STS or familiar humanist critiques of statistics. Together, we will test whether this footing leads us somewhere new.
Instructor(s): Mullee, John Terms Offered: Winter. Winter 2019

ANTH 21525. Love, Conjugalitv, and Capital: Intimacy in the Modern World. 100 Units.
A look at societies in other parts of the world demonstrates that modernity in the realm of love, intimacy, and family often had a different trajectory from the European one. This course surveys ideas and practices surrounding love, marriage, and capital in the modern world. Using a range of theoretical, historical, and anthropological readings, as well as films, the course explores such topics as the emergence of companionate marriage in Europe and the connections between arranged marriage, dowry, love, and money. Case studies are drawn primarily from Europe, India, and Africa.
Instructor(s): J. Cole, R. Majumdar Terms Offered: Winter
Prerequisite(s): Any 10000-level music course or consent of instructor
Note(s): This course typically is offered in alternate years.
Equivalent Course(s): HIST 36903, CHDV 33212, GNSE 23101, CRES 33101, ANTH 32220, SALC 33101, GNSE 31700

ANTH 21730. Science, Technology and Media via Japan. 100 Units.
This course will explore issues of culture, technology, and environment in Japan through the lens of Science and Technology Studies (STS) and Media Studies. The course is designed for undergraduate students. Its overall aim is to introduce students to some of the fundamental concepts, themes, and problematics in these fields via the particular social and historical circumstances in Japan. Some of the central concerns will be around issues of environment, disaster, gender, labor, media theory, gaming, and animation. In addition, we will devote attention to the recent emergence of the term media ecology as a framework problematizing technologically engineered environments.
Instructor(s): M. Fisch Terms Offered: Winter
Note(s): This course qualifies as a "Discovering Anthropology" selection for Anthropology majors.
Equivalent Course(s): EALC 21730, MAAD 21730

ANTH 22129. The Vocation of a Scientist. 100 Units.
Max Weber wrote that to be a scientist one needed a "strange intoxication" with scientific work and a "passionate devotion" to research as a calling. And yet, such passion seemed to conflict with the ideal of value-neutral inquiry. This class considers the vocation of science since the turn of the twentieth century. What political, economic, and cultural forces have shaped scientific professions in the United States? How are scientists represented in public culture? How was American science experienced during the colonization of the Philippines? By exploring these questions, this class will examine the values and norms that make science into a meaningful vocation.
Equivalent Course(s): HIPS 21407, KNOW 21407
ANTH 22165. Politics of Technoscience in Africa. 100 Units.
Euro-American discourse has often portrayed Africa as either a place without science and technology or as the home of deep and ancient wisdom. European imperialists used the alleged absence of science and technology as a justification for colonialism while pharmaceutical companies sought out African knowledge about healing plants. In addition to their practical applications, science and technology carry significant symbolic weight in discussions about Africa. In this class, we examine the politics of scientific and technical knowledge in Africa with a focus on colonialism and its aftermath. How have different people produced and used knowledge about the environment, medicine, and technology? What kinds of knowledge count as indigenous and who gets credit for innovation? How have independent African governments dealt with the imperial legacies of science? From the interpretation of archaeological ruins to the design of new medical technologies, this class will examine science and technology as political practice in Africa.
Equivalent Course(s): LACS 26622

ANTH 22210. Signs and the State. 100 Units.
Relations of communication, as well as coercion, are central though less visible in Weber's famous definition of the state as monopoly of legitimate violence. This course reconsiders the history of the state in connection to the history of signs. Thematic topics (and specific things and sites discussed) include changing semiotic technologies; means; forces and relations of communication (writing, archives, monasteries, books, "the" internet); and specific states (in early historic India and China, early colonial/revolutionary Europe, especially France, Britain, and Atlantic colonies, and selected postcolonial "new nations").
Instructor(s): J. Kelly Terms Offered: Winter
Note(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): ANTH 41810

ANTH 22825. Globalization, Immigration, and Culture. 100 Units.
Equivalent Course(s): CHDV 20602

ANTH 23026. Science in the South: Decolonizing the Study of Knowledge in Latin America & the Caribbean. 100 Units.
This seminar will bridge anthropologies and histories of science, technology, and medicine to Latin American decolonial thought. Throughout Latin America, techno-scientific objects and practices, with their presumed origin in the Euro-Atlantic North, are often complexly entangled with neo-imperial projects of development and modernization that elongate social forms of colonization into the present. Technoscience and its objects, however, can also generate new creative, political, and life-enhancing potentials beyond or despite their colonial resonances, or even provide tools to ongoing struggles for decolonization. Together, seminar participants will explore what a decolonial approach to the study of science, technology, and medicine in the Global South, particularly in Latin America, has become and could become and how decolonial theory can inflect our own disciplinary, conceptual, and political commitments as anthropologists of technoscience.
Instructor(s): S. Graeter Terms Offered: Spring
Equivalent Course(s): HIPS 24706, LACS 24706

ANTH 23093. Latin American Extractivisms. 100 Units.
This course will survey the historical antecedents and contemporary politics of Latin American extractivisms. While resource extraction in Latin America is far from new, the scale and transnational scope of current "neoextractivisms" have unearthed unprecedented rates of profit as well as social conflict. Today's oil wells, open-pit mines, and vast fields of industrial agriculture have generated previously unthinkable transformations to local ecologies and social life, while repeating histories of indigenous land dispossession in the present. Yet parallel to neo-extractive regimes, emergent Latin American social movements have unleashed impassioned and often unexpected forms of local and transnational resistance. Readings in the course will contrast cross-regional trends of extractive economic development and governance with fine-grained accounts of how individuals, families, and communities experience and respond to land dispossession, local and transregional conflict, and the ecological and health impacts of Latin American extractivisms.
Equivalent Course(s): LACS 26416, PBPL 26416

ANTH 23096. Development and the Right to Housing in Latin America: A Critical Appraisal. 100 Units.
Bringing a wide variety of disciplinary texts into conversation, this course leads towards a holistic understanding of the historically-rooted and globally-entangled housing condition of Latin America's urban poor. It encourages students to read along the grain of developmental discourse at different stages of twentieth-century development, thus advancing students' capacity to critically situate and condition global and national policies. The course analytically foregrounds problems of governance, resource distribution, and sociopolitical complexity, providing students with a representative range of case studies from across the subcontinent and interrogating what it means for social and economic goods to be labeled human rights. Throughout the course students will examine diverse housing arrangements and policies in the context of national, regional, and global development histories. Ultimately, this course advances comprehension of the particularities of contemporary Latin American societies and the particularities shared with the Global South and the world at large.
Instructor(s): Inés Escobar González Terms Offered: Winter
Equivalent Course(s): LACS 26622
ANTH 23101-23102-23103. Introduction to Latin American Civilization I-II-III.
Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

ANTH 23101. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): CRES 16101, LACS 16100, SOCS 26100, LACS 34600, HIST 36101, HIST 16101

ANTH 23102. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOCS 26200, HIST 16102, LACS 34700, LACS 16200, HIST 36102, CRES 16102

ANTH 23103. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, HIST 16103, SOCS 26300, CRES 16103

ANTH 23405. War: What’s It Good For? 100 Units.
War is a destructive force, but also an incredibly productive one in the transformation and reconfiguration of social relations. This course will explore war’s presences and absences in social and political thought as well as ethnographies that examine the mutually reconstitutive relationships between war and society.
Instructor(s): Darryl Li Terms Offered: Autumn
Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): CRES 23607

ANTH 23607. The Immigrant as American Prototype. 100 Units.
This undergraduate seminar explores how the figure of "the immigrant" has come to mediate various origin myths and anticipatory imaginations of "Americaness" in contemporary political struggles. A central proposition of the course is that "the immigrant" should be seen NOT as an "original" founding subject of the United States and its "American Dream" but rather, as a modern prototype-forged only since the late 19th century-for stress-testing different models of American presence and power in the world. Importantly, this is a world increasingly ordered, as well as destabilized, by the expanding logics of industrial and corporate capital-a historical development with reverberating effects into our contemporary debates over the relation of "the immigrant" to American "values" and global "competitiveness." Drawing on various historical, anthropological and audiovisual resources, this seminar aims to situate the emergence of "the immigrant" as American prototype in relation to (1) earlier cultural-historical archetypes of mass migration, such as "the settler" and "the emigrant" and (2) current debates over nativist and cosmopolitan models of American security-cum-prosperity that take "the immigrant" as the limit case for evaluating "the human," "the normal," and "the good life" across nationalist and globalizing space-times. Besides conventional reading and writing assignments, this seminar will offer students the opportunity to experiment with multimedia methods for ethnographic research through a final web-based project in which students will draw from current news and popular media sources to assemble and critically present on their own version of "the Immigrant" as American prototype.
Instructor(s): J. Chu Terms Offered: Winter
Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): CRES 23607
ANTH 23700. Capitalism, Colonialism, and Nationalism in the Pacific. 100 Units.
This course compares colonial capitalist projects and their dialogic transformations up to present political
dilemmas, with special attention to Fiji, New Zealand, and Hawai‘i, and a focus on the labor diaspora, the
fates of indigenous polities, and tensions in contemporary citizenship. We will compare Wakefield’s “scientific
colonization” in New Zealand, Gordon’s social experiments and indentured labor in Fiji, and the plantations,
American annexation, tourism, and the military in Hawai‘i. We will compare the colonial experiences of the
Maori, Hawaiians, and indigenous Fijians, and also those of the immigrant laborers and their descendants,
especially white New Zealanders, the South Asians in Fiji, and the Japanese in Hawai‘i. General propositions
about nationalism, capitalism “late” and otherwise, global cultural flows, and postcolonial subject positions
will be juxtaposed with contemporary Pacific conflicts.
Instructor(s): J. Kelly Terms Offered: Spring
Note(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): ANTH 33700

ANTH 23802. Populism and its Discontents. 100 Units.
‘Populism and its Discontents’ is a reading-based undergraduate discussion seminar. Populism is currently the
word on everyone’s lips. But what does it mean? We begin with the ambiguous status of populism in current
public debates; populism is at once imagined as the lifeblood of genuine democracy and at the same time as
the dark force that threatens democracy from within. Why should this be? Questions to be covered include, but
are not limited to, the following: Are there progressive and regressive forms of populism? Does populism look
different in today’s social media-saturated world than it did a hundred years ago? Does populism in the Global
South force us to reconsider what we think we know about its Euro-American variants? Students will be asked to
complete assignments drawing on the assigned readings and audiovisual materials and on contemporary media
sources.
Instructor(s): W. Mazzarella Terms Offered: Summer. Summer 2018
Equivalent Course(s): SOCI 28078

ANTH 23906. Magic, Science, and Religion. 100 Units.
The relationship between the categories of magic, science, and religion has been a problem for modern social
science since its inception in the nineteenth century. In the first half of this course, we will critically examine some
of the classical and contemporary approaches to these concepts. In the second half, we will explore a number
of detailed historical and ethnographic studies about modern phenomena that call some of the fundamental
assumptions behind these categories into question.
Instructor(s): A. Doostdar Terms Offered: Winter
Equivalent Course(s): RLST 28900, KNOW 28900

ANTH 23911. Anthropology of Religion. 100 Units.
This course explores classic theories and methods in the anthropology of religion. We will cover core themes that
have defined the field such as ethics, epistemology, language and political economy.
Instructor(s): A. Heo Terms Offered: Winter
Equivalent Course(s): RLST 27650

ANTH 24001-24002-24003. Colonizations I-II-III.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence
approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We
explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as
resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making
of the modern world.

ANTH 24001. Colonizations I. 100 Units.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence
approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We
explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as
resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making
of the modern world. Themes of slavery, colonization, and the making of the Atlantic world are covered in the first quarter. Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Equivalent Course(s): SOSC 24001, CRES 24001, HIST 18301

ANTH 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): SOSC 24002, HIST 18302, CRES 24002
ANTH 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): CRES 24003, HIST 18303, SOSC 24003, SALC 20702

ANTH 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): SOSC 24002, HIST 18302, CRES 24002

ANTH 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): CRES 24003, HIST 18303, SOSC 24003, SALC 20702

ANTH 24101-24102. Introduction to the Civilizations of South Asia I-II.
This sequence introduces core themes in the formation of culture and society in South Asia from the early modern period until the present. This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

ANTH 24101. Introduction to the Civilizations of South Asia I. 100 Units.
The first quarter focuses on Islam in South Asia, Hindu-Muslim interaction, Mughal political and literary traditions, and South Asia’s early encounters with Europe.
Instructor(s): M. Alam Terms Offered: Winter
Equivalent Course(s): SALC 20100, SOSC 23000, HIST 10800

ANTH 24102. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SALC 20200, SOSC 23100, HIST 10900

ANTH 24102. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SALC 20200, SOSC 23100, HIST 10900

ANTH 24302. Disability in Local and Global Contexts. 100 Units.
This is a course about intersections. Disability cuts across age, gender, class, caste, occupation, and religion—or does it? By some measures, people with disabilities are the largest minority group in the world today. In this course, we critically examine both the experiences of people with disabilities in a global context as well as the politics and processes of writing about such experiences. Indeed, questions of representation are perhaps at the core of this course. What role have the United Nations Declaration on the Rights of Persons with Disabilities and international organizations such as the United Nations, the World Health Organization, and other nongovernmental social and human service agencies played in the creation of specific understandings of disability experience? We will ask whether disability is a universal category and we will consider how experiences of health, illness, disability, and debility vary. We will engage in “concept work” by analyzing the relationships between disability and impairment and we will critically evaluate the different conceptual and analytical models employed to think about disability. In doing so, we will engage with broader questions about international development, human rights, the boundaries of the nation, the family and other kinship affiliations, and identity and community formation. How is disability both a productive analytic and a lens for thinking about pressing questions and concerns in today’s world?
Equivalent Course(s): CHDV 25250, MAPS 46460
ANTH 24307. Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences. 100 Units.
In this course we will examine the ways in which different groups of people—in different times and places—have understood the nature of life and living things, bodies and bodily processes, and health and disease, among other notions. We will address these issues principally, though not exclusively, through the lens of the changing sets of methods and practices commonly recognizable as science and medicine. We will also pay close attention to the methods through which scholars in history and anthropology have written about these topics, and how current scientific and medical practices affect historical and anthropological studies of science and medicine.
Instructor(s): M. Rossi Terms Offered: Winter
Note(s): This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40202 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): ANTH 34307, HIST 35308, KNOW 40202, CHSS 35308, HIPS 25808, KNOW 25308, HIST 25308

ANTH 24308. History of Perception. 100 Units.
Knowing time. Feeling space. Smelling. Seeing. Touching. Tasting. Hearing. Are these universal aspects of human consciousness, or particular experiences contingent upon time, place, and culture? How do we come to know about our own perceptions and those of others? This course examines these and related questions through detailed readings of primary sources, engagement in secondary scholarship in the history and anthropology of sensation, and through close work with participants’ own sensations and perceptions of the world around them.
Equivalent Course(s): CHSS 35309, ANTH 34308, HIPS 25309, KNOW 31404, KNOW 21404, HIST 35309, HIST 25309

ANTH 24309. Reproductive Worlds. 100 Units.
This course explores how human reproduction and the reproductive body is compelled, constrained, enabled, and narrated across the globe. The “natural” aspects of reproduction intersect in increasingly fraught and often surprising ways with its technological/ scientific, institutional/professional, religious/spiritual, and political/ideological aspects. The starting point for the course is that the reproduction of bodies is differently understood and politically contested among and for various groups of people. We will pay particular attention to the ways bodies, ideas, and technologies flow throughout global contexts, while exploring how inequalities at various levels (race, class, geographic region, nationality, gender, sexuality, practices of family making) impact the “nature” of the reproductive body, and how reproductive practices “reproduce” such inequalities. We will also explore how knowledge of the reproductive body is contested through biomedicine, law, and media, with particular attention to naturalizing discourse about gender and intuition. Finally, we will look at how ecology and reproduction are intertwined via concern about environmental toxicities and the impact of non-human actors.
Instructor(s): A. Ford Terms Offered: Spring
Equivalent Course(s): GNSE 24308, PBPL 24308

ANTH 24312. Body & Soul: The Anthropology of Religion, Health, & Healing. 100 Units.
In this course, we will explore how people experience religion across social and historical contexts with a focus on how religion shapes ideas of what it means to be mentally healthy and how to treat illness. In the first half, we will focus especially on the role of the body in religious experiences: how people comport, discipline, and alter their bodies in attempts to create religious experiences. In the second half, we will turn to the mind: how religion mediates cultural understandings of mental health, well-being, and illness and the experience of a normatively healthy mind and body.
Instructor(s): E. Raikhel Terms Offered: Winter
Note(s): CHDV Distribution, C, D
Equivalent Course(s): CHDV 23301, ANTH 35115, HIPS 27302, CHDV 33301

ANTH 24315. Culture, Mental Health, and Psychiatry. 100 Units.
While mental illness has recently been framed in largely neurobiological terms as “brain disease,” there has also been an increasing awareness of the contingency of psychiatric diagnoses. In this course, we will draw upon readings from medical and psychological anthropology, cultural psychiatry, and science studies to examine this paradox and to examine mental health and illness as a set of subjective experiences, social processes, and objects of knowledge and intervention. On a conceptual level, the course invites students to think through the complex relationships between categories of knowledge and clinical technologies (in this case, mainly psychiatric ones) and the subjectivities of persons living with mental illness. Put in slightly different terms, we will look at the multiple links between psychiatrists’ professional accounts of mental illness and patients’ experiences of it. Questions explored include: Does mental illness vary across social and cultural settings? How are experiences of people suffering from mental illness shaped by psychiatry’s knowledge of their afflictions?
Instructor(s): E. Raikhel Terms Offered: Winter
Note(s): CHDV Distribution, C, D
Equivalent Course(s): CHDV 23301, ANTH 35115, HIPS 27302, CHDV 33301
ANTH 24316. Thinking Psychoanalytically: From the Sciences to the Arts. 100 Units.
Since Freud’s seminal investigation into the nature of the mind, psychoanalytic thinking has offered a unique approach to unconscious, relational, and meaningful dimensions of human experience. Despite assaults on the field from numerous quarters, psychoanalytic thinking remains central to the work of practitioners across an array of disciplines. After an introduction to key psychoanalytic concepts including the unconscious, repression, and transference, we will investigate some of the ways in which these ideas are mobilized within clinical practice, neuroscience, anthropology, education, philosophy, literary studies, and the visual arts through a series of lectures presented by specialists from these fields. Along the way, we will gain an appreciation for some of the ways in which psychoanalytic perspectives continue to inspire a variety of current scientific and humanistic projects.
Instructor(s): A. Beal; Staff Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): BPRO 28400

ANTH 24320. Cultural Psychology. 100 Units.
There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of “normal” psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of “culture” and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning.
Instructor(s): R. Shweder Terms Offered: Autumn
Prerequisite(s): Undergraduates must be in third or fourth year.
Note(s): CHDV Distribution: B, C
Equivalent Course(s): GNSE 21001, AMER 33000, CHDV 31000, ANTH 35110, GNSE 31000, PSYC 23000, PSYC 33000, CHDV 21000

ANTH 24330. Medical Anthropology. 100 Units.
This course introduces students to the central concepts and methods of medical anthropology. Drawing on a number of classic and contemporary texts, we will consider both the specificity of local medical cultures and the processes which increasingly link these systems of knowledge and practice. We will study the social and political economic shaping of illness and suffering and will examine medical and healing systems—including biomedicine—as social institutions and as sources of epistemological authority. Topics covered will include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; structural violence; modernity and the distribution of risk; the meanings and effects of new medical technologies; and global health.
Instructor(s): E. Raikhel Terms Offered: Winter
Prerequisite(s): SOSC sequence
Note(s): CHDV Distribution: C, D; 4
Equivalent Course(s): CHDV 43204, CHDV 23204, ANTH 40330, HIPS 27301

ANTH 24345. Anthropology and ‘The Good Life’: Ethics, Morality, Well-Being. 100 Units.
This course takes a critical, historical and anthropological look at what is meant by “the good life.” Anthropologists have long been aware that notions of “the good” play an essential role in directing human behavior, by providing a life with meaning and shaping what it means to be a human being. Over the past several years, however, there has been an increasing demand for clarification on what is meant by “the good life,” as well as how cultural conceptions of “the good” relate to science, politics, religion, and personal practice. In this course, we will take up that challenge by exploring what is meant by “the good,” focusing on three domains in which it has most productively been theorized: ethics, morality, and well-being. Through a close reading of ethnographic and theoretical texts, as well as through analysis of documents and resources used and produced by different communities in order to explore the good life, we will gain an understanding of the different theoretical and methodological approaches for understanding the good in the social sciences, the various cultural logics shaping knowledge and practices of the good, and how human experience is shaped by those iterations in the process. The topics to be discussed include: the good life, moral reason, moral relativism, utility, deontology, virtue, happiness, well-being, flourishing, techniques of the self, spiritual exercises, professional ethics, neuroethics, and the moral sentiments.
Equivalent Course(s): ANTH 35130, CHDV 32200, MAPS 32200

ANTH 24350. Historical Epistemology & Contemporary Biomedicine. 100 Units.
No description available
ANTH 24351. Philosophies of Praxis and Conjuncture. 100 Units.

ANTH 24355. Experiencing Madness: Empathic Methods in Cultural Psychiatry. 100 Units.
This course provides students with an introduction to the phenomenological approach in cultural psychiatry, focusing on the problem of “how to represent mental illness” as a thematic anchor. Students will examine the theoretical and methodological groundings of cultural psychiatry, examining how scholars working in the phenomenological tradition have tried to describe the lived experiences of various forms of “psychopathology” or “madness.” By the end of the course, students will have learned how to describe and analyze the social dimension of a mental health experience, using a phenomenologically-grounded anthropological approach, and by adopting a technical vocabulary for understanding the lived experiences of mental illness (for instance, phenomena, life-world, being-in-the-world, intentionality, epoché, embodiment, madness, psychopathology, melancholia/ depression, schizophrenia, etc). In addition, given the ongoing problematic of “how to represent mental illness,” students will also have the opportunity to think through the different ways of presenting their analysis, both in the form of weekly blog entries and during a final-week mock-workshop, where they will showcase their work in a creative medium appropriate to that analysis.
Equivalent Course(s): MAPS 32800, HIPS 22800, CHDV 32822, CHSS 32800, ANTH 35135

ANTH 24510-24511. Anthropology of Museums I-II.
This sequence examines museums from a variety of perspectives. We consider the World’s Columbian Exposition of 1893, the Native American Graves Protection and Repatriation Act, the image and imagination of African American culture as presented in local museums, and museums as memorials, as exemplified by Holocaust exhibitions. Several visits to area museums required.

ANTH 24510. Anthropology Of Museums-1. 100 Units.
Using anthropological theories and methodology as a conceptual framework, this seminar will explore the organizational and ideological aspects of museum culture(s). The course includes visits to museums with guest museum professionals as guides into the culture of museums.
Equivalent Course(s): ANTH 34501, CHDV 34501, MAPH 34400, SOSC 34500, MAPS 34500

ANTH 24511. Anthropology Of Museum-2. 100 Units.
Using anthropological theories and methodology as a conceptual framework, this seminar will explore the organizational and ideological aspects of museum culture(s). The course includes visits to museums with guest museum professionals as guides into the culture of museums.
Instructor(s): M. Fred Terms Offered: Autumn Winter
Prerequisite(s): Advanced standing and consent of instructor
Note(s): CHDV Distribution: C
Equivalent Course(s): SOSC 34600, ANTH 34502, CHDV 38102, MAPS 34600

ANTH 24520. Temple or Forum: Designing the Obama Presidential Center. 100 Units.
Throughout this seminar participants will research and discuss key issues pertaining to the development and implications of presidential libraries and museums. These insights will become the foundation for a final project in which they will work in small teams to design a potential exhibit for the Obama Presidential Center in Jackson Park.
Equivalent Course(s): ANTH 31108, MAPS 31108

ANTH 24810. Atmospheres. 100 Units.
In a world of changing climate, how do we change the political? What affective chemistry is needed to recognize and mobilize on behalf of shifting air currents? This seminar explores the conceptual and material chemistries of atmosphere. The course will investigate key texts on climate change, embodiment, and affect, as well as recent ethnographic explorations of environmental sensibilities across air, ice, ocean, and land.
Terms Offered: Spring. Spring 2019
Note(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): HIPS 24810
ANTH 25100. Anthropology of the Body. 100 Units.
Drawing on a wide and interdisciplinary range of texts, both classic and more recent, this seminar will variously examine the theoretical debates of the body as a subject of anthropological, historical, psychological, medical, and literary inquiry. The seminar will explore specific themes, for example, the persistence of the mind/body dualism, experiences of embodiment/alienation, phenomenology of the body, Foucauldian notions of bio-politics, biopower and the ethic of the self, and the medicalized, gendered, and racialized body, among other salient themes.
Instructor(s): S. Brotherton Terms Offered: Spring
Note(s): CHDV Distribution: D
Equivalent Course(s): CRES 25112, ANTH 45100, CHDV 25100, GNSE 25112

ANTH 25117. About Nature: From Science to Sense. 100 Units.
Consider mushrooms,” Anna Tsing (2012) suggests to those who are curious about human nature and she points to the relational and biological diversity found at the unruly edges of the global empire-the governmentalized, politicized, commoditized culture nature of capitalism. This class follows the suit, tracking the scent of what evidently remains, thrives, withdraws, overwhelms, and inspires wonder in the guises of the natural, wild, organic, or awesome.
Instructor(s): L. Jasarevic Terms Offered: Winter
Equivalent Course(s): INST 27702, GLST 27702

ANTH 25118. Earthbound Metaphysics: Speculations on Earths and Heavens. 100 Units.
Social thought has recently reopened the subject matter of the “world”: what is it made of, how does it hold together, and what does it inhabit? Proposals and inquiries generated in response are as imaginative as they are self-consciously urgent: written on the crest of the global ecological disaster, from within the zones of disturbance or the sites of extreme intervention into the living matter and forms of life, contemplating the end of the world and possibilities of extinction, redemption, habitation, or “collateral survival” (Tsing 2015). All are variously political. Foregrounding the plurality of the material worlds and lived worldviews on the one hand, and of the shared historical predicament on the other, social thinkers question universal values and conceivable relations, and search for alternate forms of grasping, engaging, and representing the pluriverse. This course goes along with such interests in the “worlds” and collects a number of compelling, contemporary texts that are variously oriented towards cosmopolitics, “minimalist metaphysics,” “new materialisms,” speculative realisms, eco-theology, and multispecies coexistence. Readings will stretch out to examine some classic ethnographic texts and past theoretical excursions into the perennial problem of how to know and tell the unfamiliar, native, worlds, which are swept by, mingling with, or standing out in the more globalizing trends of capitalist, scientific, and secular materialism.
Equivalent Course(s): GLST 27703

ANTH 25148. Israel in Film and Ethnography. 100 Units.
This seminar explores the dynamics of Israeli culture and society through a combination of weekly screenings of Israeli fiction and documentary films with readings from ethnographic and other relevant research. Among the (often overlapping) topics to be covered in this examination of the institutional and ideological construction of Israeli identity/ies: the absorption of immigrants; ethnic, class, and religious tensions; the kibbutz; military experience; the Holocaust; evolving attitudes about gender and sexuality; the struggle for minorities’ rights; and Arab-Jewish relations. In addition to the readings, participants will be expected to view designated films before class related to the topic.
Equivalent Course(s): JWSC 25148, CMES 35148, NEHC 25148, MAPS 35148, ANTH 35148, NEHC 35148

ANTH 25150. Anthropology of Israel. 100 Units.
This seminar explores the dynamics of Israeli culture and society through a combination of weekly screenings of Israeli fiction and documentary films with readings from ethnographic and other relevant research. Among the (often overlapping) topics to be covered in this examination of the institutional and ideological construction of Israeli identity/ies: the absorption of immigrants; ethnic, class, and religious tensions; the kibbutz; military experience; the Holocaust; evolving attitudes about gender and sexuality; the struggle for minorities’ rights; and Arab-Jewish relations.
Equivalent Course(s): NEHC 35147, CMES 35150, NEHC 25147, ANTH 35150, MAPS 35150, JWSC 25149

ANTH 25200. Approaches to Gender in Anthropology. 100 Units.
This course examines gender as a cultural category in anthropological theory, as well as in everyday life. After reviewing the historical sources of the current concern with women, gender, and sexuality in anthropology and the other social sciences, we critically explore some key controversies (e.g., the relationship between production and reproduction in different socio-cultural orders; the links between “public” and “private” in current theories of politics; and the construction of sexualities, nationalities, and citizenship in a globalizing world).
Instructor(s): S. Gal Terms Offered: TBD
Equivalent Course(s): GNSE 25201
ANTH 25207. Gender, Sexuality, & Religion. 100 Units.
In many cultural contexts today, religion is often seen as a socially conservative force in public and political realms. For instance, Christian “pro-life” movements in the US often draw on tropes of women’s “traditional” role as mothers to argue against easily accessible abortion clinics or contraceptives; recent faith-based objections to legal protections for LGBTQ individuals; and debates in the US and Western Europe about Muslim women’s use of the veil as inherently disempowering women. Social scientists have often noted the logics of duality that shape our contemporary world: religious/secular, traditional/modern, conservative/liberal, private/public, etc. Within this logic, religious peoples are presumed to be traditional or “primitive” and therefore hostile to modernity or foreclosed from being modern. Similarly, to be progressive or liberal, one is assumed to be secular and skeptical of religion. Is it always the case, though, that religion is conservative, traditional, and works to maintain the status quo of possible gender roles and sexual identities in society? The goal of this course is to investigate this question. We will look at contemporary places around the world, multiple religions, and various genders and sexualities in order to complicate the picture of how religion and gender inform one another.
Equivalent Course(s): CHDV 20802, GNSE 20802, RLST 26909

ANTH 25209. Morality across the Life Course. 100 Units.
Morality across the Life Course. What does it mean to be a moral person? And how do moral expectations within a given society shift across the life course? Social scientists have noted that what it means to be a moral child may not always be the same as what it means to be a moral adolescent or middle-aged adult. At the same time, scholars have been interested in how moral ideals pass from one generation to another through processes such as socialization. Social reproduction must also deal with globalization and other sources of social change. By honing in on such processes of social reproduction and change, many have suggested we may better understand how moral beliefs change across generations and over time. In this course we will explore these processes of moral development, socialization, and change, drawing largely on anthropological and psychological research. While early developmental psychologists theorized moral development as stage-based and teleological (i.e., an ultimate, ideal adult moral personhood towards which developmental stages were progressive steps), anthropologists and cultural psychologists working in many different cultural contexts have complicated this understanding of morality. We will begin the quarter by looking at some of the early texts and theories about moral development in addition to early concerns about social reproduction across generations. Afterwards we will turn to a series of ethnographic monographs in order to explore in detail how particular life course stages are conceptualized in moral terms in various parts of the world and in different contexts of social change.
Equivalent Course(s): CHDV 20803

ANTH 25255. Borders, (Im)mobilities and Human Rights. 100 Units.
What is the human cost of border control? To what extent do individuals possess the right to move to other states? How do different states with large populations of refugees and asylum seekers develop and enforce migration policies, and what do the differences in these policies reveal about the social histories and futures of these states? To address these questions, we will consider how borders, institutions, and categories of migrant groups mutually shape one another. We will explore the interrelationships between categories of migration-forced, economic, regular, and irregular-in order to understand the multiple and unequal forms of mobility experienced by those who inhabit these categories. By utilizing a framework of human rights, this course will investigate how contemporary issues in migration-such as border management, illicit movement, and the fuzzy distinction between forced and economic migration-raise and reopen debates concerning the management of difference. We will draw on the work of anthropologists, sociologists, and geographers, as well as journalists, legal, and medical professionals. Our readings each week will include a mix of conceptual, ethnographic, long-form journalism, and policy texts. When possible, we will also invite representatives from different Chicago-based organizations that promote and protect the rights of people in various situations of migration to come to our class to discuss their work.
Equivalent Course(s): CHDV 23403, GLST 23403, HMRT 23403

ANTH 25305. Anthropology of Food and Cuisine. 100 Units.
Contemporary human foodways are not only highly differentiated in cultural and social terms, but often have long and complicated histories. Anthropologists have long given attention to food. But, until quite recently, they did so in an unsystematic, haphazard fashion. This course explores several related themes with a view towards both the micro- and macro-politics of food by examining a range of ethnographic and historical case studies and theoretical texts. It takes the format of a seminar augmented by lectures (during the first few weeks), scheduled video screenings, and individual student presentations during the rest of the course.
Instructor(s): S. Palmie Terms Offered: Autumn
Note(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): ANTH 35305
ANTH 25401. Consumption. 100 Units.
The modern period was associated with industrial production, class society, rationalization, disenchantment, the welfare state, and the belief in salvation by society. Current societies are characterized by a culture of consumption; consumption is central to lifestyles and identity, it is instantiated in our technological reality and the complex of advertising media, structures of wanting and shopping. Starting from the question “why do we want things” we will discuss theories and empirical studies that focus on consumption and identity formation; on shopping and the consumption of symbolic signs; on consumption as linked to the re-enchantment of modernity; as a process of distinction and of the globalization of frames; and as related to time and information. The course is built around approaches that complement the “productionist” focus of the social sciences. Students interested in economic sociology and anthropology can supplement this course by one on Markets and Money.
Instructor(s): K. Knorr Cetina
Terms Offered: Autumn
Equivalent Course(s): SOCI 20150, ANTH 35401, SOCI 30150

ANTH 25411. California: Utopia/Dystopia. 100 Units.
California is a bellwether for the nation, and the site of both utopian and dystopian imaginaries. From Silicon Valley’s reinvention of the world through technology, to Hollywood’s national storytelling through film, from Disney’s fantasyland to San Francisco’s communes to LA’s metropolis, California is a lightning rod for various visions of the future. It epitomizes the “frontier” where traditions hold less sway, especially for women and LGBTQ people. Both reactionary and progressive when confronted with social change, California previews debates that later happen on a national stage. Its current opposition to federal immigration policy should be considered alongside its history of legalized sinophobia and Japanese internment. It exaggerates American ideals and disgraces; consider the Gold Rush, which epitomized an American Dream of wealth for the taking and entailed a brutal genocide of Native Californians. The Bay Area sustainability cult exists alongside the most polluted places in the country. California hosts extremes of poverty and wealth, urban and rural, liberalism and conservatism (Reagan was, after all, Californian). We will consider California through ethnography, history, literature, sociology, theory, film, photography, and music. How do ideas about a place, and its lived reality, mutually shape each other? What is the role of utopian/dystopian thinking? A premise of the course is that utopia for some is dystopia for others.

ANTH 25905-25906. Introduction to the Musical Folklore of Central Asia.
No sequence description available.

ANTH 25905. Introduction to the Musical Folklore of Central Asia. 100 Units.
This course explores the musical traditions of the peoples of Central Asia, both in terms of historical development and cultural significance. Topics include the music of the epic tradition, the use of music for healing, instrumental genres, and Central Asian folk and classical traditions. Basic field methods for ethnomusicology are also covered. Extensive use is made of recordings of musical performances and of live performances in the area.
Instructor(s): K. Arik
Terms Offered: Spring
Equivalent Course(s): MUSI 23503, REES 25001, NEHC 20765, REES 35001, MUSI 33503, NEHC 30765

ANTH 25906. Shamans and Oral Poets of Central Asia. 100 Units.
This course explores the rituals, oral literature, and music associated with the nomadic cultures of Central Eurasia.
Instructor(s): K. Arik
Terms Offered: Spring
Note(s): NEHC 20765 and 20766 may be taken in sequence or individually.
Equivalent Course(s): NEHC 30766, NEHC 20766

ANTH 25908. Balkan Folklore. 100 Units.
Vampires, fire-breathing dragons, vengeful mountain nymphs. 7/8 and other uneven dance beats, heart-rending laments, and a living epic tradition. This course is an overview of Balkan folklore from historical, political, and anthropological perspectives. We seek to understand folk tradition as a dynamic process and consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition firsthand through visits of a Chicago-based folk dance ensemble, “Balkan Dance.”
Instructor(s): A. Ilieva
Terms Offered: Winter
Equivalent Course(s): REES 39009, REES 29009, NEHC 30568, NEHC 20568, ANTH 35908, CMLT 23301, CMLT 33301

ANTH 26100. Ancient Celtic Societies. 100 Units.
This course explores the prehistoric societies of Iron Age “Celtic” Europe and their relationship to modern communities claiming Celtic ancestry. The course aims to impart an understanding of (1) the kinds of evidence available for investigating these ancient societies and how archaeologists interpret these data, (2) processes of change in culture and society during the Iron Age, and (3) how the legacy of Celtic societies has both persisted and been reinvented and manipulated in the modern world. Issues include the relationship between language, material culture, and society; colonial interaction; urbanization; art and religion; gender roles; and cultural identity in the construction of tradition.
Equivalent Course(s): ANTH 46500
ANTH 26710-26711. Ancient Landscapes I-II.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI’s ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.

ANTH 26710. Ancient Landscapes I. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI’s ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Autumn
Equivalent Course(s): NEAA 30061, NEAA 20061, ANTH 36710, GEOG 35400, GEOG 25400

ANTH 26711. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI’s ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, NEAA 30062, NEAA 20062, GEOG 35800, GEOG 25800

ANTH 26711. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI’s ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, NEAA 30062, NEAA 20062, GEOG 35800, GEOG 25800
ANTH 26760. Archaeology of Bronze Age China. 100 Units.
Bronze Age in China conventionally refers to the time period from ca. 2000 BC to about 500 BC, during which bronze, an alloy of copper and other metals such as tin and lead, was the predominant medium used by the society, or to be more precise, the elite classes of the society. Bronze objects, in the forms of vessels, weapons, and musical instruments, were reserved for the upper ruling class of the society and were used mostly as paraphernalia during rituals and feasting. "Bronze Age" in China also indicates the emergence and eventual maturation of states with their bureaucratic systems, the presence of urban centers, a sophisticated writing system, and advanced craft producing industries, especially metal production. This course surveys the important archaeological finds of Bronze Age China and the theoretical issues such as state formation, craft production, writing, bureaucratic systems, urbanization, warfare, and inter-regional interaction, etc. It emphasizes a multi-disciplinary approach with readings and examples from anthropology, archaeology, art history, and epigraphy. This course will also visit the Smart Museum, the Field Museum, and the Art Institute of Chicago to take advantage of the local collections of ancient Chinese arts and archaeology.
Instructor(s): Y. Li Terms Offered: Spring
Equivalent Course(s): EALC 48015, EALC 28015, ANTH 46760

ANTH 26765. Archaeology of Anyang: Bronzes, Inscriptions, and World Heritage. 100 Units.
Anyang is one of the most important archaeological sites in China. The discoveries of inscribed oracle bones, the royal cemetery, clusters of palatial structures, and industrial-scale craft production precincts have all established that the site was indeed the last capital of the Shang dynasty recorded in traditional historiography. With almost continuous excavations since the late 1920s, work at Anyang has in many ways shaped and defined Chinese archaeology and the study of Early Bronze Age China. This course intends to examine the history of research, important archaeological finds, and the role of Anyang studies in the field of Chinese archaeology. While the emphasis is on archaeological finds and the related research, this course will also attempt to define Anyang in the modern social and cultural contexts in terms of world heritage, national and local identity, and the looting and illegal trade of antiquities.
Terms Offered: Winter
Equivalent Course(s): ANTH 36765, EALC 28010, EALC 48010

ANTH 26900. Archaeological Data Sets. 100 Units.
This course focuses on the methodological basis of archaeological data analysis. Its goals are twofold: (1) to provide students with an opportunity to examine research questions through the study of archaeological data; and (2) to allow students to evaluate evidential claims in light of analytical results. We consider data collection, sampling and statistical populations, exploratory data analysis, and statistical inference. Built around computer applications, the course also introduces computer analysis, data encoding, and database structure.
Instructor(s): A. Yao Terms Offered: Autumn. Not offered 2018-19; will be offered 2019-20.
Prerequisite(s): Advanced standing and consent of instructor
Equivalent Course(s): ANTH 46900

ANTH 27116. Language and Migration: Individual, Social and Institutional Perspectives. 100 Units.
This class offers a broad range of perspectives on issues regarding language in the context of migration. For instance we analyze the ways in which language has been instrumentalized by Nation-States to regiment and restrain the mobility of targeted populations. We deconstruct the straightforward correlation between socio-economic integration and language competence in discourse produced by politicians and some academics alike. We also analyze how different types of mobility (e.g., slavery, colonization, and free individual migration) produce, at different times, differing sociolinguistic dynamics.
Equivalent Course(s): CHDV 30249, LING 30249, ANTH 37116

ANTH 27305. Pornography and Language. 100 Units.
The course explores the place and role of language in pornographic films. Why does language occur in filmed pornography at all? What kind of language occurs? What role does it play? How is it gendered? How does it frame the narrative or drive it forward? How does language subvert or undermine the visual representation of sex? What does any of this tell us about gender, sexuality and erotics in non-pornographic contexts? Course readings focus on theories of pornographic representation, theories of language, gender and erotics, and methods of transcribing and analyzing dialogue. The course requires students to watch a wide range of pornography, including different varieties of straight, gay and trans porn, so anyone enrolling in the course must be interested in pornography as a social and cultural phenomenon and must also have experience watching porn and thinking about it.
Instructor(s): D. Kulick Terms Offered: Spring
Prerequisite(s): Upper-level undergrad course.
Equivalent Course(s): CHDV 20405, LING 29405
ANTH 27400. Language/Power/Identity in South East Europe. 100 Units.
This course familiarizes students with the linguistic histories and structures that have served as bases for the formation of modern Balkan ethnic identities and that are being manipulated to shape current and future events. The course is informed by the instructor’s thirty years of linguistic research in the Balkans as well as his experience as an adviser for the United Nations Protection Forces in Former Yugoslavia and as a consultant to the Council on Foreign Relations, the International Crisis Group, and other organizations. Course content may vary in response to ongoing current events.
Instructor(s): V. Friedman Terms Offered: Winter
Equivalent Course(s): LING 27200, REES 33119, LING 37200, ANTH 37400, REES 23119, HUMA 27400

ANTH 27430. Linguistic Politics: Language Revitalization. 100 Units.
Linguists and the general public have long been alarmed about the number of languages that disappear from use, and so are no longer spoken in the world. Their speakers shift to other languages. As part of the response, social groups have been mobilizing for many decades to prevent such lapses/losses and shifts in use and to document, revitalize, archive and mobilize the resources of communication. This course takes up the processes by which shift happens, asking what “language” is in these transformations; what and how linguistic forms, cultural values, and social institutions are involved and what social activism can or cannot accomplish in the “saving” of languages.
Instructor(s): S. Gal Terms Offered: Spring
Equivalent Course(s): LING 27430

ANTH 27601. Populism and Its Discontents. 100 Units.
Populism and its Discontents is a reading-based undergraduate discussion seminar. Populism is currently the word on everyone's lips. But what does it mean? We begin with the ambiguous status of populism in current public debates; populism is at once imagined as the lifeblood of genuine democracy and at the same time as the dark force that threatens democracy from within. Why should this be? Questions to be covered include, but are not limited to, the following: Are there progressive and regressive forms of populism? Does populism look different in today’s social media-saturated world than it did a hundred years ago? Does populism in the Global South force us to reconsider what we think we know about its Euro-American variants? Students will be asked to complete assignments drawing on the assigned readings and audiovisual materials and on contemporary media sources.

ANTH 27605. Language, Culture, and Thought. 100 Units.
Survey of research on the interrelation of language, culture, and thought from the evolutionary, developmental, historical, and culture-comparative perspectives with special emphasis on the mediating methodological implications for the social sciences.
Instructor(s): J. Lucy Terms Offered: Spring
Note(s): CHDV Distribution, B, C
Equivalent Course(s): PSYC 21950, ANTH 37605, PSYC 31900, CHDV 21901, LING 27605, LING 37605, CHDV 31901

ANTH 27700. Romani Language and Linguistics. 100 Units.
An introduction to the language of the Roms (Gypsies). The course will be based on the Arli dialect currently in official use in the Republic of Macedonia, but due attention will be given to other dialects of Europe and the United States. The course will begin with an introduction to Romani linguistic history followed by an outline of Romani grammar based on Macedonian Arli. This will serve as the basis of comparison with other dialects. The course will include readings of authentic texts and discussion of questions of grammar, standardization, and Romani language in society.
Instructor(s): Victor Friedman Terms Offered: Spring
Equivalent Course(s): LING 37810, LING 27810, ANTH 47900

ANTH 27902. Modern Spoken Yucatec Maya-2. 100 Units.
This sequence is a basic introduction to the modern Yucatec Maya language, an indigenous American language spoken by about 750,000 people in southeastern Mexico. Three consecutive quarters of instruction are intended for students aiming to achieve basic and intermediate proficiency. Students receiving FLAS support must take all three quarters. Others may elect to take only the first quarter or first two quarters. Students wishing to enter the course midyear (e.g., those with prior experience with the language) must obtain consent of instructor. Materials exist for a second year of the course; interested students should consult the instructor. Students wishing to continue their training with native speakers in Mexico may apply for FLAS funding in the summer.
Equivalent Course(s): CHDV 27902, LACS 27902, CHDV 47902, LACS 47902

ANTH 27903. Modern Spoken Yucatec Maya-3. 100 Units.
No description available
Equivalent Course(s): CHDV 27903, LACS 47903, ANTH 47903, CHDV 47903, LACS 27903
ANTH 28110. Human Origins: Milestones in Human Evolution and the Fossil Record. 100 Units.
This course aims at exploring the fundamentals of human origins by tracking the major events during the
course of human evolution. Starting with a laboratory based general introduction to human osteology and
muscle function, the latest on morphological and behavioral evidence for what makes Homo sapiens and their
fossil ancestors unique among primates will be presented. Our knowledge of the last common ancestor will be
explored using the late Miocene fossil record followed by a series of lectures on comparative and functional
morphology, adaptation and biogeography of fossil human species. With focus on the human fossil record, the
emergence of bipedalism, advent of stone tool use and making, abandonment of arboreality, advent of endurance
walking and running, dawn of encephalization and associated novel life histories, language and symbolism will
be explored. While taxonomic identities and phylogenetic relationships will be briefly presented, the focus will
be on investigating major adaptive transitions and how that understanding helps us to unravel the ecological
selective factors that ultimately led to the emergence of our species. The course will be supported by fresh data
coming from active field research conducted by Prof. Alemseged and state of the art visualization methods that
help explore internal structures. By tracing the path followed by our ancestors over time, this course is directly
relevant to reconnoitering the human condition today and our place in nature.
Instructor(s): Z. Alemseged Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of Instructor.
Equivalent Course(s): BIOS 22265

ANTH 28400. Bioarchaeology and the Human Skeleton. 100 Units.
This course is intended to provide students in archaeology with a thorough understanding of bioanthropological
and osteological methods used in the interpretation of prehistoric societies by introducing bioanthropological
methods and theory. In particular, lab instruction stresses hands-on experience in analyzing the human skeleton,
whereas seminar classes integrate bioanthropological theory and application to specific cases throughout the
world. Lab and seminar-format class meet weekly.
Instructor(s): M. C. Lozada Terms Offered: Winter
Note(s): This course qualifies as a Methodology selection for Anthropology majors.
Equivalent Course(s): ANTH 38800, BIOS 23247

ANTH 29500. Archaeology Laboratory Practicum. 100 Units.
This hands-on lab practicum course exposes students to various stages of artifact processing on a collection from
a recently excavated site (e.g., washing, sorting, flotation, identification, data entry, analysis, report preparation,
curation). The primary requirement is that students commit to a minimum of nine hours of lab work per week,
with tasks assigned according to immediate project needs.
Instructor(s): F. Richard, S. Dawdy Terms Offered: TBD. Various
Prerequisite(s): Consent of instructor
Note(s): This course qualifies as a Methodology selection for Anthropology majors. Undergraduates may take it
only once for credit.
Equivalent Course(s): ANTH 59500

ANTH 29601. Populism and Its Discontents. 100 Units.
Populism and its Discontents is a reading-based undergraduate discussion seminar. Populism is currently the
word on everyone’s lips. But what does it mean? We begin with the ambiguous status of populism in current
public debates; populism is at once imagined as the lifeblood of genuine democracy and at the same time as
the dark force that threatens democracy from within. Why should this be? Questions to be covered include, but
are not limited to, the following: Are there progressive and regressive forms of populism? Does populism look
different in today’s social media-saturated world than it did a hundred years ago? Does populism in the Global
South force us to reconsider what we think we know about its Euro-American variants? Students will be asked to
complete assignments drawing on the assigned readings and audiovisual materials and on contemporary media
sources.
Instructor(s): William Mazzarella Terms Offered: Spring, Spring 2019
Prerequisite(s): PQ: 3rd or 4th year standing
Note(s): This is a 3CT Capstone Course

ANTH 29700. Readings in Anthropology. 100 Units.
Independent research projects.
Instructor(s): Select section from pull down list under ANTH 29700 in the Time Schedule Terms Offered:
Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Course Form. At the discretion of the
instructor, this course is available for either a quality grade or for P/F grading.
ANTH 29900. Preparation of Bachelor's Essay. 100 Units.
Reading and Research course for Anthropology majors preparing to write a BA Essay.
Instructor(s): Select section from pull-down list under ANTH 29900 in the Time Schedule Terms Offered:
Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Course Form. At the discretion of
the instructor, this course is available for either a quality grade or for P/F grading. For honors requirements, see
Honors section under Program Requirements.

ANTH 29910. Bachelor's Essay Seminar. 100 Units.
This course is designed to help anthropology undergraduates to develop, formulate, and write a promising
research question that can be addressed in scholarly paper of 40 pages. To do this, we will develop a specialized
set of writing skills, techniques, and strategies. First, we will address the problem of processing research "data",
focusing in particular on the relationship between questions and evidence. Second, we will engage with the
writing-process proper, with a special focus on how to craft an argument of this length, including planning,
outlining, and drafting. Third, we will explore the rhetorical qualities and characteristics of academic writing as a
textual genre, with the goal of mastering the art of developing convincing argumentation.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): Open only to fourth year anthropology students currently writing BA Essays
Note(s): Open only to students currently writing BA honors papers.
ART HISTORY

Department Website: http://arthistory.uchicago.edu

Program of Study

The study of art history encompasses the visual art, architecture, and material culture of a wide range of regions and historical periods. Art history courses develop students' skills in visual analysis, interpretation of images and texts, use of historical sources, and engagement with scholarly debates. So conceived, the study of art is an element of a general, liberal arts education; the skills of analytical thinking, logical argument, and clear verbal expression necessary to the program are basic to most fields. While maintaining the University of Chicago's traditional emphasis on the life of the mind, the major in art history prepares students for advanced study at the graduate level as well as for a wide array of careers involving visual acuity, design, research, and analysis.

Within the Art History Department, courses at the 10000-level meet the general education requirement in the arts. These courses may not be taken for credit toward the major, although majors are strongly encouraged to take at least one (1) to meet their general education requirements. Upper-level courses (20000-level) may take a relatively broad or narrow approach to particular periods, places, themes, or issues, or may deal with theoretical questions. The usual prerequisite for 20000-level Art History courses is consent of instructor or any 10000-level course in Art History or Visual Arts.

GENERAL EDUCATION COURSES

Any of these 10000-level courses is an appropriate choice for any undergraduate to meet the general education requirement in the arts. None presuppose prior training in art.

Introduction to Art

ARTH 10100 Introduction to Art develops basic skills in the analysis and critical enjoyment of a wide range of visual materials. Issues and problems in the making, exhibition, and understanding of images and objects are explored through classroom discussion of key works, critical reading of fundamental texts, visits to local museums, and writing.

Survey Courses

• ARTH 14000 through 16999 - discuss major monuments of world art and architecture in the context of broad chronological and geographic categories and in relation to broad questions concerning the role art plays in individual, societal, and institutional settings.
• ARTH 14000 through 14999 - address Western art in Antiquity, the Middle Ages, and the Renaissance.
• ARTH 15000 through 15999 - address Western art from the early modern period to the present day.
• ARTH 16000 through 16999 - address the art of Africa, Asia, Latin America, and/or the Middle East.

Art in Context Courses

• ARTH 17000 through 18999 - introduce students to a well-defined issue, topic, or period of art in depth; at the same time, these courses explore issues of creativity, communication, and value in a series of concrete case studies.

Students who have taken at least one course in art history or visual art, or who have equivalent nonacademic experience, may elect to take an advanced lecture course, numbered from 20000 to 29999. The usual prerequisite is consent of instructor or any 10000-level course in art history or visual arts. The 20000-level art history courses investigate the arts of specific periods and places from a variety of perspectives. Some courses embrace large bodies of material defined by national culture; others follow developments in style, iconography, and patronage as they affect works in selected media.

MAJOR IN ART HISTORY

The BA in art history furnishes students with a broad knowledge of art, including architecture, even as it provides an opportunity for the complementary, intensive study of an area of special interest. The basic components of the concentration are: a Special Field, devised in consultation with departmental instructors and the Director of Undergraduate Studies (DUS); a distribution of courses outside the special field; at least two research papers in art history (emerging from ordinary course work in the department); and a third-year seminar on art-historical methods and issues. Fourth-year students who wish to pursue honors in the major conduct independent research on a topic of their own devising, producing a BA Paper with the guidance of a faculty member and a graduate preceptor.

PROGRAM REQUIREMENTS

Beginning with the Class of 2020, art history majors will follow the requirements outlined below. Students in the Class of 2019 have the option of adhering to the new or to the old requirements. They should meet with the Director of Undergraduate Studies to address their options and any questions or concerns.

All art history majors are expected take at least one (1) course in art history at the 10000-level to fulfill their general education requirement in the arts. Although general education courses do not count for the major,
they are useful preliminaries to advanced work. It is, therefore, strongly recommended that students take such a course as early as possible in their undergraduate careers. Note: Students who have formally declared the major in art history are guaranteed admission to 10000-level courses by notifying the instructor in advance.

The Standard Curriculum

The standard formula for requirements in the major goes by the sobriquet “4-3-2-1.” All art history majors must complete the following:

- Four (4) courses at the 20000-level to meet a distribution requirement within the department. These courses shall be selected in consultation with the Director of Undergraduate Studies. Courses should be selected for maximal geographical, chronological, cultural, and methodological diversity, and for minimal overlap with the Special Field.

- Three (3) courses at the 20000-level in a Special Field. Students develop the Special Field in consultation with departmental instructors and the Director of Undergraduate Studies. Because Special Fields reflect the interests of individual students, they range widely in topic, approach, and scope. Reading courses with art history faculty may be used to pursue specific questions within a Special Field. For more on the Special Field, see Special Field below.

- Two (2) courses at the 20000-level as free electives. Any art history courses at the 20000-level may satisfy this requirement. Courses outside the Department of Art History that relate directly to the Special Field are eligible to meet this requirement by petition to the Director of Undergraduate Studies.

- ARTH 29600 Junior Seminar: Doing Art History. Students are expected to take this course in the Winter Quarter of the third year. Students who wish to study abroad during that quarter must meet with the Director of Undergraduate Studies no later than the beginning of their third year to work out an alternative program of study.

- At least two research papers of 10–15 pages. See Research Papers below.

In all of the above cases, graduate seminars at the 40000-level may count toward requirements in the major. Students are advised, however, that such courses impose special burdens of time and expertise, and admission to them is typically only by explicit approval of the instructor and may involve various prerequisites.

Students wishing to pursue honors in the major have additional requirements, described below under Honors.

Special Field

The Special Field is developed by the student in consultation with instructors and the Director of Undergraduate Studies, and may take various forms. It may be defined with reference to a civilization, a chronological period, a nation-state, a cultural institution, or a suitable combination; it may be conceptual in character (e.g., art and the history of science, urban history, geography, gender and sexuality studies); it may combine historical, critical, and theoretical perspectives (e.g., politics and visual art in the twentieth century); it may be based in a particular medium or class of object (e.g., the built environment, tomb assemblages, or prints); it may combine historical and studio-practice courses (e.g., DoVA, CMST, TAPS, Music) to explore interrelations (e.g., art and dance). In many cases, courses outside the Department of Art History will be directly relevant to the Special Field; up to two such courses may be counted toward the major as free electives to complement the Special Field.

For those writing a BA Paper, the topic normally develops from the Special Field and allows for further study in the Special Field through independent research and writing.

A proposal for the Special Field, in the form of a written petition, must be received by the Director of Undergraduate Studies and approved no later than the end of a student's third year. It is strongly recommended that students complete at least two courses in their Special Field by the end of their third year. The Special Field Declaration Form is available on the Department of Art History website (https://arthistory.uchicago.edu/undergraduate/major-requirements).

Junior Seminar

ARTH 29600 Junior Seminar: Doing Art History is designed to introduce the methods of art historical research. It is offered in Winter Quarter and required of art history majors; if they wish, minors may take the course to satisfy a 20000-level course requirement. Majors or prospective majors who wish to study abroad during Winter Quarter of their third year must meet with the Director of Undergraduate Studies, preferably in their first or second year and no later than the beginning of their third year, to work out an alternative program of study. Second-year art history majors are permitted to enroll in the Junior Seminar with permission from the instructor and the Director of Undergraduate Studies.

Research Papers

All art history majors write at least two research papers of 10–15 pages. Students who wish to write a BA Paper should complete this requirement before the beginning of their fourth year. A research paper can be:
a paper written to fulfill a course assignment,
the extension of a shorter course paper (either during the course or after its completion) to meet the
page requirement, or
a new paper on a topic chosen in consultation with the instructor.

The paper should include an analysis of existing scholarship and other relevant source materials. The paper
should also draw on that scholarship and evidence to shape and support a thesis or argument of the student’s
own devising. Formal analyses of works of art and analytic papers on materials assembled by the instructor do
not qualify. On completion of a research paper, students must submit an approval form, signed by the course
instructor, to the Director of Undergraduate Studies. It is the student’s responsibility to obtain this signature and
to submit the form. Approval forms are available on the Art History website (https://arthistory.uchicago.edu/
undergraduate/major-requirements).

Honors

Art history majors who wish to pursue a BA with honors must complete the following requirements in
addition to the standard curriculum. These students must register for the BA Paper writing seminar (ARTH
29800 Senior Seminar: Writing Workshop) in Autumn Quarter of the fourth year. Writing the BA Paper is a
process that usually takes more than two quarters. Each student must secure the consent of an art history faculty
member who will serve as his or her adviser by the second week of Autumn Quarter (i.e., two quarters before
the planned quarter of graduation). Working with a preceptor, students must then complete a BA Paper by the
second week of Spring Quarter of the fourth year. The BA Paper is typically a 20- to 30-page research paper of
original work that grows out of the Special Field. For more information, see BA Paper and Seminar.

To be eligible for honors in the major, students must complete both the BA seminar and the BA Paper, and
must have earned a major GPA of at least 3.5 and cumulative GPA of 3.3 at the time of graduation. Please note
that completion of the BA Paper does not, in itself, guarantee honors in the major. Honors are awarded by the
College on the basis of a departmental nomination of exceptional BA Papers.

BA Paper and Seminar

ARTH 29800 Senior Seminar: Writing Workshop is a workshop course offered in Autumn Quarter designed
to assist students in writing and researching their BA Papers. Students typically take the seminar in Autumn
Quarter before graduating in Spring Quarter; students graduating in Autumn or Winter Quarter should take
the course in the previous academic year. In the closing sessions of the seminar, students present their work-in
progress for the BA Paper. They continue their research on the paper during the following quarters, meeting at
intervals with their faculty BA advisor. Students have the option of taking ARTH 29900 Preparation for the BA
Paper in Autumn or Winter Quarter to afford additional time for research or writing; this course is taught by
arrangement between a student and his or her instructor. This course would be in addition to the 11 courses for
the major with honors.

A polished draft of the BA Paper is due by Friday of ninth week of the quarter preceding graduation; the
final version of the BA Paper is due Monday of second week of the quarter of graduation. Both the draft and
final version of the BA Paper must be submitted in duplicate: one copy to the faculty advisor and the second to
the Director of Undergraduate Studies. Because individual projects vary, no specific requirements for the BA
Paper have been set. Essays typically range in length from 20 to 30 pages, but there is no minimum or maximum.
Students should consult their BA advisor regarding all details, including optimal length, of the BA Paper.

The BA Paper is a substantial research paper that presents an original argument or develops original
evidence about an intellectual problem. The paper should demonstrate the student’s capacity to formulate a
serious research problem, develop a clear thesis, and substantiate the thesis on the basis of careful analysis of
relevant evidence and measured consideration of competing views. The originality of the BA Paper may lie in
the discovery of evidence, a new, critical analysis of familiar claims, or the synthesis of materials. In keeping
with guidelines set by the College, the Department of Art History only recommends papers that have earned the
highest grade to the master of the Humanities Collegiate Division for consideration of departmental honors.

Double Majors and the BA Paper

Whether or not a single BA Paper can satisfy requirements for a double major in art history and another
program is decided by the department on a case-by-case basis. Students should consult with the Director of
Undergraduate Studies. The criteria on which the decision is based include:

• the degree to which the resulting thesis is likely to speak from and to art history, even as it necessarily
  speaks from and to another field;
• the feasibility of the proposed advising arrangements for the proposed joint thesis; and
• the department’s estimation of the student’s track record for independent work that bodes well for
  writing a successful thesis while navigating between two majors.

Transferring Credit

No credit from Advanced Placement (AP) exams can be used in the major. Up to four courses taken outside
the University of Chicago may be counted towards the art history major, contingent on approval by the College
and Director of Undergraduate Studies. Students planning to take courses outside the University are urged to consult with the Director of Undergraduate Studies as they formulate their plans. Students should also consult with their College adviser to be sure that they understand the University’s procedures for transfer credit. Refer to Transfer Credit for more information.

While studying abroad, students are encouraged to keep excellent records: they will be required to submit the syllabus and all written work for each course in order to be considered for credit. Please note that some courses may be approved by the College but not by the major.

Students first apply for transfer credit from the College, and credit for courses taken as part of a University of Chicago-affiliated direct enrollment program is vetted by Study Abroad. When the credit has been approved, students petition the Director of Undergraduate Studies in writing for credit for the major. The petition must include a cover letter with the title and description of the course, as well as the name and location of the institution. To the cover letter should be attached a syllabus and a written record of the work the student did for the course. The Director of Undergraduate Studies will review the work for each course individually, determine if the course is applicable for credit in the major, and, if so, where that credit should be applied.

**SUMMARY OF REQUIREMENTS FOR THE MAJOR**

**MAJOR: Standard Curriculum**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four (4) courses approved to meet the distribution requirement</td>
<td>400</td>
</tr>
<tr>
<td>Three (3) courses approved in a special field</td>
<td>300</td>
</tr>
<tr>
<td>Two (2) courses approved as electives</td>
<td>200</td>
</tr>
<tr>
<td>ARTH 29600 Junior Seminar: Doing Art History</td>
<td>100</td>
</tr>
<tr>
<td>Two (2) 10- to 15-page research papers</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1000</td>
</tr>
</tbody>
</table>

* All courses must be at the 20000-level or higher.

**MAJOR: Honors Curriculum**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four (4) courses to meet the distribution requirement</td>
<td>400</td>
</tr>
<tr>
<td>Three (3) courses in a special field</td>
<td>300</td>
</tr>
<tr>
<td>Two (2) courses as electives</td>
<td>200</td>
</tr>
<tr>
<td>ARTH 29600 Junior Seminar: Doing Art History</td>
<td>100</td>
</tr>
<tr>
<td>Two (2) 10- to 15-page research papers</td>
<td></td>
</tr>
<tr>
<td>ARTH 29800 Senior Seminar: Writing Workshop</td>
<td>100</td>
</tr>
<tr>
<td>BA Paper</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1100</td>
</tr>
</tbody>
</table>

* All courses must be at the 20000-level or higher.

+ Some students register for ARTH 29900 Preparation for the BA Paper in Autumn or Winter Quarter to afford additional time for research or writing. This course would be taken in addition to the 11 courses in the major with honors.

**ADVISING**

Art history majors should see the Director of Undergraduate Studies no less than once a year for consultation and guidance in planning a special field, in selecting courses, and in choosing a topic for the BA Paper if pursuing honors, as well as for help with any academic problems within the major. When choosing courses, students should refer to the worksheet available on the Art History website (https://arthistory.uchicago.edu/undergraduate/major-requirements). This form helps each student and the Director of Undergraduate Studies monitor the student’s progress in the program.

In order to keep an accurate record of students’ progress to graduation, students will need to regularly provide a copy of the updated major worksheet to their College adviser for processing.

**RECOMMENDATIONS FOR ART HISTORY MAJORS**

Qualified undergraduate students in art history may, with the express permission of the instructor, enroll in graduate seminars in the department. (These seminars are also open to non-majors with the same proviso.) For students interested in graduate study in art history, it is advantageous to have performed well in a graduate seminar while completing the BA.

Students are urged to also pursue upper-level language courses. If a language course is relevant to a student’s Special Field, the student may petition the Director of Undergraduate Studies to count it toward electives.
Those planning to continue their study of art history at the graduate level are advised to achieve language competency equal to at least two years of college study in French or German, or in the language(s) relevant for the geographic region that corresponds to their primary area of interest.

**GRADING**

Art history majors must receive quality grades in courses taken for the major. ARTH 29900 Preparation for the BA Paper is open for Pass/Fail grading with consent of the instructor. Art history courses elected beyond program requirements may be taken for P/F grading with consent of the instructor. All courses taken to satisfy the general education requirement in the arts must receive quality grades. Nonmajors may select the P/F grading option with consent of the instructor if they are taking an art history course that is not satisfying a general education requirement. A Pass grade is given only for work of C– quality or higher.

**MINOR IN ART HISTORY**

Beginning with the Class of 2020, art history minors will follow the requirements outlined below. Students in the Class of 2019 have the option of adhering to the new or to the old requirements. They should meet with the Director of Undergraduate Studies to address their options and any questions or concerns.

All art history minors are encouraged take at least one (1) course in art history at the 10000-level to fulfill their general education requirement in the arts. Although general education courses do not count for the minor, they are useful preliminaries to advanced work. It is, therefore, strongly recommended that students take such a course as early as possible in their undergraduate careers. Note: Students considering the minor in art history and seeking admission to a 10000-level ARTH course may identify themselves to the instructor in advance.

The formula for requirements in the minor goes by the sobriquet “3-and-3”:

- All art history minors take **three (3) courses at the 20000-level to meet a distribution requirement** within the department. These courses shall be selected in consultation with the Director of Undergraduate Studies. Courses should be selected for maximal geographical, chronological, cultural, and methodological diversity, and for minimal overlap with the Special Field.
- All art history minors take **three (3) courses at the 20000-level in a Special Field**. Students develop the Special Field in consultation with departmental instructors and the Director of Undergraduate Studies. Because Special Fields reflect the interests of individual students, they range widely in topic, approach, and scope. Reading courses with art history faculty may be used to pursue specific questions within a Special Field. For more on the Special Field, see Special Field.

In all of the above cases, graduate seminars at the 40000-level may count toward requirements in the minor. Students are advised, however, that such courses impose special burdens of time and expertise, and admission to them is typically only by explicit approval of the instructor and may involve various prerequisites.

In one of the courses, students also write one research paper of about 10–15 pages on a topic chosen with and guided by the instructor, by individual arrangement at the start of the quarter (see Research Papers). Minors may elect to take ARTH 29600 Junior Seminar: Doing Art History with the majors; if they do, they will research and write an essay on a topic of their choice instead of preparing a BA Paper proposal.

Students who elect the minor program in art history must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the Director of Undergraduate Studies. The Director's approval for the minor program should be submitted to a student's College adviser by the deadline above on a form available on the Art History website (https://arthistory.uchicago.edu/undergraduate/program/minor-requirements).

Courses in the minor may not be double counted with the student's major(s), other minors, or general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

**Special Field**

The Special Field is developed by the student in consultation with instructors and the Director of Undergraduate Studies and may take various forms. It may be defined with reference to a civilization, a chronological period, a nation-state, a cultural institution, or a suitable combination; it may be conceptual in character (e.g., art and the history of science, urban history, geography, gender and sexuality studies); it may combine historical, critical, and theoretical perspectives (e.g., politics and visual art in the twentieth century); it may be based in a particular medium or class of object (e.g., the built environment, tomb assemblages, or prints); it may combine historical and studio-practice courses (e.g., DoVA, CMST, TAPS, Music) to explore interrelations (e.g., art and dance).

**Summary of Requirements for the Minor in Art History**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three (3) courses at the 20000-level to meet the distribution requirement</td>
<td>300</td>
</tr>
<tr>
<td>Three (3) courses at the 20000-level in a special field</td>
<td>300</td>
</tr>
</tbody>
</table>
One (1) 10- to 15-page research paper

Total Units 600

* One of the courses may be ARTH 29600 Junior Seminar: Doing Art History. Students in the minor would research and write an essay on a topic of their choice instead of preparing an honors paper proposal.

MINOR IN ARCHITECTURAL STUDIES

Beginning with the Class of 2020, architectural studies minors will follow the requirements outlined below. Students in the Class of 2019 have the option of adhering to the new or to the old requirements. They should meet with the Director of Undergraduate Studies to address their options and any questions or concerns.

The minor in architectural studies combines course work in art history, which equips students to analyze the form and changing history of the built environment in diverse cultures, places, and times, with up to three courses on architectural or urban topics offered in any department. Thus the minor enables students to enrich art historical analysis with methods from other disciplines. A student might choose to minor in architectural studies because the student is interested in the built environment—the inescapable setting of our lives—from a liberal arts perspective or because the student is considering applying to architecture school. The minor could represent an interest distinct from the student’s major or it could complement a major in the social sciences or humanities by exploring the material setting of history and social life or the context for works of literature, film, music, or drama. It could equally complement a major in the sciences, such as medical fields, ecology, geology, physics, or mathematics.

Prospective minors need to meet with the Department of Art History’s Director of Undergraduate Studies before the end of the third year to discuss their interests and course plans and to obtain advice and approval. Together the student and the Director of Undergraduate Studies will fill out the Minor Program Application Form listing the intended courses, which the Director signs. The student should download the form from the Art History website (https://arthistory.uchicago.edu/undergraduate/architectural-studies) and submit the completed, signed version to his or her College adviser before the end of the third year.

Requirements

The minor in architectural studies requires a total of six courses at the 20000-level chosen in consultation with the Director of Undergraduate Studies, all of which must either focus on the built environment or permit the student to devote the assignments or papers to the built environment. A minimum of three courses must be in the Department of Art History. The additional three courses may be taken in art history or in other departments or programs. Some of the programs that may offer relevant courses are geographical studies, visual arts, history, English language and literature, anthropology, and environmental studies. In one of the courses, students also write one research paper of about 10 to 15 pages on a topic chosen with and guided by the instructor, by individual arrangement at the start of the quarter (see Research Papers).

Minors are strongly encouraged to take ARTH 20700 Understanding the Built Environment when available. Minors may elect to take ARTH 29600 Junior Seminar: Doing Art History, for which they would research and write an essay on a topic of their choice instead of preparing a BA Paper proposal. This option is particularly suitable for minors interested in doing graduate work in architectural history.

Graduate seminars at the 40000-level may count toward requirements. Students are advised, however, that such courses impose special burdens of time and expertise, and admission to them is typically only by explicit approval of the instructor and may involve various prerequisites.

Contact the Director of Undergraduate Studies in art history if you have questions about whether a course may be counted toward the architectural studies minor.

Courses in the minor may not be double counted with the student’s major(s) or with other minors. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor in Architectural Studies

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<tr>
<th>Requirement</th>
<th>Units</th>
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<tr>
<td>Three (3) courses at the 20000-level in ARTH focusing on the built environment</td>
<td>300</td>
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<tr>
<td>Three (3) courses at the 20000-level in ARTH or other departments focusing on the built environment</td>
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<tr>
<td>One (1) 10- to 15-page research paper written for one of the six courses in the minor</td>
<td>300</td>
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Total Units 600

* One of the courses may be ARTH 29600 Junior Seminar: Doing Art History. Students in the minor would research and write an essay on a topic of their choice instead of preparing an honors paper proposal.

The following faculty members in art history specialize in architectural history: Niall Atkinson, Wei-Cheng Lin, and Katherine Fischer Taylor. Many other faculty members in art history have an interest in the built environment and will support students writing papers on architecture; students are welcome to ask their instructors.
An updated list of courses that can count for the minor in architectural studies is available from the Director of Undergraduate Studies. For more information about the minor in architectural studies, please contact the Director of Undergraduate Studies in art history at arth-dus@lists.uchicago.edu. Forms related to the minor in architectural studies are available on the Art History website (https://arthistory.uchicago.edu/undergraduate/architectural-studies).

**ART HISTORY COURSES**

ARTH 10100. Introduction to Art. 100 Units.
This course develops skills in perception, comprehension, and evaluation of various art objects. It encourages close analysis of visual materials, exploring the range of questions and methods appropriate to works of art, in their historical, theoretical, and social dimensions. Most importantly, the course emphasizes articulate writing and salient argumentation about visual and other aesthetic phenomena. Three coherent units, on Monument/Site, Image/Medium, and Object/Museum, explore these issues across cultures and periods. Examples draw on original objects in campus collections.
Instructor(s): Staff Terms Offered: Spring Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.

ARTH 14105. Introduction to Roman Art and Archaeology. 100 Units.
This course offers a survey of the art and archaeology of the Roman world from the founding of Rome in the eighth century BC to the Christianization of the Empire in the fourth century AD. Students will witness the transformation of Rome from a humble village of huts surrounded by marshland in central Italy into the centripetal force of a powerful Empire that spanned mind-bogglingly distant reaches of space and time. Throughout the course, we will consider how the built environments and artifacts produced by an incredible diversity of peoples and places can make visible larger trends of historical, political, and cultural change. What, we will begin and end by asking, is Roman about Roman art?
Instructor(s): P. Crowley Terms Offered: Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): CLCV 14113

ARTH 14107. Greek Art and Archaeology. 100 Units.
This course examines the art and archaeology of ancient Greece from ca. 1000 BCE - ca. 200 BCE. Participants will learn a lot of facts about the Greek world; they will see the Greeks emerge from poverty and anarchy to form a distinctive political and social system based on city-states, and they will see that system grow unstable and collapse. They will see the emergence of distinctive forms of sculpture, architecture, pottery, and urban design - many of which are still in use today. Along with these facts, they will acquire a conceptual toolkit for looking at works of art and for thinking about the relation of art to social life.
Instructor(s): S. Estrin Terms Offered: Autumn
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): CLCV 21807

ARTH 14200. Introduction to Medieval Art. 100 Units.
This course explores the challenging world of medieval art. Beginning with the fourth-century fusion of Imperial and Christian images and ending with the advent of print, we trace how images and art-making took on new roles-and re-invented old ones-over the course of the Middle Ages. We consider architecture, sculpture, wall-painting, manuscript painting, stained glass, metalwork, and textiles in their historical contexts, questioning why medieval objects look the way they do and how they were seen and used by medieval viewers. Readings include medieval sources (in translation) and exemplary modern scholarship.
Instructor(s): A. Kumler Terms Offered: Spring

ARTH 15650. Art Since 1900. 100 Units.
Focusing on the interrelationships between avant-garde culture and the emerging mass cultural formations of industrializing societies, our survey will address a wide range of historical and methodological questions: the impact of new technologies of production, the utopian projects of the Euro-American avant-gardes, the transformation of modernist conceptions of artistic autonomy, the changing roles of cultural institutions, the construction of social Others, the formation of new audiences, and the rise of "contemporary art."
Equivalent Course(s): ARTV 15650
ARTH 15780. Modern Art from the Enlightenment until Today. 100 Units.
Surveying the history of modern Western art from the 18th through the 21st century, this course will introduce students to the artists, art works, and issues central to the relationship between art and modernity: the rise of the self and identity politics, the growth of the metropolis, the questioning of the "real" and the invention of photography, the autonomous thrust and semiotic potential of abstraction, the political ambitions of the avant-garde, and the impact of consumer and media cultures. Most discussion sections will center around original works of art and take place in the Smart Museum of Art.
Instructor(s): C. Mehring Terms Offered: Spring
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.

ARTH 15800. Contemporary Art. 100 Units.
This course will consider the practice and theory of visual art in the late twentieth and early twenty-first centuries. Among the subjects that will drive our narrative will be the rise of postmodernism, pop art, the aesthetics of the social movements of the 1960s, institutional critique, the relationship between reproductive media and Feminism, the concept of spectacle, conceptual art, the appearance of a global art industry after 1989, the connections between art school and art-making, "relational aesthetics," the fate of art in the age of the Internet, the art of the post-studio moment, and what happens to art when it engages with "everything".
Instructor(s): M. Jackson Terms Offered: Spring
Prerequisite(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): ARTV 20006

ARTH 17121. The Art of Leonardo da Vinci. 100 Units.
The central focus of this course will be on the small, damaged and disputed body of paintings that Leonardo has left to us, the wealth of his drawings that help us make sense of that problematic heritage and provide the most direct route into his creative thinking, and the hundreds of pages of text in the form of notes in mirror-image handwriting that comment on art and so many other subjects. Our structure will be roughly chronological, including his late fifteenth-century Florentine artistic and social context; his two long periods in Milan as a court artist; his triumphant return to Florence and rivalry with the young Michelangelo; his brief and unsatisfying stay in papal Rome; and his final years in France. Among the themes that will be critically examined are: Leonardo’s role in the creation of what is still grandiosely called the High Renaissance; the value and problematic aspects of thinking of him as the quintessential artist-scientist; the significance of the fact that he has been a figure of such obsessive art-historical and broader cultural significance for over 500 years; and the ways in which recent scientific examination and digital imaging have shed surprising amounts of new light on his art. Through the concentrated study of the works of Leonardo and his artistic context, the course will take seriously the attempt to introduce students with little or no background in art history to some of the major avenues for analysis and interpretation in this field.
Instructor(s): C. Cohen Terms Offered: Autumn
Prerequisite(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): FNDL 21414

ARTH 17410. Frank Lloyd Wright in Chicago and Beyond. 100 Units.
This course looks at Wright’s work from multiple angles, examining his architecture, urbanism, relationship to the built environment and socio-cultural context of his lifetime, and legend. We’ll take advantage of the Robie House on campus and the rich legacy of Wright’s early work in Chicago; we’ll also think about his later “Usonian” houses for middle-income clients and the urban framework he imagined for his work (“Broadacre City”), as well as his Wisconsin headquarters (Taliesin), and spectacular works like the Johnson Wax Factory (a required one-day Friday field trip, if funds permit), Fallingwater, and the Guggenheim Museum. By examining on architect’s work in context, students will gain experience analyzing buildings and their siting, and interpreting them in light of their complex ingredients and circumstances. The overall goal is to provide an introduction to thinking about architecture and urbanism. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): K. Taylor Terms Offered: Autumn
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): FNDL 20502, AMER 17410
ARTh 17700. 19th Century French Art in the Art Institute. 100 Units.
In this course, we will closely examine 19th century paintings and sculptures in the Art Institute of Chicago and seek to understand how and why art changed during this period. Topics to be considered include the meaning of stylistic innovation in the 19th century, the development and dissolution of the genres as landscape and portraiture, and varying conceptions of realism and abstraction. Most class sessions will be devoted to looking at works in the galleries of the Art Institute. Because attendance is mandatory, students should consider whether their schedules will allow time for traveling to and from the museum for class meetings. Assignments include three papers and a variety of written homework exercises.
Instructor(s): M. Ward Terms Offered: Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.

ARTh 17705. A Curating History: The Documenta Case. 100 Units.
This course proposes a reading of recent art history as seen through the periodical prism of one of the field's most important, signature events - the five-yearly Documenta exhibition in Kassel, Germany. Starting with the landmark 1972 edition organized by Harald Szeemann and ending with the 2017 edition which I worked on as a member of its curatorial team, the course will discuss one Documenta edition per class to touch upon key issues of contemporary art practice and theory: the dynamics of globalization; gender and identity; the vagaries of market influence; history and memory; the pressures of the political; questions of aesthetics and beauty. As a history of exhibition making and curatorial practice, the course will also draw on recent developments of the biennial model (in Venice, Sao Paulo, Shanghai, the Whitney etc.), and will be recounted in part from the perspective of actual exhibition-making experience. The class will consist of hands-on curatorial experimentation, as well as writing and reading assignments that mirror and follow the 45-year arc of our historical periodization.
Instructor(s): D. Roelstraete Terms Offered: Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): ARTV 15500

ARTh 17735. The Art of Post-Revolutionary Mexico. 100 Units.
This course surveys the landscape of Mexican art from the eve of the Revolution (1910-1920) into the 1940s, exploring the developments, debates, and problems of this particularly rich moment in the history of twentieth-century art. Within the context of post-revolutionary society and politics, we will study the production, circulation, and reception of prints, photographs, easel painting, film, and craft, along with the celebrated work of the Mexican muralists. Issues to be addressed include: the formation of new ideas of nation and citizenship, debates about art, politics, and social efficacy, the relationship of artists to the state, the place of the Indian in the new social order, the incorporation of both old and new media and technologies, and the intersection of gender, class, and national identities. Students will develop their ability to analyze works of art both formally and historically and will learn the fundamentals of art historical writing.
Instructor(s): M. Sullivan Terms Offered: Spring
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): LACS 17735

ARTh 18000. Photography And Film. 100 Units.
This is a core course that serves as an introduction to the history of art by concentrating on some fundamental issues in the history of photography and film. The course is divided roughly in half between still photography and film. The central theme of the course concerns the way in which photographs and films have been understood and valued during the past 165 years. There have been profound changes in attitudes and beliefs regarding the nature of photographs throughout the history of photography (this is likewise true of film). The current range of views is very different from those held by the various audiences for photographs and films in the last century and the century before. For instance, photographs were originally conceived of as copies of things that can be seen, but the notion of copy was drawn from a long-established set of views about what makes a picture a work of art and copies were said to be incapable of being works of art. This view continues to haunt the writings of some critics and historians of photography and film. The course will concentrate on the work of photographers, theorists of photography and film, and on films by John Huston, Billy Wilder, and Roman Polanski.
Instructor(s): J. Snyder Terms Offered: Autumn
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
ARTH 18206. **Drawing, Building, Bulldozer: Intro to Architecture & Built Env.** 100 Units.

**ARTH 20000. Introduction to Film Analysis.** 100 Units.
This course introduces basic concepts of film analysis, which are discussed through examples from different national cinemas, genres, and directorial oeuvres. Along with questions of film technique and style, we consider the notion of the cinema as an institution that comprises an industrial system of production, social and aesthetic norms and codes, and particular modes of reception. Films discussed include works by Hitchcock, Porter, Griffith; Eisenstein, Lang, Renoir, Sternberg, and Welles.

Instructor(s): Staff Terms Offered: Autumn Spring Winter
Note(s): Required of students taking a major or minor in Cinema and Media Studies.
Equivalent Course(s): ENGL 10800, ARTV 20300, CMST 10100

**ARTH 20612. Early Christian and Late Ancient Jewish Art.** 100 Units.
This course will explore the rise of both Christian and Jewish art in the context of the Roman Empire - both in the eastern Mediterranean and in the city of Rome itself - from minority and subaltern contexts to the rise of Christian hegemony. It will examine the formation of characteristic religious iconographies and visual identities in response to those available in the material and visual culture of the Roman world, and will explore the ways these experimental and often surprising visual forms were ultimately transmuted into what are now the recognizable models for these religions. The course is intended for both undergraduates and graduate students, and will be taught over 5 weeks in the Spring Quarter on an intensive schedule. It will be examined on the basis of a paper, due on a subject to be agreed and on a date to be agreed at the end of the Spring quarter.

Instructor(s): Jas' Elsner Terms Offered: Spring
Equivalent Course(s): RLVC 30612, ARTH 30612

**ARTH 20700. Understanding the Built Environment.** 100 Units.
This course aims to equip students with the basic skills and knowledge required to analyse architecture and the urban environment. It offers an introduction to the methods and procedures of the architectural historian. These include practical tasks such as understanding architectural terminology, reading and interpreting architectural drawings, engaging with buildings 'on site', and studying buildings in context through urban design issues, such as street networks and public spaces. At a broader level, the course will involve critical discussions about the relationship between architecture and society, the building as a historical object, cultural representations of architecture, and modes of perceiving/experiencing the built environment. The course will operate through a combination of in-class seminars and site visits to buildings in Chicago. This course is specifically geared to introducing the fundamentals of architectural history to those undergraduate students seeking a minor in architectural studies. However, MA and PhD students in other fields are welcome to register.

Instructor(s): N. Atkinson Terms Offered: Spring
Equivalent Course(s): ARTH 30700

**ARTH 21320. Philippe Parreno's Media Temporalities.** 100 Units.
In the 2013 exhibition "Anywhere, Anywhere Out of the World, the French artist Philippe Parreno (b. 1964) turned the monumental space of the Palais de Tokyo in Paris into a living, evolving organism, where music, light, films, images, and performances led visitors through a precisely choreographed journey of discovery, based on the idiosyncratic body of work that he had created since the early 1990s. This course is devoted to an in-depth study of Parreno's work and the highly original form of media thinking that informs it. Rather than focusing on the properties of distinct media or on multimodal forms or presentation, his works explore the new forms of life and social existence that result from the various ways in which 20th- and 21st-century media technologies store, manipulate, and produce time. This is a form of thinking and artistic creation that addresses the realities of formats, programs, and platforms rather than media apparatuses and messages, and that engages everything from architecture and design to social situations, natural worlds, and virtual beings. (The course will be taught in collaboration with Jörn Schafaff).

Instructor(s): I. Blom Terms Offered: Autumn
Equivalent Course(s): ARTH 31320, MAAD 21320, CMST 23412, CMST 33412

**ARTH 21410. Advanced Theories of Sex/Gender: Ideology, Culture, and Sexuality.** 100 Units.
Beginning with the extension of the democratic revolution in the breakup of the New Left, this seminar will explore the key debates (foundations, psychoanalysis, sexual difference, universalism, multiculturalism) around which gender and sexuality came to be articulated as politically significant categories in the late 1980s and the 1990s. (A

Instructor(s): L. Zerilli
Prerequisite(s): Completion of GNSE 10100-10200 and GNSE 28505 or 28605 or permission of instructor.
ARTH 21810. Post-War American Avant-Garde. 100 Units.
In the 1940s the American avant garde cinema gained a new identity with the work of filmmakers like Maya Deren, and Kenneth Anger. Working primarily in 16mm, exhibiting mainly in non-commercial theaters, pursuing new models of sexuality, perception and political action, a generation of filmmakers formulated an alternative cinema culture and a new visionary aesthetic. This tradition gained further definition in the following, with journals, new critical discourses and a network of exhibition. Film modes moved through the mythic and dream-like cinema of Stan Brakhage, Bruce Baillie, the underground cinema of Ken Jacobs, Andy Warhol and Jack Smith, and the structural films of Hollis Frampton, Michael Snow and Ernie Gehr. The course will trace these developments and examine its legacy.
Instructor(s): T. Gunning Terms Offered: Autumn
Prerequisite(s): CMST 10100, ARTH 20000, ENGL 10800, ARTV 25300, or consent of instructor.
Equivalent Course(s): ARTH 31810, CMST 31810, CMST 21810

ARTH 22020. Contemporary Art from Latin America. 100 Units.
This seminar examines developments in art from Latin America since the 1960s. A set of questions will guide our investigation: What is contemporary art? How has globalization affected the production and reception of art from Latin America in recent decades? What are the advantages and disadvantages of hanging on to regional or national frameworks in the study of contemporary art?
Instructor(s): M. Sullivan Terms Offered: Spring
Equivalent Course(s): ARTH 32020, LACS 32020, LACS 22020

ARTH 22106. Introduction to the Study of Iconography. 100 Units.
Equivalent Course(s): HCHR 32106, RLST 28320, RLIT 32106, ARTH 32106

ARTH 22302. Byzantium: Art, Religion, Culture. 100 Units.
In this introductory seminar we will explore works of art and architecture as primary sources for Byzantine civilization. Through the close investigation of artifacts of different media and techniques, students will gain insight into the artistic production of the Byzantine Empire from its foundation in the 4th century AD to the Ottoman conquest in 1453. We will employ different methodological approaches and resources that are relevant for the fruitful investigation of artifacts in their respective cultural settings. In order to fully assess the pivotal importance of the visual arts in Byzantine culture, we will address a wide array of topics, including art and ritual, patronage, the interrelation of art and text, classical heritage, art and theology, Iconoclasm, etc.
Equivalent Course(s): HCHR 32302, ARTH 32302, RLVC 32302

ARTH 22402. Perspective as a Challenge to Art History. 100 Units.
Equivalent Course(s): ARTH 32402, ENGL 42412, SCTH 32402, ENGL 22402

ARTH 22405. Perspective: Rhetoric & Poetic. 100 Units.
By reading classic texts and analyzing works of art deploying linear perspective, from paintings to the built environment and photography, this course will examine ways that perspectival projection functions as a poetics—as a purportedly coherent system of organizing form—and as a rhetoric—as a means of persuading viewers of perspectively informed works of art to perceive them in particular terms. To this end, it will necessarily also consider the history of the rise and uses of perspective, and place texts and works of art within that history.
Instructor(s): J. Snyder & K. Taylor Terms Offered: Winter
Equivalent Course(s): ARTH 32405

ARTH 23015. Ornament and Islamic Art. 100 Units.
Intricate patterns, luxurious materials, the absence of human figures: in the western imagination ornament and Islamic art are synonymous. This class will interrogate why, even after decades of scholarship to the contrary, the rhetoric of ornament and Islamic art persists. What does it mean to call a work of art—and by extension an entire culture-ornamental? This class positions ornament as a critical lens and explores how western ideas about the role of ornament shaped, and were shaped by, the study of Islamic artworks. In locating the ornamental history of Islamic art, we will confront legacies of imperialism and orientalism, interwoven with politics of technology, representation, and design. Islamic ornament once inspired artists and fueled early art historians. But the seeds that had been sown in the nineteenth century bore quite a different fruit in the twentieth, and modernism’s explicit rejection of the ornamented surface pushed Islamic art from center stage to the periphery. We will consider foundational works of Islamic art and architecture (including textiles, carpets, metalwork, ceramics, arts of the book, calligraphy, and examples of mosque and palace architecture) and analyze the ways in which they have been imagined by European and American artists, theorists, and historians. In-class lectures and discussions will be supplemented with visits to Special Collections and the Rookery.
Instructor(s): M. MacMurdie Terms Offered: Winter
ARTH 23700. The Painted Room in Early Modern Italy and China. 100 Units.

This course concentrates on Raphael, perhaps historically the most influential figure of the outsized trio (including Leonardo and Michelangelo), who embody the "culminating moment" of the Renaissance. Some attention will be given to the history of the idea and to the style concept "High Renaissance" and its usefulness as a vehicle for understanding three such diverse personalities. While we will try to do justice to the enormously diverse, if short, career of Raphael, the investigation of the High Renaissance will lead us to examine the mature works of Leonardo and Michelangelo's painting and sculpture through 1520 (including the Sistine Ceiling and the Julius Tomb), which is the part of their careers that overlap with Raphael. Special attention will be given to the writings and drawings of the major artists as a means of interpreting their works.

Instructor(s): C. Cohen
Terms Offered: Autumn

Note(s): This course does not meet the general education requirement in the dramatic, musical, and visual arts.

ARTH 23804. COSI: Italian Renaissance. 100 Units.

ARTH 23807. Rhoades Seminar: Art, War, & Pageantry in Medieval & Early Modern Europe. 100 Units.

Today war is often thought of as the antithesis to art and culture, but in the medieval and early modern world it was a great stimulus to the arts in all media. Weapons were adorned like jewelry, while armor could imitate the fashion of the finest silks. This seminar will study the material remains of this culture of conflict and pageantry as it influenced technology, costume design, architecture, visual culture, the art of the book, and especially metalwork in medieval and early modern Europe. Themes include the pageantry of tournaments, the art of heraldry, the visual culture of war—its glories and miseries, the image of noble princes, music, the birth of martial art manuals, fashion on the battlefield, fortification technology and the engineer. With a focus on object-based study, lectures will analyze the collections at the Art Institute of Chicago including: armor, edged weapons, textiles, prints, rare books and many other facets of this martial culture. Students will be encouraged to engage with this cultural history of warfare and pageantry as it relates to their own fields of interest and explore the broad and definite impact of conflict on the arts of design.

Instructor(s): Staff
Terms Offered: Autumn

Note(s): Students must attend first class to confirm enrollment. This course will meet at the Art Institute of Chicago; plan accordingly.

Equivalent Course(s): ARTH 33807

ARTH 24002. Advanced Nonfiction Workshop: Writing About the Arts. 100 Units.

Writing about the arts has long been a way for writers to investigate the wide world and to look inward. In this course, we'll be focusing on the visual arts, and we'll try to see how reflecting on painting, photography, installation art, and those arts that get called "decorative" gives us ways to consider the object in space, and also history, war, friendship, education, material culture, aesthetics, and coming-of-age. In writing, we will practice all kinds of forms: lyric fragments; polemics; reviews; catalog essays; museum wall texts; personal meditations on a single work; documentation of lost techniques and lost works; and history, criticism, and biography written for readers outside the academy. Students will also write a longer essay to be workshopped in class. We'll read and discuss writers such as Susan Sontag, Geoff Dyer, Claudia Rankine, Tiana Bighorse, Rebecca Solnit, Zbigniew Herbert, Donald Judd, Octavio Paz, Mark Doty, Hervé Guibert, Kevin Young, Lawrence Weschler, and Walter Benjamin. Students will make some guided and some independent visits to museums, including the Art Institute, DuSable Museum of African American History, Smart Museum of Art, Oriental Institute, and National Museum of Mexican Arts.

Instructor(s): R. Cohen
Terms Offered: Spring

Prerequisite(s): Submit nonfiction writing sample when applying to register for the course.

Equivalent Course(s): ARTH 34002, CRWR 24002, CRWR 44002

ARTH 24170. Research the Chicago Cityscape. 100 Units.

This course has three goals: (1) To support artist Theaster Gates's renovations of South Side Chicago buildings for civic uses with student research on the architectural and social history of prospective buildings and their environs. The Stony Island Arts Bank and the Arts Incubator at the University are examples of Gates’s work: https://rebuild-foundation.org/ (2) To develop research skills, which can be adapted to other built environments. (3) To develop an understanding of Chicago’s built environment and its social history. We meet twice a week, once to discuss common readings and once for a longer session to enable field trips (a tour of Gates’s area; visits to research archives) and collaborative research work among students. Students will work together to produce historical reports. Permission of instructor required. Please send an email explaining your interest in the course and any relevant background experience (e.g., previous course work in architectural or urban history, urban problems, or experience with any aspect of the built environment or Chicago history). Although the course does not require significant background, ideally it will include students with diverse pockets of expertise.

Instructor(s): K. Taylor
Terms Offered: Spring

Note(s): Permission of instructor required.

Equivalent Course(s): AMER 34170, ARTH 34170, AMER 24170
ARTH 24190. Imagining Chicago's Common Buildings. 100 Units.
This class is an architectural studio based in the common residential buildings of Chicago and the city's built environment. While a design project and architectural skills will be the focus of the class, it will also incorporate readings, a small amount of writing, and some social and geographical history. We will: (1) give students interested in pursuing architecture or the study of cities experience with a studio class and some skills related to architectural thinking, (2) acquaint students intimately with Chicago's common residential buildings and built fabric, and (3) situate all this within a context of social thought about residential architecture, common buildings, housing, and the city.

Instructor(s): L. Joyner Terms Offered: Autumn
Equivalent Course(s): AMER 24190, ARTV 20210, GEOG 24190, ENST 24190

ARTH 24250. A Visual History of Latin American Women. 100 Units.
This undergraduate seminar will analyze both visual and literary images of and by women to show their role in society and the transformations experienced in terms of their civil, political, labor, and reproductive rights. These vignettes, which span from Pre-Colombian times to the present, will be examined from an art-historical perspective, thus providing students with the opportunity to discuss Latin America's historical context through visual culture.

Instructor(s): Rosario Granados Terms Offered: TBD
Equivalent Course(s): GNSE 24250, LACS 24250

ARTH 24416. Biocentrism: The Concept of Life in German Literature and Art. 100 Units.
This course explores the notion of life broadly understood, drawing on texts from a variety of disciplines (literature, philosophy, art history, biology) as well as on artworks that reflect on the concept of life. How did artists and writers conceive of the process of life? How did they situate life in relation to movement? How do notions of the organic/inorganic, material/spiritual organize writers’ and artists’ understanding of life? How did scientific and cultural currents such as organicism, vitalism, constructivism influence literary and aesthetic practices and theoretical frameworks? What are the networks of exchange between literature, the arts, and the emerging life sciences in the period? These and other questions will be grounded in close consideration of works by Aristotle, Nietzsche, Freud, Rilke, Woolf, Kafka, Benjamin, Haeckel, Murnau, Kandinsky, Klee, Mies.

Instructor(s): M. Christian Terms Offered: TBD
Note(s): Course conducted in German
Equivalent Course(s): GRMN 24416

ARTH 24615. Modern & Contemporary Materialities (Suzanne Deal Booth Conservation Seminar) 100 Units.
This course aims to explore the links between materiality, making, and meaning of modern art and investigate how surface, form, texture, and color are localized in particular artistic or historical contexts. It can be argued that the discipline of art history still remains substantially divided between those who study what objects mean and those who study how objects are made, where ‘meaning’ typically derives from cultural hermeneutics, while ‘madeness’ remains the province of technical analysis. The course will discuss the methods, theory, and strategies of a material-based approach, its forms of writing and claims to meaning. Readings will be drawn from a variety of disciplines, including art history, visual and material culture, anthropology, philosophy, and material science.

Equivalent Course(s): ARTH 34615

ARTH 24625. Chinese Art & Material Culture in the Field Museum Collection. 100 Units.
Most classes will be held in the galleries of Cyrus Tang Hall of China and the Elizabeth Hubert Malott Hall of Jades on the second floor in the Field Museum. Class attendance and participation in class discussion are mandatory. The installation introduces objects in historical and anthropological contexts in keeping with the Field Museum’s history and mission. It features objects made for and used by people of diverse social strata, geographies, and ethnicities and features particular types of materials used from the Neolithic through Early Modern periods of Chinese history. The class will examine artworks from perspectives of material culture, media, and image-making. Assigned readings will provide historical information and scholarly perspectives on objects in cultural contexts of production, function, religious worship, and burial in tombs. Students will closely study individual objects from these perspectives, discuss them with the class, and write about them, focusing on the significance of certain visual and material elements, their continuing use, and innovations and changes that occurred over time. The classes will also include meetings with curatorial and research staff members who will introduce their work on the collections-research, installation, and history of acquisitions. Visits will include access to conservation and storage areas.

Instructor(s): K. Tsiang Terms Offered: Autumn
Note(s): Most courses will meet off campus at the Field Museum; plan accordingly.
Equivalent Course(s): EALC 24625, EALC 34625, ARTH 34625
ARTH 24810. The Body and Embodiment in Ancient Greek Art. 100 Units.
Whether naked or clothed, male or female, mortal or divine, the body takes pride of place in the visual worlds constructed by ancient Greek artists. Yet this emphasis on depicting the body begs the question: What is a body that exists as an image? What, in other words, is a body that is not embodied? This problem, articulated already in our ancient sources, serves as the starting point for this course’s investigation of the relationship between images of the body in Greek art and the experiences such images solicited from their viewers. It examines, on the one hand, how Greek art promoted the body as a social construct—through artistic practices that configured the body’s appearance, like distinctive techniques, styles, and iconography; through conceptual categories that ascribed identities, like gender, class, and race; and through contexts that integrated depictions of the body into lived experience, like sanctuaries, cemeteries, and domestic settings. But we will give equal attention to the viewer’s subjective experience of embodiment, including its sensorial and affective dimensions, and the ways in which that experience is negotiated and articulated as a function of works of art. Finally, we will turn to the legacy of the Greek body in more recent centuries and consider its enduring impact as a visual paradigm today. Instructor(s): S. Estrin Terms Offered: Winter
Equivalent Course(s): ARTH 34810, CLCV 24818, CLAS 34818

ARTH 25115. Winckelmann: Enlightenment Art Historian and Philosopher. 100 Units.
We approach the first great modern art historian through reading his classic early and mature writings and through the art and criticism of his time (and at the end, our own). Reading-intensive, with a field trip to the Art Institute.
Instructor(s): Andrei Pop Terms Offered: Autumn
Prerequisite(s): German reading competence helpful, but NOT required.
Equivalent Course(s): KNOW 35000, SCTX 35000, GRMN 25015, ARTH 35115, GRMN 35015, CLAS 35014

ARTH 25202. Visual Encounters in the Global Renaissance. 100 Units.
This course examines the visual, material, and political encounters between the peoples of Europe, Africa, Asia, and the Americas between the era of European expansion inaugurated circa 1450 to the abolitionist period of the mid eighteen hundreds. It seeks to bring a multicultural framework to the understanding of the early modern period. We will examine the role of images, material exchange and visual reckoning in the early modern institutions and endeavors that helped shape our current world: the Atlantic slave trade, envisioning the other in European and non-European art, religious encounters and conflicts, visual and material exchange in scientific explorations, imperialism and colonialism. Special attention will be given to the enduring effects of these interactions in contemporary European societies and emphasis brought to a critical consideration of the idea of the Renaissance as a keystone of histories of ‘Western’ art, culture, and science.
Instructor(s): C. Fromont Terms Offered: Winter
Equivalent Course(s): ARTH 35202, LACS 35202, LACS 25202

ARTH 25217. Viaggio in Italia. 100 Units.
An ideal journey to Italy: we will travel to Firenze, Venezia, Ferrara, Urbino, Roma, and Palermo through literature and art. Visits to the rare books in the Special Collections Research Center and the Smart Museum of Art will allow us to investigate material aspects of selected works. Among others, Giotto, Ariosto, Michelangelo, Casanova, and Tomasi di Lampedusa will travel with us. This course is intended for students who wish to explore Italian literature, art, and culture.
Equivalent Course(s): ITAL 25217

ARTH 25300. Pilgrimage in Antiquity and the Early Christendom. 100 Units.
This course will present an interdisciplinary interrogation into the nature of pilgrimage in pre-Christian antiquity and the rise of Christian pilgrimage in the years after Constantine. It will simultaneously be a reflection on the disciplinary problems of examining the phenomena of pilgrimage from various standpoints including art history, archaeology, anthropology, the history of religions, the literary study of travel writing, as well as on the difficulties of reading broad and general theories against the bitty minutiae of ancient evidence and source material. The core material, beyond the theoretical overview, will be largely limited to antiquity and early Christianity; but if students wish to write their papers on areas beyond this relatively narrow remit (in other religions, in the middle ages, modern or early modern periods), this will be positively encouraged!
Instructor(s): J. Elsner Terms Offered: Spring
Note(s): This course will be taught in an intensive format twice per week, plus some individual discussion sessions to set up term papers, for the first five weeks of the quarter.
Equivalent Course(s): RLVC 38002, ARTH 35300

ARTH 25500. Avant-Garde in East Central Europe. 100 Units.
The avant-gardes of the “other” Europe are the mainstay of this course, which focuses especially, but not exclusively, on the interwar avant-gardes of Austria, Czechoslovakia, Hungary, Poland, Romania, Slovenia, and Yugoslavia. A comparative framework is employed whenever lucrative to comprehend the East/Central European movements in the wider context of the European avant-garde. The course also traces the development and legacy (political and artistic) of these avant-gardes in their contemporary scenes. Plastic, verbal, and performative arts (including film) are studied.
Instructor(s): Malynne Sternstein Terms Offered: Spring
Equivalent Course(s): ARTH 35500, REES 23141, CMST 25100, CMST 35100, REES 33141
ARTH 25708. Imagining Private Life in Early Modern China. 100 Units.
This course examines how artists, poets, moralists, politicians, and philosophers painted, sang about, or legislated private life in early modern China. The paintings, poems, and documents we examine will allow us to peer deeply into the private lives of people speaking as intellectuals, monks, lovers, married couples, or parents. In addition to such private objects as pillows, mirrors, or personal fans, we’ll also look at paintings about private matters intended for viewing in public. To prepare us for this voyeuristic voyage, we will read modern studies of early modern family life in China by historians, sociologists and anthropologists, as well as primary legal and philosophical arguments written in classical and early modern China. We will also read some primary and secondary materials relating to private life in early modern Europe. Students will acquire a basic understanding of moral, political, and legal issues relevant to the conduct of private life at the time. Along the way, students will learn the fundamentals of conducting social history research using primary materials, including visual art. We will view works at the Art Institute of Chicago as part of the class. Requirements include regular class participation, short class presentations, a longer presentation, and a final paper based on the longer presentation. Graduate students will be expected to write longer papers utilizing more advanced research methods, including the use of primary languages.
Instructor(s): M. Powers Terms Offered: Spring
Equivalent Course(s): EALC 35708, ARTH 35708, EALC 25708

ARTH 25885. 20th Century American Drama. 100 Units.
Equivalent Course(s): ENGL 24503, TAPS 20110

ARTH 25900. Theories of Media. 100 Units.
This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat in which images proliferate and take on a “life of their own.” The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato’s Allegory of the Cave and Cratylus, Aristotle’s Poetics, and modern texts such as Marshall McLuhan’s Understanding Media, Regis Debray’s Mediology, and Friedrich Kittler’s Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of concepts such as the “unmediated” or “immediate”? How do media become intelligible and concrete in the form of “metapictures” or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become “mixed”? We will also look at recent films such as The Matrix and Existenz that project fantasies of a world of total mediation and hyperreality.
Instructor(s): W. J. T. Mitchell Terms Offered: Winter
Prerequisite(s): Any 100-level ARTH or COVA course, or consent of instructor.
Equivalent Course(s): ENGL 32800, CMST 27800, AMER 30800, ARTH 35900, ENGL 12800, CMST 37800, ARTV 20400

ARTH 26110. Ways of Curating and Collecting. 100 Units.
This seminar takes stock of contemporary currents in curating and collecting practices at a time when we are experiencing rapid expansion of the museum sector internationally, and witnessing the growing ubiquity of “curation” within the spheres of leisure, culture, entertainment and tourism. Using institutions across campus, the city of Chicago and beyond as our primary locus, we will explore curatorial and collecting strategies employed by a variety of visual arts institutions and platforms from the scale of the single-room/single curator gallery, to the museum and the international biennial. We will consider how curatorial work, and the shifting status of the art object within collecting and non-collecting institutions. Together we will explore significant curatorial projects at a local, national and international level; we will undertake site visits as well as play host to visiting curators, artists and thinkers. Course readings will feature the writings of seminal international curators as well as selections from historians and theorists in the field of curatorial studies. Students will work through a series of independent and collaborative assignments as well as a final project that integrates curatorial theory and practice.
Instructor(s): Y. Umolu Terms Offered: Spring
Equivalent Course(s): ARTV 30008, ARTV 20008, ARTH 36110
ARTH 26114. Invention and Revival in European Prints, 1500-1900. 100 Units.
This course will offer a wide-ranging panorama of European printmaking using works exclusively drawn from the Smart Museum’s permanent collection. We will be closely engaged with the historical development of print media and the technical advances that opened new possibilities to artists, while also addressing prints’ relationship to other art forms. In addition, we will tackle broad thematic issues including originality and reproduction, dissemination and collecting, formats and genres, and markets and value. Grounded in the firsthand examination of original works of art, the course will encompass leading masters of printmaking such as Dürer, Callot, Rembrandt, Goya, and Whistler, as well as lesser-known figures and side currents in the European tradition. In concert with other course requirements, students will have the opportunity to help prepare a small exhibition of prints.
Instructor(s): A. Leonard Terms Offered: Winter
Equivalent Course(s): ARTH 36114

ARTH 26200. Magic and the Cinema. 100 Units.
No description available.
Equivalent Course(s): CMST 25600, CMST 35600, ARTH 36200

ARTH 26790. A Curating Case-Study: The Hut. 100 Units.
This course - part curatorial practice, part art theory - will be taught in tandem with an exhibition titled "The Hut", opening at the Neubauer Collegium gallery in the spring of 2019. We will be using this exhibition project, originally conceived for the 2018 Venice architecture biennial, as a framework, test site and occasional hut-sized classroom for hands-on curatorial exercises as much as artistic and philosophical debate. Both seminar and exhibition center on three philosophers' huts; these act as platforms to discuss a wide range of issues pertaining to modern and contemporary art debates: Ludwig Wittgenstein's hut in Norway, Martin Heidegger's hut in the Black Forest, and a Ian Hamilton Finlay sculpture titled "Adorno's Hut" (after Theodor Adorno). The course will map the relationships between these three philosophers and the shadows they cast across 20th century aesthetics and art theory, as well as consider topics related to escape and escapism, exile and retreat, habitation and homelessness, as seen through the prism of architecturally inflected contemporary art practices. The seminar’s bibliography will be shaped in large part by readings of said philosophers. We will also be studying artworks, meeting artists and visiting exhibitions and sites of architectural interest. A final project, consisting of writing & construction work, will seek to expand the scope of philosophical architecture and building philosophy.
Instructor(s): D. Roelstraete Terms Offered: Spring
Equivalent Course(s): ARTV 30012, ARTH 36790, ARTV 20012

ARTH 27301. Aesthetics: Phil/Photo/Film. 100 Units.
Equivalent Course(s): CMST 29300, CMST 39300, ARTH 37301, PHIL 31301, PHIL 21100

ARTH 27304. Photo/Modernism/Esthetic. 100 Units.
The course presents the history of photographic practices in the United States, beginning in the late 19th century and extending into the 1980s, aimed at gaining an audience for photographs within museums of art. The issues under study include the contention over claims about medium specificity, notions of photographic objectivity, a peculiarly photographic esthetics, the division of photography into two categories-art vs. documentary-and the role of tradition and canon formation in the attempted definition of the photographic medium.
Instructor(s): J. Snyder Terms Offered: Spring
Equivalent Course(s): ARTH 37304, ARTV 30704, ARTV 20704

ARTH 27420. Modernist Architecture on Campus. 100 Units.
How have universities brought modern architecture into campuses designed in traditional architectural styles, whether classical or medieval? How have they balanced architecture's capacity to exemplify a consistent institutional image and to symbolize innovative leadership? Can the two be integrated, whether in single new buildings, renovations of old buildings, or groupings of old and new? What effect do new building materials, methods, and technologies, as well as new purposes for buildings, have on these questions? While acknowledging other institutions, the course will focus on our own campus history, examining varied approaches to updating our collegiate Gothic campus architecture and layout from the construction of Levi Hall (the Administration Building) in the 1940s to the present. We will analyze buildings and campus plans in relation to the abundant and largely unstudied drawings and related building documents at Special Collections, and work together to interpret the histories we produce in the context of the broader, changeful history of modernist architecture and its debates. Our work will lay the foundation for a future architectural exhibition. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): K. Taylor Terms Offered: Autumn
Equivalent Course(s): ARTH 37420
ARTH 27800. The Material Science of Art (Suzanne Deal Booth Conservation Seminar) 100 Units.
This course will introduce students to the methods, theories, and strategies of scientific approaches to studying art objects and consider the meaning of different materials and surfaces across artistic media. It will showcase new scholarship generated in the field of conservation science and object-based art history that draws its strength from the collaborative work among scientists, conservators, art historians, and theorists. Conservation science draws on the applied sciences and engineering to understand how to preserve the world’s cultural heritage and forge connections between making and meaning. The course will explore scientific examinations to investigate the production and use of art objects. Focusing on material studies of paintings and sculptures, pigments as well as their binding media, students will learn about the material make-up of art objects by employing visual analysis alongside practical studies using scientific analysis and imaging on campus and at the Art Institute of Chicago. Readings will be drawn from a variety of disciplines, including material science and chemistry, art history, visual and material culture, anthropology, and philosophy.
Instructor(s): M. Kokkori Terms Offered: Winter
Prerequisite(s): Students must have instructor consent to register for this course. Please email Dr. Kokkori at mkokkori@artic.edu by Friday, November 17 to express your interest.
Equivalent Course(s): ARTH 37800

ARTH 28002. Islamic Art and Architecture of the Medieval Perso-Turkic Courts. 100 Units.
This course considers art and architecture patronized by the Seljuk, Mongol, and Timurid courts from Anatolia to Central Asia from the eleventh to the fifteenth centuries. While the princes of these courts were of Turkic and/or Mongol origin, they adopted many of the cultural and artistic expectations of Perso-Islamicate court life. Further, many objects and monuments patronized by these courts belong to artistic histories variously shared with non-Islamic powers from the Byzantine Empire to China. Questions of how modern scholars have approached and categorized the arts and architecture of these courts will receive particular attention. Each student will write a historiographic review essay with a research component.
Instructor(s): P. Berlekamp Terms Offered: Winter
Equivalent Course(s): NEHC 38002, ARTH 38002, NEHC 28002

ARTH 28405. The Films of Alfred Hitchcock. 100 Units.
No single filmmaker has equaled Alfred Hitchcock’s combination of popular success, critical commentary and widespread influence on other filmmakers. Currently, his work is so familiar it threatens to be taken for granted. This course will reveal Hitchcock as the filmmaker who systematically used the stylistics of late silent film to forge a dialectical approach to the so-called Classical Style. Hitchcock devised a relation among narrative, spectator and character point of view, yielding a configuration of suspense, sensation and perception. Tracing Hitchcock’s career chronologically, we will follow his intertwining of sexual desire and gender politics, and his reshaping of melodrama according to Freudian concepts of repression, memory, interpretation and ab-reaction, as he navigates from silent film to sound and from Great Britain to Hollywood.
Equivalent Course(s): ARTH 38405, CMST 26500, CMST 36500, FNDL 26501

This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is strongly recommended but not required.

ARTH 28500. History of International Cinema I: Silent Era. 100 Units.
This course provides a survey of the history of cinema from its emergence in the mid-1890s to the transition to sound in the late 1920s. We will examine the cinema as a set of aesthetic, social, technological, national, cultural, and industrial practices as they were exercised and developed during this 30-year span. Especially important for our examination will be the exchange of film techniques, practices, and cultures in an international context. We will also pursue questions related to the historiography of the cinema, and examine early attempts to theorize and account for the cinema as an artistic and social phenomenon.
Instructor(s): A. Field Terms Offered: Autumn
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or minoring in Cinema and Media Studies.
Note(s): This is the first part of a two-quarter course.
Equivalent Course(s): ARTV 20002, CMST 48500, ENGL 48700, ARTH 38500, CMLT 32400, ENGL 29300, CMST 28500, CMLT 22400, MAPH 33600
ARTH 28600. History of International Cinema II: Sound Era to 1960. 100 Units.
The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell’s Film History: An Introduction; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.
Instructor(s): R. Bird
Terms Offered: Winter
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or minoring in Cinema and Media Studies.
Note(s): CMST 28500/28500 strongly recommended
Equivalent Course(s): REES 45005, REES 25005, CMST 48600, ENGL 29600, ARTH 38600, CMLT 32500, ARTV 20003, CMST 28600, ENGL 48900, CMLT 22500, MAPH 33700

ARTH 28815. World’s Fairs, 1851-1937: Chicago and Paris. 100 Units.
The great era of world’s fairs (or universal expositions) lasted about ninety years. Although this golden age originated in London and took expression on every continent, two of its most significant hosts were Paris and Chicago. This course will examine the character and impact of expositions in these two cities, concentrating on Paris expositions held between 1855 and 1937 and the two Chicago fairs of 1893 and 1933. Particular attention will be given to the art, design, and architecture featured, stimulated, and sometimes ignored by the fairs. But technological, racial, political, institutional, and social themes will be examined as well. This colloquium is meant to encourage creation of research papers. It will meet once a week and there will be heavy reliance upon images at each session.
Equivalent Course(s): HIST 28805

ARTH 29410. Dimensions of Citizenship: The Venice Architecture Biennale 2018. 100 Units.
In conjunction with the US pavilion at the 2018 Venice Architecture Biennale - co-commissioned by the University of Chicago and co-curated by Professor Niall Atkinson - this Gold Gory Traveling Seminar will explore the multiple relationships between architecture and citizenship both in contemporary practice and in historical perspective. The course will be centered around the pavilion’s theme of architecture and citizenship at seven spatial scales: Citizen, Civic, Region, Nation, Globe, Network, Cosmos. Through these scales, students will engage critically with the works of participating artists, architects, and designers, works that address the spatial dimensions of belonging in contemporary society. Students will also explore the historical dimensions citizenship through Venice’s complex history as a globally connected maritime empire that incorporated multiple linguistic, ethnic, and religious communities. Finally, the seminar will take account of the politics of national display at the root of the biennale itself and the relationship between historical and contemporary spatial experiences of citizenship and rights of abode, belonging and exile, migration and refuge, and the design of liminal spaces such as ships, ports of entry, quarantine centers, and ghettos as places of agonistic cultural exchange.
Instructor(s): N. Atkinson
Terms Offered: Autumn
Note(s): This is a traveling seminar; the course in its entirety will be taught Sept 4-25 in Venice. Registration is limited and by instructor consent only.
Equivalent Course(s): ARTH 39410

ARTH 29412. The Face in Western Culture from the Mona Lisa to the Selfie. 100 Units.
The course will approach the history of the human face from a variety of disciplinary perspectives, ranging across art history through to the history of science and technology. Topics will include the Mona Lisa and Renaissance portraiture; early modern identity and identity documents; the discipline of physiognomy; Johann Kaspar Lavater and the makings of racial science; the impact of photography; Alphonse Bertillon and the “mug shot”; smiles in advertisements; biometrics to facial recognition technologies; and the art and science of the selfie. The course will draw on specialized readings from secondary literature alongside a wide range of literary and visual primary sources, including scientific texts, paintings, drawings, identity documents, photographs, advertisements, cosmetics, and prosthetic parts. The subject offers a great deal of room for the selection of a topic for a research paper on a subject of students’ choices.
Equivalent Course(s): HIPS 29412, HIST 29412

ARTH 29504. Art, Community, Activism. 100 Units.
Equivalent Course(s): ARTH 39504
ARTH 29600. Junior Seminar: Doing Art History. 100 Units.
The aim of this seminar is to deepen an understanding of art history as a discipline and of the range of analytic strategies art history affords to students beginning to plan their honors papers or, in the case of students who are minoring in art history, writing research papers in art history courses. Students read essays that have shaped and represent the discipline, and test their wider applicability and limitations. Through this process, they develop a keener sense of the kinds of questions that most interest them in the history and criticism of art and visual culture. Students develop a formal topic proposal in a brief essay, and write a final paper analyzing one or two works of relevant, significant scholarship for their topics.
Instructor(s): P. Crowley Terms Offered: Winter
Note(s): Required of third-year students who are majoring in art history; open to nonmajors with consent of instructor. This course does not meet the general education requirement in the arts.

ARTH 29700. UG Rdg Course: Art History. 100 Units.
This course is primarily intended for students who are majoring in art history and who can best meet program requirements by study under a faculty member's individual supervision. The subject, course of study, and requirements are arranged with the instructor. Prerequisite(s): Consent of Instructor and Director of Undergraduate Studies Note(s): Students are required to submit the College Reading and Research Form. Must be taken for a quality grade. With adviser's approval, students who are majoring in art history may use this course to satisfy requirements for the major, a special field, or electives. This course is also open to nonmajors with advanced standing. This course does not meet the general education requirement in the dramatic, musical, and visual arts.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of Instructor and Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Form. Must be taken for a quality grade. With adviser's approval, students who are majoring in art history may use this course to satisfy requirements for the major, a special field, or electives. This course is also open to nonmajors with advanced standing. This course does not meet the general education requirement in the arts.

ARTH 29800. Senior Seminar: Writing Workshop. 100 Units.
Problems and methods in Art History. Required of fourth-year Art History majors.
Instructor(s): Staff Terms Offered: Autumn
Note(s): Required of fourth-year students who are majoring in art history. This course does not meet the general education requirement in the arts.

ARTH 29900. Preparation for the BA Paper. 100 Units.
This course provides guided research on the topic of the senior paper. Students arrange their program of study and a schedule of meetings with their senior paper advisor.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and Undergraduate Program Chair
Note(s): Students are required to submit the College Reading and Research Form. May be taken for P/F grading with consent of instructor.
Astronomy and Astrophysics

Department Website: http://astro.uchicago.edu

Program of Study

Astronomy is the oldest of the natural sciences; since antiquity astronomers have sought to understand the origin and destiny of the universe and its celestial contents. How did the universe evolve from an early, almost uniform, state to the rich structure that we see at the present epoch? Where did the elements of the periodic table come from? How do stars, along with their systems of planets, form and how do they change with time? Do other life-bearing worlds exist? These questions have evolved over millennia, with answers now sought using the mathematical, technological, and computational tools of modern astronomy.

For students interested in examining fundamental questions through scientific study of the universe, the Department of Astronomy and Astrophysics offers several choices to explore. Options include general education courses, the minor program in Astronomy and Astrophysics (aimed at students not majoring in the sciences), and the major program in Astrophysics, with both BA and BS tracks.

General Education Courses

Many options are available for choosing two- or three-quarter sequences that will satisfy the general education requirement in the physical sciences from among six courses numbered in the 12000s. These courses are designed for students not majoring in the sciences and present a range of foundational topics, from the grand principles governing the universe and understanding its beginning, to the formation and evolution of stars and galaxies, and the search for habitable extrasolar planets. All courses numbered in the 12000s include labs for engaging in astronomical inquiry through classical experiments, opportunities for telescope observing, and data analysis. The Study Abroad program in Paris is another option for completing the general education requirement in the physical sciences.

Students seeking a more in-depth examination of selected astrophysical topics may take a course numbered in the 18000s as a third course in the physical sciences or as a general elective. While the 12000 and 18000 courses are aimed at students not majoring in the sciences, quantitative analysis is an important part of all courses offered by the Department of Astronomy and Astrophysics. Any tools beyond pre-calculus algebra will be taught as needed.

Major in Astrophysics

The major program in Astrophysics reflects Chicago's tradition of interdisciplinary study and emphasis on mastery of the intellectual processes of inquiry and discovery. Courses in Computer Science and Statistics complement a foundational program in Physics, reflecting the essential relationships among the physical sciences. Students will gain broad knowledge of the universal, physical laws from the nuclear to cosmological; familiarity with computational methods and statistical data analysis; and experience with experimental and observational techniques through participation in research. Graduates of the Astrophysics program will be positioned to pursue advanced degrees in physics, astronomy, or similar fields, or enter government service, science education, or scientific journalism.

There are two tracks for students interested in the major. The program leading to a BA in Astrophysics consists of fifteen courses beyond the general education requirement. The program leading to a BS in Astrophysics consists of eighteen courses beyond the general education requirement. The BS track is recommended for students expecting to apply to graduate school in the physical sciences.

Please note that courses counted toward the major must be taken for quality grades (no P/F grading).

Note: The 2018–19 academic year will be the first in which the major in Astrophysics is offered. In very particular cases, students in the Class of 2019 may be eligible to complete the major depending on how many requirements they have already completed. Interested students should consult with the Department of Astronomy and Astrophysics and their College adviser immediately to determine the possibility and a proper course of study moving forward. This in no way guarantees that the major can be completed, however. Completion of the major for members of the Class of 2020 will also be contingent on the number of electives completed so far; these students should consult with the department as soon as possible. Students in the Class of 2021 who took Physics (or Chemistry, if interested in the Chemistry Variant) in their first year will be able to enter the major.

Summary of Requirements for the BA in Astrophysics

General Education

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<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
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<tr>
<td>PHYS 13100-13200</td>
<td>Mechanics; Electricity and Magnetism (or higher)</td>
<td>200</td>
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<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
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<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
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Total Units: 400
## MAJOR

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<th>Course</th>
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<th>Units</th>
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<tr>
<td>ASTR 13300</td>
<td>Introduction to Astrophysics %</td>
<td>100</td>
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<tr>
<td>PHYS 13300</td>
<td>Waves, Optics, and Heat (or higher)</td>
<td>100</td>
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<td>One of the following:</td>
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<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III</td>
<td>100</td>
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<td>MATH 15300</td>
<td>Calculus III</td>
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<td>Honors Calculus III</td>
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<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 15400</td>
<td>Modern Physics</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20100</td>
<td>Mathematical Methods for Physical Sciences II</td>
<td></td>
</tr>
<tr>
<td>One of the following:</td>
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<td></td>
</tr>
<tr>
<td>CMSC 12100</td>
<td>Computer Science with Applications I</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 15100</td>
<td>Intro To Computer Science-1</td>
<td></td>
</tr>
<tr>
<td>CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
<td></td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications *</td>
<td>100</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
<td></td>
</tr>
<tr>
<td>STAT 24400</td>
<td>Statistical Theory and Methods I</td>
<td></td>
</tr>
<tr>
<td>STAT 24410</td>
<td>Statistical Theory and Methods Ia</td>
<td></td>
</tr>
<tr>
<td>ASTR 21100</td>
<td>Computational Techniques in Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 21200</td>
<td>Observational Techniques</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 29800</td>
<td>Undergraduate Research Seminar</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 25400</td>
<td>Radiation Processes in Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTR 23900</td>
<td>Physics of Galaxies</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 24300</td>
<td>Cosmological Physics</td>
<td></td>
</tr>
<tr>
<td>Two electives to be selected from list of approved courses</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>1500</td>
</tr>
</tbody>
</table>

* Credit may be granted by examination.

% Students who matriculated prior to Autumn 2018 may substitute any 200-level ASTR course for ASTR 13300

## SUMMARY OF REQUIREMENTS FOR THE BS IN ASTROPHYSICS (PHYSICS VARIANT)

### GENERAL EDUCATION

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100-13200</td>
<td>Mechanics; Electricity and Magnetism *</td>
<td>200</td>
</tr>
<tr>
<td>One of the following sequences:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II *</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td></td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>400</td>
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### MAJOR

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 13300</td>
<td>Introduction to Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 13300</td>
<td>Waves, Optics, and Heat (or higher)</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 15400</td>
<td>Modern Physics</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
<td></td>
</tr>
<tr>
<td>MATH 20100</td>
<td>Mathematical Methods for Physical Sciences II</td>
<td></td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 12100</td>
<td>Computer Science with Applications I</td>
</tr>
<tr>
<td>CMSC 15100</td>
<td>Intro To Computer Science-I</td>
</tr>
<tr>
<td>CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications *</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
</tr>
<tr>
<td>STAT 24400</td>
<td>Statistical Theory and Methods I</td>
</tr>
<tr>
<td>STAT 24410</td>
<td>Statistical Theory and Methods Ia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 21100</td>
<td>Computational Techniques in Astrophysics</td>
</tr>
<tr>
<td>ASTR 21200</td>
<td>Observational Techniques</td>
</tr>
<tr>
<td>ASTR 29800</td>
<td>Undergraduate Research Seminar</td>
</tr>
<tr>
<td>PHYS 23400</td>
<td>Quantum Mechanics I</td>
</tr>
<tr>
<td>ASTR 25400</td>
<td>Radiation Processes in Astrophysics</td>
</tr>
<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars</td>
</tr>
<tr>
<td>PHYS 19700</td>
<td>Statistical and Thermal Physics</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 23900</td>
<td>Physics of Galaxies</td>
</tr>
<tr>
<td>ASTR 24300</td>
<td>Cosmological Physics</td>
</tr>
</tbody>
</table>

Three electives to be selected from list of approved courses

Total Units: 1800

* Credit may be granted by examination.

**Summary of Requirements for the BS in Astrophysics (Chemistry Variant)**

**General Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II (or equivalent) *</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II *</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
</tbody>
</table>

Total Units: 400

**Major**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100-13200</td>
<td>Mechanics; Electricity and Magnetism (or higher)</td>
</tr>
<tr>
<td>ASTR 13300</td>
<td>Introduction to Astrophysics</td>
</tr>
<tr>
<td>PHYS 13300</td>
<td>Waves, Optics, and Heat (or higher)</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III</td>
</tr>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 20000</td>
<td>Mathematical Methods for Physical Sciences I</td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
</tr>
<tr>
<td>MATH 20100</td>
<td>Mathematical Methods for Physical Sciences II</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 12100</td>
<td>Computer Science with Applications I</td>
</tr>
<tr>
<td>CMSC 15100</td>
<td>Intro To Computer Science-I</td>
</tr>
<tr>
<td>CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications *</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
</tr>
</tbody>
</table>
**Astronomy and Astrophysics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 24400</td>
<td>Statistical Theory and Methods I</td>
<td></td>
</tr>
<tr>
<td>STAT 24410</td>
<td>Statistical Theory and Methods Ia</td>
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</tr>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III</td>
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</tr>
<tr>
<td>ASTR 21100</td>
<td>Computational Techniques in Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 21200</td>
<td>Observational Techniques</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 29800</td>
<td>Undergraduate Research Seminar</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 25400</td>
<td>Radiation Processes in Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 26100</td>
<td>Quantum Mechanics</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 26200</td>
<td>Thermodynamics</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>ASTR 23900</td>
<td>Physics of Galaxies</td>
<td></td>
</tr>
<tr>
<td>ASTR 24300</td>
<td>Cosmological Physics</td>
<td></td>
</tr>
<tr>
<td>One elective to be selected from list of approved courses</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td>1800</td>
</tr>
</tbody>
</table>

* Credit may be granted by examination

**Sample Programs**

The sample programs below illustrate different paths for fulfilling requirements for the Astrophysics major. The first example shows a path for the BS in Astrophysics with the introductory sequence in Physics.

**First Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100</td>
<td>PHYS 13200</td>
<td>ASTR 13300</td>
</tr>
<tr>
<td>MATH 15100</td>
<td>MATH 15200</td>
<td>PHYS 13300</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 15400</td>
<td>ASTR 21100</td>
<td>ASTR 21200</td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>STAT 23400</td>
<td>PHYS 23400</td>
</tr>
<tr>
<td>CMSC 12100</td>
<td></td>
<td></td>
</tr>
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</table>

**Third Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 25400</td>
<td>ASTR 24100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
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</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 19700</td>
<td>Elective</td>
<td>ASTR 24300</td>
</tr>
</tbody>
</table>

This sample shows a path for the BS in Astrophysics with the introductory sequence in Chemistry.

**First Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11100</td>
<td>CHEM 11200</td>
<td>ASTR 13300</td>
</tr>
<tr>
<td>MATH 16100</td>
<td>MATH 16200</td>
<td>CHEM 11300</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100</td>
<td>PHYS 13200</td>
<td>PHYS 13300</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>MATH 20100</td>
<td></td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 25400</td>
<td>ASTR 24100</td>
<td>ASTR 21200</td>
</tr>
<tr>
<td>CMSC 12100</td>
<td>ASTR 21100</td>
<td>ASTR 29800</td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 26100</td>
<td>CHEM 26200</td>
<td>ASTR 23900</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
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**Electives**

<table>
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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ASTR 25800</td>
<td>Astrophysics of Exoplanets</td>
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<tr>
<td>ASTR 28200</td>
<td>Current Topics in Astrophysics</td>
<td>100</td>
</tr>
<tr>
<td>ASTR 30100</td>
<td>Stars</td>
<td>100</td>
</tr>
</tbody>
</table>
ASTR 30300  Interstellar Matter  100
ASTR 30400  Galaxies  100
ASTR 33000  Computational Physics and Astrophysics  100
CMSC 15200  Intro To Computer Science-2  100
CMSC 15400  Introduction to Computer Systems  100
CMSC 23500  Introduction to Database Systems  100
CMSC 23900  Data Visualization  100
CMSC 28510  Introduction to Scientific Computing  100
GEOS 21200  Physics of the Earth  100
GEOS 22040  Formation of Planetary Syst. in our Galaxy: From Dust to Planetesimals  100
GEOS 22050  Formation of Planetary Systems in our Galaxy: From Planetesimals to Planets  100
GEOS 22060  What Makes a Planet Habitable?  100
GEOS 22200  Geochronology  100
MATH 20250  Abstract Linear Algebra (or higher)  100
PHYS 18500  Intermediate Mechanics  100
PHYS 19700  Statistical and Thermal Physics (B.A. only)  100
PHYS 22500  Intermediate Electricity and Magnetism I  100
PHYS 22600  Electronics  100
PHYS 22700  Intermediate Electricity and Magnetism II  100
PHYS 23400  Quantum Mechanics I (B.A. only)  100
PHYS 23500  Quantum Mechanics II  100
PHYS 26000  Fluid Dynamics  100
PHYS 26400  Spacetime and Black Holes  100
STAT 22200  Linear Models And Experimental Design  100
STAT 22400  Applied Regression Analysis  100
STAT 24500  Statistical Theory and Methods II  100
STAT 24510  Statistical Theory and Methods IIa  100
STAT 25100  Introduction to Mathematical Probability  100
STAT 25300  Introduction to Probability Models  100
STAT 27400  Nonparametric Inference  100
STAT 27850  Multiple Testing, Modern Inference, and Replicability  100

HONORS

Students who have completed the requirements for the BA or BS in Astrophysics and who have begun a substantive research project with a research mentor are encouraged to prepare an honors thesis based on their work. To be considered for honors, a student must earn a GPA of 3.5 or higher in the required courses for the major and 3.0 overall (or obtain consent from the assistant chair for academic affairs), and have an approved research project that will be supervised by a faculty member.

Eligible students who wish to be considered for honors will first meet with the academic affairs administrator to obtain guidelines and requirements for this option, followed by a meeting with their research mentor resulting in a plan for the supervision of the research. The student enrolls in ASTR 29900 Honors Thesis in any quarter of their graduation year. A goal of the honors track is to mentor students through the process of preparing research and submitting it for publication. Along the way, students present their research to various groups, including Astronomy and Astrophysics faculty, for feedback and discussion.

MINOR IN ASTRONOMY AND ASTROPHYSICS

The grand narrative of astronomy holds wide popular appeal and lends itself to interdisciplinary study: there is a deep history and cultural context, the night sky is profoundly inspiring and accessible to everyone, and the spirit of exploration is communicated in daily media reports of new discoveries. The minor in Astronomy and Astrophysics was designed for students not majoring in the sciences to cultivate understanding of science as a human endeavor across multiple social, historical, and cultural contexts, and to develop comprehension of the quantitative reasoning that supports a deep conceptual understanding of science.

Students are allowed flexibility in selecting five courses to compose a rigorous program of study according to individual interest. The selection must include at least two courses numbered in the 12000s and at least one in the 18000s. It is possible for a student pursuing the minor to substitute a course numbered in the 20000s for one of the 18000 courses. Students interested in exploring this option must meet with the academic affairs administrator to discuss course selection. Please note: courses taken to satisfy the general education requirement in the physical sciences may not be counted towards the minor. Students who satisfy their general
education requirement in the physical sciences in Astronomy and Astrophysics may pursue the minor through completing the remaining courses numbered in the 12000s and at least one in the 18000s.

There are no Physics or Mathematics prerequisites for the minor. Courses must be taken for quality grades (no P/F grading). Students must meet with the academic affairs administrator before the end of Spring Quarter of their third year to declare their intention to complete the minor and fill out the College's Consent to Complete a Minor Program (http://college.uchicago.edu/sites/college.uchicago.edu/files/Consent_Minor_Program.pdf) form.

STUDY ABROAD PROGRAM

Every Spring Quarter a three-course Astronomy program is offered in Paris, composed from the courses numbered in the 12000s that are offered on campus. This sequence was designed for students not majoring in the sciences but may also be of interest to science majors who want to supplement their work in physics and chemistry with a quarter devoted to the cosmos. In Spring Quarter 2019, the Paris program will offer ASTR 12600 Matter, Energy, Space, and Time; ASTR 12610 Black Holes; and ASTR 12620 The Big Bang.

The Astronomy program in Paris satisfies the general education requirement in the physical sciences. Students who have already completed their general education requirement in the physical sciences may count the three courses taken in Paris toward the five required to satisfy the minor in Astronomy and Astrophysics. For details, see the Study Abroad (https://study-abroad.uchicago.edu) page for Paris: Astronomy (http://study-abroad.uchicago.edu/programs/paris-astronomy).

ASTRONOMY AND ASTROPHYSICS COURSES

ASTR 12600. Matter, Energy, Space, and Time. 100 Units.
A comprehensive survey of how the physical world works, and how matter, energy, space, and time evolved from the beginning to the present. A brief survey of the historical development of mathematics, physics, and astronomy leads to a conceptual survey of the modern theory of the physical universe: space and time in relativity; the quantum theory of matter and energy; and the evolution of cosmic structure and composition. The major theme of this course is the understanding of all nature, from the prosaic to the exotic, using powerful quantitative theory grounded in precise experiments. Although quantitative analysis will be an important part of the course, students will not be expected to employ mathematics beyond algebra. (L)
Instructor(s): Stephan Meyer Terms Offered: Autumn
Equivalent Course(s): PHSC 12600

ASTR 12610. Black Holes. 100 Units.
Black Holes are the most exotic, extreme and paradoxical systems in the universe. They are the densest concentrations of energy, yet they convert all matter that falls in to pure space-time curvature; they radiate more power than anything else, even though most of their radiation is not even made of light; they are mathematically the most perfectly understood of any physical structure, but their enigmatic behavior is still the subject of a violent disagreement among experts that highlights our ignorance of how quantum physics relates to gravity. This course will survey the physics of space and time, the nature of black holes, their effects on surrounding matter and light, the astrophysical contexts in which they are observed, frontier areas of research as quantum gravity and gravitational waves, and the importance of space-time physics to everyday needs such as navigation and energy. The modern theory of space and time, as well as black holes, will be placed in historical context, with special attention to the work of Albert Einstein. Experimental exercises will include direct measurement of the speed of light and gravitational mass, and experience with interferometry. Quantitative analysis will be an important part of the course, but mathematics beyond algebra will not be required. (L)
Instructor(s): Craig Hogan Terms Offered: Winter
Prerequisite(s): PHSC 12600 or PHSC 12700
Equivalent Course(s): PHSC 12610

ASTR 12620. The Big Bang. 100 Units.
The Big Bang model describes the Universe on the largest scales and its evolution from the earliest observationally accessible times through the formation of the complex world we live in today. This powerful framework allows us to interpret a wide range of observations and to make detailed and precise predictions for new experiments. The key motivating observations include the expansion of the Universe and how it has changed with time; the existence of radiation indicating a hot and dense early phase; the abundance of the light elements; and how matter is organized over a wide range of physical scales. The model naturally incorporates dark matter and dark energy; two surprising and poorly understood components that govern the growth of structure over time. The course will explore the history of scientific cosmology and the evidence for the Big Bang model, its consequences for the earliest moments after the Big Bang, and its predictions for the eventual fate of the Universe. Labs will include a hands-on measurement of the relic cosmic microwave background radiation from the early universe and the use of astronomical data to verify key discoveries in the history of Big Bang cosmology. Quantitative analysis will be an important part of the course, but prior experience with mathematics beyond algebra will not be required. (L)
Instructor(s): Dan Hooper Terms Offered: Spring
Prerequisite(s): PHSC 12600
Equivalent Course(s): PHSC 12620
ASTR 12700. Stars. 100 Units.
Elements such as carbon and oxygen are created in fusion reactions at high temperatures and pressures in the deep interiors of stars, conditions that naturally arise in stars like the Sun. This course will outline the physical principles at work and the history of the development of the key ideas: how nuclear physics and the theory of stellar interiors account for how stars shine, why they live for such long times, and how the heavy elements in their cores are dispersed to form a new generation of stars. Gravity assembles stars out of diffuse material, a process that includes the formation of planetary systems. The course shows how, taken together, these physical processes naturally lead to the ingredients necessary for the emergence of life, namely elements like carbon, nitrogen, and oxygen, and planets in stable orbits around long-lived stars. The course features quantitative analysis of data; any tools needed beyond pre-calculus algebra will be taught as part of the course. (L)
Instructor(s): Daniel Fabrycky Terms Offered: Autumn
Equivalent Course(s): PHSC 12700

ASTR 12710. Galaxies. 100 Units.
Galaxies have been called "island universes," places where stars are concentrated, where they are born, and where they die. The study of galaxies reaches back to the Renaissance; Galileo Galilei first pointed a telescope skyward in 1610 and confirmed a then 2000 year-old Greek conjecture about the nature of our own galaxy-the Milky Way. This course will use extensive modern observational data from a wide range of telescopes to trace the modern picture for the formation and evolution of galaxies and the stars in them. Galaxies will then be used as markers of yet larger scale structures, in order to explore the influence of gravity over cosmic time. The object of study in this course is galaxies, and the narrative arc traced through that extensive data and understanding will highlight our profound discovery that most of the mass in galaxies (and the Universe as a whole) is in fact an exotic form of matter-dark matter-that we cannot directly see. Quantitative analysis will be an important part of the course in both laboratory work and lectures, but mathematics beyond algebra and some geometric understanding will not be required. This course will feature several observationally-oriented labs that will allow students to directly experience how some of the modern understanding of galaxies has arisen. (L)
Instructor(s): Michael Gladders Terms Offered: Winter
Prerequisite(s): PHSC 12600 or PHSC 12700. PHSC 12710 can be taken as the first course in a sequence combined with PHSC 12720.
Equivalent Course(s): PHSC 12710

ASTR 12720. Exoplanets. 100 Units.
The past two decades have witnessed the discovery of planets in orbit around other stars and the characterization of extra-Solar (exo-) planetary systems. We are now able to place our Solar System into the context of other worlds and a surprising conclusion that most planetary systems look nothing like our own. A challenging next step is to find planets as small as the Earth in orbit around stars like the Sun. The architecture of planetary systems reflects the formation of the parent star and its protoplanetary disk, and how these have changed with time. This course will review the techniques for discovery of planets around other stars, what we have learned so far about exoplanetary systems, and the driving questions for the future, including the quest for habitable environments elsewhere. Although quantitative analysis will be an important part of the course, students will not be expected to employ mathematics beyond algebra. (L)
Instructor(s): Leslie Rogers Terms Offered: Spring
Prerequisite(s): PHSC 10800, PHSC 10100, PHSC 12700 or PHSC 12710.
Equivalent Course(s): PHSC 12720

ASTR 13300. Introduction to Astrophysics. 100 Units.
The course is intended for first-year students intending to major in Astrophysics as an introduction to the range of important physical processes that operate in astrophysical environments, and how these govern structures across a wide range of scales, from planets to superclusters. We will examine gravitating systems such as stars and galaxies, both in an out of equilibrium, in situations where the particles are collisionless (star clusters) and where the system is collisional (stars forming out of dense gas). The course will address thermal radiation in a number of contexts, including the relic radiation from the Big Bang. Line emission and absorption will also be introduced. Thermodynamic principles will be used to illuminate the behavior and evolution of a number of kinds of astrophysical systems, such as how supermassive black holes may have formed.
Instructor(s): Angela Olinto Terms Offered: Spring
Prerequisite(s): PHYS 13300; may be taken concurrently.

ASTR 18000. The Search for Extraterrestrial Life. 100 Units.
The origin of life is one of the biggest questions of modern science. While substantial progress has been made in understanding how life arose on our planet, such research represents just a single case study in how life originates and evolves. This course covers the search for life beyond Earth from the planets and moons of the Solar System to planets orbiting other stars and intelligent life that may have left its mark on macroscopic scales. The discovery of life beyond Earth would be transformative for our understanding of humanity’s place in the universe. A range of ongoing and planned experiments have the potential to detect or put strong constraints on the existence of life during the next few decades. This class will mix traditional lectures with flipped classroom problem-solving sessions.
Instructor(s): J. Bean Terms Offered: Autumn
ASTR 18100. The Milky Way. 100 Units.
Within a largely empty universe, we live in a vast stellar “island” that we call the Milky Way. As we survey the stellar and interstellar components of the Milky Way—the distribution and motions of stars and interstellar gas, and how these dynamic, ever-changing components interact with each other during their life cycles inside the Milky Way—we will follow the path of ancient astronomers, wonder at their mistakes and prejudices, and form our own understanding.
Instructor(s): Nickolay Gnedin Terms Offered: Spring
Prerequisite(s): Any two-course 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Equivalent Course(s): PHSC 18100

ASTR 18700. From Fossils to Fermi’s Paradox: Origin and Evolution of Intelligent Life. 100 Units.
The course approaches Fermi’s question, “Are we alone in the universe?,” in the light of recent evidence primarily from three fields: the history and evolution of life on Earth (paleontology), the meaning and evolution of complex signaling and intelligence (cognitive science), and the distribution, composition and conditions on planets and exoplanets (astronomy). We also review the history and parameters governing extrasolar detection and signaling. The aim of the course is to assess the interplay between convergence and contingency in evolution, the selective advantage of intelligence, and the existence and nature of life elsewhere in the universe—in order to better understand the meaning of human existence.
Instructor(s): P. Sereno; L. Rogers; S. London Terms Offered: Winter
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): BPRO 28800, PSYC 28810

ASTR 20000. Tutorial in Astronomy and Astrophysics. 100 Units.
Students in this tutorial read topics in astronomy and astrophysics under the supervision of a faculty member. Instructors meet with one to three students for approximately two hours each week to discuss readings on topics they choose together.
Instructor(s): TBD Terms Offered: TBD
Prerequisite(s): Any 10000-level general education sequence in chemistry, geophysical sciences, physical sciences, or physics.
Note(s): Students must arrange with instructor in advance of the start of the term. Class limited to six students. Available for either quality grades or for P/F grading.

ASTR 21100. Computational Techniques in Astrophysics. 100 Units.
This course will introduce basic computational techniques most often used in astronomical research, such as interpolation, transforms, smoothing, numerical differentiation and integration, integration of ordinary differential equations, and Monte Carlo methods, and elements of basic computer algorithms, data structures, and parallel programming using Python as the main course programming language. Practical examples where these numerical techniques are applied will be covered via homework and in class exercises using real-world astronomical problems and results of recent papers with emphasis on implementing the algorithms from scratch. The course will cover the access to astronomical archival data, and how to search it efficiently, focusing specifically on the Sloan Digital Sky Survey, but with introduction to other data sets. Machine learning methods will be introduced to illustrate how large data sets can be mined for interesting information.
Instructor(s): Andrey Kravtsov Terms Offered: Winter
Prerequisite(s): CMSC 12100; or CMSC 15100 or CMSC 16100 plus working knowledge of Python.

ASTR 21200. Observational Techniques. 100 Units.
This course will prepare students in methods that will be used in their independent research by introducing observation and analysis techniques in a field of astrophysics chosen by the instructor. Students will learn basics of astronomical instrumentation and will apply that knowledge in a practical context (for example, using an on-campus telescope or telescopes controlled robotically from campus). The process of data reduction and calibration will be illustrated, leading to the extraction of scientifically meaningful results.
Instructor(s): Doyal Harper Terms Offered: Spring
Prerequisite(s): ASTR 13300 or by consent of instructor.

ASTR 23000. Cosmos and Conscience: Looking for Ourselves Elsewhere. 100 Units.
Science and religion are two ways, among many others, that people can seek to know about reality: how do we construct ordered pictures of the whole-cosmos or civilization—and how do we relate to them in terms of action? How do we know what we do not know, and what does that kind of “knowledge” mean for the orientation and direction of human existence? How would cultural biases be affected by knowing that there are others “out there” in the universe, should we discover them? From various perspectives, this course addresses these questions of the origins, structures, and ends of reality as we look for ourselves—seeking an understanding of the human condition in the cosmos but also in complex religious and cultural traditions. Whereas in our popular culture, science is often identified with the realm of knowledge and religion is simply “belief” or “practice,” the course also seeks to trace the rational limits of science and the rational force of religion with respect to the ethical problem of the right and good conduct of human life.
Instructor(s): W. Schweiker, D. York Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing.
Equivalent Course(s): RLST 23603, BPRO 23000
ASTR 23900. Physics of Galaxies. 100 Units.
This course will provide a comprehensive introduction to galaxies and the interstellar medium and will examine
the physical processes involved in their structure and evolution. Topics will include the stellar content of galaxies
and the dynamics of stars within galaxies, the physical state of the interstellar medium, central supermassive
black holes and power generation in active galactic nuclei, what can be learned about the distribution of mass
from gravitational lensing, and processes that shape the relative distributions of dark matter and baryonic matter.
Instructor(s): Hsiao-Wen Chen Terms Offered: Spring
Prerequisite(s): ASTR 24100 or consent of instructor.

ASTR 24100. The Physics of Stars. 100 Units.
This course develops the physical theory of the internal structure of stars and how their structure changes
with time. The material illustrates how to build model stars based on these physical principles and covers
observational constraints on these models, such as the neutrino flux from the core of the Sun. Topics include
supernovae and the end states of stars-white dwarfs, neutron stars, and black holes.
Instructor(s): Robert Rosner Terms Offered: Winter
Prerequisite(s): ASTR 25400.

ASTR 24300. Cosmological Physics. 100 Units.
This course will provide a comprehensive introduction to the principal topics in cosmology, including theoretical
and observational foundations. Key topics will include the expansion of the Universe, dark matter and energy,
cosmic microwave background, hot Big Bang, and the origin and evolution of structure.
Instructor(s): Wayne Hu Terms Offered: Spring
Prerequisite(s): ASTR 24100 or consent of instructor.

ASTR 25400. Radiation Processes in Astrophysics. 100 Units.
Most of what we know about the Universe comes from detection of electromagnetic radiation emitted by
individual sources or by diffuse media. Once we understand the processes by which the radiation was created
and the processes by which the radiation is scattered or modified as it passes through matter, we can address the
physical nature of the sources. The physics of radiation processes includes electricity and magnetism; quantum
mechanics and atomic and nuclear structure; statistical mechanics; and special relativity.
Instructor(s): Damiano Caprioli Terms Offered: Autumn
Prerequisite(s): ASTR 13300 and PHYS 15400.
Equivalent Course(s): ASTR 30500

ASTR 28200. Current Topics in Astrophysics. 100 Units.
This advanced course presents the forefront research and interests of a member of the Astronomy &
Astrophysics faculty, with instructors and topics changing annually.
Instructor(s): Erik Shirokoff Terms Offered: Winter
Prerequisite(s): PHYS 15400. Recommended for third- and fourth-year students majoring in Physics or the
Geophysical Sciences, or students who have completed two quarters of Calculus.

ASTR 28300. Current Topics in Astrophysics: Instrumentation. 100 Units.
The topic of this course in 2019 is Catching Long-wavelength Photons. Many important events in the history
of our universe are best observed at wavelengths between the microwave and the far-infrared. These include
the cosmic microwave background (CMB), the early galaxies which played host to the first stars during the
epoch of reionization, and the astrophysical processes which drive nearby star forming regions. This class will
introduce these science topics and then explore in detail the tools and techniques required to measure this
radiation. Topics will include: antennas, horns, and direct absorbers; receiver sensitivity and fundamental noise
sources; coherent detectors, bolometers, and pair-breaking superconducting devices; microwave theory and
interferometry; telescope fundamentals; and a survey of current and near-future instruments. This course should
provide a comprehensive background for students interested in instrumentation for the CMB, submm, and far-
IR astronomy. Grading will include problem sets and a final project in which students design their own detailed
instrument proposal. There are no lab sections, though some class sessions will involve hands-on demonstrations
in a research lab on campus.
Instructor(s): Erik Shirokoff Terms Offered: Winter
Prerequisite(s): Third- or fourth-year students majoring in Astrophysics, Physics or the Geophysical Sciences; or
by consent of instructor.

ASTR 29700. Participation in Research. 100 Units.
Students are assigned to work in the research group of a member of the faculty. Participation in research may
take the form of independent work on a small project or assistance to an advanced graduate student or faculty
member in his or her research.
Instructor(s): Rich Kron Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): Third- or fourth-year standing and consent of instructor.
Note(s): Students must arrange with instructor in advance of the start of the term. Students are required to
submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading.
Students may register for this course for as many quarters as they wish; they need not work with the same
faculty member each time.
ASTR 29800. Undergraduate Research Seminar. 100 Units.
In this course students will engage with various scientific practices to prepare them for participation in research. Students will critically analyze research presented in popular and scholarly scientific literature and practice computational, statistical, and observational techniques to explore astrophysical problems. The course will emphasize student-led discussions and interactive presentations to synthesize previous coursework and strengthen scientific thinking and communication skills. Guest lectures by members of research groups will highlight projects undertaken by faculty in the Astronomy and Astrophysics Department to acquaint students with possibilities for research participation.
Instructor(s): Clarence Chang Terms Offered: Spring
Prerequisite(s): CMSC 12100, CMSC 15100 or CMSC 16100; STAT 22000, STAT 23400, STAT 24400 or STAT 24410; and ASTR 21100 and ASTR 21200.
Note(s): Intended for students in the Major for Astrophysics program.

ASTR 29900. Honors Thesis. 100 Units.
Students who have completed the requirements for the B.A. or B.S. in Astrophysics and who have begun a substantive research project with a research mentor are encouraged to prepare an Honors Thesis based on their work.
Instructor(s): Rich Kron Terms Offered: Autumn Spring Winter
Prerequisite(s): Open to students who are majoring in Astrophysics with fourth-year standing and approval of thesis topic. Students are required to submit the College Reading and Research Course form.
Note(s): To be considered for Honors, a student must earn a G.P.A. of 3.50 or higher in the required courses for the Major and 3.0 overall (or obtain consent from the Astronomy and Astrophysics Assistant Chair for Academic Affairs), and have an approved research project that will be supervised by a faculty member. Eligible students who wish to be considered for Honors will first meet with the Academic Affairs Administrator to obtain guidelines and requirements for this option, followed by a meeting with their research mentor resulting in a plan for the supervision of the research.
## BIOLOGICAL CHEMISTRY

Department Website: http://chemistry.uchicago.edu/kb

### PROGRAM OF STUDY

The Department of Chemistry, in conjunction with the Department of Biochemistry and Molecular Biology (BCMB) in the Division of the Biological Sciences, offers a BS degree in Biological Chemistry. The program is designed to prepare students to enter a variety of interdisciplinary fields in biochemical and biophysical sciences. Undergraduate research is strongly encouraged. By combining resources of both departments, students in this program are given the opportunity to study chemistry and physics of macromolecules, mechanisms of actions of enzymes and hormones, molecular and cellular biology, biotechnology, and other related fields.

### SUMMARY OF REQUIREMENTS

#### GENERAL EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II</td>
<td>100</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (requires grade of A- or higher)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20186</td>
<td>Fundamentals of Cell and Molecular Biology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20187</td>
<td>Fundamentals of Genetics (or AP credit, if an AP 5 Fundamentals Sequence is completed)</td>
<td>100</td>
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Total Units: 600

#### MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 12300</td>
<td>Honors General Chemistry III</td>
<td>100</td>
</tr>
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</thead>
<tbody>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 19620</td>
<td>Linear Algebra</td>
<td>100</td>
</tr>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III (requires grade of A- or higher)</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20000-20100</td>
<td>Mathematical Methods for Physical Sciences I-II</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 20100</td>
<td>Inorganic Chemistry I</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 12100-12200-12300</td>
<td>General Physics I-II-III (or higher)</td>
<td>300</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>CHEM 22000-22100-22200</td>
<td>Organic Chemistry I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>CHEM 23000-23100-23200</td>
<td>Honors Organic Chemistry I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>CHEM 26100 &amp; CHEM 26200</td>
<td>Quantum Mechanics and Thermodynamics</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 26700</td>
<td>Experimental Physical Chemistry</td>
<td>100</td>
</tr>
</tbody>
</table>

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<tr>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20200</td>
<td>Inorganic Chemistry II</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 23300</td>
<td>Intermediate Organic Chemistry</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 26300</td>
<td>Chemical Kinetics and Dynamics</td>
<td>100</td>
</tr>
</tbody>
</table>

One appropriate 20000-level course in Biology (under the category Advanced-Level Courses) | 100 |
| BIOS 20200 | Introduction to Biochemistry | 100 |
| BIOS 21317 | Topics in Biological Chemistry | 100 |

One approved 30000-level biochemistry or chemistry course | 100 |

Total Units: 1900

† Credit may be granted by examination.
‡ MATH 10100-10200 Introductory General Chemistry I-II and CHEM 12100-12200 Honors General Chemistry I-II also satisfy this requirement. Enrollment into a particular sequence is based on chemistry placement or AP score.
See Advanced Placement and Accreditation Examinations sections of this catalog. **Note that no credit is given for IB chemistry.**

Chemistry and Biological Chemistry majors can take these courses without the Biological Sciences prerequisites (BIOS 20150-20151) unless they pursue a double major in the Biological Sciences. They are expected to show competency in mathematical modelling of biological phenomena covered in BIOS 20151.

Students with a score of 5 on the AP biology test receive one credit. They are eligible to register for a three-quarter AP 5 Fundamental Sequence. Upon completion of the sequence, students receive an additional AP credit, for a total of two, to meet the general education requirement. Students majoring in Biological Chemistry will count the AP 5 Fundamentals Sequence as three electives.

These courses must be chosen in consultation with the departmental counselor; their approval must be conveyed to the student’s College adviser for proper documentation.

**NOTE:** The three-quarter sequence MATH 20300-20400-20500 Analysis in Rn I-II-III may be substituted for MATH 20000 Mathematical Methods for Physical Sciences I; please note that MATH 20250 Abstract Linear Algebra or STAT 24300 Numerical Linear Algebra is a prerequisite for MATH 20400. MATH 27300 Basic Theory of Ordinary Differential Equations may be substituted for MATH 20100 Mathematical Methods for Physical Sciences II. MATH 19620 Linear Algebra is recommended for Biological Chemistry majors who plan to pursue advanced study in physical chemistry.

### ADVANCED PLACEMENT

Students who earn a score of 5 on the AP test in chemistry are given credit for CHEM 11100 Comprehensive General Chemistry I. Students with CHEM 11100 Comprehensive General Chemistry I credit may join CHEM 11200 Comprehensive General Chemistry II in the Winter Quarter. A score of 5 on the AP exam also permits students to take CHEM 12100-12200-12300 Honors General Chemistry I-II-III; students may opt to begin with CHEM 12100 Honors General Chemistry I in the Autumn Quarter or CHEM 12200 Honors General Chemistry II in the Winter Quarter. Students who complete the first quarter of Comprehensive General Chemistry or Honors General Chemistry forgo the AP credit. Note that no credit is given for IB chemistry.

### ACCREDITATION

The Department of Chemistry also administers accreditation examinations for CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III to entering College students. Only incoming first-year and transfer students are eligible to take these examinations, which are offered at the beginning of Autumn Quarter. Students may receive credit on the basis of their performance on accreditation examinations.

### GRADING

Students majoring in biochemistry must earn 1) a major GPA of 2.0 or higher and 2) a C- or higher in all courses required by the Biochemistry major, including those courses counting toward general education requirements in the mathematical, biological, and physical sciences. Nonmajors may take chemistry courses on a P/F basis; only grades of C- or higher constitute passing work.

### HONORS AND UNDERGRADUATE RESEARCH

By their third year, students majoring in Biological Chemistry are strongly encouraged to participate in research with a faculty member. For more information on research opportunities and honors in Biological Chemistry, visit chemistry.uchicago.edu/undergraduate-chemistry-major-and-research.

Excellent students who pursue a substantive research project with a faculty member in the Department of Chemistry or the Department of Biochemistry and Molecular Biology should plan to submit an honors thesis based on their work. Students usually begin this research program during their third year, and they continue their research activities through the following summer and their fourth year. To be considered for honors, students are expected to complete their arrangements with the departmental counselor before the end of their third year and to register for one quarter of CHEM 29900 Advanced Research in Chemistry or one year of CHEM 29600 Research in Chemistry during their third or fourth years.

A BS with honors in Biological Chemistry requires students to write a creditable honors paper describing their research. The paper must be approved by the program advisers in the Department of Chemistry and the Department of Biochemistry and Molecular Biology, and it must be submitted before the deadline established by the department. In addition, an oral presentation of the research is required.

To earn a BS degree with honors in Biological Chemistry, students must also have an overall GPA of 3.0 or higher.

### JOINT DEGREE PROGRAM

A four-year joint degree program leading to a concurrent award of the BS in Biological Chemistry and the MS in Chemistry is available for a select group of students who have achieved advanced standing through their performance on placement or on accreditation examinations. Special programs are developed
for such students. For more information, consult Ka Yee Lee at kayeelee@uchicago.edu and Vera Dragisich at vdragisi@uchicago.edu in the Chemistry Department.
BIOLOGICAL SCIENCES

Department Website: http://bscd.uchicago.edu

PROGRAM OF STUDY

Biology is the study of life, past and present. The faculty of the College believe that a sound knowledge of biology is essential for understanding the world in which we live, engaging many pressing problems facing humanity, and becoming a part of their eventual solution. The Biological Sciences Collegiate Division, therefore, provides a variety of general education courses for all College students—prospective biologists and non-biologists alike. Although most of the course offerings beyond the introductory year are designed to serve the needs of students majoring in biological sciences, many of these courses are well suited to students in other areas who wish to study some aspect of modern biology in greater detail. Courses on the ethical and societal implications of the biological sciences, for example, are of interest to many non-majors. For prospective biologists and medical professionals, our curriculum offers in-depth course work at all scales of life, from complex ecosystems to organisms to the molecular mechanisms operating in subcellular compartments.

Academic Honesty

Academic dishonesty is a matter of grave concern to the faculty of the Biological Sciences Collegiate Division and will not be tolerated. Students should become familiar with the guidelines presented in Doing Honest Work in College by Charles Lipson and consult with each of their instructors to make sure they understand the specific expectations of each course. Consequences of academic dishonesty (including plagiarism) may result in suspension or expulsion from the University.

THE GENERAL EDUCATION REQUIREMENT IN THE BIOLOGICAL SCIENCES

Students choose one of the following options to meet the general education requirement in the Biological Sciences:

1. a two-quarter general education sequence for non-majors; or
2. The Pre-Med Sequence for non-science majors; or
3. BIOS 20153 Fundamentals of Ecology and Evolution and BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced).

ADVANCED PLACEMENT CREDIT

For students who do not plan to major in the Biological Sciences or prepare for the health professions, a score of 4 or 5 on the AP biology test confers credit for BIOS 10130 Core Biology. These students meet the general education requirement with either one or two topics courses in the Biological Sciences, depending on how the requirements in the mathematical and physical sciences are met; consult your College adviser for details.

Students with a score of 4 or 5 on the AP biology test who complete the first three quarters of an Advanced Biology Fundamentals Sequence will be awarded a total of two quarters of credit to be counted toward the general education requirement for the Biological Sciences. This option is especially appropriate for students who plan to major in the Biological Sciences or prepare for the health professions, but it is open to all qualified students.

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE IN THE BIOLOGICAL SCIENCES

The goals of the Biological Sciences program are to give students (1) an understanding of currently accepted concepts in biology and the experimental support for these concepts and (2) an appreciation of the gaps in our current understanding and the opportunities for new research in this field. Emphasis is placed on introducing students to the diversity of subject matter and methods of investigation in the Biological Sciences. The program prepares students for graduate or professional study in the Biological Sciences and for careers in the Biological Sciences. The following sections describe the requirements for a BA in the Biological Sciences. Sequences in the first year of the program are referred to as the Fundamentals and include the following: (1) The Advanced Biology sequence—designed for first-year students who have achieved a score of 4 or 5 on the Advanced Placement Biology test. (2) Molecules to Organisms (Sections 1 and 2) sequence—begins in the Winter Quarter of the first year and is structured to provide students with a broad-based understanding of contemporary biology. (3) Life, Ecosystems, and Evolution (formerly Track C)—designed for students interested in pursuing careers in ecology and evolution or environmental science. At the completion of the first three quarters of a Fundamentals sequence students begin taking the upper-level advanced elective courses and may start a specialization.

General Education Courses for Biological Sciences Majors

To prepare for more advanced work in the Biological Sciences, students must take the following to satisfy general education requirements:

PHYSICAL SCIENCES. One of the following sequences:

CHEM 10100
& CHEM 10200
Introductory General Chemistry I
and Introductory General Chemistry II (or equivalent)
CHEM 1100-11200 Comprehensive General Chemistry I-II

MATHEMATICAL SCIENCES. One of the following sequences: 200

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (or higher)</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
</tbody>
</table>

BIOLOGICAL SCIENCES. One of the following: 200

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 20153 &amp; BIOS 20151</td>
<td>Fundamentals of Ecology and Ev and Introduction to Quantitative Modeling in Biology (Basic)</td>
</tr>
<tr>
<td>BIOS 20153 &amp; BIOS 20152</td>
<td>Fundamentals of Ecology and Ev and Introduction to Quantitative Modeling in Biology (Advanced)</td>
</tr>
<tr>
<td>BIOS 20234-20235-20236</td>
<td>Molecular Biology of the Cell; Biological Systems; Biological Dynamics</td>
</tr>
</tbody>
</table>

Total Units 600

* Students with a score of 4 or 5 on the AP Biology test may use their AP credit to meet the general education requirement in the Biological Sciences if the first three quarters of the Advanced Biology sequence are completed.

COURSES REQUIRED FOR THE BIOLOGICAL SCIENCES MAJOR*

Natural Science excluding Biology

In addition to the general education requirements, all students majoring in Biological Sciences must complete the third quarter of general chemistry (CHEM 11300 Comprehensive General Chemistry III, or equivalent).

(Biological Sciences majors following the Molecules to Organisms or Advanced Biology Fundamentals sequences also take two quarters of organic chemistry (CHEM 22000 Organic Chemistry I and CHEM 22100 Organic Chemistry II/CHEM 23100 Honors Organic Chemistry II)**; two quarters of physics (PHYS 12100-12200 General Physics I-II, or higher); and one general quantitative course (BIOS 26210 Mathematical Methods for Biological Sciences I, PHYS 12300 General Physics III (or higher), or STAT 22000 Statistical Methods and Applications (or higher)).

Biological Sciences majors following the Life, Ecosystems, and Evolution Fundamentals sequence take either two quarters of organic chemistry (CHEM 22000 Organic Chemistry I and CHEM 22100 Organic Chemistry II/CHEM 23100 Honors Organic Chemistry II) OR two quarters of physics (PHYS 12100-12200 General Physics I-II, or higher), one general quantitative course (BIOS 26210 Mathematical Methods for Biological Sciences I, PHYS 12300 General Physics III (or higher), or STAT 22000 Statistical Methods and Applications (or higher)), and three additional quantitative courses (http://bscd.uchicago.edu/page/quantitative-courses).

Biological Sciences Fundamentals Sequences

Students register for four quarters of Biological Sciences Fundamentals courses associated with one of three sequences.

- **Molecules to Organisms**: BIOS 20186 Fundamentals of Cell and Molecular Biology, BIOS 20187 Fundamentals of Genetics, BIOS 20188 Fundamentals of Physiology or BIOS 20191 Integrative Physiology, and BIOS 20189 Fundamentals of Developmental Biology or BIOS 20190 Principles of Developmental Biology
- **Life, Ecosystems, and Evolution (formerly Track C)**: BIOS 20186 Fundamentals of Cell and Molecular Biology, BIOS 20187 Fundamentals of Genetics, BIOS 20198 Biodiversity, and BIOS 20196 Ecology and Conservation
- **Advanced Biology Fundamentals** (open only to first-year students who have scored a 4 or 5 on the AP Biology exam): BIOS 20234 Molecular Biology of the Cell, BIOS 20235 Biological Systems, BIOS 20236 Biological Dynamics, and BIOS 20242 Principles of Physiology.

Students who do not enter the Advanced Biology sequence must complete BIOS 20153 Fundamentals of Ecology and Ev in Winter Quarter and BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) (Spring) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced) (Winter) their first year. (These two courses fulfill the general education requirement.)

* Students planning to apply to medical school should be aware of individual medical school admissions requirements and should tailor their program accordingly with the help of UChicago Careers in Health Professions (http://ccihp.uchicago.edu) (UCIHP).

** The first two quarters of organic chemistry are required for all Biological Sciences majors except for those completing Life, Ecosystems, and Evolution, who may take either two quarters of Organic Chemistry or two quarters of General Physics.

NOTE: Biological Sciences does NOT require the third quarter of calculus in any of the sequences. Students entering the Molecules to Organisms or the Life, Ecosystems, and Evolution sequence MUST
take BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced), and students in the Advanced Biology sequence MUST take BIOS 20236 Biological Dynamics. NO MATH courses may be substituted for these requirements.

2020-Level and Above Courses in Biological Sciences

Students taking the Molecules to Organisms or Advanced Biology sequence also register for BIOS 20200 Introduction to Biochemistry plus five additional 21000- to 28999-level courses in Biological Sciences. The Life, Ecosystems, and Evolution sequence also requires five additional 21000- to 28999-level courses in the Biological Sciences, but not BIOS 20200 Introduction to Biochemistry. These courses may be selected by the student or in consultation with the BSCD Senior Advisers (Megan McNulty, mmcnulty@uchicago.edu and Christine Andrews, candrews@uchicago.edu). If the student chooses to complete a “specialization” (see sections that follow), courses should be chosen in consultation with the Specialization Adviser (listed below).

NOTE: BIOS 00199 Undergraduate Research, BIOS 00206 Readings: Biology, and BIOS 00299 Advanced Research: Biological Sciences may not be used to meet requirements for the Biological Sciences major. Courses listed under the heading Specialized Courses (numbered in the 29000 range) may not be used to meet requirements for the Biological Sciences major.

Summary of General Education Requirements for Molecules to Organisms; Advanced Biology; and Life, Ecosystems, and Evolution

GENERAL EDUCATION

One of the following CHEM sequences (or equivalent): $^*$

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100</td>
<td>Introductory General Chemistry I</td>
</tr>
<tr>
<td>&amp; CHEM 10200</td>
<td>and Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II</td>
</tr>
</tbody>
</table>

One of the following MATH sequences: $^*$

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
</tbody>
</table>

One of the following BIOS sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 26210</td>
<td>Mathematical Methods for Biological Sciences I</td>
</tr>
<tr>
<td>BIOS 26214</td>
<td>and Introduction to Quantitative Modeling in Biology (Basic)</td>
</tr>
<tr>
<td>BIOS 26218</td>
<td>and Introduction to Quantitative Modeling in Biology (Advanced)</td>
</tr>
</tbody>
</table>

Total Units: 600

*$^*$ Open only to students with a 4 or 5 on the AP Biology test. Upon completion of the first three quarters of the sequence, students will be awarded a total of 200 units to be counted toward the general education requirement in the Biological Sciences.

$^*$ Credit may be granted by examination.

Summary of Major Requirements: Molecules to Organisms

MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (or equivalent) $^*$</td>
</tr>
<tr>
<td>PHYS 12100-12200</td>
<td>General Physics I-II (or higher) $^*$</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 26210</td>
<td>Mathematical Methods for Biological Sciences I</td>
</tr>
<tr>
<td>PHYS 12300</td>
<td>General Physics III (or higher) $^*$</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications (or higher) $^*$</td>
</tr>
</tbody>
</table>

All of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 20186</td>
<td>Fundamentals of Cell and Molecular Biology</td>
</tr>
<tr>
<td>BIOS 20187</td>
<td>Fundamentals of Genetics</td>
</tr>
<tr>
<td>BIOS 20188</td>
<td>Fundamentals of Physiology</td>
</tr>
<tr>
<td>or BIOS 20191</td>
<td>Integrative Physiology</td>
</tr>
<tr>
<td>BIOS 20189</td>
<td>Fundamentals of Developmental Biology</td>
</tr>
<tr>
<td>or BIOS 20190</td>
<td>Principles of Developmental Biology</td>
</tr>
<tr>
<td>BIOS 20200</td>
<td>Introduction to Biochemistry</td>
</tr>
</tbody>
</table>

Five courses above BIOS 20242 in Biological Sciences

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 20186</td>
<td>Fundamentals of Cell and Molecular Biology</td>
</tr>
<tr>
<td>BIOS 20187</td>
<td>Fundamentals of Genetics</td>
</tr>
<tr>
<td>BIOS 20188</td>
<td>Fundamentals of Physiology</td>
</tr>
<tr>
<td>or BIOS 20191</td>
<td>Integrative Physiology</td>
</tr>
<tr>
<td>BIOS 20189</td>
<td>Fundamentals of Developmental Biology</td>
</tr>
<tr>
<td>or BIOS 20190</td>
<td>Principles of Developmental Biology</td>
</tr>
<tr>
<td>BIOS 20200</td>
<td>Introduction to Biochemistry</td>
</tr>
</tbody>
</table>

Five courses above BIOS 20242 in Biological Sciences

One of the following sequences:
CHEM 22000 & CHEM 22100: Organic Chemistry I and Organic Chemistry II
CHEM 23000 & CHEM 23100: Honors Organic Chemistry I and Honors Organic Chemistry II

Total Units: 1600

§ Credit may be granted by examination.

Summary of Major Requirements: Life, Ecosystems, and Environment

MAJOR

CHEM 11300: Comprehensive General Chemistry III (or equivalent) §

One of the following two-quarter sequences:

CHEM 22000 & CHEM 22100: Organic Chemistry I and Organic Chemistry II
CHEM 23000 & CHEM 23100: Honors Organic Chemistry I and Honors Organic Chemistry II
PHYS 12100-12200: General Physics I-II (or higher) §

One of the following:

BIOS 26210: Mathematical Methods for Biological Sciences I
PHYS 12300: General Physics III (or higher) §
STAT 22000: Statistical Methods and Applications (or higher) §

All of the following:

BIOS 20186: Fundamentals of Cell and Molecular Biology
BIOS 20187: Fundamentals of Genetics
BIOS 20198: Biodiversity
BIOS 20196: Ecology and Conservation
Three additional quantitative courses (http://bscd.uchicago.edu/page/quantitative-courses)
Five courses above BIOS 20242 in Biological Sciences

Total Units: 1600

§ Credit may be granted by examination.

Summary of Major Requirements: Advanced Biology*

MAJOR

CHEM 11300: Comprehensive General Chemistry III (or equivalent) §

PHYS 12100-12200: General Physics I-II (or higher) §

One of the following:

BIOS 26210: Mathematical Methods for Biological Sciences I
PHYS 12300: General Physics III (or higher) §
STAT 22000: Statistical Methods and Applications (or higher, or petition BSCD for replacement) §

All of the following:

BIOS 20234: Molecular Biology of the Cell
BIOS 20235: Biological Systems
BIOS 20236: Biological Dynamics
BIOS 20200: Introduction to Biochemistry
BIOS 20242: Principles of Physiology
Five courses above BIOS 20242 in Biological Sciences

One of the following sequences:

CHEM 22000 & CHEM 22100: Organic Chemistry I and Organic Chemistry II
CHEM 23000 & CHEM 23100: Honors Organic Chemistry I and Honors Organic Chemistry II

Total Units: 1600
Open only to students with a 4 or 5 on the AP Biology test. Upon completion of the first three quarters of the sequence, students will be awarded a total of 200 units to be counted toward the general education requirement in the Biological Sciences.

§ Credit may be granted by examination.

GRADING

Students must receive quality grades in all courses that meet requirements for the Biological Sciences major.

RESEARCH OPPORTUNITIES

Students are encouraged to carry out individual guided research in an area of their interest. A student may propose an arrangement with any faculty member in the Division of the Biological Sciences to sponsor and supervise research on an individual tutorial basis. Students may register for BIOS 00199 Undergraduate Research or BIOS 00299 Advanced Research: Biological Sciences if they want to receive general elective credit for their research work. Consult the following course description section for information about procedures, grading, and requirements for registration in BIOS 00199 Undergraduate Research and BIOS 00299 Advanced Research: Biological Sciences. For more information, see bscd.uchicago.edu/content/undergrad-research or contact John Kennedy (jm kennedy@uchicago.edu). NOTE: Course credit cannot be given for work that is compensated by a salary.

Some financial support may be available to students for summer research through their research supervisors or through fellowships awarded competitively by the Biological Sciences Collegiate Division. Application deadlines for various fellowships range from mid-February to early April. Please see bscd.uchicago.edu/content/undergrad-research for more information about fellowship opportunities.

HONORS

Honors in Biological Sciences can be earned via one of two tracks. Scholar Honors: This track recognizes exceptional academic performance (minimum cumulative GPA of 3.75 or above), including submission and acceptance of a scholarly thesis. Research Honors: This track emphasizes exceptional achievement in a program of original research (minimum cumulative GPA of 3.30 or above) plus submission and acceptance of an in-depth research thesis. Both programs require formal declarations of intent to seek Honors by the candidates. The details of each program are provided on the BSCD Website (http://bscd.uchicago.edu/page/honors-biology). Candidates must apply for either program no later than the beginning of Spring quarter of their third year in the College.

SPECIALIZATION PROGRAMS IN THE BIOLOGICAL SCIENCES

Students who wish to complete a "specialization" should discuss their plans with the specialization director by Spring Quarter of their second year. Students may complete only one specialization. All courses must be taken for a quality grade in order to count towards a specialization.

Specialization in Cancer Biology

Students who complete the requirements detailed below will be recognized as having completed a specialization in cancer biology.

To be eligible to carry out a specialization in cancer biology, students must average a B grade in the first three quarters of a Biological Sciences Fundamentals Sequence.

Students who plan to specialize in cancer biology are advised to begin the required specialization courses below in their third year. Students who elect to specialize should consult Dr. Kay F. Macleod, Ben May Department for Cancer Research and the Committee on Cancer Biology (kmacleod@uchicago.edu), who is available to advise on the objectives of the specialization and the importance of each of the classes, and to identify labs in which individual research projects can be carried out.

The following two courses are required for a specialization in cancer biology. To continue in the specialization, students must achieve an A or B grade in both courses.

BIOS 25108 Cancer Biology 100
BIOS 25308 Heterogeneity in Human Cancer: Etiology and Treatment 100

To complete the specialization in cancer biology, students should also take one of the following two courses in either their third or fourth year, having successfully completed BIOS 25108 and BIOS 25308 above, and started work in their chosen research laboratory.

BIOS 25326 Tumor Microenvironment and Metastasis 100
BIOS 25327 Health Disparities in Breast Cancer 100

Laboratory Research

To complete the specialization in cancer biology, students will also carry out an individual guided cancer research project that is written up as an honors thesis and evaluated by an honors thesis committee, and attend cancer biology–related seminars. Participation in the research component of the specialization in cancer biology
is by invitation only and is based on: (1) performance in the above-mentioned courses, (2) identification of a research project and mentor, (3) submission of a research abstract for consideration by the end of the Winter Quarter of their junior year to the Director of the Specialization in Cancer Biology (Dr. Kay Macleod).

Independent research projects performed by students in the specialization in cancer biology must be approved by the Director of the Specialization (Dr. Macleod) and be of sufficiently high standard to qualify as a senior honors project and ideally to produce data that contributes to peer-reviewed publication.

Students are encouraged to begin their research project no later than the Spring/Summer Quarter of their junior year.

Specialization in Cellular and Molecular Biology

Students majoring in Biological Sciences who meet the following requirements will be recognized as having completed a specialization in the area of cellular and molecular biology.

The following requirements must be met:

**Courses**

<table>
<thead>
<tr>
<th>One of the following:</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 22200 Organic Chemistry III</td>
<td></td>
</tr>
<tr>
<td>CHEM 23200 Honors Organic Chemistry III</td>
<td></td>
</tr>
<tr>
<td>Three of the following:*</td>
<td>300</td>
</tr>
<tr>
<td>BIOS 21236 Genetics of Model Organisms</td>
<td></td>
</tr>
<tr>
<td>BIOS 21237 Developmental Mechanisms</td>
<td></td>
</tr>
<tr>
<td>BIOS 21238 Cell Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOS 23299 Plant Development and Molecular Genetics</td>
<td></td>
</tr>
<tr>
<td>BIOS 21208 Fundamentals of Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIOS 21360 Advanced Molecular Biology</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 400

* If students choose a developmental course, they must choose between BIOS 21237 or BIOS 23299.

**Laboratory Research**

Completion of an independent research project is required under the guidance of a faculty mentor/adviser that either:

1. Qualifies as a senior honors project; or
2. Is approved by the Director of the Specialization and the student’s Research Adviser.

The specialization in cellular and molecular biology is administered by the Department of Molecular Genetics and Cell Biology. The director of this specialization is TBA.

Specialization in Ecology and Evolution

Students majoring in Biological Sciences who complete the course work indicated below and write a research-based senior thesis will be recognized as having completed a specialization in ecology and evolution. This specialization is recommended for students who are interested in pursuing graduate work in the field or in laboratory sciences of ecology, evolution, population genetics, or behavior. Based on the student’s particular interest, he or she will select a Faculty Adviser, who then may recommend specific courses necessary to meet the specialization requirements (see following section). The Faculty Advisers may also help the student find an appropriate research lab in which to conduct an individual research project.

The following requirements must be met:

**Courses**

1. Students intending to pursue the Ecology and Evolution specialization are strongly encouraged to follow Life, Ecosystems, and Evolution (formerly Track C) for the BIOS Fundamentals sequence. Students who take the Advanced Biology sequence are also eligible for the specialization and should consult with Chris Andrews (candrews@uchicago.edu) to plan their course work.

2. Students in the Ecology and Evolution specialization must take three courses in statistics (STAT 22000 Statistical Methods and Applications or higher) or other quantitative approaches relevant to their research plans (BIOS 26210 Mathematical Methods for Biological Sciences I and BIOS 26211 Mathematical Methods for Biological Sciences II recommended). These courses can count toward the quantitative requirements for the Life, Ecosystems, and Environment sequence. See bscd.uchicago.edu/page/quantitative-courses.
3. Three of the upper-level courses required for completion of the BIOS major must be chosen from a menu of courses in behavior, ecology, evolution, and genetics.

Students must select the courses required for the Ecology and Evolution specialization in consultation with the Faculty Research Adviser, the director of the specialization (Cathy Pfister, 773.834.0071, cpfister@uchicago.edu) or the BSCD Ecology and Evolution Adviser (Chris Andrews, 773.702.1214, candrews@uchicago.edu).

Laboratory or Field Research

Students specializing in Ecology and Evolution must perform original research under the guidance of a member of the ecology and evolution faculty and write a senior thesis based on this research. The research paper draft should be submitted before the end of fifth week in Spring Quarter, with the final thesis due in eighth week. NOTE: Students must complete field research by the end of the growing season (summer) of their third year.

The specialization in ecology and evolution is administered by the Department of Ecology and Evolution. For more information, please consult the director of the specialization, Cathy Pfister (773.834.0071, cpfister@uchicago.edu).

Specialization in Endocrinology

After taking the following three courses, students majoring in Biological Sciences will be recognized as having completed a specialization in endocrinology. Students who complete the specialization will be well versed in all aspects of endocrinology, ranging from basic cell signaling to the integration of endocrine systems and their dysregulation in human disease. Students will also have the option of participating in a hands-on research component in an endocrinology lab. The prerequisite for these courses is completion of the Fundamentals Sequence. It is strongly recommended that students complete a Biochemistry course before enrolling; however, the specialization can be completed as Endocrinology I–II–III or Endocrinology II–III–I.

Introductory Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 25226</td>
<td>Endocrinology I: Cell Signaling (Autumn)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25227</td>
<td>Endocrinology II: Systems and Physiology (Winter)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25228</td>
<td>Endocrinology III: Human Disease (Spring)</td>
<td>100</td>
</tr>
</tbody>
</table>

The specialization in endocrinology is administered by the Section of Endocrinology, Diabetes and Metabolism, the Committee on Molecular Metabolism & Nutrition, and the NIH funded Diabetes Research & Training Center. For more information, consult Matthew Brady (mbrady@medicine.bsd.uchicago.edu).

Specialization in Genetics

Biological Sciences majors who obtain a B or better in the five courses from the categories listed below and complete an independent research project will be recognized as having fulfilled the requirements for a specialization in the area of genetics. Please consult Vincent Lynch (vjlynch@uchicago.edu) if you would like to request approval for any non-listed course with significant genetics content to satisfy this requirement.

One of the following:  
- BIOS 20187 Fundamentals of Genetics  
- BIOS 20235 Biological Systems  
- STAT 22000 Statistical Methods and Applications (or higher)  
- BIOS 21306 Human Genetics and Evolution  

One of the following:  
- BIOS 21236 Genetics of Model Organisms (Autumn)  
- BIOS 23258 Molecular Evolution I: Fundamentals and Principles (Winter)  

One of the following:  
- BIOS 21216 Intro Statistical Genetics (Winter)  
- BIOS 21229 Genome Informatics: How Cells Reorganize Genomes (Winter)  
- BIOS 21237 Developmental Mechanisms (Winter)  
- BIOS 23299 Plant Development and Molecular Genetics (Spring)  
- BIOS 25216 Molecular Basis of Bacterial Disease (Winter)  
- BIOS 25287 Introduction to Virology (Spring)  
- BIOS 28407 Genomics and Systems Biology (Spring)  

Total Units 500

Laboratory Research

completion of an independent research project.
The project must either:

qualify as a senior honors project

or

be approved by the director of the specialization.

The specialization in genetics is administered by the Committee on Genetics. Consult Vincent Lynch (773.834.1326, vlynch@uchicago.edu) for more information.

Specialization in Global Health Sciences

Students majoring in Biological Sciences who complete the following requirements will be recognized as having completed a specialization in global health sciences. Note that this specialization fulfills two upper-level elective requirements in the Biological Sciences major, and students must take three additional upper-level electives to complete the major.

Students register for the three required courses listed below. BIOS 27810 and BIOS 27811 qualify as upper-level electives in the Biological Sciences major, and BIOS 29812 qualifies as a general elective in the College. There are two ways to complete this specialization:

1. On campus: Offered every other year, as a yearlong sequence beginning Autumn 2016, or
2. At the University of Chicago Center in Paris: Offered every year in Winter Quarter. See study-abroad.uchicago.edu/programs/paris-global-health.

Additional courses may be available but are not required. These courses should be identified in consultation with the director of the specialization, Dr. Sola Olopade (solopade@bsd.uchicago.edu).

Courses

Students are required to take the following three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 27810</td>
<td>Epidemiology and Population Health: Global Health Sciences I</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 27811</td>
<td>Global Health Sciences II: Microbiology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 29812</td>
<td>Global Health Sciences III: Topics in Global Health</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Units 300

Thesis Option

For students interested in a career in the area of Global Health, a thesis is recommended and should be arranged with the director of the specialization during the Spring Quarter of their third year. The thesis may be either a report on an original research project conducted under the direction of a faculty mentor or an original review of a current area of interest in the literature and must be approved by the director of the specialization.

For more information, students should consult with Dr. Sola Olopade (solopade@bsd.uchicago.edu).

Specialization in Immunology

After taking three of the four courses listed below, students majoring in Biological Sciences will be recognized as having completed a specialization in immunology. The fourth course is available to students who wish further study.

Students are required to take the following three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 25256</td>
<td>Immunobiology (Autumn)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25258</td>
<td>Immunopathology (Winter)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25266</td>
<td>Molecular Immunology (Spring)</td>
<td>100</td>
</tr>
</tbody>
</table>

The following is an elective course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 25260</td>
<td>Host Pathogen Interactions (Autumn)</td>
<td>100</td>
</tr>
</tbody>
</table>

For more information, students should consult with Bana Jabri, Department of Pathology and the Committee on Immunobiology (773.834.8670, bjabri@bsd.uchicago.edu).
Accelerated Program in Immunology

The University of Chicago Graduate Program in Immunology permits undergraduate students who have demonstrated outstanding potential for graduate studies in biology to begin graduate school during their fourth year in the College. This is a competitive merit-award program.

Because of the accelerated nature of the curriculum, applicants must have outstanding academic credentials (i.e., GPA typically in the range of 3.7 and GRE scores typically not less than 1400). Eligible students also have a clear understanding of their motivation for immunology. Laboratory experience is not mandatory but highly encouraged.

Candidates will apply to the Graduate Program in Immunology at the University of Chicago during their third year in the College. Eligible students must have completed thirty-three credits (of the forty-two required for a degree in the College) by the end of their third year. These thirty-three credits must include all fifteen general education requirements and one-half of the requirements for their major.

For further information, contact Bana Jabri, Department of Pathology and the Committee on Immunobiology (773.834.8670, bjabri@bsd.uchicago.edu).

Specialization in Microbiology

Students majoring in Biological Sciences who complete three courses on the list that follows will be recognized as having completed a specialization in microbiology.

Students should preferentially register for BIOS 25206 Fundamentals of Bacterial Physiology, BIOS 25216 Molecular Basis of Bacterial Disease, and BIOS 25287 Introduction to Virology.

With prior approval from the specialization chair, Dominique Missiakas (dmissiak@bsd.uchicago.edu), students may substitute BIOS 25206 and BIOS 25216 for the two elective courses GEOS 26650 Environmental Microbiology and BIOS 27811 Global Health Sciences II: Microbiology respectively. The elective courses are also available to students who wish to pursue additional studies in microbiology.

Students are encouraged to begin this sequence in Autumn Quarter of their third year, carry out individual guided research, participate in the honors research program, and attend the Microbiology Seminar series (https://biomedsciences.uchicago.edu/page/committee-microbiology-activities). Students who elect to specialize should consult Dominique Missiakas (dmissiak@bsd.uchicago.edu) for advice on the choice of courses and identification of a laboratory to carry out research projects in microbiology.

Students are required to take the following three courses:

- BIOS 25206 Fundamentals of Bacterial Physiology (Autumn) 100
- BIOS 25216 Molecular Basis of Bacterial Disease (Winter) 100
- BIOS 25287 Introduction to Virology (Spring) 100

Total Units 300

ELECTIVES

- BIOS 27811 Global Health Sciences II: Microbiology (Winter) 100
- GEOS 26650 Environmental Microbiology (Autumn) 100

Specialization in Neuroscience

The specialization in Neuroscience is no longer available starting with the entering class of Autumn Quarter 2017. Students who matriculated before Autumn Quarter 2017 who wish to complete the specialization should contact Megan McNulty (mmcnulty@uchicago.edu) for guidance regarding course selection.

Specialization in Quantitative Biology

Quantitative biology is a burgeoning interdisciplinary field that encompasses questions ranging across all scales of biology, from populations to molecules, and uses quantitative methods drawn from computer science, statistics, and mathematics. Students will acquire skills necessary for cutting-edge biological research: to program in a high-level language, to extract information from data sets, and to analyze mathematical models of dynamic and stochastic systems. Students majoring in Biological Sciences who complete the course work indicated below and complete a research-based senior thesis will be recognized as having completed a specialization in quantitative biology.

For additional information, please contact the Director of Specialization, Dmitry Kondrashov, at dkon@uchicago.edu.

Foundational Courses

- BIOS 26210 Mathematical Methods for Biological Sciences I (fulfills one of the major course requirements) 100
- BIOS 26212 Mathematical Methods for Biological Sciences III 100
Students are required to take two BIOS courses chosen from the following options:

- BIOS 21216 Intro Statistical Genetics 100
- BIOS 21249 Organization, Expression, and Transmission of Genome Information 100
- BIOS 21328 Biophysics of Biomolecules 100
- BIOS 21349 Protein Structure and Functions in Medicine 100
- BIOS 21358 Simulation, Modeling, and Computation in Biophysics 100
- BIOS 21407 Image Processing in Biology 100
- BIOS 21417 Systems Biology: Molecular Regulatory Logic of Networks 100
- BIOS 21507 The Engineering and Biology of Tissue Repair 100
- BIOS 23258 Molecular Evolution I: Fundamentals and Principles 100
- BIOS 23365 Evolutionary and Genomic Medicine I 100
- BIOS 23404 Reconstructing the Tree of Life: An Introduction to Phylogenetics 100
- BIOS 23409 The Ecology and Evolution of Infectious Diseases 100
- BIOS 26120 An Introduction to Bioinformatics and Proteomics 100
- BIOS 26318 Fundamentals of Biological Data Analysis 100
- BIOS 28407 Genomics and Systems Biology 100

Students are required to take two courses from quantitative programs, including the following options:

- MATH 19620 Linear Algebra 100
- MATH 21100 Basic Numerical Analysis 100
- MATH 21200 Advanced Numerical Analysis 100
- MATH 23500 Markov Chains, Martingales, and Brownian Motion 100
- MATH 27300 Basic Theory of Ordinary Differential Equations 100
- MATH 27500 Basic Theory of Partial Differential Equations 100
- STAT 22000 Statistical Methods and Applications 100
  or STAT 23400 Statistical Models and Methods 100
- STAT 22200 Linear Models And Experimental Design 100
- STAT 22400 Applied Regression Analysis 100
- STAT 22700 Biostatistical Methods 100
- STAT 22810 Epidemiology and Population Health 100
- STAT 24300 Numerical Linear Algebra 100
- STAT 24400-24500 Statistical Theory and Methods I-II 200
- STAT 25100 Introduction to Mathematical Probability 100
- STAT 25300 Introduction to Probability Models 100
- STAT 27725 Machine Learning 100
- CMSC 12100-12200-12300 Computer Science with Applications I-II-III 300
- CMSC 23900 Data Visualization 100
- CMSC 25025 Machine Learning and Large-Scale Data Analysis 100
- CMSC 27200 Theory of Algorithms 100
- CMSC 27610 Digital Biology 100
- MENG 21400 Introduction to Applications of Quantum Mechanical Methods to Materials Design 100
- MENG 21600 Bioengineering Kinetics 100
- MENG 24100-24200 Selected Topics in Molecular Engineering: Molecular/Materials Modelling I-II 100
- MENG 24300 The Engineering and Biology of Tissue Repair 100
- MENG 24310 Cellular Engineering 100

Other courses from quantitative programs may be counted by consent of the director of the specialization.

**Research Component**

Students will develop the skills necessary for quantitative biology research, which is expected to be primarily, though not exclusively, computational in nature. They will work on mini-research projects starting in the foundational BIOS 26210-26211 sequence and in the third year develop a research proposal under the direction of a faculty advisor, which has to be approved by the director of the specialization by the Spring Quarter. In their last year students will complete either (1) a senior honors project based on original research or (2) a senior thesis project approved by the director of the specialization. Students are expected to communicate
and share their research with their peers through participation in the Quantitative Biology discussion club and by presenting their research in the annual Quantitative Biology undergraduate research conference. Opportunities to further their quantitative biology training and to work on their research project over the summer exist through summer quantitative biology fellowships.

REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN THE BIOLOGICAL SCIENCES

Students can earn a BS in the Biological Sciences by (1) completing three upper-level BIOS courses beyond those required for the BA degree, and (2) writing a BS thesis (research paper or literature review) under the supervision of an Adviser who is on the BSD research faculty. The BA is designed for students who wish to gain extensive training in modern biology but also retain the flexibility to take elective courses outside the major. The BS is suitable for students who wish to take more courses within the major and to write a senior thesis. Students completing the honors program or a specialization that requires a senior thesis can submit the same thesis for the BS degree. If you have any questions, please contact BSCD Senior Adviser Chris Andrews (candrews@uchicago.edu) or Megan McNulty (mmcnulty@uchicago.edu@uchicago.edu (nicho@uchicago.edu)). Details of the BS degree and a timeline for completion of requirements are provided on the BSCD website at https://bscd.uchicago.edu/page/bs-biological-sciences.

MINOR PROGRAM IN THE BIOLOGICAL SCIENCES

Students who elect the minor program must meet with one of the Senior Advisers of the Biological Sciences Collegiate Division by the Spring Quarter of their second year in order to obtain consent to pursue the minor and to plan out the appropriate curriculum (Chris Andrews [candrews@uchicago.edu] or Megan McNulty [mmcnulty@uchicago.edu@uchicago.edu (nicho@uchicago.edu)]). The minor in Biological Sciences requires a total of seven BIOS courses beyond the general education requirement. Courses in the minor may be selected from a specific area of the Biological Sciences (e.g., molecular and cell biology, genetics, evolutionary biology, developmental biology, organismal biology, ecology, neurobiology, immunobiology, microbiology). Alternatively, courses may be selected from related areas to construct a program that gives a more inclusive account of how different disciplines of biology interact. These areas could comprise, for instance, immunology and microbiology, organismal biology and evolution, genetics and genomics, developmental biology and evolution, or ecology and evolution. Other combinations are also possible.

Students must meet general education requirements in the Biological Sciences and the physical sciences before entering the program. Biological Sciences courses at the 10000 level or above and MATH 13100 Elementary Functions and Calculus I and MATH 13200 Elementary Functions and Calculus II are the minimal general education requirements for the minor. Students interested in completing the minor are strongly encouraged to take BIOS 20153 Fundamentals of Ecology and Evolution and BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced) to complete the general education requirement in the Biological Sciences, as these courses also serve as prerequisites to the Fundamentals courses (BIOS 20186-20198), three of which are required for the minor. Students who fulfill their general education requirement in the Biological Sciences via other paths may also request approval to pursue the minor. General Chemistry and Organic Chemistry are not specifically required. These courses would, however, allow for a greater variety of upper-level Biological Sciences courses, especially those in the areas of molecular and cellular biology; chemistry and/or biochemistry are usually prerequisites for those courses.

Following completion of the general education requirements, the minor can then be completed by taking three Fundamentals courses and at least four upper level electives to be chosen in consultation with one of the Senior Advisers in the Biological Sciences Collegiate Division.

Students who complete the pre-med sequence for non-majors (BIOS 20170s) are also eligible for the Biological Sciences minor. BIOS 20170 Microbial and Human Cell Biology and BIOS 20171 Human Genetics and Developmental Biology satisfy the general education requirement in biology; BIOS 20172 Mathematical Modeling for Pre-Med Students, BIOS 20173 Perspectives of Human Physiology and BIOS 20175 Biochemistry and Metabolism satisfy the fundamentals requirement. These students must follow up the 20170s with at least four upper-level electives to be chosen in consultation with one of the Senior Advisers in the Biological Sciences Collegiate Division.

No course in the minor can be double counted with the student’s major(s) or with other minors, nor can they be counted toward general education requirements. More than half of the requirements for the minor must be met by registering for courses with University of Chicago course numbers. All courses for the minor must be taken for quality grades.

Prior to beginning the minor program, students must obtain formal approval from one of the Senior Advisers in the Biological Sciences on a form obtained from their College adviser and returned to the adviser by the deadline. To schedule an appointment with one of the Senior Advisers, contact Christine Andrews (candrews@uchicago.edu) or Megan McNulty (mmcnulty@uchicago.edu).

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MINOR PROGRAM IN COMPUTATIONAL NEUROSCIENCE

The minor in computational neuroscience is offered by the Biological Sciences Collegiate Division. Information regarding the program and its requirements can be found on the Computational Neuroscience page of this catalog.

COURSES: BIOLOGICAL SCIENCES (BIOS)

Students must confirm their registration with their instructors by the second class meeting or their registration may be canceled.

In the following course descriptions, L indicates courses with a laboratory.

Courses at Marine Biological Laboratory

Semester in Environmental Science Sequence

Courses BIOS 27710 to BIOS 27715 are the College designations for the Semester in Environmental Science that is taught at the Marine Biological Laboratory in Woods Hole, Massachusetts. Registration in BIOS 27710 Ecology - Marine Biological Laboratory, BIOS 27711 Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory, and BIOS 27712 Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory, plus one of BIOS 27713 Quantitative Environmental Analyses # Marine Biological Laboratory, BIOS 27714 Methods in Microbial Ecology - Marine Biological Laboratory, or BIOS 27715 Roles of Animals in Ecosystems # Marine Biological Laboratory are required. Admission to the Semester in Environmental Science program is by application, which must be received by the Marine Biological Laboratory in March of the year preceding the start of the semester. Admissions decisions will be mailed in April. Note that these courses start at the beginning of September, typically four weeks prior to the start of the College's Autumn Quarter and are completed by the end of Autumn Quarter. More information on the course content and the application process can be found at www.mbl.edu/ses.

September Courses (Autumn Quarter)

The College offers three courses at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts. These intensive, three-week-long courses are designed for students with a strong interest in research in the sciences. All are taught by University of Chicago and MBL faculty, and take advantage of both the unique research strengths and the natural environmental resources found at MBL. The courses will each meet 5–6 days/week, 8 hours per day, with lecture in the mornings and lab or fieldwork in the afternoons. Students may only enroll in one course. Classes are small (12–15 students maximum), and the teaching environment will allow extensive contact with the instructors. The course topics cross several disciplines; students in such majors as Biological Sciences, Neuroscience, Computer Science, Physics, Mathematics, Molecular Engineering, Geophysical Sciences, Environmental Science, and Chemistry are particularly encouraged to consider these opportunities.

Each course carries 100 units of credit. All courses count as upper-level electives for Biological Sciences majors; for students in other majors, the courses can be used as courses to fulfill the second quarter of the general education requirement in the Biological Sciences. Descriptions for BIOS 27720 Microbiomes Across Environments, BIOS 27721 Observing Proteins in Action: How to Design and Build Your Own, and BIOS 27723 Biodiversity and Genomics: Exploring the Marine Animal Diversity of Woods Hole Using Molecular Tools can be found in the General Courses section of this page.

Students register for a September MBL course as part of their Autumn Quarter course load. The courses will take place from September 1 through September 21, 2018. This will allow students to return to campus in time for the remainder of the Autumn Quarter. Since the courses at MBL are considered part of Autumn Quarter, students who participate in the program will take either 200 or 300 units of credit for the rest of the quarter. This is something applicants should consider carefully when looking at major and general education requirements.

In addition to tuition, each course has a program fee of $2,750, which covers three weeks' dorm-style housing and meals at MBL, as well as all supplies and excursions. A limited number of need-based scholarships are available. Students seeking financial assistance are encouraged to apply early. Because of the small course sizes, the MBL program will be admissions-based. An application form can be found at college.uchicago.edu/academics/mlb-september-courses.

For questions about the program, contact Jocelyn Malamy at jmalamy@bsd.uchicago.edu.

Biological Sciences Sequences for Non-Majors

All students must take at least two courses in the Biological Sciences to fulfill the general education requirement. The requirement should be completed by the end of the second year. Information regarding course and sequence options for non-majors can be found on the Biological Sciences Curriculum page in this catalog.

BIOLOGICAL SCIENCES SEQUENCES FOR MAJORS AND STUDENTS PREPARING FOR THE HEALTH PROFESSIONS

Fundamentals Sequences

All first-year students who wish to major in Biological Sciences must take BIOS 20153 Fundamentals of Ecology and EV and either BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152...
Introduction to Quantitative Modeling in Biology (Advanced) during their first year as prerequisites for the Fundamentals courses. Beginning in 2017, BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) can be taken together with the first course of the Fundamentals sequence. (Chemistry, Biological Chemistry, and Neuroscience majors can take the Fundamentals Sequences without the Biological Sciences prerequisites (BIOS 20153-20151/20152) unless they pursue a double major in Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151 or BIOS 20152.)

BIOS 20151. Introduction to Quantitative Modeling in Biology (Basic) 100 Units.
The goal for this course is to give future biologists the quantitative tools to fully participate in modern biological research. These include descriptive statistics, linear regression, stochastic independence and hypothesis testing, Markov models and stationary probability distributions, solutions of linear differential equations, equilibria and stability analysis of nonlinear differential equations. The ideas are applied to different areas of biology, e.g. molecular evolution, allometry, epidemiology, and biochemistry, and implemented by students in computer assignments using the R computational platform.

Instructor(s): D. Kondrashov Terms Offered: Spring. L.
Prerequisite(s): Two quarters of calculus of any sequence (MATH 13200 or 15200 or 16200) AND CHEM 10100-10200 or CHEM 11100-11200 or CHEM 12100-12200. First-year Biology Major standing only.

BIOS 20152. Introduction to Quantitative Modeling in Biology (Advanced) 100 Units.
This is a more advanced version of 20151, intended for students with greater mathematical maturity. In addition to the topics covered in the regular version, students will learn about nonlinear least-squares fitting, eigenvalues and eigenvectors, bifurcations and bistability in differential equations. Additional applications will include phylogenetic distance and systems biology.

Instructor(s): D. Kondrashov Terms Offered: Winter. L.
Prerequisite(s): MATH placement of 15200 or higher OR completion of MATH 16200 AND CHEM 10100-10200 or CHEM 11100-11200 or CHEM 12100-12200. First-year Biology Major standing only.

BIOS 20153. Fundamentals of Ecology and Ev. 100 Units.
This course surveys the basic principles of ecology and evolutionary biology to lay the foundation for further study in all fields of biology. Broad ecological concepts, such as population growth, disease dynamics, and species interactions, will be explored through a combination of published data, simulations, and mathematical models. The emphasis is on "ecological thinking" rather than specific notions. Essential topics in the modern study of evolutionary biology will be covered with a focus on both theory and empirical examples. Examples of topics include history of evolutionary thought, evidence for evolution, mechanisms of microevolution, phylogenetics, molecular evolution, and speciation. This course requires a weekly 120-minute discussion period.

Instructor(s): T. Price, M. Kronforst, C. Andrews, A. Hunter. Terms Offered: Winter. L.
Prerequisite(s): Concurrent enrollment in CHEM 10100–10200 or CHEM 11100–11200 or CHEM 12100–12200. First-year Biology Major standing only.

BIOS 20154. Microbial and Human Cell Biology. 100 Units.
This is the entry point into an integrated biology sequence designed to prepare non-biology majors for application to medical school. We explore topics in human cell biology within the context of evolutionary biology, chemistry, microbiology, and medicine. We pay special attention to the influence of prokaryotes on the history of life and to the ecological interactions between humans and their microbiota, which have major implications for human health and disease. Students read and discuss papers from the scientific literature, attend discussions led by physicians, researchers, and other medical professionals, and gain experience with microbiological basic microscopy techniques in lab.

Instructor(s): C. Andrews, R. Zaragoza, E. Kvar Terms Offered: Winter. L.
Prerequisite(s): First or second-year standing, or consent of instructors.
BIOS 20171. Human Genetics and Developmental Biology. 100 Units.
This course covers the fundamentals of genetics, with an emphasis on human traits and diseases. Topics include Mendelian genetics, simple and complex traits, genetic diseases, the human genome, and testing for human traits and diseases. After establishing a foundation in genetics, we will discuss mechanisms underlying differentiation and development in humans. We will focus on events that lead to gastrulation and the establishment of the body plan (how humans develop from an unpatterned egg into a recognizable human form). Other topics may include limb development and stem cell biology.
Instructor(s): O. Pineda-Catalan, R. Zaragoza Terms Offered: Spring. L.
Prerequisite(s): BIOS 20170

BIOS 20172. Mathematical Modeling for Pre-Med Students. 100 Units.
This course covers mathematical approaches in biology and medicine, including basic statistics and hypothesis testing, mathematical modeling of biological systems, and an introduction to bioinformatics. Students will apply what they learn as they analyze data and interpret primary papers in the biological and clinical literature. BIOS 20172 lays the foundation for biomathematical approaches explored during subsequent courses in the BIOS 20170s sequence.
Instructor(s): E. Haddadian Terms Offered: Spring. L.
Prerequisite(s): BIOS 20170, concurrent enrollment in BIOS 20171

BIOS 20173. Perspectives of Human Physiology. 100 Units.
This course will explore the structure and function of the human body as a set of integrated, interdependent systems. We will continue the cellular, genetic, and developmental themes of the previous courses to explore the emergent functions of the human body, from cells to systems. The laboratory exercises will allow the students to experience the concepts discussed in lecture in a way that introduces them to the methods of academic research, including the application of mathematical models to physiological questions. Students will be asked to serve as test subjects in several of the laboratory exercises. In required weekly discussions, students will present on papers from the scientific literature and attend talks by physicians, researchers, and other medical professionals.
Instructor(s): C. Andrews, E. Kovar Terms Offered: Autumn. L.
Prerequisite(s): BIOS 20170, BIOS 20171, BIOS 20172

BIOS 20175. Biochemistry and Metabolism. 100 Units.
The course introduces cellular biochemical metabolism. The chemical characteristics, biochemical properties, and function of carbohydrates, proteins, and lipids are introduced. Basic protein structure and enzyme kinetics including basic allosteric interactions are considered. The integration of carbohydrates, proteins, and lipids in cellular intermediary metabolism is examined including pathway regulation and bioenergetics. Adaptation of the pathways to changes in nutritional or disease state is used to highlight interrelationships in cellular metabolism.
Instructor(s): P. Strieleman Terms Offered: Winter
Prerequisite(s): BIOS 20170, BIOS 20171, BIOS 20172, BIOS 20173

BIOS 20186 through 20191
This sequence is an introduction to the breadth of biology as a modern scientific discipline. It is designed for students who are preparing for a career in the Biological Sciences. Topics include cell and molecular biology, genetics, physiology, and developmental biology. Students registering for this sequence must have completed or placed out of general or honors chemistry or be enrolled concurrently in general or honors chemistry.

BIOS 20186. Fundamentals of Cell and Molecular Biology. 100 Units.
This course is an introduction to molecular and cellular biology that emphasizes the unity of cellular processes amongst all living organisms. Topics are the structure, function, and synthesis of nucleic acids and protein; structure and function of cell organelles and extracellular matrices; energetics; cell cycle; cells in tissues and cell-signaling; temporal organization and regulation of metabolism; regulation of gene expression; and altered cell functions in disease states.
Instructor(s): Section 1: D. Kovar, B. Glick, E. Kovar, Staff. Section 2: R. Fehon, D. Arac, C. Schonbaum, E. Kovar. Terms Offered: Spring, L.
Prerequisite(s): BIOS 20150 or 20153 & at least concurrent registration in 20151 or 20152 or similar math prep. Avg. grade of C or higher in, and completion of, CHEM 10100-10200 or 11100-11200 or 12100-12200, a 5 on the AP Chem. exam, or consent. Reg. by lab sec.
Note(s): NSCI majors and other students, through petition BSCD, may take BIO20186 without BIOS 20151/20152, 20153 unless they plan to pursue a double major in Biological Sciences. All students in BIOS20186 will be expected to possess the competency in mathematical modeling of biological phenomena covered in BIOS 20151 or BIOS 20152. Contact BSCD Advisers, Megan McNulty (mmcnulty@uchicago.edu) or Chris Andrews (candrews@uchicago.edu) to petition.
BIOS 20187. Fundamentals of Genetics. 100 Units.
The goal of this course is to integrate recent developments in molecular genetics into the structure of classical genetics with an emphasis on recent advances in genetics and genomics. Topics include Mendelian inheritance, genotype-phenotype relationships, linkage analysis, modern gene mapping techniques, gene expression, model systems genetics and analysis of genetic pathways.
Prerequisite(s): BIOS 20186

BIOS 20188. Fundamentals of Physiology. 100 Units.
This course focuses on the physiological problems that animals (including humans) face in natural environments; solutions to these problems that the genome encodes; and the emergent physiological properties of the molecular, cellular, tissue, organ, and organismal levels of organization. Lectures and labs emphasize physiological reasoning, problem solving, and current research.
Instructor(s): D. McGehee, J. Kennedy. Terms Offered: Spring. L.
Prerequisite(s): BIOS 20187. Credit can NOT be earned for both BIOS 20188 and BIOS 20191.

BIOS 20189. Fundamentals of Developmental Biology. 100 Units.
This course covers both the classical experiments that contributed to our understanding of developmental biology and the recent explosion of information about development made possible by a combination of genetic and molecular approaches. Examples from both vertebrate and invertebrate systems are used to illustrate underlying principles of animal development.
Instructor(s): R. Ho, S. Horne-Badovinac, C. Schonbaum, E. Kovar Terms Offered: Winter. L.
Prerequisite(s): BIOS 20187. Credit can NOT be earned for both BIOS 20189 and BIOS 20190.

BIOS 20190. Principles of Developmental Biology. 100 Units.
This course will cover important concepts of developmental biology including differentiation, lineage, fate, pattern formation, and morphogenesis. We will review developmental processes and experimental evidence used to uncover underlying mechanisms. We will focus on a few model organisms-vertebrates (chicken and mice) and non-vertebrates (Drosophila).
Instructor(s): A. Imamoto, W. Du Terms Offered: Spring. L.
Prerequisite(s): BIOS 20187. Credit may not be earned for both BIOS 20190 and BIOS 20189.

BIOS 20191. Integrative Physiology. 100 Units.
This course investigates body function in animals (including humans) at times of rest and under various environmental stresses such as temperature, salinity, altitude, fasting, activity, and others. The lectures and labs of this course will draw together concepts of physics, chemistry, and quantitative biology to explore the interactions of molecules, cells, tissues, and organs in living organisms. Students will be asked to serve as test subjects in the various laboratory exercises of this course.
Instructor(s): J. Kennedy, E. Kovar. Terms Offered: Winter. L.
Prerequisite(s): BIOS 20187. Credit CANNOT be earned for both BIOS 20188 and BIOS 20191.

BIOS 20196 through 20198
Life, Ecosystems, and Evolution

This sequence is designed for students majoring in Biological Sciences and interested in pursuing a course of study in ecology and evolution or environmental science. Students will begin the sequence with BIOS 20186 Fundamentals of Cell and Molecular Biology and BIOS 20187 Fundamentals of Genetics, and continue with courses that emphasize biological diversity, conservation biology, principles of ecology, and mechanisms of evolution (BIOS 20198 Biodiversity and BIOS 20196 Ecology and Conservation).

BIOS 20196. Ecology and Conservation. 100 Units.
This course focuses on the contribution of ecological theory to the understanding of current issues in conservation biology. We emphasize quantitative methods and their use for applied problems in ecology (e.g., risk of extinction, impact of harvesting, role of species interaction, analysis of global change). Course material is drawn mostly from current primary literature; lab and field components complement concepts taught through lecture. Overnight field trip required. Prerequisite(s): BIOS 20150, BIOS 20151 or BIOS 20152 Note(s): BIOS 20196 is identical to the previously offered BIOS 23251. Students who have taken BIOS 23251 should not enroll in BIOS 20196. Equivalent Course(s): ENSC 24400
Instructor(s): C. Pfister, E. Larsen Terms Offered: Autumn. L.
Prerequisite(s): BIOS 20150, BIOS 20151 or BIOS 20152. Note(s): BIOS 20196 is identical to the previously offered BIOS 23251. Students who have taken BIOS 23251 should not enroll in BIOS 196. Equivalent Course(s): ENSC 24400
BIOS 20198. Biodiversity. 100 Units.
An overview of the diversity of living organisms, both prokaryotes and eukaryotes, is presented. We emphasize the major groups of organisms, their evolutionary histories and relationships, and the biological and evolutionary implications of the characteristic features of each group. We discuss how the biosphere transformed to its present state over the past four billion years.
Instructor(s): M. LaBarbera, C. Andrews Terms Offered: Spring. L.
Prerequisite(s): BIOS 20150 except for Geophysical Sciences majors
Note(s): BIOS 20198 is identical to the previously offered BIOS 20184. Students who have taken BIOS 20184 should not enroll in BIOS 20198.

Four-Quarter Advanced Biology Fundamentals Sequence

Advanced Biology is an accelerated four-quarter Fundamentals sequence designed for motivated first-year students with exceptionally strong science and mathematics backgrounds and an intense interest in examining and understanding biological mechanisms. Successful students are those motivated to learn about biological processes and mechanisms through learning how to interpret the primary evidence that supports modern understanding. The courses emphasize experimental design and interpretation, together with quantitative and theoretical approaches to understanding biological mechanisms. This sequence is most appropriate for students considering careers in biomedical sciences. Students are expected to devote significant time to this sequence (minimum four to eight hours/week for reading primary literature and background information and for working problem sets, in addition to attendance at lectures and participation in laboratory exercises and discussion sections). A score of 4 or 5 on the Biology AP exam is required and successful students usually also have strong preparation in chemistry and calculus as well as some experience in computer programming.

Upon completion of the first three quarters of the Advanced Biology sequence, students will have three credits in the major and they will have met the general education requirement in the Biological Sciences. Beginning with the graduating Class of 2015, all students must register for BIOS 20234 Molecular Biology of the Cell (Autumn Quarter), BIOS 20235 Biological Systems (Winter Quarter), and BIOS 20236 Biological Dynamics (Spring Quarter). Students complete the sequence by taking BIOS 20242 Principles of Physiology. During their second year, Advanced Biology students are required to take BIOS 20242 Principles of Physiology (Autumn Quarter).

* BIOS majors unable to complete the sequence after the first quarter must then complete BIOS 20151/BIOS 20152 which will be applied to their Biological Sciences general education requirement along with their AP Biology credit. BIOS 20234 Molecular Biology of the Cell would then be applied toward their major which they complete by following the requirements for either the Molecules to Organisms sequence or the Life, Ecosystems, and Evolution sequence.

BIOS 20234. Molecular Biology of the Cell. 100 Units.
This course covers the fundamentals of molecular and cellular biology. Topics include protein structure and function; DNA replication, repair, and recombination; transcription, translation, control of gene expression; cytoskeletal dynamics; protein modification and stability; cellular signaling; cell cycle control; mitosis; and meiosis. Prerequisite(s): Score of 4 or 5 on the AP biology test
Instructor(s): M. Glotzer, A. Ruthenburg, N. Bhasin. L. Terms Offered: Autumn
Prerequisite(s): Score of 4 or 5 on the AP biology test
Note(s): To continue in the sequence, students must receive a minimum grade of B- in BIOS 20234

BIOS 20235. Biological Systems. 100 Units.
Students preparing for the health professions must take BIOS 20235 and 20242 in sequence. This course builds upon molecular cell biology foundations to explore how biological systems function. Topics include classical and molecular genetics, developmental signaling networks, genomics, proteomics, transcriptomics, and biological networks.
Instructor(s): I. Rebay, M. Pascual, N. Bhasin. L. Terms Offered: Winter
Prerequisite(s): A grade of B- or above in BIOS 20234

BIOS 20236. Biological Dynamics. 100 Units.
This class introduces the use of quantitative approaches to study biological dynamics. Deeper exploration of cellular and developmental processes introduced in BIOS 20234 and BIOS 20235 will emphasize the use of quantitative analysis and mathematical modeling to infer biological mechanisms from molecular interactions. The lab portion of the class will introduce basic approaches for simulating biological dynamics using examples drawn from the lectures.
Instructor(s): E. Munro, M. Rust, E. Kovar. Terms Offered: Spring. L.
Prerequisite(s): BIOS 20234 and BIOS 20235 with a minimum grade of B- in each course.

BIOS 20242. Principles of Physiology. 100 Units.
This course focuses on the physiological problems that animals (including humans) face in natural environments; solutions to these problems that the genome encodes; and the emergent physiological properties of the molecular, cellular, tissue, organ, and organismal levels of organization. We emphasize physiological reasoning, problem solving, and current research.
Instructor(s): M. Feder, E. Kovar. Terms Offered: Autumn. L.
Prerequisite(s): BIOS 20236 or BIOS 20189 or consent of instructor
Course Summary

The following list provides information for students who are planning programs of study. Letters after course titles refer to the subject matter presented in the course: (C) Cell and Molecular, Genetics, Developmental Biology, or Biochemistry; (CI) Computer Intensive; (E&E) Ecology and Evolution; (F) Fundamentals Sequence; (MIV) Microbiology, Immunology, or Virology; (N) Neuroscience; (O) Organismal; (SB) Systems Biology; and (S) Specialized. L indicates courses with laboratory.

**Autumn Quarter**

20173. Human Physiology. L. (F)
20187. Fundamentals of Genetics. L. (F)
20190. Principles of Developmental Biology. (F)
20196. Ecology and Conservation. L. (F)
20200. Introduction to Biochemistry. L. (F)
20234. Molecular Biology of the Cell. L. (F)
20242. Principles of Physiology. L. (F)
21236. Genetics of Model Organisms. (C)
21416. Stem Cells and Regeneration. (C)
22249. Principles of Toxicology. (O)
22265. Human Origins: Milestones in Human Evolution and the Fossil Record. (E&E)
22306. Evolution and Development. (O)
23261. Invertebrate Paleobiology and Evolution. (E&E)
23262. Mammalian Evolutionary Biology. L. (E&E)
23266. Evolutionary Adaptation. (E&E)
23404. Reconstructing the Tree of Life: An Introduction to Phylogenetics. (E&E)
24208. Survey of Systems Neuroscience. (N)
24226. Gazing into the Black Box: Neocortex. (N)
24248. Biological Clocks and Behavior. (N)
25206. Fundamentals of Bacterial Physiology. (MIV)
25226. Endocrinology I: Cell Signaling. (MIV)
25256. Immunobiology. (MIV)
25260. Host Pathogen Interactions. (MIV)
25308. Heterogeneity in Human Cancer: Etiology and Treatment. (MIV)
26120. An Introduction to Bioinformatics and Proteomics. L. (CI)
26210. Mathematical Models for Biological Sciences I. (CI)
26318. Fundamentals of Biological Data Analysis. (CI)
27810. Epidemiology and Population Health: Global Health Sciences I
29265. Evolution and Economics of Human Behavior. (S)
29271. The Psychology and Neurobiology of Stress. (S)
29313. Medical Ethics: Central Topics. (S)

**Winter Quarter**

20152. Introduction to Quantitative Modeling in Biology. L. (Advanced) (F)
20153. Fundamentals of Ecology and Evolution. (F)
20170. Microbial and Human Cell Biology. L. (F)
20175. Biochemistry and Nutrition. (F)
20189. Fundamentals of Developmental Biology. L. (F)
20191. Integrative Physiology. L. (F)
20235. Biological Systems. L. (F)
21216. Introductory Statistical Genetics. (C)
21229. Genome Informatics: How Cells Reorganize Genomes. (C)
21237. Developmental Mechanisms. (C)
21238. Cell Biology. (C)
21306. Human Genetics and Evolution. (C)
21358. Simulation, Modeling, and Computation in Biophysics. (C)
21360. Advanced Molecular Biology. (C)
21418. Historical and Conceptual Foundations of Evolutionary Development. (C)
21506. Biological Physics. (C)
21508. Cellular Engineering. (C)
22250. Chordates: Evolution and Comparative Anatomy. (O)
23247. Bioarchaeology and the Human Skeleton. (E&E)
23249. Animal Behavior. (E&E)
23258. Molecular Evolution I: Fundamentals and Principles. (E&E)
23289. Marine Ecology. (E&E)
23365. Evolutionary and Genomic Medicine I. (E&E)
23406. Biogeography. (E&E)
24209. Photons to Consciousness. (N)
24217. Conquest of Pain. (N)
24249. Neurobiology of Seeing. (N)
25108. Cancer Biology. (MIV)
25216. Molecular Basis of Bacterial Disease. (MIV)
25227. Endocrinology II: Systems and Physiology. (MIV)
25258. Immunopathology. (MIV)
25327. Health Disparities in Breast Cancer. (MIV)
25407. Organ Transplantation. (MIV)
26211. Mathematical Models for Biological Sciences II. (CI)
27811. Microbiology: Global Health Sciences II. (MIV)
29294. Introduction to Global Health. (S)
29300. Biological Psychology. (S)
29323. Health Care and the Limits of State Action. (S)

**Spring Quarter**

20151. Introduction to Quantitative Modeling in Biology. L. (Basic) (F)
20171. Human Genetics and Developmental Biology. L. (F)
20172. Mathematical Modeling for Pre-Med Students I. L. (F)
20186. Fundamentals of Cell and Molecular Biology. L. (F)
20188. Fundamentals of Physiology. L. (F)
20190. Principles of Developmental Biology. L. (F)
20198. Biodiversity. L. (F)
20200. Introduction to Biochemistry. L. (F)
20236. Biological Dynamics. L. (F)
21249. Organization, Expression, and Transmission of Genome Information. (C)
21317. Topics in Biological Chemistry. (C)
21328. Biophysics of Biomolecules. (C)
21349. Protein Structure and Functions in Medicine. (C)
21356. Vertebrate Development. (O)
21407. Image Processing In Biology. (C)
21415. Stem Cells in Development and Diseases. (C)
21417. Systems Biology: Molecular Regulatory Logic of Networks. (C)
21507. Selected Topics in Molecular Engineering. (C)
22233. Comparative Vertebrate Anatomy. (O)
22236. Reproductive Biology of Primates. (O)
22260. Vertebrate Structure and Function. (O)
23100. Dinosaur Science. (O)
23232. Ecology and Evolution in the Southwest. (E&E)
23233. Ecology and Evolution in the Southwest: Field School. (E&E)
23242. Primate Evolution and the Roots of Human Biology. (E&E)
23252. Field Ecology. L. (E&E)
23254. Mammalian Ecology. L. (E&E)
23299. Plant Development and Molecular Genetics. (E&E)
23409. The Ecology and Evolution of Infectious Diseases. (E&E)
23410. Complex Interactions: Coevolution, Parasites, Mutualists, and Cheaters. (E&E)
24131. Molecular Neuroscience. (N)
24232. Computational Approaches to Cognitive Neuroscience. (N)
24408. Signal Analysis and Modeling for Neuroscientists. L. (N)
25109. Topics in Reproductive Biology and Cancer. (MIV)
25126. Animal Models of Human Disease. (MIV)
25228. Endocrinology III: Human Disease. (MIV)
25266. Molecular Immunology. (MIV)
25267. Mucosal Immunology. (MIV)
25287. Introduction to Virology. (MIV)
25326. Tumor Microenvironment and Metastasis. (MIV)
28407. Genomics and Systems Biology. (SB)
29326. Introduction to Medical Physics and Medical Imaging. (S)
29327. Topics in Clinical Research. (S)
29812. Biological and Social Determinants of Health: Global Health Sciences III. (S)

Advanced-Level Courses

There are three types of advanced courses. In courses listed under the heading General Courses, instructors present the general principles and recent developments for broad areas within the Biological Sciences. Such
courses are usually offered on a regular basis, either annually or biennially. In courses listed under the heading Specialized Courses, the focus is on either a topic of particular interest to the instructor or on topics that are examined at a more advanced level than in General Courses. Such courses are offered less regularly, as warranted by student and faculty interest. Unless otherwise stated, most General Courses assume mastery of the material covered in the Fundamentals Sequences. Courses listed under the headings Specialized Courses and Independent Study and Research may not be counted toward the courses required for the major with the exception of BIOS 00296 Undergraduate Honors Research.

General Courses

Most general and specialized courses that are at the 20000-level and above assume mastery of the material covered in the Fundamentals Sequences. Students who have not yet completed the Fundamentals Sequence should consult with the individual instructor and the BSCD Senior Advisers before registering for the following courses. Students must confirm their registration with their instructors by the second class meeting or their registration may be canceled.

BIOS 20200. Introduction to Biochemistry. 100 Units.
This course meets the biochemistry requirement in the Biological Sciences major. This course examines the chemical nature of cellular components, enzymes, and mechanisms of enzyme activity, energy interconversion, and biosynthetic reactions. Strong emphasis is given to control and regulation of metabolism through macromolecular interactions.
Instructor(s): M. Makinen, E. Özkan, P. Strieleman, M. Zhao. L. Terms Offered: Autumn Spring Summer. L. Prerequisite(s): Completion of a Biological Sciences fundamentals sequence with an average grade of C and CHEM 22000-22100/23100 with an average grade of C.

BIOS 21216. Intro Statistical Genetics. 100 Units.
This course focuses on genetic models for complex human disorders and quantitative traits. Topics covered also include linkage and linkage disequilibrium mapping and genetic models for complex traits, and the explicit and implicit assumptions of such models.
Instructor(s): Xin He, Hae Kyung Im Terms Offered: Winter
Equivalent Course(s): HGEN 47100, GENE 47100

BIOS 21229. Genome Informatics: How Cells Reorganize Genomes. 100 Units.
This course deals with the molecular and cellular basis of genetic change. We discuss DNA repair functions, mutator loci, induced mutation, mechanisms of homologous recombination and gene conversion, site-specific recombination, transposable elements and DNA rearrangements, reverse transcription and retrotransposons, transposable vector systems for making transgenic organisms, and genetic engineering of DNA sequences in antibody formation. Discussion section required.
Instructor(s): J. Shapiro Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.

BIOS 21236. Genetics of Model Organisms. 100 Units.
A small number of organisms have been chosen for extensive study by biologists. The popularity of these organisms derives largely from the fact that their genomes can be easily manipulated, allowing sophisticated characterization of biological function. This course covers modern methods for genetic analysis in budding yeast (Saccharomyces cerevisiae), fruit flies (Drosophila melanogaster), plants (Arabidopsis thaliana), and mice (Mus musculus). Case studies demonstrate how particular strengths of each system have been exploited to understand such processes as genetic recombination, pattern formation, and epigenetic regulation of gene expression.
Instructor(s): D. Bishop, H-.C Lee, E. Ferguson, I. Moskowitz Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence including BIOS 20187.

BIOS 21237. Developmental Mechanisms. 100 Units.
This course provides an overview of the fundamental questions of developmental biology, with particular emphasis on the genetic, molecular and cell biological experiments that have been employed to reach mechanistic answers to these questions. Topics covered will include formation of the primary body axes, the role of local signaling interactions in regulating cell fate and proliferation, the cellular basis of morphogenesis, and stem cells.
Instructor(s): E. Ferguson, R. Fehon Terms Offered: Winter
Prerequisite(s): For undergraduates only: Three quarters of a Biological Sciences Fundamentals sequence including BIOS 20189, BIOS 20190, or BIOS 20235.
Equivalent Course(s): MGC 36400, DVBI 36400

BIOS 21238. Cell Biology II. 100 Units.
This course covers the mechanisms with which cells execute fundamental behaviors. Topics include signal transduction, cell cycle progression, cell growth, cell death, cancer biology, cytoskeletal polymers and motors, cell motility, cytoskeletal diseases, and cell polarity. Each lecture will conclude with a dissection of primary literature with input from the students. Students will write and present a short research proposal, providing excellent preparation for preliminary exams.
Instructor(s): M. Glotzer, D. Kovar Terms Offered: Winter
Prerequisite(s): For undergraduates: Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): DVBI 31700, BCMB 31700, MGC 31700
BIOS 21249. Organization, Expression, and Transmission of Genome Information. 100 Units.
This seminar course examines how genomes are organized for coding sequence expression and transmission to progeny cells. The class discusses a series of key papers in the following areas: bacterial responses to external stimuli and genome damage, control of eukaryotic cell differentiation, complex loci regulating developmental expression in animals, centromere structure and function, position effect variegation, chromatin domains, chromatin remodeling, RNAi, and chromatin formatting.
Instructor(s): J. Shapiro Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence. Recommended for Advanced Biology students

BIOS 21306. Human Genetics and Evolution. 100 Units.
The goal of this course is to provide an evolutionary perspective on the molecular genetic bases of human diseases and non-clinical human traits. The course covers fundamental concepts and recent progress in Mendelian and complex trait mapping as well as evolutionary principles as they apply to genomics analyses of DNA sequence variation in human populations. These topics will be introduced through lectures and will be complemented by discussion and student presentations of original research papers.
Instructor(s): V. Lynch, A Di Rienzo. Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Fundamentals Sequence including BIOS 20187 or BIOS 20235.

BIOS 21317. Topics in Biological Chemistry. 100 Units.
Required of students who are majoring in biological chemistry. This course examines a variety of biological problems from a chemical and structural perspective, with an emphasis on molecular machines. Topics include macromolecular structure-function relationships, DNA synthesis and repair, RNA folding and function, protein synthesis, targeting and translocation, molecular motors, membrane proteins, photosynthesis, and mechanisms of signal transduction. Computer graphics exercises and in-class journal clubs complement the lecture topics.
Instructor(s): P. Rice, R. Keenan Terms Offered: Spring
Prerequisite(s): BIOS 20200

BIOS 21328. Biophysics of Biomolecules. 100 Units.
This course covers the properties of proteins, RNA, and DNA, as well as their interactions. We emphasize the interplay between structure, thermodynamics, folding, and function at the molecular level. Topics include cooperativity, linked equilibrium, hydrogen exchange, electrostatics, diffusion, and binding.
Instructor(s): T. Sosnick Terms Offered: Spring
Prerequisite(s): Consent of instructor
Equivalent Course(s): BPHS 31000, BCMB 32200

BIOS 21349. Protein Structure and Functions in Medicine. 100 Units.
This course explores how molecular machinery works in the context of medicine (vision, fight or flight, cancer, and action of drugs). We first explore the physical and biochemical properties of proteins in the context of cellular signaling. We then examine how proteins and other cellular components make up the signal transduction pathway of humans and conduct their biological functions. The course engages students to strengthen their scientific communication and teaching skills via the in-class podcast, oral examinations, computer-aided structural presentations, student lectures, and discussions.
Instructor(s): W-J. Tang Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence. Biochemistry strongly recommended.
Equivalent Course(s): CABI 31900, NURB 33500

BIOS 21356. Vertebrate Development. 100 Units.
This advanced-level course combines lectures, student presentations, and discussion sessions. It covers major topics on the developmental biology of embryos (e.g. formation of the germ line, gastrulation, segmentation, nervous system development, limb patterning, orgathogenesis). We make extensive use of the primary literature and emphasize experimental approaches including embryology, genetics, and molecular genetics.
Instructor(s): V. Prince, C. Ragsdale. Terms Offered: Spring
Prerequisite(s): For College students: Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): MGCB 35600, ORGB 33600, DVBI 35600

BIOS 21358. Simulation, Modeling, and Computation in Biophysics. 100 Units.
This course develops skills for modeling biomolecular systems. Fundamental knowledge covers basic statistical mechanics, free energy, and kinetic concepts. Tools include molecular dynamics and Monte Carlo simulations, random walk and diffusion equations, and methods to generate random Gaussian and Poisson distributors. A term project involves writing a small program that simulates a process. Familiarity with a programming language or Mathlab would be valuable.
Instructor(s): B. Roux Terms Offered: Winter
Prerequisite(s): BIOS 20200 and BIOS 26210-26211, or consent from instructor
Equivalent Course(s): CPNS 31358, BCMB 31358
BIOS 21360. Advanced Molecular Biology. 100 Units.
This course covers genome structures, transcription of DNA to RNA, messenger RNA splicing, translation of RNA to protein, transcriptional and post-transcriptional gene regulations, non-coding RNA functions, epigenetics and epitranscriptomics. Basic methods in molecular biology will also be covered. The course also includes special, current topics on genomics, single molecule studies of gene expression, epitranscriptomics, and others.
Instructor(s): J. Fei, T. Pan. Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and Organic Chemistry, or consent of instructor.

BIOS 21407. Image Processing in Biology. 100 Units.
Whether one is trying to read radio signals from faraway galaxies or to understand molecular structures, it is necessary to understand how to read, interpret, and process the data that contain the desired information. In this course, we learn how to process the information contained in images of molecules as seen in the electron microscope. We also deal with the principles involved in processing electron microscope images, including the underlying analytical methods and their computer implementation.
Instructor(s): R. Josephs Terms Offered: Spring
Prerequisite(s): For College students: Three quarters of a Biological Sciences Fundamentals sequence and one year of calculus
Equivalent Course(s): MGCB 34300

BIOS 21415. Stem Cells in Development and Diseases. 100 Units.
This course will provide a survey of concepts and biology of stem cells based on experimental evidence for their involvement in developmental processes and human diseases. Topics will discuss classic models as well as recent advances made in the biomedical research community.
Instructor(s): A. Imamoto, X. Wu Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, including BIOS 20186 and BIOS 20187

BIOS 21416. Stem Cells and Regeneration. 100 Units.
The course will focus on the basic biology of stem cells and regeneration, highlighting biomedically relevant findings that have the potential to translate to the clinic. We will cover embryonic and induced pluripotent stem cells, as well as adult stem cells from a variety of systems, both invertebrate and vertebrate.
Instructor(s): E. Ferguson, V. Prince, J. Cunningham, J. De Jong, X. Wu Terms Offered: Autumn
Prerequisite(s): For undergraduates only: completion of a Biological Sciences fundamentals sequence
Equivalent Course(s): DVBI 36200

BIOS 21417. Systems Biology: Molecular Regulatory Logic of Networks. 100 Units.
Systems biologists investigate networks of genes and model how they function. They do this to better understand the nature of systems-based mechanisms that control development, physiology, evolution, and disease resistance. Quantitative techniques and computational tools help investigators analyze heterogeneous data about molecular networks to uncover meaningful relationships about key components. These studies inspire a framework for understanding the molecular regulatory logic of living states. Related principles about dynamic biological systems are the focus of the course.
Instructor(s): B. Aprison, E. Kovar. Terms Offered: Autumn
Prerequisite(s): For Biology Majors: Three quarters of a Biological Sciences Fundamentals sequence and consent of Instructor

BIOS 21418. Historical and Conceptual Foundations of DevoEvo. 100 Units.
The goal of this course is to explore the historical and conceptual foundations of Developmental Evolution (DevoEvo) through readings and group discussions of historical and philosophical literature on evolutionary and developmental biology, in particular the role developmental biology played in the formulation of evolutionary theory and its subsequent banishment from the Modern Synthesis. The course begins with a review of nineteenth-century scientific and evolutionary thought, including an examination of competing theories of evolution (Theistic Evolutionism, Lamarckism, Orthogenesis, and Mutation Theory) and their contribution (or lack thereof) to modern evolutionary biology. We then explore how (and why) developmental biology was excluded from the formulation of the Synthesis and Neo-Darwinian thought, and examine the source of continued conflicts between Neo-Darwinism and DevoEvo. The course concludes with a discussion of what (if anything) DevoEvo can contribute to evolutionary theory that other research programs cannot (for example, what kinds of phenomena do developmental mechanisms contribute more to the explanation of evolutionary processes than population genetic mechanisms?).
Instructor(s): V. Lynch. Terms Offered: Winter
Prerequisite(s): For Biology Majors: Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): ORGB 39500, HGEN 39500
BIOS 21506. Biological Physics. 100 Units.
This course is an introduction to the physics of living matter. Its goal is to understand the design principles from physics that characterize the condensed and organized matter of living systems. Topics include: basic structures of proteins, nucleotides, and biological membranes; application of statistical mechanics to diffusion and transport; hydrodynamics of low Reynolds number fluids; thermodynamics and chemical equilibrium; physical chemistry of binding affinity and kinetics; solution electrostatics and depletion effect; biopolymer mechanics; cellular mechanics and motions; molecular motors.
Instructor(s): A. Murugan Terms Offered: Spring
Prerequisite(s): PHYS 13300 or PHYS 14300
Note(s): Students majoring in Physics may use this course either as a Physics elective OR as an upper level elective in the Biological Sciences major.
Equivalent Course(s): PHYS 25500, MENG 21900

BIOS 21507. The Engineering and Biology of Tissue Repair. 100 Units.
In this course, students will gain an understanding of the science and application of tissue engineering, a field that seeks to develop technologies for restoring lost function in diseased or damaged tissues and organs. The course will first introduce the underlying cellular and molecular components and processes relevant to tissue engineering: extracellular matrices, cell/matrix interactions such as adhesion and migration, growth factor biology, stem cell biology, inflammation, and innate immunity. The course will then discuss current approaches for engineering a variety of tissues, including bone and musculoskeletal tissues, vascular tissues, skin, nerve, and pancreas. Students will be assessed through in-class discussions, take-home assignments and exams, and an end-of-term project on a topic of the student’s choice.
Instructor(s): Jeffrey Hubbell Terms Offered: Spring
Prerequisite(s): BIOS 20186 or BIOS 20234
Equivalent Course(s): MENG 24300, MPMM 34300, MENG 34300

BIOS 22226. Human Developmental Biology. 100 Units.
This course covers the anatomic and physiologic development of the human from conception to birth, on an organ-by-organ basis. Special attention is paid to the profound physiologic events that take place in the transition from intra-uterine to extra-uterine life. Examples of clinical conditions due to specific errors in development are presented in context. Genetic regulation of organogenesis with reference to mouse models are discussed where the data are available.
Instructor(s): J. Marks Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence

BIOS 22233. Comparative Vertebrate Anatomy. 100 Units.
This course covers the structure and function of major anatomical systems of vertebrates. Lectures focus on vertebrate diversity, biomechanics, and behavior (from swimming and feeding to running, flying, seeing, and hearing). Labs involve detailed dissection of animals (muscles, organs, brains) and a focus on skull bones in a broad comparative context from fishes to frogs, turtles, alligators, mammals, birds, and humans. Field trip to Field Museum and visit to medical school lab for human dissection required.
Instructor(s): M. Westneat, L. Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): ORGB 32233

BIOS 22236. Reproductive Biology of Primates. 100 Units.
The aim of this advanced-level course is to provide a comparative overview of adaptations for reproduction in primates as a background to human reproductive biology. Where appropriate, reference will be made to other mammals and some comparisons will be even wider. Ultimately, the aim of all comparisons is to arrive at concrete lessons for human reproduction, notably in the realm of obstetrics and gynecology. For this reason, the course will be of interest for medical students as well as for those studying anthropology, biology or psychology.
Instructor(s): R. Martin Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.

BIOS 22249. Principles of Toxicology. 100 Units.
This course covers basic concepts of toxicology including routes of exposure and uptake, metabolic conversion, and elimination of toxic agents, as well as fundamental laws governing the interaction of external chemicals with biological systems. In addition to toxins of biological origin, we also consider a set of physical and chemical toxicants in the environment, including air pollution, radiation, manufactured chemicals, metals, and pesticides. Methods of risk assessment will also be considered.
Instructor(s): Y-Y He Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and BIOS 20200
BIOS 22250. Chordates: Evolution and Comparative Anatomy. 100 Units.
Chordate biology emphasizes the diversity and evolution of modern vertebrate life, drawing on a range of sources (from comparative anatomy and embryology to paleontology, biomechanics, and developmental genetics). Much of the work is lab-based, with ample opportunity to gain firsthand experience of the repeated themes of vertebrate body plans, as well as some of the extraordinary specializations manifest in living forms. The instructors, who are both actively engaged in vertebrate-centered research, take this course beyond the boundaries of standard textbook content.
Instructor(s): M. Coates Terms Offered: Winter. L.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence. Recommended for Advanced Biology students.
Equivalent Course(s): ORGB 30250, EVOL 30200

BIOS 22260. Vertebrate Structure and Function. 100 Units.
This course is devoted to vertebrate bones and muscles, with a focus on some remarkable functions they perform. The first part takes a comparative look at the vertebrate skeleton via development and evolution, from lamprey to human. The major functional changes are examined as vertebrates adapted to life in the water, on land, and in the air. The second part looks at muscles and how they work in specific situations, including gape-feeding, swimming, leaping, digging, flying, and walking on two legs. Dissection of preserved vertebrate specimens required.
Instructor(s): P. Sereno. L. Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and consent of instructor. See also http://paulsereno.uchicago.edu/fossil_lab/classes/vertebrate_structure_and_function for more information.

BIOS 22265. Human Origins: Milestones in Human Evolution and the Fossil Record. 100 Units.
This course aims at exploring the fundamentals of human origins by tracking the major events during the course of human evolution. Starting with a laboratory based general introduction to human osteology and muscle function, the latest on morphological and behavioral evidence for what makes Homo sapiens and their fossil ancestors unique among primates will be presented. Our knowledge of the last common ancestor will be explored using the late Miocene fossil record followed by a series of lectures on comparative and functional morphology, adaptation and biogeography of fossil human species. With focus on the human fossil record, the emergence of bipedalism, advent of stone tool use and making, abandonment of arboreality, advent of endurance walking and running, dawn of encephalization and associated novel life histories, language and symbolism will be explored. While taxonomic identities and phylogenetic relationships will be briefly presented, the focus will be on investigating major adaptive transitions and how that understanding helps us to unravel the ecological selective factors that ultimately led to the emergence of our species. The course will be supported by fresh data coming from active field research conducted by Prof. Alemseged and state of the art visualization methods that help explore internal structures. By tracing the path followed by our ancestors over time, this course is directly relevant to reconnoitering the human condition today and our place in nature.
Instructor(s): Z. Alemseged Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of Instructor.
Equivalent Course(s): ANTH 28110

BIOS 22306. Evolution and Development. 100 Units.
The course will provide a developmental perspective on animal body plans in phylogenetic context. The course will start with a few lectures, accompanied by reading assignments. Students will be required to present a selected research topic that fits the broader goal of the course and will be asked to submit a referenced written version of it after their oral presentation. Grading will be based on their presentation (oral and written) as well as their contributions to class discussions. Prerequisite(s): Advanced undergraduates may enroll with the consent of the instructor.
Instructor(s): U. Schmidt-Ott Terms Offered: Autumn
Prerequisite(s): Advanced undergraduates may enroll with the consent of the instructor.
Equivalent Course(s): EVOL 33850, ORGB 33850, DVBI 33850

BIOS 23100. Dinosaur Science. 100 Units.
This introductory-level (but intensive) class includes a ten-day expedition to South Dakota and Wyoming (departing just after graduation). We study basic geology (e.g., rocks and minerals, stratigraphy, Earth history, mapping skills) and basic evolutionary biology (e.g., vertebrate and especially skeletal anatomy, systematics and large-scale evolutionary patterns). This course provides the knowledge needed to discover and understand the meaning of fossils as they are preserved in the field, which is applied to actual paleontological sites. Participants fly from Chicago to Rapid City, and then travel by van to field sites. There they camp, prospect for, and excavate fossils from the Cretaceous and Jurassic Periods. Field trip required.
Instructor(s): P. Sereno. L. Terms Offered: Spring
Prerequisite(s): Consent of instructor, three quarters of a Biological Sciences Fundamentals sequence and a prior course in general science, preferably geology. See also http://paulsereno.uchicago.edu/fossil_lab/classes/dinosaur_science for more information.
Note(s): Need based financial assistance for field trip may be available. Apply to the Master of BSCD (jmalamy@bsd.uchicago.edu)
BIOS 23232. Ecology and Evolution in the Southwest. 100 Units.
This lecture course focuses on the ecological communities of the Southwest, primarily on the four subdivisions of the North American Desert, the Chihuahuan, Sonoran, Mohave, and Great Basin Deserts. Lecture topics include climate change and the impact on the flora and fauna of the region; adaptations to arid landscapes; evolutionary, ecological, and conservation issues in the arid Southwest, especially relating to isolated mountain ranges; human impacts on the biota, land, and water; and how geological and climatic forces shape deserts.
Instructor(s): E. Larsen Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of instructor

BIOS 23233. Ecology and Evolution in the Southwest: Field School. 100 Units.
This lecture/lab course is the same course as BIOS 13111, but includes a lab section preparatory to a two-week field trip at end of Spring Quarter, specific dates to be announced. Our goal in the lab is to prepare proposals for research projects to conduct in the field portion of this course. Field conditions are rugged. Travel is by twelve-passenger van. Lodging during most of this course is tent camping on developed campsites.
Instructor(s): E. Larsen Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and consent of instructor
Note(s): Need based financial assistance for field trip may be available. Apply to the Master of BSCD (jimalamy@bsd.uchicago.edu)

BIOS 23242. Primate Evolution and the Roots of Human Biology. 100 Units.
The course is designed to achieve a state-of-the-art synthesis of primate evolution and human origins. An overview of the biology and evolution of the mammalian order Primates provides a broad foundation for considering the special case human evolution. Across primates as a group, the course explores and integrates comparative evidence from anatomy, physiology, behavior, chromosomal studies, and molecular genetics. Both living primates and their fossil relatives are covered, with due reference to theoretical aspects. Particular emphasis is given to evaluation of characters for inference of evolutionary relationships and to explicit examination of scaling effects of body size in between-species comparisons. Within the general framework of origins and adaptations of primates, human evolution is examined with respect to all features covered. Special features of humans are identified and related to an overview of the hominid fossil record. A specific goal of this course is to guide students to read, interpret, and synthesize scientific literature, and exercise critical thinking with respect to selected topics. As shown by examples, the course is directly relevant to the field of Darwinian medicine, which considers health and disease in relation to the evolutionary background of human biology.
Instructor(s): R. Martin Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of instructor.

BIOS 23247. Bioarchaeology and the Human Skeleton. 100 Units.
This course is intended to provide students in archaeology with a thorough understanding of bioanthropological and osteological methods used in the interpretation of prehistoric societies by introducing bioanthropological methods and theory. In particular, lab instruction stresses hands-on experience in analyzing the human skeleton, whereas seminar classes integrate bioanthropological theory and application to specific cases throughout the world. Lab and seminar-format class meet weekly.
Instructor(s): M. C. Lozada Terms Offered: Winter
Note(s): This course qualifies as a Methodology selection for Anthropology majors.
Equivalent Course(s): ANTH 38800, ANTH 28400

BIOS 23249. Animal Behavior. 100 Units.
This course introduces the mechanism, ecology, and evolution of behavior, primarily in nonhuman species, at the individual and group level. Topics include the genetic basis of behavior, developmental pathways, communication, physiology and behavior, foraging behavior, kin selection, mating systems and sexual selection, and the ecological and social context of behavior. A major emphasis is placed on understanding and evaluating scientific studies and their field and lab techniques.
Instructor(s): S. Pruett-Jones (even years), J. Mateo (odd years) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.
Note(s): CHDV Distribution: A
Equivalent Course(s): PSYC 23249, CHDV 23249

BIOS 23252. Field Ecology. 100 Units.
Open only to students who are planning to pursue graduate research. This course introduces habitats and biomes in North America and the methods of organizing and carrying out field research projects in ecology and behavior, focusing on questions of evolutionary significance. A two-week field trip to southern Florida during the Winter/Spring Quarter break consists of informal lectures and discussions, individual study, and group research projects. During Spring Quarter, there are lectures on the ecology of the areas visited and on techniques and methods of field research. Field trip required.
Instructor(s): S. Pruett-Jones Terms Offered: Spring. This course is offered in alternate (odd) years.
Prerequisite(s): Consent of instructor
BIOS 23254. Mammalian Ecology. 100 Units.
This course introduces the diversity and classification of mammals and their ecological relationships. Lectures cover natural history, evolution, and functional morphology of major taxonomic groups. Lab sessions focus on skeletal morphology, identifying traits of major taxonomic groups, and methods of conducting research in the field. Participation in field trips, occasionally on Saturday, is required.
Instructor(s): E. Larsen Terms Offered: Spring. L. Offered every other year in odd years.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and third-year standing or consent of instructor.

BIOS 23258. Molecular Evolution I: Fundamentals and Principles. 100 Units.
The comparative analysis of DNA sequence variation has become an important tool in molecular biology, genetics, and evolutionary biology. This course covers major theories that form the foundation for understanding evolutionary forces that govern molecular variation, divergence, and genome organization. Particular attention is given to selectively neutral models of variation and evolution, and to alternative models of natural selection. The course provides practical information on accessing genome databases, searching for homologous sequences, aligning DNA and protein sequences, calculating sequence divergence, producing sequence phylogenies, and estimating evolutionary parameters.
Instructor(s): M. Kreitman Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and two quarters of calculus, or consent of instructor.
Equivalent Course(s): ECEV 44001, EVOL 44001

BIOS 23261. Invertebrate Paleobiology and Evolution. 100 Units.
This course provides a detailed overview of the morphology, paleobiology, evolutionary history, and practical uses of the invertebrate and microfossil groups commonly found in the fossil record. Emphasis is placed on understanding key anatomical and ecological innovations within each group and interactions among groups responsible for producing the observed changes in diversity, dominance, and ecological community structure through evolutionary time. Labs supplement lecture material with specimen-based and practical application sections. An optional field trip offers experience in the collection of specimens and raw paleontological data. Several “Hot Topics” lectures introduce important, exciting, and often controversial aspects of current paleontological research linked to particular invertebrate groups. (L)
Instructor(s): M. Webster Terms Offered: Autumn
Prerequisite(s): GEOS 13100 and 13200, or equivalent. Students majoring in Biological Sciences only; Completion of the general education requirement in the Biological Sciences, or consent of instructor.
Equivalent Course(s): GEOS 36300, GEOS 26300, EVOL 32400

BIOS 23262. Mammalian Evolutionary Biology. 100 Units.
This course examines mammalian evolution—the rise of living mammals from ancient fossil ancestors stretching back over 300 million years. Lectures focus on the evolutionary diversification of mammals, including anatomical structure, evolutionary adaptations, life history, and developmental patterns. Labs involve detailed comparative study of mammalian skeletons, dissection of muscular and other systems, trips to the Field Museum to study fossil collections, and studies of human anatomy at the Pritzker School of Medicine. Students will learn mammalian evolution, functional morphology, and development, and will gain hands-on experience in dissection. Taught by instructors who are active in scientific research on mammalian evolution, the course is aimed to convey new insights and the latest progress in mammalian paleontology, functional morphology, and evolution. Prerequisite(s): Second-year standing and completion of a Biological Sciences Fundamentals sequence; or GEOS 13100-13200 or GEOS 22300, or consent of instructors.
Instructor(s): Z. Luo, K. Angielczyk Terms Offered: Autumn. L.
Prerequisite(s): Second-year standing and three quarters of a Biological Sciences Fundamentals sequence; or GEOS 13100-13200 or GEOS 22300, or consent of instructors.
Equivalent Course(s): EVOL 31201, ORGB 31201

BIOS 23266. Evolutionary Adaptation. 100 Units.
This course deals with the adaptation of organisms to their environments and focuses on methods for studying adaptation. Topics include definitions and examples of adaptation, the notion of optimization, adaptive radiations, the comparative method in evolutionary biology, and the genetic architecture of adaptive traits. Students will draw on the logical frameworks covered in lecture as they evaluate primary papers and prepare two writing assignments on an adaptive question of their choice.
Instructor(s): C. Andrews Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence or consent of instructor.
BIOS 23289. Marine Ecology. 100 Units.
This course provides an introduction into the physical, chemical, and biological forces controlling the function of marine ecosystems and how marine communities are organized. The structures of various types of marine ecosystems are described and contrasted, and the lectures highlight aspects of marine ecology relevant to applied issues such as conservation and harvesting.
Instructor(s): T. Wootton Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and prior introductory course in ecology or consent of instructor.
Equivalent Course(s): ENST 23289

BIOS 23299. Plant Development and Molecular Genetics. 100 Units.
Genetic approaches to central problems in plant development will be discussed. Emphasis will be placed on embryonic pattern formation, meristem structure and function, reproduction, and the role of hormones and environmental signals in development. Lectures will be drawn from the current literature; experimental approaches (genetic, cell biological, biochemical) used to discern developmental mechanisms will be emphasized. Graduate students will present a research proposal in oral and written form; undergraduate students will present and analyze data from the primary literature, and will be responsible for a final paper.
Instructor(s): J. Greenberg Terms Offered: Spring
Prerequisite(s): For undergraduates only: Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): DVBI 36100, MGCB 36100, ECEV 32900

BIOS 23365. Evolutionary and Genomic Medicine I. 100 Units.
Evolution is regularly investigated in free-living organisms, but some of its most fascinating and important examples occur in the interface between free-living and non-free-living states. In this course, we will use evolutionary and ecological principles to study the dynamics of viruses, unicellular organisms and cells in multicellular organisms relevant to human medicine. In EGM I, the emphasis will be on the evolution of pathogens, the evolution of cells of the immune system in response to pathogen invasion, the basis of autoimmune disorders, and the population genetics of cancerous cells in light of recent cancer genomic studies. EGM II will cover more general topics including Darwinian medicine, aging, and systems biology/medicine.
Instructor(s): S. Cobey, C-I. Wu Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence. Background in evolution and population genetics.
Equivalent Course(s): ECEV 33365

BIOS 23404. Reconstructing the Tree of Life: An Introduction to Phylogenetics. 100 Units.
This course is an introduction to the tree of life (phylogeny): its conceptual origins, methods for discovering its structure, and its importance in evolutionary biology and other areas of science. Topics include history and concepts, sources of data, methods of phylogenetic analysis, and the use of phylogenies to study the tempo and mode of lineage diversification, coevolution, biogeography, conservation, molecular biology, development, and epidemiology. One Saturday field trip and weekly computer labs required in addition to scheduled class time.
This course is offered in alternate (odd) years.
Instructor(s): R. Ree. Terms Offered: Autumn. L.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence or consent of instructor
Note(s): This course is offered in alternate (odd) years.
Equivalent Course(s): EVOL 35401

BIOS 23406. Biogeography. 100 Units.
This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).
Instructor(s): B. Patterson (odd years, lab), L. Heaney (even years, discussion) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and a course in either ecology, evolution, or earth history; or consent of instructor
Equivalent Course(s): GEOG 25500, ENST 25500, GEOG 35500, EVOL 45500

BIOS 23409. The Ecology and Evolution of Infectious Diseases. 100 Units.
Understanding the ecology and evolution of infectious diseases is crucial for both human health and for preservation of the natural environment. In this course, we combine mathematical modeling with ecological and evolutionary analyses to understand how fundamental mechanisms of host-pathogen interactions are translated into disease dynamics and host-pathogen co-evolution.
Instructor(s): G. Dwyer Terms Offered: Spring. L.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and Integral calculus.
BIOS 23410. Complex Interactions: Coevolution, Parasites, Mutualists, and Cheaters. 100 Units.
This course emphasizes the enormous diversity of interactions between organisms. It is an introduction to the biology and ecology of parasitic and mutualistic symbiotic associations and their evolution. Topics include endosymbioses and their impact on the evolution of photosynthetic organisms, bacterial symbioses (e.g., nitrogen fixation), symbioses that fungi evolved with plants and animals (e.g., endophytes, mycorrhizae, lichens), pollination biology, insect-plant associations, and associations of algae with animals. Methods to elucidate the evolution of these associations are discussed with a focus on coevolutionary events and the origin of cheaters.
Instructor(s): T. Lumbsch Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.

BIOS 24110. Fundamental Neuroscience. 100 Units.
This course is a rigorous introduction to the study of neurons, nervous systems and brains. The systems anatomy and physiology of the vertebrate brain will be covered in depth. Common features of neural circuits, such as those subserving the stretch reflex, will be examined. The biology of brain evolution and development will be introduced. A highlight of this course will be student dissections of sheep brains and the laboratory presentation of human brain dissections by the instructors.
Instructor(s): C. Ragsdale, P. Mason Terms Offered: Autumn
Prerequisite(s): At least two quarters of Biological Sciences instruction (including courses taken concurrently) or consent of instructor
Equivalent Course(s): NSCI 20110

BIOS 24120. Cellular Neuroscience. 100 Units.
This course describes the cellular and subcellular properties of neurons, including passive and active electrophysiological properties, and their synaptic interactions. Readings are assigned from a general neuroscience textbook.
Instructor(s): R.A. Eatock, W. Wei Terms Offered: Winter
Prerequisite(s): NSCI 20110, along with completion of MATH 13100, or MATH 15100, or MATH 16100, or consent of instructor
Equivalent Course(s): NSCI 20120

BIOS 24130. Systems Neuroscience. 100 Units.
This course covers vertebrate and invertebrate systems neuroscience with a focus on the anatomy, physiology, and development of sensory and motor control systems. The neural bases of form and motion perception, locomotion, memory, and other forms of neural plasticity are examined in detail. We also discuss clinical aspects of neurological disorders.
Instructor(s): D. Freedman Terms Offered: Spring
Prerequisite(s): NSCI 20110, NSCI 20120 or consent of instructors
Equivalent Course(s): NSCI 20130

BIOS 24131. Molecular Neuroscience. 100 Units.
This lecture/seminar course explores the application of modern cellular and molecular techniques to clarify basic questions in neurobiology. Topics include mechanisms of synaptic transmission, protein trafficking, exo- and endo-cytosis, and development and mechanisms of neurological diseases.
Instructor(s): S. Sisodia Terms Offered: Spring
Prerequisite(s): NSCI 20110, NSCI 20120 and BIOS 20200, or consent of instructor
Equivalent Course(s): NSCI 22100

BIOS 24208. Survey of Systems Neuroscience. 100 Units.
This lab-centered course teaches students the fundamental principles of vertebrate nervous system organization. Students learn the major structures and the basic circuitry of the brain, spinal cord and peripheral nervous system. Somatic, visual, auditory, vestibular and olfactory sensory systems are presented in particular depth. A highlight of this course is that students become practiced at recognizing the nuclear organization and cellular architecture of many regions of brain in rodents, cats and primates.
Instructor(s): S. Bensmaia
Prerequisite(s): NSCI 20130. For Biological Sciences majors: Three quarters of a Biological Sciences fundamentals sequence
Equivalent Course(s): NURB 31600, ORGB 32500, CPNS 30116

BIOS 24217. Conquest of Pain. 100 Units.
This course examines the biology of pain and the mechanisms by which anesthetics alter the perception of pain. The approach is to examine the anatomy of pain pathways both centrally and peripherally, and to define electrophysiological, biophysical, and biochemical explanations underlying the action of general and local anesthetics. We discuss the role of opiates and enkephalins. Central theories of anesthesia, including the relevance of sleep proteins, are also examined.
Instructor(s): K. Ruskin Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, CHEM 2200-22100-22200 or BIOS 20200 and prior course in neurobiology or physiology is recommended.
BIOS 24231. Methods in Computational Neuroscience. 100 Units.
Topics include (but are not limited to): Hodgkin-Huxley equations, Cable theory, Single neuron models, Information theory, Signal Detection theory, Reverse correlation, Relating neural responses to behavior, and Rate vs. temporal codes.
Instructor(s): S. Bensmaia Terms Offered: Winter. L.
Prerequisite(s): BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.
Equivalent Course(s): CPNS 34231, PSYC 24231

BIOS 24232. Computational Approaches to Cognitive Neuroscience. 100 Units.
This course is concerned with the relationship of the nervous system to higher order behaviors (e.g., perception, object recognition, action, attention, learning, memory, and decision making). Psychophysical, functional imaging, and electrophysiological methods are introduced. Mathematical and statistical methods (e.g. neural networks and algorithms for studying neural encoding in individual neurons and decoding in populations of neurons) are discussed. Weekly lab sections allow students to program cognitive neuroscientific experiments and simulations.
Instructor(s): N. Hatsopoulos Terms Offered: Spring. L.
Prerequisite(s): BIOS 26210, a course in systems neuroscience, and knowledge using Matlab, or consent of instructor.
Equivalent Course(s): ORGB 34650, CPNS 33200, PSYC 34410

BIOS 24248. Biological Clocks and Behavior. 100 Units.
This course will address physiological and molecular biological aspects of circadian and seasonal rhythms in biology and behavior. The course will primarily emphasize biological and molecular mechanisms of CNS function, and will be taught at a molecular level of analysis from the beginning of the quarter. Those students without a strong biology background are unlikely to resonate with the course material.
Instructor(s): B. Prendergast Terms Offered: Spring
Prerequisite(s): A quality grade in PSYC 20300 Introduction to Biological Psychology. Additional biology courses are desirable. Completion of Core biology will not suffice as a prerequisite.
Equivalent Course(s): PSYC 21750

BIOS 24408. Modeling and Signal Analysis for Neuroscientists. 100 Units.
The course provides an introduction into signal analysis and modeling for neuroscientists. We cover linear and nonlinear techniques and model both single neurons and neuronal networks. The goal is to provide students with the mathematical background to understand the literature in this field, the principles of analysis and simulation software, and allow them to construct their own tools. Several of the 90-minute lectures include demonstrations and/or exercises in Matlab.
Instructor(s): W. van Drongelen Terms Offered: Spring. L.
Prerequisite(s): Undergraduates: Biology Major - BIOS 26210 and 26211, or consent of instructor. Neuroscience Major - NSCI 20130
Equivalent Course(s): NSCI 24000, CPNS 32111

BIOS 25108. Cancer Biology. 100 Units.
This course covers the fundamentals of cancer biology with a focus on the story of how scientists identified the genes that cause cancer. The emphasis is on "doing" science rather than "done" science: How do scientists think, how do they design experiments, where do these ideas come from, what can go wrong, and what is it like when things go right? We stress the role that cellular subsystems (e.g., signal transduction, cell cycle) play in cancer biology, as well as evolving themes in cancer research (e.g., ongoing development of modern molecular therapeutics).
Instructor(s): M. Rosner, W. Du Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.

BIOS 25109. Topics in Reproduction and Cancer. 100 Units.
This course focuses on several aspects of the molecular and cellular biology of human reproduction. We also discuss the basis of chemical/viral carcinogenesis and the progression, treatment, and prevention of cancer. The role of steroid hormones and their receptors in the control of growth, development, and specialized cell function is discussed in the context of normal and abnormal gene expression in human development and disease. Key historical events, research approaches, utilization of knowledge, recent advances in drug design and herbal medicines, and philosophies of scientific research are also covered.
Instructor(s): G. Greene, L. Becker Terms Offered: Spring.
Prerequisite(s): For Biology majors: Three quarters of a Biological Sciences Fundamentals sequence and Biochemistry, or consent of instructor.

BIOS 25126. Animal Models of Human Disease. 100 Units.
This course introduces the use of animals in biomedical research for the purposes of understanding, treating, and curing human disease. Particular emphasis is placed on rodent models in the context of genetic, molecular, and immunologic manipulations, as well as on the use of large animal surgical models. University veterinarians also provide information regarding humane animal care.
Instructor(s): K. Luchirs Terms Offered: Spring.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of instructor.
BIOS 25206. Fundamentals of Bacterial Physiology. 100 Units.
This course meets one of the requirements of the microbiology specialization. This course introduces bacterial diversity, physiology, ultra-structure, envelope assembly, metabolism, and genetics. In the discussion section, students review recent original experimental work in the field of bacterial physiology.
Instructor(s): D. Missiakas Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of instructor
Equivalent Course(s): MICR 30600

BIOS 25216. Molecular Basis of Bacterial Disease. 100 Units.
This course meets one of the requirements of the microbiology specialization. This lecture/discussion course involves a comprehensive analysis of bacterial pathogens, the diseases that they cause, and the molecular mechanisms involved during pathogenesis. Students discuss recent original experimental work in the field of bacterial pathogenesis.
Instructor(s): H. Shuman Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): MICR 31600

BIOS 25226. Endocrinology I: Cell Signaling. 100 Units.
The subject matter of this course considers the wide variety of intracellular mechanisms that, when activated, change cell behavior. We cover aspects of intracellular signaling, the latter including detailed discussions of receptors, G-proteins, cyclic nucleotides, calcium and calcium-binding proteins, phosphoinositides, protein kinases, and phosphatases.
Instructor(s): M. Brady, R. Cohen Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and BIOS 20200.
Equivalent Course(s): NPHP 33600

BIOS 25227. Endocrinology II: Systems and Physiology. 100 Units.
Endocrinology is the study of hormones, which are chemical messengers released by tissues that regulate the activity of other cells in the body. This course covers the classical hormone systems, including hormones regulating metabolism, energy mobilization and storage, calcium and phosphate metabolism, reproduction, growth, "fight or flight," and circadian rhythms. We focus on historical perspective, the mechanisms of action, homeostatic regulation, and relevant human diseases for each system.
Instructor(s): M. Brady, R. Cohen Terms Offered: Winter
Prerequisite(s): Completion of the first three quarters of a Biological Fundamentals Sequence.

BIOS 25228. Endocrinology III: Human Disease. 100 Units.
A Fundamentals Sequence (BIOS 20180s or 20190s, or AP 5 sequence) and BIOS 25227 recommended but not required. This course is a modern overview of the patho-physiologic, genetic, and molecular basis of human diseases with nutritional perspectives. We discuss human diseases (e.g., hypertension, cardiovascular diseases, obesity, diabetes, osteoporosis, alopecia).
Instructor(s): Y. C. Li Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence is required and BIOS 25227 is strongly recommended.

BIOS 25256. Immunobiology. 100 Units.
This comprehensive survey course presents an integrated coverage of the tactics and logistics of innate and adaptive immunity in mammalian organisms. It conveys the elegance and complexity of immune responses against infectious agents. It introduces their implications in autoimmune diseases, cancer and organ transplantation and presents some of the emerging immunotherapeutics that are transforming health care. Prior knowledge of microbiology (e.g., BIOS 25206) will be advantageous. Prerequisite(s): Completion of a Biological Sciences Fundamentals Sequence which includes, Cell, Genetics, Developmental Biology, and Physiology
Instructor(s): A. Bendelac Terms Offered: Autumn
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.

BIOS 25258. Immunopathology. 100 Units.
Five examples of diseases are selected each year among the following categories: autoimmune diseases, inflammatory bowel diseases, infection immunity, immunodeficiencies and gene therapy, and transplantation and tumor immunology. Each disease is studied in depth with general lectures that include, where applicable, histological analysis of diseased tissue samples and discussions of primary research papers on experimental disease models. Special emphasis is placed on understanding immunopathology within the framework of general immunological concepts and on experimental approaches to the study of immunopathological models.
Instructor(s): B. Jabri Terms Offered: Winter
Prerequisite(s): BIOS 25256 with a grade of B or higher.
Equivalent Course(s): IMMU 30010, PATH 30010
BIOS 25260. Host Pathogen Interactions. 100 Units.
This course explores the basic principles of host defense against pathogens, including evolutionary aspects of innate and adaptive immunity and immune evasion strategies. Specific examples of viral and bacterial interactions with their hosts are studied in depth. A review of immunological mechanisms involved in specific cases is incorporated in the course.
Instructor(s): A. Chervonsky Terms Offered: Autumn
Prerequisite(s): BIOS 25206 and BIOS 25256
Equivalent Course(s): IMMU 31200, MICR 31200

BIOS 25266. Molecular Immunology. 100 Units.
This discussion-oriented course examines the molecular principles of immune recognition. We explore the roles of protein modification, protein-protein and protein-DNA interactions in the discrimination between self and non-self, and study the molecular fundamentals of cell stimulation and signaling. Primary literature focused on molecular research of the immune system is integrated with lectures on commonly used biochemical, structural and immunological techniques used in the research papers examined.
Instructor(s): E. Adams Terms Offered: Spring. Offered in odd years
Prerequisite(s): BIOS 20200 or 25256, or consent of instructor
Equivalent Course(s): IMMU 30266

BIOS 25267. Mucosal Immunology. 100 Units.
This course addresses how the gut associated lymphoid tissue distinguishes innocuous dietary antigens and commensal bacteria from pathogenic microbes and mounts an appropriate response. The realization that we live in a dynamic relationship with the trillions of bacteria that form the commensal microbiome has added additional complexity to our understanding of this conundrum. In this course a topic will be introduced with a lecture and review article for the first class of each week. In the second class each week students will lead the discussion of the primary articles assigned. The course will be graded on class participation and a final essay-based exam. Although intended primarily for graduate students in the Immunology, Microbiology, MPMM and CMMN programs, undergraduates may enroll with the permission of the instructor.
Instructor(s): C. Nagler Terms Offered: Spring. Offered every other year in even years.
Prerequisite(s): BIOS 25266
Equivalent Course(s): IMMU 37000

BIOS 25287. Introduction to Virology. 100 Units.
This class on animal viruses considers the major families of the viral kingdom with an emphasis on the molecular aspects of genome expression and virus-host interactions. Our goal is to provide students with solid appreciation of basic knowledge, as well as instruction on the frontiers of virus research.
Instructor(s): T. Golovkina Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and third- or fourth-year standing
Equivalent Course(s): MICR 34600

BIOS 25308. Heterogeneity in Human Cancer: Etiology and Treatment. 100 Units.
This course addresses the importance of understanding human tumor heterogeneity (organ site by organ site) in terms of predicting whether tumors will progress to malignancy and how tumors will respond to standard treatments or require tailored molecular therapeutics. Alternating lecture and discussion lectures will explore and tease apart the controversies in the field that limit progress in cancer prevention, diagnosis and treatment. At the end of the course, students should have an in-depth understanding of the complexities, challenges and opportunities facing modern cancer researchers and clinical oncologists and be able to discuss novel scientific approaches to solving these issues.
Instructor(s): K. MacLeod Terms Offered: Autumn 2018
Prerequisite(s): A grade of B or better in BIOS 25108
Equivalent Course(s): CABI 30500

BIOS 25326. Tumor Microenvironment and Metastasis. 100 Units.
The tumor microenvironment regulates disease progression and chemoresistance in most cancers. This course addresses the functional contribution of the different cellular and non-cellular constituents of the tumor that surround the malignant cancer cells in cancer progression and metastasis. We will thoroughly discuss the function of stroma, inflammation, tumor senescence, immunity and the interactome in cancer progression and metastasis. Moreover, we will evaluate the translational impact of targeting the tumor microenvironment. Laboratory studies will introduce key techniques and organotypic model systems to elucidate these functions. At the end of the course, students should be able to understand the biology behind cancer metastasis and to evaluate manuscripts reporting novel findings in cancer biology. Prerequisite(s): BIOS 25108 and BIOS 25308
Instructor(s): H. Kenny, E. Lengyel Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.
Note(s): Three optional weekend, one-day workshops will be offered during the quarter. This course qualifies in the Cancer Specialization.
BIOS 25327. Health Disparities in Breast Cancer. 100 Units.

Across the globe, breast cancer is the most common women’s cancer. In the last two decades, there have been significant advances in breast cancer detection and treatment that have resulted in improved survival rates. Yet, not all populations have benefited equally from these improvements, and there continues to be a disproportionate burden of breast cancer felt by different populations. In the U.S., for example, white women have the highest incidence of breast cancer but African-American women have the highest breast cancer mortality overall. The socioeconomic, environmental, biological, and cultural factors that collectively contribute to these disparities are being identified with a growing emphasis on health disparities research efforts. In this 10-week discussion-based course students will meet twice weekly and cover major aspects of breast cancer disparities.

Instructor(s): Eileen Dolan, Suzanne Conzen Terms Offered: Winter
Prerequisite(s): BIOS 25108
Equivalent Course(s): CCTS 40400, CCTS 20400

BIOS 25407. Organ Transplantation. 100 Units.

This course presents biological, technical, ethical, and economic issues associated with organ transplantation. We sharply focus the immunologic knowledge from BIOS 25256 onto the biologic barriers to organ acceptance and the ultimate goal of immunologic tolerance. We also address principles of organ preservation and the mechanisms of ischemia/reperfusion injury. The technical aspects and physiology of organ transplantation (i.e., kidney, liver, heart, lung, pancreas, islet, intestinal) are covered. The social, economic, and ethical issues raised in transplantation (i.e., allografts, xenografts, living donation) are also discussed. This course is offered in alternate years.

Instructor(s): A. Chong Terms Offered: Winter. Offered Winter 2020
Prerequisite(s): BIOS 25256

BIOS 26120. An Introduction to Bioinformatics and Proteomics. 100 Units.

Modern biology generates massive amounts of data; this course is devoted to biological information and the models and techniques used to make sense of it. Students learn about biological databases, algorithms for sequence alignment, phylogenetic tree building, and systems biology. They will also learn about the basics of large-scale study of proteins, particularly their structures and functions. Students will be introduced to basics of high performance computation (HPC) and its application to the field of bioinformatics. They will learn how to use our in-house Super Computer to process and analyze next generation sequencing data. Using state of the art tools, students will align and genotype a group of genes in order to identify disease-relevant variants. The course will be taught as a hands on computer approach (a computation background would be helpful, but not needed).

Instructor(s): E. Haddadian Terms Offered: Autumn.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence or BIOS 20172 or consent of Instructor. No computation background required.

BIOS 26210-26211. Mathematical Methods for Biological Sciences I-II.

BIOS 26210. Mathematical Methods for Biological Sciences I. 100 Units.

This course builds on the introduction to modeling course biology students take in the first year (BIOS 20151 or 152). It begins with a review of one-variable ordinary differential equations as models for biological processes changing with time, and proceeds to develop basic dynamical systems theory. Analytic skills include stability analysis, phase portraits, limit cycles, and bifurcations. Linear algebra concepts are introduced and developed, and Fourier methods are applied to data analysis. The methods are applied to diverse areas of biology, such as ecology, neuroscience, regulatory networks, and molecular structure. The students learn computations methods to implement the models in MATLAB.

Instructor(s): D. Kondrashov Terms Offered: Autumn.
Prerequisite(s): BIOS 20151 or BIOS 20152 and three quarters of a Biological Sciences Fundamentals sequence or consent of the instructor
Equivalent Course(s): PSYC 36210, CPNS 31000

BIOS 26211. Mathematical Methods for Biological Sciences II. 100 Units.

This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g., Markov Chain, Monte Carlo, and Gillespie algorithm. Students complete an independent project on a topic of their interest.

Instructor(s): D. Kondrashov Terms Offered: Winter.
Prerequisite(s): BIOS 26210 or equivalent.
Equivalent Course(s): CPNS 31100, PSYC 36211
BIOS 26211. Mathematical Methods for Biological Sciences II. 100 Units.
This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g., Markov Chain Monte Carlo, and Gillespie algorithm. Students complete an independent project on a topic of their interest.
Instructor(s): D. Kondrashov Terms Offered: Winter. L.
Prerequisite(s): BIOS 26210 or equivalent.
Equivalent Course(s): CPNS 31100, PSYC 36211

BIOS 26318. Fundamentals of Biological Data Analysis. 100 Units.
This course is intended for students who have original data from a research project and are looking to produce a thesis or publication. Students will learn to organize, process, visualize, and make inferences from biological data sets using the data processing tools of R. We will review statistics concepts, such as probability distributions, linear and nonlinear fitting, estimation and hypothesis testing, and introduce new concepts relevant for the specific research questions identified by the students. The end result will be a written report that can function as a methods and results section of a research publication and contains high-quality graphics.
Instructor(s): D. Kondrashov, S. Allesina Terms Offered: Autumn. L.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals Sequence, STAT 22000 or higher, and fourth-year standing, or consent of Instructor. Primarily intended for students that have a data set from original research.

BIOS 27710-27711-27712-27713-27714-27715. Ecology – Marine Biological Laboratory; Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems – Marine Biological Laboratory; Independent Undergraduate Research in Environmental Sciences – Marine Biological Laboratory; Quantitative Environmental Analyses – Marine Biological Laboratory; Methods in Microbial Ecology – Marine Biological Laboratory; Roles of Animals in Ecosystems – Marine Biological Laboratory.
Marine Biological Laboratory Semester in Environmental Science Sequence (SES). Courses BIOS 27710-27715 are the College designations for the Semester in Environmental Science that is taught at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts. Registration in BIOS 27710, 27711, and 27712, plus one of BIOS 27713, 27714, or 27715 is required. Admission to the Semester in Environmental Science program is by application, which must be received by the MBL in March of the year preceding the start of the semester. Admissions decisions will be mailed in April. Note that these courses start at the beginning of September, typically four weeks prior to the start of the College’s Autumn Quarter and are completed by the end of Autumn Quarter. More information on the course content and the application process can be found at www.mbl.edu/ses.

BIOS 27710. Ecology - Marine Biological Laboratory. 100 Units.
This course examines the structure and functioning of terrestrial and aquatic ecosystems including the application of basic principles of community and ecosystem ecology. The course also examines contemporary environmental problems such as the impacts of global and local environmental change on community composition and food webs within forest, grassland, marsh and nearshore coastal ecosystems on Cape Cod. This course examines the structure and functioning of terrestrial and aquatic ecosystems including the application of basic principles of community and ecosystem ecology. The course also examines contemporary environmental problems such as the impacts of global and local environmental change on community composition and food webs within forest, grassland, marsh and nearshore coastal ecosystems on Cape Cod.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27711 and BIOS 27712 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): ENSC 24100

BIOS 27711. Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory. 100 Units.
This course examines the interface of biological processes with chemical processes in ecological systems. Course content emphasizes aquatic chemistry and the role of microbes in the cycling of nitrogen, carbon, and other elements. Effects of global changes on chemical cycling are emphasized.
Instructor(s): Marine Biological Laboratory Staff. Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27712 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): ENSC 23820
BIOS 27712. Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory. 100 Units.
This course is the culmination of the Semester in Environmental Science at the Marine Biological Laboratory. An independent research project, on a topic in aquatic or terrestrial ecosystem ecology, is required. Students will participate in a seminar for scientific communication as well as submit a final paper on their project.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27711 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): ENSC 29800

BIOS 27713. Quantitative Environmental Analyses # Marine Biological Laboratory. 100 Units.
This course emphasizes the application of quantitative methods to answering ecological questions. Students apply mathematical modeling approaches to simulating biological and chemical phenomena in terrestrial and marine ecosystems.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent Only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): ENSC 28100

BIOS 27714. Methods in Microbial Ecology - Marine Biological Laboratory. 100 Units.
This course explores the biology of microbes found in the environment, including relationships with the physical, chemical, and biotic elements of their environment. Emphasis is placed on understanding the science underlying the various methodologies used in the study of these organisms and systems. In the laboratory, students will work with the latest techniques to measure microbial biomass, activity, extracellular enzymes, and biogeochemical processes. Students are also introduced to molecular methods for assessing microbial genomic diversity.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): ENSC 24200

BIOS 27715. Roles of Animals in Ecosystems # Marine Biological Laboratory. 100 Units.
This course addresses the question, How do animals, including man, affect the structure and function of ecosystems. The course takes an interdisciplinary approach focused on the interactions of animal diversity, migration patterns, population dynamics, and behavior with biogeochemical cycles, productivity, and transport of materials across ecosystems. This course is an elective option within the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711, and BIOS 27712.
Equivalent Course(s): ENSC 24300

BIOS 27711. Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory. 100 Units.
This course examines the interface of biological processes with chemical processes in ecological systems. Course content emphasizes aquatic chemistry and the role of microbes in the cycling of nitrogen, carbon, and other elements. Effects of global changes on chemical cycling are emphasized.
Instructor(s): Marine Biological Laboratory Staff. Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27712 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): ENSC 23820

BIOS 27712. Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory. 100 Units.
This course is the culmination of the Semester in Environmental Science at the Marine Biological Laboratory. An independent research project, on a topic in aquatic or terrestrial ecosystem ecology, is required. Students will participate in a seminar for scientific communication as well as submit a final paper on their project.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27711 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): ENSC 29800
BIOS 27713. Quantitative Environmental Analyses - Marine Biological Laboratory. 100 Units.
This course emphasizes the application of quantitative methods to answering ecological questions. Students apply mathematical modeling approaches to simulating biological and chemical phenomena in terrestrial and marine ecosystems.
Instructor(s): Marine Biological Laboratory Staff
Terms Offered: Autumn. L.
Prerequisite(s): Consent Only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): ENSC 28100

BIOS 27714. Methods in Microbial Ecology - Marine Biological Laboratory. 100 Units.
This course explores the biology of microbes found in the environment, including relationships with the physical, chemical, and biotic elements of their environment. Emphasis is placed on understanding the science underlying the various methodologies used in the study of these organisms and systems. In the laboratory, students will work with the latest techniques to measure microbial biomass, activity, extracellular enzymes, and biogeochemical processes. Students are also introduced to molecular methods for assessing microbial genomic diversity.
Instructor(s): Marine Biological Laboratory Staff
Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): ENSC 24200

BIOS 27715. Roles of Animals in Ecosystems - Marine Biological Laboratory. 100 Units.
This course addresses the question, How do animals, including man, affect the structure and function of ecosystems. The course takes an interdisciplinary approach focused on the interactions of animal diversity, migration patterns, population dynamics, and behavior with biogeochemical cycles, productivity, and transport of materials across ecosystems. This course is an elective option within the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA.
Instructor(s): Marine Biological Laboratory Staff
Terms Offered: Autumn
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711, and BIOS 27712.
Equivalent Course(s): ENSC 24300

BIOS 27720. Microbiomes Across Environments. 100 Units.
Microbiomes Across Environments provides a comprehensive introduction to microbiome research, tools and approaches for investigation, and a lexicon for biological understanding of the role of microbial communities in environmental and host environments. Microbiome science is an emerging field that bridges disciplines, merging microbiology with genomics, ecosystem science, computation, biogeochemistry, modeling, medicine, surgery, immunology, molecular engineering, and many others, including architecture, social science, chemistry and even economics. In this course we will uncover the vast biochemical and metabolic diversity of the microbial world by examining life in ocean and marine systems, terrestrial ecosystems, and animal (including human) host-associated contexts. Students will develop or strengthen biological field/lab techniques, analyze and compare data prepared from student-collected samples, and will integrate fundamental knowledge, modeling, and theory as it pertains to microbiome research.
Instructor(s): J. Gilbert, D. Mark-Welch, M. Sogin, T. Flynn
Terms Offered: Autumn L. September 2018.
Note(s): This course will be given at Marine Biological Laboratory, Woods Hole, Massachusetts.

BIOS 27721. Observing Proteins in Action: How to Design and Build Your Own. 100 Units.
New insights into cell function are now possible using technologies that resolve single molecules. However, as devices become more complicated, we are often faced with three questions: What is it that our instruments actually measure; how can we change the instrument to see a new behavior; and, how do we analyze the data to get the greatest insight? We will learn how to answer these questions by designing, building, and using our own electrical and optical instruments, making measurements, and then analyzing the results. Membrane proteins play an essential role in the behavior of all cells. We will study membrane protein channels in synthetic membranes, host cells, and giant axons from squid collected in the waters surrounding the MBL. The movement of electrical charge produced by conformational changes will be correlated with both the current passing through single channels and structural information obtained from light and electron microscopy. The course will proceed from simple measurements to student-designed projects.
Instructor(s): E. Schwartz, F. Bezanilla, E. Perozo
Terms Offered: Autumn L. September 2018.
Note(s): This course will be given at Marine Biological Laboratory, Woods Hole, Massachusetts
BIOS 27723. Biodiversity and Genomics: Exploring the Marine Animal Diversity of Woods Hole Using Molecular Tools. 100 Units.
In this course, student will have the opportunity to explore the large diversity of marine animal species in Woods Hole, Massachusetts and its surroundings. We will combine fieldwork with genomic and bioinformatic approaches to study different aspects of the evolution, ecology, taxonomy, physiology, and biogeography of marine animals in this unique location. Student will integrate knowledge and analytical tools from different biological disciplines to develop short research projects. During the three weeks of the course, student will have access to the Marine Biological Laboratory’s collection of living marine animals, participate in ongoing research projects at MBL, and contribute data that will advance our understanding of marine biodiversity.
Instructor(s): O. Pineda-Catalan Terms Offered: Autumn. L. September 2018
Note(s): This course will be given at Marine Biological Laboratories, Woods Hole, Massachusetts.

BIOS 27810. Epidemiology and Population Health: Global Health Sciences I. 100 Units.
Epidemiology is the basic science of public health. It is the study of how diseases are distributed across populations and how one designs population-based studies to learn about disease causes, with the object of identifying preventive strategies. Epidemiology is a quantitative field and draws on biostatistical methods. Historically, epidemiology’s roots were in the investigation of infectious disease outbreaks and epidemics. Since the mid-twentieth century, the scope of epidemiologic investigations has expanded to a fuller range non-infectious diseases and health problems. This course will introduce classic studies, study designs and analytic methods, with a focus on global health problems. Prerequisite(s): Completion of the first three quarters of a Biological Sciences Fundamentals Sequence or consent of the Master of BSCD, Laurens Mets (mets@uchicago.edu). STAT 220 or other introductory statistics highly desirable.
Instructor(s): D. Lauderdale. Terms Offered: Autumn,Winter. This course is offered Autumn Quarter every year on campus and Winter Quarter every other year in Paris as part of Study Abroad beginning Winter 2018.
Prerequisite(s): Completion of the three quarters of a Biological Sciences Fundamentals Sequence and completion of the quantitative requirements for the biological sciences major. STAT 22000 or other introductory statistics highly desirable.

BIOS 27811. Global Health Sciences II: Microbiology. 100 Units.
This course will examine infectious diseases with global health impact, analyzing their historic and projected impact, their biological foundations, treatment, and preventative control. Course topics include gastrointestinal infections (e.g., cholera, bacillary dysentery, typhoid fever, rotavirus infections), sexually transmitted diseases (HIV), infections transmitted via aerosol droplets (tuberculosis, meningitis), and vector borne diseases (e.g., malaria, typhus, dengue fever, plague). Special emphasis will be placed on emerging infectious diseases (Ebola, Lassa, Rift Valley fever) and either completed or ongoing studies for infectious disease elimination (smallpox, polio, diphtheria, river blindness). The course encompasses lectures, student presentations, and the preparation of a capstone essay.
Instructor(s): D. Missiakas, O. Schneewind Terms Offered: Winter. This course is offered on campus in alternate years beginning Winter Quarter 2017 and in Paris in alternate years beginning Winter Quarter 2018.
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence, or consent of Instructor.

BIOS 28407. Genomics and Systems Biology. 100 Units.
This lecture course explores technologies for high-throughput collection of genomic-scale data, including sequencing, genotyping, gene expression profiling, and assays of copy number variation, protein expression and protein-protein interaction. In addition, the course will cover study design and statistic analysis of large data sets, as well as how data from different sources can be used to understand regulatory networks, i.e., systems. Statistical tools that will be introduced include linear models, likelihood-based inference, supervised and unsupervised learning techniques, methods for assessing quality of data, hidden Markov models, and controlling for false discovery rates in large data sets. Readings will be drawn from the primary literature. Evaluation will be based primarily on problem sets.
Instructor(s): Y. Gilad Terms Offered: Spring
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and STAT 23400 or BIOS 26210 and BIOS 26211
Equivalent Course(s): CABI 47300, IMMU 47300, BPHS 47300, HGEN 47300

Big Problems Courses
These courses may not be used towards the general education requirement in the Biological Sciences unless approved through petition to the BSCD Senior Advisers.
BIOS 02280. Drinking Alcohol: Social Problem or Normal Cultural Practice? 100 Units.
Alcohol is the most widely used psychoactive agent in the world, and, as archaeologists have recently demonstrated, it has a very long history dating back at least 9,000 years. This course will explore the issue of alcohol and drinking from a trans-disciplinary perspective. It will be co-taught by an anthropologist/archaeologist with experience in alcohol research and a neurobiologist who has experience with addiction research. Students will be confronted with literature on alcohol research from anthropology, sociology, history, biology, medicine, psychology, and public health and asked to think through the conflicts and contradictions. Selected case studies will be used to focus the discussion of broader theoretical concepts and competing perspectives introduced in the first part of the course. Topics for lectures and discussion include: What is alcohol? The early history of alcohol; Histories of drinking in ancient, medieval, and modern times; Alcohol and the political economy; Alcohol as a cultural artifact; Styles of drinking and intoxication; Alcohol, addiction, and social problems; Alcohol and religion; Alcohol and health benefits; Comparative case studies of drinking.
Instructor(s): M. Dietler, W. Green Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing.
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): BPRO 22800, ANTH 25310

BIOS 02490. Biology and Sociology of AIDS. 100 Units.
This interdisciplinary course deals with current issues of the AIDS epidemic.
Instructor(s): H. Pollack, J. Schneider Terms Offered: Not offered in 2018-2019; May be offered in 2019-2020
Prerequisite(s): Third- or fourth-year standing
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): BPRO 24900, SSAD 65100

Specialized Courses
These courses may not be counted toward the courses required for the Biological Sciences major.

BIOS 29100. Biology of Toxoplasma. 100 Units.
This course is suitable for undergraduates with a good background in biology and molecular genetics. This course does not meet requirements for the biological sciences major. This course undertakes a study of Toxoplasma gondii and toxoplasmosis: a model system to study the cellular and molecular biology, biochemistry, and genetics of an obligate intracellular protozoan parasite; the immune responses it elicits; its interactions with host cells; and the pathogenesis of the diseases it causes. This information is also applied to consideration of public health measures for prevention of infection, for vaccines, and for development of new antimicrobial treatments. General principles applicable to the study of other microorganisms are emphasized.
Instructor(s): R. Mcleod Terms Offered: Autumn, Spring
Prerequisite(s): Consent of instructor. This course does not meet the requirements for the Biological Sciences Major.

BIOS 29265. Evolution and Economics of Human Behavior. 100 Units.
This course explores how evolutionary biology and behavioral economics explain many different aspects of human behavior. Specific topics include evolutionary theory, natural and sexual selection, game theory, cost-benefit analyses of behavior from an evolutionary and a behavioral economics perspective, aggression, power and dominance, cooperation and competition, biological markets, parental investment, life history and risk-taking, love and mating, physical attractiveness and the market, emotion and motivation, sex and consumer behavior, cognitive biases in decision-making, and personality and psychopathology. Note(s): CHDV Distribution, A*; 1* Equivalent Course(s): CHDV 37950, PSYC 27950, PSYC 37950, BIOS 29265, ECON 14810
Instructor(s): D. Maestripieri Terms Offered: Winter
Note(s): CHDV Distribution, A
Equivalent Course(s): PSYC 27950, CHDV 27950, PSYC 37950, CHDV 37950, ECON 14810

BIOS 29271. The Psychology and Neurobiology of Stress. 100 Units.
This course explores the topic of stress and its influence on behavior and neurobiology. Specifically, the course will discuss how factors such as age, gender, and social context interact to influence how we respond to stressors both physiologically and behaviorally. The course will also explore how stress influences mental and physical health.
Instructor(s): G. Norman Terms Offered: Autumn
Note(s): This course does not meet the requirements for the Biological Sciences Major.
Equivalent Course(s): PSYC 25750
BIOS 29294. Introduction to Global Health. 100 Units.
This course provides an overview of global health from the historical perspective to the current state of global health. The course features weekly guest lecturers with a broad range of expertise in the field: topics include the social and economic determinants of health, the economics of global health, global burden of disease, and globalization of health risks, as well as the importance of ethics, human rights, and diplomacy in promoting a healthier world. The course is designed for graduate-level students and senior undergraduates with an interest in global health work in resource-limited settings.
Instructor(s): C. Babcock, N. Fenny Terms Offered: Winter
Prerequisite(s): This course does not meet requirements for the Biological Sciences major
Equivalent Course(s): PBPL 29294, CCTS 43000

BIOS 29300. Biological Psychology. 100 Units.
What are the relations between mind and brain? How do brains regulate mental, behavioral, and hormonal processes; and how do these influence brain organization and activity? This course introduces the anatomy, physiology, and chemistry of the brain; their changes in response to the experiential and sociocultural environment; and their relation to perception, attention, behavioral action, motivation, and emotion.
Instructor(s): L. Kay, B. Prendergast Terms Offered: Winter
Prerequisite(s): Some background in biology and psychology.
Note(s): This course does not meet requirements for the Biological Sciences Major.
Equivalent Course(s): CHDV 20300, PSYC 20300

BIOS 29314. Medical Ethics: Central Topics. 100 Units.
Decisions about medical treatment, medical research, and medical policy often have profound moral implications. Taught by a philosopher, two physicians, and a medical lawyer, this course will examine such issues as paternalism, autonomy, assisted suicide, kidney markets, abortion, and research ethics.
Instructor(s): D. Brudney; Staff Terms Offered: TBD. May be offered in 2019-2020
Prerequisite(s): Third or fourth year standing. This course does not meet requirements for the Biological Sciences major.
Note(s): Undergrads enroll in section 01 and 02. Graduates enroll in section 03. For Philosophy majors: this course fulfills the practical philosophy (A) requirement.
Equivalent Course(s): PHIL 31609, PHIL 21609, HIPS 21609, BPRO 22612

BIOS 29323. Health Care and the Limits of State Action. 100 Units.
In a time of great human mobility and weakening state frontiers, epidemic disease is able to travel fast and far, mutate in response to treatment, and defy the institutions invented to keep it under control: quarantine, the cordon sanitaire, immunization, and the management of populations. Public health services in many countries find themselves at a loss in dealing with these outbreaks of disease, a deficiency to which NGOs emerge as a response (an imperfect one to be sure). Through a series of readings in anthropology, sociology, ethics, medicine, and political science, we will attempt to reach an understanding of this crisis of both epidemiological technique and state legitimacy, and to sketch out options.
Instructor(s): E. Lyon, H. Saussy Terms Offered: Not offered in 2018-2019; may be offered in 2019-2020
Prerequisite(s): Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.
Equivalent Course(s): CMLT 28900, BPRO 28600, HMRT 28602

BIOS 29326. Introduction to Medical Physics and Medical Imaging. 100 Units.
This course covers the interaction of radiation with matter and the exploitation of such interactions for medical imaging and cancer treatment. Topics in medical imaging include X-ray imaging and radionuclide imaging, as well as advanced technologies that provide three-dimensional images, including X-ray computed tomography (CT), single photon emission computed tomography (SPECT), positron emission tomography (PET), magnetic resonance imaging (MRI), and ultrasonic imaging.
Instructor(s): S. Armato, P. La Riviere, C. Pelizzari Terms Offered: Spring
Prerequisite(s): PHYS 23500. This course does not meet requirements for the Biological Sciences major. Students majoring in physics may use this course either as an elective or as one of the topics courses to meet the general education requirement in the Biological Sciences.
Equivalent Course(s): MPHY 29326
BIOS 29327. Topics in Clinical Research. 100 Units.
This course provides an overview of clinical research subject matter from the history and ethics of clinical research to the types and practice of contemporary clinical research. How does clinical research differ from other research traditions? What is special about clinical research? What types of questions can be answered by clinical research (what questions not)? What types of ethical oversight over the responsible conduct of research have arisen over the years? We will learn how to read and critique clinical research, survey the major types of clinical research designs, and the differences between hypothesis generation and hypothesis testing. Finally, we provide an overview of the mechanics of developing and implementing clinical research, including grant writing, regulatory issues, and quality assurance. Along the way, we will be teaching core statistical concepts including prevalence, risk ratios, and sensitivity and validation techniques. The objectives are for students to obtain an understanding of how and why to perform clinical research and to do so in an ethical and responsible manner.
Instructor(s): Valerie Press Terms Offered: Spring. Last offered 2017
Prerequisite(s): Completed general education requirement in the social sciences. This course does not meet requirements for the Biological Sciences major.
Equivalent Course(s): CCTS 21003

BIOS 29812. Global Health Sciences III: Topics in Global Health. 100 Units.
This course will review the major factors that influence the health of individuals and communities worldwide and seek to gain a better understanding of the complexities of global health. Students will study both broad and disease-specific global health challenges (e.g., cancer, diabetes, and cardiopulmonary disease) and strategies for responding to them; key institutions and stakeholders; environmental impacts on health; ethical considerations in research and interventions; maternal and child health; health and human rights; and international legal frameworks within global health diplomacy. The course encompasses lectures, student presentations, and the preparation of a proposal addressing a significant global health problem with major impact.
Instructor(s): C. Olopade, O. Olopade Terms Offered: Spring Winter. This course is offered in alternate years on campus beginning Spring Quarter 2017 and in alternate years in Paris beginning Winter Quarter 2018.
Prerequisite(s): This course does not meet the requirements for the Biological Sciences major.

Independent Study and Research

BIOS 00199. Undergraduate Research. 100 Units.
This course may be elected for up to three quarters. Before Friday of fifth week of the quarter in which they register, students must submit a one-page summary of the research that they are planning to their research sponsor and to the director of undergraduate research and honors. A detailed two to three page summary on the completed work must be submitted to the research sponsor and the Master of BSCD before Friday of examination week.
Instructor(s): BSCD Master Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of research sponsor and the Master of BSCD.
Note(s): Students are required to submit the College Reading and Research Course Form. This course is graded P/F. This course does not meet requirements for the biological sciences major.

BIOS 00206. Readings: Biology. 100 Units.
Students may register for only one BIOS 00206 tutorial per quarter. Enrollment must be completed by the end of the second week of the quarter. This tutorial offers individually designed readings.
Terms Offered: Summer, Autumn, Winter, Spring
Prerequisite(s): Consent of faculty sponsor.
Note(s): Students are required to submit the College Reading and Research Course Form. This course is graded P/F. This course does not meet requirements for the biological sciences major.

BIOS 00296. Undergraduate Honors Research. 100 Units.
This course is required for students accepted into the BSCD Research Honors program. Students must register for this course both Autumn and Winter Quarters of their fourth year. This course can be counted toward the Biological Sciences major and may be counted among the three upper-level courses required for the BS. See also bscd.uchicago.edu/page/honors-biology. Quality grade. Prerequisite(s): Consent Only. Acceptance in BSCD Honors Research Program.
Instructor(s): S. Kron Terms Offered: Autumn, Winter
Prerequisite(s): Consent Only. Acceptance in BSCD Honors Research Program.
BIOS 00299. Advanced Research: Biological Sciences. 100 Units.
Before Friday of fifth week of the quarter in which they register, students must submit a one-page summary of the research that they are planning to their research sponsor and to the director of undergraduate research and honors. A detailed two to three page summary on the completed work must be submitted to the research sponsor and the Master of BSCD before Friday of examination week. This course does may be counted as a general elective but does not meet requirements for the Biological Sciences major. In the first quarter of registration, students must submit College Reading and Research form to their research sponsor and the director of undergraduate research and honors.
Instructor(s): BSCD Master
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Fourth-year standing and consent of research sponsor and Master of BSCD.
Note(s): Students are required to submit the College Reading and Research Course Form. This course is graded P/F.

Graduate-Level Courses

Many graduate-level courses in the Division of the Biological Sciences are open to qualified College students. Students should consult their Advisers, the BSCD office, or the various departments and committees in the division to identify appropriate courses.
Program Requirements: BA
A minimum of eight courses in chemistry beyond the general education requirement (which should be taken in the first year) is required for the BA degree.

Program Requirements: BS
A minimum of twelve courses in chemistry beyond the general education requirement (which should be taken in the first year) is typically required for the BS degree.

Summary of Requirements: BA in Chemistry

General Education

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<th>Course Title</th>
<th>Units</th>
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<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II ‡*‡</td>
<td>200</td>
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<td>One of the following sequences:</td>
<td></td>
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<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>200</td>
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<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II †</td>
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<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (requires a grade of A- or higher)</td>
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<tr>
<td>Total Units</td>
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<td>400</td>
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Major

One of the following: ‡*‡

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III</td>
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</tr>
<tr>
<td>CHEM 12300</td>
<td>Honors General Chemistry III</td>
<td></td>
</tr>
<tr>
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<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 19620</td>
<td>Linear Algebra †</td>
<td></td>
</tr>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III (requires a grade of A- or higher)</td>
<td></td>
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<tr>
<td>MATH 20000-20100</td>
<td>Mathematical Methods for Physical Sciences I-II</td>
<td>200</td>
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<tr>
<td>PHYS 13100-13200-13300</td>
<td>Mechanics; Electricity and Magnetism; Waves, Optics, and Heat (or higher)</td>
<td>300</td>
</tr>
<tr>
<td>CHEM 20100</td>
<td>Inorganic Chemistry I</td>
<td>100</td>
</tr>
<tr>
<td>One of the following sequences:</td>
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<td>300</td>
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<tr>
<td>CHEM 22000-22100-22200</td>
<td>Organic Chemistry I-II-III</td>
<td></td>
</tr>
<tr>
<td>CHEM 26100 &amp; CHEM 26200</td>
<td>Quantum Mechanics and Thermodynamics</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 26700</td>
<td>Experimental Physical Chemistry</td>
<td>100</td>
</tr>
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<td>1400</td>
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</table>

Summary of Requirements: BS in Chemistry

General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II ‡*‡</td>
<td>200</td>
</tr>
<tr>
<td>One of the following sequences:</td>
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</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
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</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II †</td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Total Units</td>
<td>1800</td>
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</tr>
</tbody>
</table>

MAJOR

One of the following:  
CHEM 11300 Comprehensive General Chemistry III  
CHEM 12300 Honors General Chemistry III

One of the following:  
MATH 15300 Calculus III  
MATH 16300 Honors Calculus III  
MATH 19620 Linear Algebra †

MATH 13300 Elementary Functions and Calculus III (requires a grade of A- or higher)

MATH 20000-20100 Mathematical Methods for Physical Sciences I-II  
PHYS 13100-13200-13300 Mechanics; Electricity and Magnetism; Waves, Optics, and Heat (or higher)  
CHEM 20100-20200 Inorganic Chemistry I-II

One of the following sequences:  
CHEM 22000-22100-22200 Organic Chemistry I-II-III  
CHEM 23300 Intermediate Organic Chemistry  
CHEM 26100-26200-26300 Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics  
CHEM 26700 Experimental Physical Chemistry

One of the following:  
CHEM 22700 Advanced Organic/Inorganic Laboratory  
CHEM 26800 Computational Chemistry and Biology

† Credit may be granted by examination.  
* See following sections on Advanced Placement and Accreditation Examinations.  
‡ CHEM 10100-10200 Introductory General Chemistry I-II and CHEM 12100-12200 Honors General Chemistry I-II also satisfy this requirement. Enrollment into a particular sequence is based on chemistry placement or AP score.

NOTE: The three-quarter sequence MATH 20300-20400-20500 Analysis in Rn I-II-III may be substituted for MATH 20000 Mathematical Methods for Physical Sciences I; please note that MATH 20250 Abstract Linear Algebra or STAT 24300 Numerical Linear Algebra is a prerequisite for MATH 20400. MATH 27300 Basic Theory of Ordinary Differential Equations may be substituted for MATH 20100 Mathematical Methods for Physical Sciences II. MATH 19620 Linear Algebra is recommended for Chemistry majors who plan to pursue advanced study in physical chemistry.

Advanced Placement  
Students who earn a score of 5 on the AP test in chemistry are given credit for CHEM 11100 Comprehensive General Chemistry I. Students with CHEM 11100 Comprehensive General Chemistry I credit may join CHEM 11200 Comprehensive General Chemistry II in the Winter Quarter. A score of 5 on the AP exam also permits students to take CHEM 12100-12200-12300 Honors General Chemistry I-II-III; students may opt to begin with CHEM 12100 Honors General Chemistry I in the Autumn Quarter or CHEM 12200 Honors General Chemistry II in the Winter Quarter. Students who complete the first quarter of Comprehensive General Chemistry or Honors General Chemistry forgo the AP credit. Note that no credit is given for IB chemistry.

Accreditation  
The Department of Chemistry also administers accreditation examinations for CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III to entering College students. Only incoming first-year and transfer students are eligible to take these examinations, which are offered at the beginning of Autumn Quarter. Students may receive credit on the basis of their performance on accreditation examinations.

GRADING  
Students majoring in Chemistry must earn (1) a major GPA of 2.0 or higher and (2) a C- or higher in all courses required by the Chemistry major, including those courses counting toward general education requirements in the mathematical and physical sciences. Nonmajors may take chemistry courses on a P/F basis; only grades of C- or higher constitute passing work.
Undergraduate Research and Honors

By their third year, students majoring in chemistry are strongly encouraged to participate in research with a faculty member. For more information on research opportunities, visit chemistry.uchicago.edu/kb.

Excellent students who pursue a substantive research project with a faculty member of the Department of Chemistry should plan to submit an honors thesis based on their work. Students usually begin this research program during their third year and continue through the following summer and their fourth year. Students who wish to be considered for honors are expected to complete their arrangements with the departmental counselor before the end of their third year and to register for one quarter of CHEM 29900 Advanced Research in Chemistry or one year of CHEM 29600 Research in Chemistry during their third or fourth years.

To be eligible to receive honors, students in the BA or BS degree program in chemistry must write a credible honors paper describing their research. The paper must be submitted before the deadline established by the departmental counselor and must be approved by the Department of Chemistry. In addition, an oral presentation of the research is required. The research paper or project used to meet this requirement may not be used to meet the BA paper or project requirement in another major.

To earn a BA or BS degree with honors in chemistry, students must also have an overall GPA of 3.0 or higher.

Sample Program

The following is a suggested schedule for completing a BA or BS degree in chemistry:

First Year

CHEM 10100-10200-11300 Introductory General Chemistry I-II; Comprehensive General Chemistry III or CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III or CHEM 12100-12200-12300 Honors General Chemistry I-II-III

MATH 15100-15200-15300 Calculus I-II-III or equivalent

Second Year

CHEM 22000-22100-22200 Organic Chemistry I-II-III

MATH 20000-20100 Mathematical Methods for Physical Sciences I-II

Physics sequence (three quarters)

Third Year

CHEM 26100-26200-26300 Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics (if physics is taken in the second year)

CHEM 20100 Inorganic Chemistry I

CHEM 20200 Inorganic Chemistry II, CHEM 23300 Intermediate Organic Chemistry, or CHEM 26300 Chemical Kinetics and Dynamics (for BS)

Fourth Year

CHEM 26100-26200-26300 Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics (if physics taken in the third year)

CHEM 23300 Intermediate Organic Chemistry or CHEM 26300 Chemical Kinetics and Dynamics (for BS)

CHEM 22700 Advanced Organic/Inorganic Laboratory or CHEM 26800 Computational Chemistry and Biology (for BS)

Joint Degree Programs

Students who achieve advanced standing through their performance on placement examinations or accreditation examinations may consider the formulation of a four-year degree program that leads to the concurrent award of the BS and MS degrees in chemistry. For more information, consult Ka Yee Lee at kayeelee@uchicago.edu and Vera Dragisich at vdragisi@uchicago.edu in the Chemistry Department.

Laboratory Safety

In chemistry labs, safety goggles must be worn at all times. Students who require prescriptive lenses may wear prescription glasses under goggles; contact lenses may not be worn. Exceptions for medical reasons must be obtained from the lab director.

Minor in Chemistry

Before a student can declare the minor in chemistry, the student must complete the general education requirements in chemistry. A student must receive the director of undergraduate studies’ approval for the minor program; this is done through the Consent to Complete a Minor Program (http://college.uchicago.edu/sites/college.uchicago.edu/files/Consent_Minor_Program.pdf) form, which can be obtained from the student’s College
adviser. Once signed by the director, this form must then be returned to the student's College adviser by the end of Spring Quarter of the student's third year.

To earn the minor in chemistry, a student must complete five courses as outlined below. All lecture courses in the 20000 level (or above) in chemistry can be used as electives for the minor; the student has to make sure that prerequisites for the chosen courses are fulfilled. Before meeting with the director, students should invest some thought into which courses they would like to complete for the minor and how those courses relate as a set.

Courses in the minor program may not be (1) double counted with the student’s major(s) or with other minors, or (2) counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers. Students minoring in chemistry must earn (1) a minor GPA of 2.0 or higher and (2) a C– or higher in all courses required by the chemistry minor.

**Summary of Requirements: Minor in Chemistry**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the following *</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 11300 Comprehensive General Chemistry III</td>
<td></td>
</tr>
<tr>
<td>CHEM 12300 Honors General Chemistry III</td>
<td></td>
</tr>
<tr>
<td>Four additional 20000-level (or higher) courses</td>
<td>400</td>
</tr>
<tr>
<td>in chemistry</td>
<td></td>
</tr>
<tr>
<td>Total units</td>
<td>500</td>
</tr>
</tbody>
</table>

* If this course is already counted toward the student’s major, a 20000-level (or higher) chemistry course can be used as a substitution for this requirement.

Below are some examples of courses that would work as a set:

1. **Organic Chemistry Courses**
   - CHEM 22000 Organic Chemistry I 100
   - CHEM 22100 Organic Chemistry II 100
   - CHEM 22200 Organic Chemistry III 100
   - CHEM 23300 Intermediate Organic Chemistry 100
   OR
   - CHEM 23300 Intermediate Organic Chemistry 100

2. **Organic/Inorganic Chemistry Courses**
   - CHEM 22000 Organic Chemistry I 100
   - CHEM 22100 Organic Chemistry II 100
   - CHEM 20100 Inorganic Chemistry I 100
   - CHEM 20200 Inorganic Chemistry II 100
   OR
   - CHEM 22000 Organic Chemistry I 100
   - CHEM 22100 Organic Chemistry II 100
   - CHEM 22200 Organic Chemistry III 100
   - CHEM 20100 Inorganic Chemistry I 100

3. **Physical Chemistry Courses**
   - CHEM 26100 Quantum Mechanics 100
   - CHEM 26200 Thermodynamics 100
   - CHEM 26300 Chemical Kinetics and Dynamics 100
   - CHEM 26700 Experimental Physical Chemistry 100
   OR
   - CHEM 26100 Quantum Mechanics 100
   - CHEM 26200 Thermodynamics 100
   - CHEM 26300 Chemical Kinetics and Dynamics 100
   - CHEM 26800 Computational Chemistry and Biology 100

4. **Organic/Physical Chemistry Courses**
   - CHEM 22000 Organic Chemistry I 100
   - CHEM 22100 Organic Chemistry II 100
   - CHEM 26100 Quantum Mechanics 100
   - CHEM 26200 Thermodynamics 100
5. Inorganic/Physical Chemistry Courses

CHEM 20100  Inorganic Chemistry I  100
CHEM 26100  Quantum Mechanics  100
CHEM 26200  Thermodynamics  100
CHEM 26300  Chemical Kinetics and Dynamics  100

OR

CHEM 20100  Inorganic Chemistry I  100
CHEM 20200  Inorganic Chemistry II  100
CHEM 26200  Thermodynamics  100
CHEM 26300  Chemical Kinetics and Dynamics  100

CHEMISTRY COURSES

CHEM 00111-00112-00113. Collaborative Learning in General Chemistry I-II-III.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student's level of participation and attendance.

CHEM 00111. Collaborative Learning in General Chemistry I. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student's level of participation and attendance.
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11100 Note(s): Enrollment in CHEM 00111 is section specific: CHEM 11100-01 students should enroll in CHEM 00111-01 while CHEM 11100-02 students should enroll in CHEM 00111-02.
Instructor(s): B. Ratliff Terms Offered: Autumn
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11100
Note(s): Enrollment in CHEM 00111 is section specific: CHEM 11100-01 students should enroll in CHEM 00111-01 while CHEM 11100-02 students should enroll in CHEM 00111-02.
CHEM 00112. Collaborative Learning in General Chemistry II. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance. Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11100 Note(s): Enrollment in CHEM 00111 is section specific: CHEM 11100-01 students should enroll in CHEM 00111-01 while CHEM 11100-02 students should enroll in CHEM 00111-02.
Instructor(s): B. Ratliff Terms Offered: Winter
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11200
Note(s): Enrollment in CHEM 00112 is section specific: CHEM 11200-01 students should enroll in CHEM 00112-01 while CHEM 11200-02 students should enroll in CHEM 00112-02. CHEM 00111 is not a prerequisite for this course.

CHEM 00113. Collaborative Learning in General Chemistry III. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance. Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11300
Note(s): Enrollment in CHEM 00113 is section specific: CHEM 11300-01 students should enroll in CHEM 00113-01 while CHEM 11300-02 students should enroll in CHEM 00113-02. CHEM 00111 and CHEM 00112 are not prerequisites for this course.

CHEM 00112. Collaborative Learning in General Chemistry II. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance. Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11100 Note(s): Enrollment in CHEM 00111 is section specific: CHEM 11100-01 students should enroll in CHEM 00111-01 while CHEM 11100-02 students should enroll in CHEM 00111-02.
Instructor(s): B. Ratliff Terms Offered: Winter
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11200
Note(s): Enrollment in CHEM 00112 is section specific: CHEM 11200-01 students should enroll in CHEM 00112-01 while CHEM 11200-02 students should enroll in CHEM 00112-02. CHEM 00111 is not a prerequisite for this course.
CHEM 00113. Collaborative Learning in General Chemistry III. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 11100-11200-11300 Comprehensive General Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Comprehensive General Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Comprehensive General Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance.
Instructor(s): B. Ratliff
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 11300
Note(s): Enrollment in CHEM 00113 is section specific: CHEM 11300-01 students should enroll in CHEM 00113-01 while CHEM 11300-02 students should enroll in CHEM 00113-02. CHEM 00111 and CHEM 00112 are not prerequisites for this course.

CHEM 00220-00221-00222. Collaborative Learning in Organic Chemistry I-II-III.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 22000-22100-22200 Organic Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Organic Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Organic Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance.
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22000-22100-22200 Organic Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Organic Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Organic Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance.
Instructor(s): B. Ratliff
Terms Offered: Autumn
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22000

CHEM 00221. Collaborative Learning in Organic Chemistry II. 000 Units.
Instructor(s): B. Ratliff
Terms Offered: Winter
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22100
Note(s): CHEM 00220 and CHEM 00221 are not prerequisites for this course.

CHEM 00222. Collaborative Learning in Organic Chemistry III. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 22000-22100-22200 Organic Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Organic Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Organic Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student’s level of participation and attendance.
Instructor(s): B. Ratliff
Terms Offered: Spring
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22200
Note(s): CHEM 00220 and CHEM 00221 are not prerequisites for this course.

CHEM 00221. Collaborative Learning in Organic Chemistry II. 000 Units.
Instructor(s): B. Ratliff
Terms Offered: Winter
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22100
Note(s): CHEM 00220 is not a prerequisite for this course.
CHEM 00222. Collaborative Learning in Organic Chemistry III. 000 Units.
This is an optional, limited enrollment workshop for students concurrently enrolled in CHEM 22000-22100-22200 Organic Chemistry I-II-III. Undergraduate Team Leaders guide small groups of students in weekly workshops. The workshops focus on the analysis of problem sets designed to augment and complement the Organic Chemistry material. Instead of tutoring or lecturing, Team Leaders coach students as they work collaboratively in small groups on the assigned problems by referencing class lectures and assigned reading materials. The workshops do not repeat but extend the substantive discussions and lectures of the Organic Chemistry course. Additionally, these workshops aim to develop communication skills, cooperative attitudes, and promote a teamwork environment. Because the benefits of collaborative learning can only be gained through consistent effort and attendance, this zero-credit course is graded P/F based on the student's level of participation and attendance.
Instructor(s): B. Ratliff
Prerequisite(s): Corequisite: Concurrent enrollment in CHEM 22200
Note(s): CHEM 00220 and CHEM 00221 are not prerequisites for this course.

CHEM 10100-10200-11300. Introductory General Chemistry I-II; Comprehensive General Chemistry III.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. The first two courses in this sequence meet the general education requirement in the physical sciences. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300.

CHEM 10100. Introductory General Chemistry I. 100 Units.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300. Prerequisite(s): Enrollment limited to first-year students
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
Instructor(s): B. Ratliff. L: M. Zhao. Terms Offered: Autumn
Prerequisite(s): Enrollment limited to first-year students
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 10200. Introductory General Chemistry II. 100 Units.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300. Prerequisite(s): Enrollment limited to first-year students
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
Instructor(s): B. Ratliff. L: M. Zhao. Terms Offered: Winter
Prerequisite(s): Enrollment limited to first-year students
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
CHEM 11100. Comprehensive General Chemistry I. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300.
Instructor(s): Y. Weizmann, L. Yu. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 11200. Comprehensive General Chemistry II. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. This three-quarter sequence is a comprehensive survey of modern descriptive, inorganic, and physical chemistry for students with a good secondary school exposure to general chemistry. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Attendance at one discussion session per week and laboratory sessions is required.
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 11300. Comprehensive General Chemistry III. 100 Units.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300.
Instructor(s): Y. Weizmann, L. Yu. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
CHEM 11300. Comprehensive General Chemistry III. 100 Units.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300.
Instructor(s): Y. Weizmann, L. Yu. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 11200. Comprehensive General Chemistry II. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. This three-quarter sequence is a comprehensive survey of modern descriptive, inorganic, and physical chemistry for students with a good secondary school exposure to general chemistry. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Attendance at one discussion session per week and laboratory sessions is mandatory. Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
Instructor(s): N. Scherer, A. Tokmakoff. L: M. Zhao. Terms Offered: Winter
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 11300. Comprehensive General Chemistry III. 100 Units.
This three-quarter sequence is a systematic introduction to chemistry for beginning students in chemistry or for those whose exposure to the subject has been moderate. We cover atomic and molecular theories, chemical periodicity, chemical reactivity and bonding, chemical equilibria, acid-base equilibria, solubility equilibria, phase equilibria, thermodynamics, electrochemistry, kinetics, quantum mechanics, and nuclear chemistry. Examples are drawn from chemical, biological, and materials systems. The laboratory portion includes an introduction to quantitative measurements, investigation of the properties of the important elements and their compounds, and experiments associated with the common ions and their separation and identification. Apart from one discussion session per week and a laboratory component, special emphasis on scientific problem-solving skills is made through two additional structured learning sessions per week devoted to quantitative reasoning. Attendance at discussion, structured learning, and laboratory sessions is mandatory. FOR THE THIRD (SPRING) QUARTER OF THE SEQUENCE, STUDENTS WILL ENROLL IN CHEM 11300.
Instructor(s): Y. Weizmann, L. Yu. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the mathematics/calculus and chemistry placement tests
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 12100-12200-12300. Honors General Chemistry I-II-III.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. The subject matter and general program of this sequence is similar to that of the Comprehensive General Chemistry sequence. However, this accelerated course on the subject matter is designed for students deemed well prepared for a thorough and systematic study of chemistry. Introductory materials covered in the Comprehensive General Chemistry sequence are not part of the curriculum for this sequence; instead, special topics are included in each quarter to provide an in-depth examination of various subjects of current interest in chemistry. Attendance at one discussion session per week and laboratory sessions is required.

CHEM 12100. Honors General Chemistry I. 100 Units.
No description available
Instructor(s): S. Sibener. L: M. Zhao Terms Offered: Autumn
Prerequisite(s): Good performance on the chemistry placement test or a score of 5 on the AP chemistry test
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.
CHEM 12200. Honors General Chemistry II. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. The subject matter and general program of this sequence is similar to that of the Comprehensive General Chemistry sequence. However, this accelerated course on the subject matter is designed for students deemed well prepared for a thorough and systematic study of chemistry. Introductory materials covered in the Comprehensive General Chemistry sequence are not part of the curriculum for this sequence; instead, special topics are included in each quarter to provide an in-depth examination of various subjects of current interest in chemistry. Attendance at one discussion session per week and laboratory sessions is required.
Instructor(s): K.Y.C. Lee. L: M. Zhao Terms Offered: Winter
Prerequisite(s): Good performance on the chemistry placement test or a score of 5 on the AP chemistry test
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 12300. Honors General Chemistry III. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. The subject matter and general program of this sequence is similar to that of the Comprehensive General Chemistry sequence. However, this accelerated course on the subject matter is designed for students deemed well prepared for a thorough and systematic study of chemistry. Introductory materials covered in the Comprehensive General Chemistry sequence are not part of the curriculum for this sequence; instead, special topics are included in each quarter to provide an in-depth examination of various subjects of current interest in chemistry. Attendance at one discussion session per week and laboratory sessions is required.
Instructor(s): B. Roux. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the chemistry placement test or a score of 5 on the AP chemistry test
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 12200. Honors General Chemistry II. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. The subject matter and general program of this sequence is similar to that of the Comprehensive General Chemistry sequence. However, this accelerated course on the subject matter is designed for students deemed well prepared for a thorough and systematic study of chemistry. Introductory materials covered in the Comprehensive General Chemistry sequence are not part of the curriculum for this sequence; instead, special topics are included in each quarter to provide an in-depth examination of various subjects of current interest in chemistry. Attendance at one discussion session per week and laboratory sessions is required.
Instructor(s): K.Y.C. Lee. L: M. Zhao Terms Offered: Winter
Prerequisite(s): Good performance on the chemistry placement test or a score of 5 on the AP chemistry test
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 12300. Honors General Chemistry III. 100 Units.
Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences. The subject matter and general program of this sequence is similar to that of the Comprehensive General Chemistry sequence. However, this accelerated course on the subject matter is designed for students deemed well prepared for a thorough and systematic study of chemistry. Introductory materials covered in the Comprehensive General Chemistry sequence are not part of the curriculum for this sequence; instead, special topics are included in each quarter to provide an in-depth examination of various subjects of current interest in chemistry. Attendance at one discussion session per week and laboratory sessions is required.
Instructor(s): B. Roux. L: M. Zhao Terms Offered: Spring
Prerequisite(s): Good performance on the chemistry placement test or a score of 5 on the AP chemistry test
Note(s): Enrollment by placement only. The first two courses in this sequence meet the general education requirement in the physical sciences.

CHEM 20100-20200. Inorganic Chemistry I-II.
The extraordinarily diverse chemistry of the elements is organized in terms of molecular structure, electronic properties, and chemical reactivity. CHEM 20100 concentrates on structure and bonding, solid state chemistry, and selected topics in the chemistry of the main group elements and coordination chemistry. CHEM 20200 focuses on organometallic chemistry, reactions, synthesis, and catalysis, as well as bioinorganic chemistry.

CHEM 20100. Inorganic Chemistry I. 100 Units.
No description available.
Instructor(s): J. Anderson Terms Offered: Winter
Prerequisite(s): CHEM 11100-11200-11300 or equivalent, CHEM 22000 and CHEM 22100, or concurrent enrollment in CHEM 22100 or equivalent.
CHEM 20200. Inorganic Chemistry II. 100 Units.
The extraordinarily diverse chemistry of the elements is organized in terms of molecular structure, electronic properties, and chemical reactivity. CHEM 20100 concentrates on structure and bonding, solid state chemistry, and selected topics in the chemistry of the main group elements and coordination chemistry. CHEM 20200 focuses on organometallic chemistry, reactions, synthesis, and catalysis, as well as bioinorganic chemistry.
Instructor(s): R. Jordan Terms Offered: Spring
Prerequisite(s): CHEM 20100 and CHEM 22200

CHEM 20200. Inorganic Chemistry II. 100 Units.
The extraordinarily diverse chemistry of the elements is organized in terms of molecular structure, electronic properties, and chemical reactivity. CHEM 20100 concentrates on structure and bonding, solid state chemistry, and selected topics in the chemistry of the main group elements and coordination chemistry. CHEM 20200 focuses on organometallic chemistry, reactions, synthesis, and catalysis, as well as bioinorganic chemistry.
Instructor(s): R. Jordan Terms Offered: Spring
Prerequisite(s): CHEM 20100 and CHEM 22200

CHEM 22000-22100-22200. Organic Chemistry I-II-III.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.

CHEM 22000. Organic Chemistry I. 100 Units.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.
Instructor(s): S. Kozmin; L: V. Keller Terms Offered: Autumn
Prerequisite(s): An average grade of C or higher in CHEM 10100-10200-11300 or CHEM 11100-11200-11300 or CHEM 12100-12200-12300, or consent of the Dept.; lab and discussion linked.

CHEM 22100. Organic Chemistry II. 100 Units.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.
Instructor(s): B. Dickinson. L: V. Keller Terms Offered: Winter
Prerequisite(s): An average grade of C or higher in CHEM 10100-10200-10300 or CHEM 11100-11200-11300 or CHEM 12100-12200-12300, a 5 on the AP Chemistry exam, or consent of the department
Note(s): (Students who receive a grade of B+ or higher in CHEM 22000 have the option of moving into honors organic chemistry for Winter/Spring. See following listing for CHEM 23100-23200.) NOTE: Most medical schools require a full academic year of organic chemistry. A lab is one afternoon a week in addition to scheduled class time each quarter.

CHEM 22200. Organic Chemistry III. 100 Units.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.
Instructor(s): R. Moellering. L: V. Keller Terms Offered: Spring
Prerequisite(s): An average grade of C or higher in CHEM 10100-10200-10300 or CHEM 11100-11200-11300 or CHEM 12100-12200-12300, a 5 on the AP Chemistry exam, or consent of the department
Note(s): (Students who receive a grade of B+ or higher in CHEM 22000 have the option of moving into honors organic chemistry for Winter/Spring. See following listing for CHEM 23100-23200.) NOTE: Most medical schools require a full academic year of organic chemistry. A lab is one afternoon a week in addition to scheduled class time each quarter.
CHEM 22100. Organic Chemistry II. 100 Units.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.
Instructor(s): B. Dickinson. L: V. Keller Terms Offered: Winter
Prerequisite(s): An average grade of C or higher in CHEM 10100-10200-10300 or CHEM 11100-11200-11300 or CHEM 12100-12200-12300, a 5 on the AP Chemistry exam, or consent of the department
Note(s): (Students who receive a grade of B+ or higher in CHEM 22000 have the option of moving into honors organic chemistry for Winter/Spring. See following listing for CHEM 23100-23200. NOTE: Most medical schools require a full academic year of organic chemistry. A lab is one afternoon a week in addition to scheduled class time each quarter.

CHEM 22200. Organic Chemistry III. 100 Units.
The fundamental structures of organic molecules and the spectroscopic methods used to define them are studied. A comprehensive understanding of the reactions and properties of organic molecules (from kinetic, thermodynamic, and mechanistic viewpoints) is developed and applied to the synthesis of organic compounds and to an appreciation of nature's important molecules.
Instructor(s): R. Moellering. L: V. Keller Terms Offered: Spring
Prerequisite(s): An average grade of C or higher in CHEM 10100-10200-10300 or CHEM 11100-11200-11300 or CHEM 12100-12200-12300, a 5 on the AP Chemistry exam, or consent of the department
Note(s): Students who receive a grade of B+ or higher in CHEM 22000 have the option of moving into honors organic chemistry for Winter/Spring. See following listing for CHEM 23100-23200.) NOTE: Most medical schools require a full academic year of organic chemistry. A lab is one afternoon a week in addition to scheduled class time each quarter.

CHEM 22700. Advanced Organic/Inorganic Laboratory. 100 Units.
This course combines a project approach with exposure to the more advanced techniques of organic and inorganic chemistry. Multistep synthesis, the synthesis of air-sensitive compounds, advanced chromatographic and spectroscopic characterization of products, and the handling of reactive intermediates are a part of the lab.
Instructor(s): M. Hopkins Terms Offered: Spring
Prerequisite(s): CHEM 20100 and 23300, or consent of instructor
Note(s): Consent required. Priority given to 4th and then 3rd year Chemistry/Biochemistry majors. Students in other majors will be considered only if the course has not met capacity by the start of the term.

CHEM 23300. Intermediate Organic Chemistry. 100 Units.
Proteins are the dominant natural products of the 21st century. This course will explore the organic chemistry of protein molecules: their chemical structure and biological functions, protein biosynthesis, intein-mediated protein splicing, and the use of chemistry to probe the molecular basis of the remarkable properties of proteins and enzymes.
Instructor(s): S. Kent Terms Offered: Autumn
Prerequisite(s): A grade of C or higher in CHEM 22200 or 23200, or consent of instructor

CHEM 26100-26200-26300. Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics.
This three-quarter sequence studies the application of physical and mathematical methods to the investigation of chemical systems.

CHEM 26100. Quantum Mechanics. 100 Units.
This three-quarter sequence studies the application of physical and mathematical methods to the investigation of chemical systems. This course presents quantum mechanics, the Schrödinger wave equation with exact and approximate methods of solution, angular momentum, and atomic spectra and structure.
Instructor(s): D. Mazziotti Terms Offered: Autumn
Prerequisite(s): CHEM 11300 or equivalent; MATH 20100 and PHYS 13300

CHEM 26200. Thermodynamics. 100 Units.
This course continues the sequence with the study of thermodynamic principles and applications, as well as statistical mechanics.
Instructor(s): S. Vaikuntanathan Terms Offered: Winter
Prerequisite(s): CHEM 11300 or equivalent; MATH 20100 and PHYS 13300

CHEM 26300. Chemical Kinetics and Dynamics. 100 Units.
This course is a discussion of chemical kinetics and dynamics for processes in gases, in liquids, and at interfaces.
Instructor(s): T. Berkelbach Terms Offered: Spring
Prerequisite(s): CHEM 11300 or equivalent; MATH 20100 and PHYS 13300
CHEM 26200. Thermodynamics. 100 Units.
This course continues the sequence with the study of thermodynamic principles and applications, as well as statistical mechanics.
Instructor(s): S. Vaikuntanathan Terms Offered: Winter
Prerequisite(s): CHEM 11300 or equivalent; MATH 20100 and PHYS 13300

CHEM 26300. Chemical Kinetics and Dynamics. 100 Units.
This course is a discussion of chemical kinetics and dynamics for processes in gases, in liquids, and at interfaces.
Instructor(s): T. Berkelbach Terms Offered: Spring
Prerequisite(s): CHEM 11300 or equivalent; MATH 20100 and PHYS 13300

CHEM 26700. Experimental Physical Chemistry. 100 Units.
This course introduces the principles and practice of physical chemical measurements. Techniques used in the design and construction of apparatus are discussed in lectures, and practice is provided through lab exercises and experiments. Subjects covered include vacuum techniques, electronics, optics, use of computers in lab instrumentation, materials of construction, and data analysis.
Instructor(s): J. Park Terms Offered: Winter
Prerequisite(s): CHEM 26100

CHEM 26800. Computational Chemistry and Biology. 100 Units.
The theme for this course is the identification of scientific goals that computation can assist in achieving. We examine problems such as understanding the electronic structure and bonding in molecules, interpreting the structure and thermodynamic properties of liquids, protein folding, enzyme catalysis, and bioinformatics. The lectures deal with aspects of numerical analysis and with the theoretical background relevant to calculations of the geometric and electronic structure of molecules, molecular mechanics, molecular dynamics, and Monte Carlo simulations. The lab consists of computational problems drawn from a broad range of chemical and biological interests.
Instructor(s): G. Voth Terms Offered: Spring
Prerequisite(s): CHEM 26100-26200, or PHYS 19700 and 23400

CHEM 29600. Research in Chemistry. 000 Units.
Students conduct advanced, individually-guided research. Students must submit a written report covering their research activities to the undergraduate counselor. Because this is a 000 credit course, it may be taken as a fifth course without additional charge. Prerequisite(s): Consent of a faculty sponsor and/or the undergraduate counselor
Note(s): Graded P/F; Students are required to submit the College Reading/Research Course Form
Instructor(s): K.Y.C. Lee Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of a faculty sponsor and/or the undergraduate counselor
Note(s): Graded P/F; Students are required to submit the College Reading/Research Course Form

CHEM 29900. Advanced Research in Chemistry. 100 Units.
Students conduct advanced, individually guided research. Students may submit a written report covering their research activities for consideration for departmental honors.
Instructor(s): Staff Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of a faculty sponsor and the undergraduate counselor
Note(s): Open only to students majoring in chemistry who are eligible for honors. Available for either quality grades or for P/F grading. Students are required to submit the College Reading and Research Course Form.

CHEM 30100. Advanced Inorganic Chemistry. 100 Units.
Group theory and its applications in inorganic chemistry are developed. These concepts are used in surveying the chemistry of inorganic compounds from the standpoint of quantum chemistry, chemical bonding principles, and the relationship between structure and reactivity.
Instructor(s): W. Lin Terms Offered: Autumn
Prerequisite(s): CHEM 20100 and CHEM 26100

CHEM 30200. Synthesis and Physical Methods in Inorganic Chemistry. 100 Units.
This course covers theoretical and practical aspects of important physical methods for the characterization of inorganic molecules. Topics may include NMR, IR, RAMAN, EPR, and electronic and photoelectron spectroscopy; electrochemical methods; and single-crystal X-ray diffraction.
Instructor(s): W. Lin Terms Offered: Winter
Prerequisite(s): CHEM 30100

CHEM 30400. Organometallic Chemistry. 100 Units.
This course covers preparation and properties of organometallic compounds (notably those of the transition elements, their reactions, and the concepts of homogeneous catalysis).
Instructor(s): J. Lewis Terms Offered: Autumn
Prerequisite(s): CHEM 20100
CHEM 30500. Nanoscale Materials. 100 Units.
This course provides an overview of nanoscale phenomena in metals, semiconductors, and magnetic materials (e.g., the fundamental aspects of quantum confinement in semiconductors and metals, superparamagnetism in nanoscale magnets, electronic properties of nanowires and carbon nanotubes, surface plasmon resonances in nanomaterials, photonic crystals). Special attention is paid to preparative aspects of nanomaterials, colloidal and gas-phase syntheses of nanoparticles, nanowires, and nanotubes. Engineered nanomaterials and their assemblies are considered promising candidates for a variety of applications, from solar cells, electronic circuits, light-emitting devices, and data storage to catalysts, biological tags, cancer treatments, and drug delivery. The course covers state-of-the-art in these and other areas. Finally, the course provides an overview of the experimental techniques used for structural characterization of inorganic nanomaterials (e.g., electron microscopy, X-ray diffractometry, small-angle X-ray scattering, STM, AFM, Raman spectroscopy).
Instructor(s): B. Tian
Prerequisite(s): CHEM 20200 and 26300, or consent of instructor

CHEM 30600. Chemistry Of The Elements and Materials. 100 Units.
This course surveys the descriptive chemistries of the main-group elements and the transition metals from a synthetic perspective, and reaction chemistry of inorganic molecules is systematically developed.
Instructor(s): J. Anderson Terms Offered: Winter
Prerequisite(s): CHEM 20100

CHEM 30900. Bioinorganic Chemistry. 100 Units.
This course covers various roles of metals in biology. Topics include coordination chemistry of bioinorganic units, substrate binding and activation, electron-transfer proteins, atom and group transfer chemistry, metal homeostasis, ion channels, metals in medicine, and model systems.
Instructor(s): C. He Terms Offered: Spring
Prerequisite(s): CHEM 22020 and 22200/23200

CHEM 32100. Physical Organic Chemistry I. 100 Units.
This course focuses on the quantitative aspects of structure and reactivity, molecular orbital theory, and the insight it provides into structures and properties of molecules, stereochemistry, thermochemistry, kinetics, substituent and isotope effects, and pericyclic reactions.
Instructor(s): L. Yu Terms Offered: Autumn
Prerequisite(s): CHEM 22200/23200 and 26200, or consent of instructor

CHEM 32200. Organic Synthesis and Structure. 100 Units.
This course considers the mechanisms, applicability, and limitations of the major reactions in organic chemistry, as well as of stereochemical control in synthesis.
Instructor(s): G. Dong Terms Offered: Autumn
Prerequisite(s): CHEM 22200/23200 or consent of instructor

CHEM 32300. Strategies and Tactics of Organic Synthesis. 100 Units.
This course discusses the important classes for organic transformation. Topics include carbon-carbon bond formation; oxidation; and reduction using a metal, non-metal, or acid-base catalyst. We also cover design of the reagents and the scope and limitation of the processes.
Instructor(s): S. Snyder Terms Offered: Winter
Prerequisite(s): CHEM 22200/23200 or consent of instructor

CHEM 32400. Physical Organic Chemistry II. 100 Units.
Topics covered in this course include the mechanisms and fundamental theories of free radicals and the related free radical reactions, biradical and carbene chemistry, and pericyclic and photochemical reactions.
Instructor(s): Staff
Prerequisite(s): CHEM 32100

CHEM 32500. Bioorganic Chemistry. 100 Units.
A goal of this course is to relate chemical phenomena with biological activities. We cover two main areas: (1) chemical modifications of biological macromolecules and their potential effects; and (2) the application of spectroscopic methods to elucidate the structure and dynamics of biologically relevant molecules.
Equivalent Course(s): BCMB 32500

CHEM 33000. Complex Chemical Systems. 100 Units.
This course describes chemical systems in which nonlinear kinetics lead to unexpected (emergent) behavior of the system. Autocatalytic and spatiotemporal pattern forming systems are covered, and their roles in the development and function of living systems are discussed.
Instructor(s): Staff
Prerequisite(s): CHEM 22200/23200 and MATH 20100, or consent of instructor

CHEM 33100. New Synthetic Reactions and Catalysts. 100 Units.
This course presents recent highlights of new synthetic reactions and catalysts for efficient organic synthesis. Mechanistic details and future possibilities are discussed.
Instructor(s): Staff
Prerequisite(s): CHEM 23300
CHEM 33200-33300. Chemical Biology I-II.
This course emphasizes the concepts of physical organic chemistry (e.g., mechanism, molecular orbital theory, thermodynamics, kinetics) in a survey of modern research topics in chemical biology. Topics, which are taken from recent literature, include the roles of proteins in signal transduction pathways, the biosynthesis of natural products, strategies to engineer cells with novel functions, the role of spatial and temporal inhomogeneities in cell function, and organic synthesis and protein engineering for the development of molecular tools to characterize cellular activities.

CHEM 33200. Chemical Biology I. 100 Units.
This course focuses on the applications of fundamental chemical principles and methods to measure, perturb, and control biological systems, through a critical analysis of both classic and recent literature.
Instructor(s): B. Dickinson Terms Offered: Autumn
Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

CHEM 33300. Chemical Biology II. 100 Units.
Instructor(s): R. Moellering Terms Offered: Winter
Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

CHEM 33300. Chemical Biology II. 100 Units.
Instructor(s): R. Moellering Terms Offered: Winter
Prerequisite(s): Basic knowledge of organic chemistry and biochemistry

CHEM 33500. Chemistry of Enzyme Catalysis. 100 Units.
The course will cover a series of topics illustrating and exploring aspects of the chemistry of enzyme catalysis, and will use case studies based on the primary scientific literature—both classic and current papers. For each class, there will be primary scientific papers assigned that the student will be expected to have studied in depth prior to class, including “reading around” on the same and related topics; suggestions for supplementary reading will be given. Classes will be conducted as discussion sessions; guided by the Instructor—all students will be expected to be prepared to answer questions from the instructor, and to take active part in class discussions. Participation in class will count for a portion of the grade for each student.
Instructor(s): Jared Lewis Terms Offered: Winter
Prerequisite(s): CHEM 23300

CHEM 33600. Biological Chemistry of Materials: Principles and Applications. 100 Units.
Instructor(s): Yossi Weizmann Terms Offered: Winter
Prerequisite(s): CHEM 23300 or consent of instructor

CHEM 33700. RNA Structure, Function, and Biology. 100 Units.
Students will learn principles of RNA structure and function, RNA catalysis, and RNA molecular cell biology as they relate to the field of RNA metabolism. In recent years it has become apparent that much of an organisms genome is transcribed, yielding a far more expansive collection of RNA molecules than previously thought: many of these RNAs are classic messenger RNAs that code for proteins but many serve functions other than protein coding (noncoding RNAs). These RNAs are processed, modified, and usually interact with RNA binding proteins (RBPs) to form ribonucleoprotein (RNP) complexes. We will consider emerging themes in noncoding RNA biology and investigate methods for interrogating their cellular structure and function.
Instructor(s): Prof. Joseph Piccirilli Terms Offered: Spring

CHEM 33800. Organotransition Metal Chemistry. 100 Units.
Transition-metal catalysis becomes one of the most important tools in organic synthesis. In this course, we will start to review the fundamental knowledge in organo-transition metal chemistry, such as bonding, coordination chemistry of metal-ligand complexes, in detail. The main focus will be the basic elementary reactions of organometallic complexes, such as oxidative addition, migratory insertion, reductive elimination etc. Lastly, we will study the subject of catalysis, and examine various catalytic transformations through the course.

CHEM 36100. Wave Mechanics and Spectroscopy. 100 Units.
This course presents the introductory concepts, general principles, and applications of wave mechanics to spectroscopy.
Instructor(s): T. Berkelbach Terms Offered: Autumn
Prerequisite(s): CHEM 26300
CHEM 36200. Quantum Mechanics. 100 Units.  
This course builds upon the concepts introduced in CHEM 36100 with greater detail provided for the role of quantum mechanics in chemical physics.  
Instructor(s): D. Mazziotti  
Terms Offered: Winter  
Prerequisite(s): CHEM 36100

CHEM 36300. Statistical Thermodynamics. 100 Units.  
This course covers the thermodynamics and introductory statistical mechanics of systems at equilibrium.  
Instructor(s): S. Vaikuntanathan  
Terms Offered: Autumn  
Prerequisite(s): CHEM 26100-26200

CHEM 36400. Advanced Statistical Mechanics. 100 Units.  
Topics covered in this course may include statistics of quantum mechanical systems, weakly and strongly interacting classical systems, phase transitions and critical phenomena, systems out of equilibrium, and polymers.  
Instructor(s): G. Voth  
Terms Offered: Winter  
Prerequisite(s): CHEM 36300 or equivalent

CHEM 36500. Chemical Dynamics. 100 Units.  
This course develops a molecular-level description of chemical kinetics, reaction dynamics, and energy transfer in both gases and liquids. Topics include potential energy surfaces, collision dynamics and scattering theory, reaction rate theory, collisional and radiationless energy transfer, molecule-surface interactions, Brownian motion, time correlation functions, and computer simulations.  
Instructor(s): N. Scherer  
Terms Offered: Spring  
Prerequisite(s): CHEM 36100 required; 36300 recommended

CHEM 37100. Advanced Spectroscopies. 100 Units.  
This linear and nonlinear spectroscopy course includes notions on matter-radiation interaction, absorption, scattering, and oscillator strength. They are applied mostly with the optical range, but we briefly touch upon microwave (NMR, ESR) and X-rays at the extreme. We cover nonlinear optical processes such as coherent Raman, harmonic, and sum-frequency; induced transparency; slow light; and X-ray generation. We also cover coherent and incoherent dynamical probes, such as pump-probe, echos, and two-dimensional spectroscopy.  
Instructor(s): P. Guyot-Sionnest  
Terms Offered: Winter

CHEM 37300. Advanced Special Topics in Theory and Computation. 100 Units.  
This course introduces topics in theoretical and computational chemistry beyond those in the traditional graduate physical chemistry sequence. Specific topics will vary from year to year based on the interests of the instructor and students. Representative topics are diagrammatic methods, field theories, renormalization, nonequilibrium statistical mechanics, and quantum dynamics.  
Instructor(s): Aaron Dinner  
Terms Offered: Spring

CHEM 38700. Biophysical Chemistry. 100 Units.  
This course develops a physicochemical description of biological systems. Topics include macromolecules, fluid-phase lipid-bilayer structures in aqueous solution, biomembrane mechanics, control of biomolecular assembly, and computer simulations of biomolecular systems.  
Instructor(s): A. Tokmakoff  
Terms Offered: Spring  
Prerequisite(s): CHEM 23500, CHEM 26200.

CHEM 39000. Materials Chemistry I. 100 Units.  
This course is an introduction to modern materials chemistry. It covers basic chemistry and physics of condensed systems, such as solids, polymers, and nanomaterials. The electronic structure of metals, semiconductors and magnetically ordered phases will be discussed. We will review optical and electronic properties of different classes of materials using examples of hard and soft condensed matter systems and drawing structure-property relationships for conventional solids, polymers, and nanomaterials. Finally, the course will cover the fundamentals of surface science and material synthesis, applying modern understanding of nucleation and growth phenomena.  
Instructor(s): Prof. Dmitri Talapin  
Terms Offered: Autumn  
Prerequisite(s): CHEM 26100, CHEM 26200, and CHEM 26300, or equivalent
CHEM 39100. Materials Chemistry II. 100 Units.
This course will focus on the physical properties and kinetics of materials. The chemically-enabled properties of many different materials will be described, including linear and nonlinear elasticity, piezoelectricity, magnetic phenomena, diffusion and other transport properties, nonlinear optical properties, linear and nonlinear acoustic wave phenomena, and biological impacts. Selected applications associated with these properties will be included. Additionally, the course will discuss complex motion of dislocations and interfaces, morphological evolution, and phase transformations in materials synthesis.
Instructor(s): Prof. Bozhi Tian Terms Offered: Spring
Prerequisite(s): CHEM 26100 and CHEM 26300 or equivalent
CINEMA AND MEDIA STUDIES

Department Website: http://cms.uchicago.edu

PROGRAM OF STUDY

The major program in Cinema and Media Studies provides a framework within which students can approach the history of film and related media from a variety of historical, critical, and theoretical perspectives. Focusing on the study of the moving image, as well as sound, the program enables students to analyze how cinema creates meanings through particular forms, techniques, and styles; how industrial organization affects the way films are produced and received; and how the social context in which they are made and circulated influences our understanding of the medium.

At the same time, the goal is to situate the cinema and related media in broader contexts: modernity, modernism, and the avant-garde; narrative theory, poetics, and rhetoric; commercial entertainment forms and consumer culture; sexuality and gender; constructions of ethnic, racial, and national identities; and international media production and circulation.

Students focusing their studies in Cinema and Media Studies major will be trained in critical, formal, theoretical, and historical thinking and analysis. The curriculum fosters discussion and writing skills, and students will gain the tools to approach film history as well as today's media environment within specific cultural contexts and broad transnational perspectives.

MAJOR PROGRAM IN CINEMA AND MEDIA STUDIES

Students wishing to major in Cinema and Media Studies should meet with the Director of Undergraduate Studies early in their second year to help construct their course plan going forward; this meeting should take place by the end of Spring Quarter of a student's second year. Participation in the major must be declared to the Director of Undergraduate Studies, and the subsequent approved paperwork will be sent to the student's College adviser for official registration.

The major in Cinema and Media Studies consists of twelve courses—four required courses and eight electives—and the completion of a BA research paper. The following four (4) courses are required:

CMST 10100 Introduction to Film Analysis: This course provides an introduction to the basic concepts of film analysis. It should be completed before other Cinema and Media Studies courses; it must be completed before other required courses.

CMST 28500-28600 History of International Cinema I-II: This required two-quarter sequence covers the silent era (CMST 28500 History of International Cinema I: Silent Era) and the sound era to 1960 (CMST 28600 History of International Cinema II: Sound Era to 1960), as well as major characteristics and developments of each. It is typically taught in Autumn and Winter Quarters. It should be completed by the end of the third year.

CMST 29800 Senior Colloquium: In Autumn Quarter of their fourth year, students must participate in a Senior Colloquium that helps them conceptualize their BA research paper and address more advanced questions of methodology and theory. There are additional stipulations for those pursuing a Creative BA; see BA Research Paper for details. Note: Students are also required to register for CMST 29900 B.A. Essay: CMST during their final year in the College, preferably during the quarter they intend to graduate. This is a zero-unit course, but enrollment ensures that a thesis grade will appear on the student's transcript.

Elective Courses

Of the eight (8) remaining courses, five (5) must either originate in or be cross-listed with Cinema and Media Studies. Students must receive prior approval of the five courses that they choose from the Director of Undergraduate Studies, and they are encouraged to consider broad survey courses as well as those with more focused topics (e.g., courses devoted to a single genre, director, or national cinema). The Major Course Agreement Form is to be signed by the Director of Undergraduate Studies by fourth week of Autumn Quarter of the student's third year and is available on the Cinema and Media Studies website. (https://cms.uchicago.edu/undergraduate/requirements)

Although the other three (3) electives may be taken outside Cinema and Media Studies, students must demonstrate their relevance to the study of cinema. For example, a group of courses could focus on traditional disciplines (e.g., history, anthropology/ethnography, philosophy); subfields within area studies (e.g., East Asian, African American, Jewish studies); art forms and media (e.g., art history, theater, opera); or cross-disciplinary topics or sets of problems (e.g., the urban environment, violence and pornography, censorship, concepts of the public sphere). A Further Electives Form explaining the choice of outside electives must be submitted to the Director of Undergraduate Studies for approval.

Cinema and Media Studies courses eligible for the general education requirement in the arts (CMST 14400 Film and the Moving Image; CMST 14500-14599) may not be used to satisfy requirements in the Cinema and Media Studies major or minor.
BA Research Paper

Before the seventh week of Spring Quarter of the third year, students meet with the Director of Undergraduate Studies to discuss the focus of their required BA project. Students should try to begin reading and research during Summer Quarter. Students must enroll in CMST 29800 Senior Colloquium during the Autumn Quarter of their fourth year. By the end of week four of Autumn Quarter, students select a project advisor and prepare to present an outline of their project to the Senior Colloquium. Writing and revising take place during Winter Quarter. All students are required to register for the zero-unit course CMST 29900 B.A. Essay: CMST during the academic year in which they plan to graduate from the College. The final version is due by fourth week of the quarter the student intends to graduate.

The BA research paper typically consists of a substantial essay that engages a research topic in the history, theory, and criticism of film and/or other media. A creative project in film or video production supplemented by an essay (the Creative BA Option, outlined below) is sometimes an option, contingent on faculty approval.

Creative BA Option: To be considered for this option, the student will submit a written proposal to the Director of Undergraduate Studies by the seventh week of Spring Quarter of the third year. Priority will be given to students who have completed three production courses (two [2] of which must originate in Cinema and Media Studies) by the end of Autumn Quarter of their fourth year. These courses should be used to fulfill the electives in the Cinema and Media Studies major; two (2) of the courses must be taken by the end of the student's third year—a third production course may only be taken during Autumn Quarter of fourth year.

In addition to enrollment in CMST 29800 Senior Colloquium during the Autumn Quarter of the fourth year, students who supplement their BA thesis project with film or video work are required to enroll in the CMST 23905 Creative Thesis Workshop during Winter Quarter of fourth year. The Creative Thesis Workshop may not be counted toward distribution requirements for the major—it will serve as general elective credit only. All students are required to register for the zero-unit course CMST 29900 B.A. Essay: CMST during the academic year they plan to graduate from the College.

SUMMARY OF REQUIREMENTS: MAJOR IN CINEMA AND MEDIA STUDIES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CMST 10100</td>
<td>Introduction to Film Analysis</td>
<td>100</td>
</tr>
<tr>
<td>CMST 28500-28600</td>
<td>History of International Cinema I-II</td>
<td>200</td>
</tr>
<tr>
<td>CMST 29800</td>
<td>Senior Colloquium §</td>
<td>100</td>
</tr>
<tr>
<td>Five electives originating in or cross-listed with Cinema and Media Studies †</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Three electives relevant to the study of cinema †</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>CMST 29900</td>
<td>B.A. Essay: CMST</td>
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</tbody>
</table>

Total Units 1200

§ Students with permission to pursue the Creative BA Thesis Project are required to enroll in CMST 23905 Creative Thesis Workshop during Winter Quarter of fourth year. This course does not count towards major requirements.

† Students must submit a Major Course Agreement Form (and a Further Electives Form if necessary) to the Director of Undergraduate Studies for approval before a major can be officially declared.

GRADING

Students majoring in Cinema and Media Studies must receive a quality grade in all courses required for the major. With prior consent of the instructor, non-majors may take Cinema and Media Studies courses for P/F grading.

HONORS

Students who have earned an overall GPA of 3.25 or higher and a major GPA of 3.5 or higher are eligible for honors. To receive honors, students must also write a BA research paper that shows exceptional intellectual and/or creative merit in the judgment of the first and the second readers, the Director of Undergraduate Studies, and the Master of the Humanities Collegiate Division.

ADVISING

A course agreement form to be signed by the Director of Undergraduate Studies by fourth week of Autumn Quarter of the student’s third year is required to obtain approval of the five elective courses that must either originate in or be cross listed with Cinema and Media Studies. A form to be signed by the Director of Undergraduate Studies by fourth week of Winter Quarter of the student’s fourth year is required to obtain approval of the three additional elective courses. Both forms are available on the CMS website at cms.uchicago.edu.

STUDY ABROAD

The College’s Winter Quarter Cinema and Media Studies program in Paris provides undergraduate students with an opportunity to explore the study of film and related media at the University of Chicago Center in Paris. The program includes two courses that can be used toward the College’s general education requirement.
in the arts, while the third course may be used as either an elective or within the Cinema and Media Studies major. The first two courses may also be eligible for credit within the Cinema and Media Studies major if the general education requirement in the arts has already been fulfilled and with approval from the Director of Undergraduate Studies in Cinema and Media Studies. Program participants also take a French language course. For more information or to apply, visit the Study Abroad website (http://study-abroad.uchicago.edu/programs/paris-cinema-and-media-studies).

MINOR PROGRAM IN CINEMA AND MEDIA STUDIES

The minor in Cinema and Media Studies requires the completion of six courses, the first of which should be CMST 10100 Introduction to Film Analysis. Student should aim to take this course early in their undergraduate career or at the beginning of their minor course of study. It must be taken no later than Spring Quarter of a student's third year.

Sample Minor Program: Cinema and Media Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 10100</td>
<td>Introduction to Film Analysis</td>
<td>100</td>
</tr>
<tr>
<td>CMST 28500</td>
<td>History of International Cinema I: Silent Era</td>
<td>100</td>
</tr>
<tr>
<td>CMST 28600</td>
<td>History of International Cinema II: Sound Era to 1960</td>
<td>100</td>
</tr>
<tr>
<td>CMST 23404</td>
<td>French Cinema of the 20's and 30's</td>
<td>100</td>
</tr>
<tr>
<td>CMST 28202</td>
<td>Contemporary Documentary</td>
<td>100</td>
</tr>
<tr>
<td>CMST 28002</td>
<td>Sound in the Cinema</td>
<td>100</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>

Students who elect the minor program in Cinema and Media Studies must meet with the Director of Undergraduate Studies to declare their intention to complete the minor and to select courses. The approved Minor Program Agreement Form will be sent to the student's College adviser by the Cinema and Media Studies Department Administrator once it has been signed by the Director of Undergraduate Studies. Approval forms can be obtained from the Director of Undergraduate Studies, the Cinema and Media Studies Administrator (Classics 304), or the department's website (http://cms.uchicago.edu).

Courses in the minor (1) may not be double-counted with the student's major(s) or with other minors; and (2) may not be counted toward general education requirements. All classes toward the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

CINEMA AND MEDIA STUDIES COURSES

**CMST 10100. Introduction to Film Analysis. 100 Units.**

This course introduces basic concepts of film analysis, which are discussed through examples from different national cinemas, genres, and directorial oeuvres. Along with questions of film technique and style, we consider the notion of the cinema as an institution that comprises an industrial system of production, social and aesthetic norms and codes, and particular modes of reception. Films discussed include works by Hitchcock, Porter, Griffith, Eisenstein, Lang, Renoir, Sternberg, and Welles.

Instructor(s): Staff Terms Offered: Autumn Spring Winter

Note(s): Required of students taking a major or minor in Cinema and Media Studies. Equivalent Course(s): ENGL 10800, ARTH 20000, ARTV 20300

**CMST 11000. Film Academy At Chicago. 100 Units.**

This course seeks to develop skills in perception, comprehension, and interpretation when dealing with film and other moving image media. It encourages the close analysis of audiovisual forms, their materials and formal attributes, and explores the range of questions and methods appropriate to the explication of a given film or moving image text. It also examines the intellectual structures basic to the systematic study and understanding of moving images. Most importantly, the course aims to foster in students the ability to translate this understanding into verbal expression, both oral and written. Texts and films are drawn from the history of narrative, experimental, animated, and documentary or non-fiction cinema. Screenings are a mandatory course component.

Instructor(s): J.Lastra; R.Majumdar; D.Morgan; S.Skvirsky; A.Field Terms Offered: Autumn Spring Winter

Note(s): Attendance in first class is mandatory to confirm enrollment. Open only to non-CMS majors; may not count towards CMS major requirements. For non-majors, any CMST 14400 through 14599 course meets the general education requirement of Arts, Music, Drama (AMD) Courses.

**CMST 14502. Cinema and Poetry: The Modern City. 100 Units.**

Equivalent Course(s): REES 23015
CMST 14519. Global Melodrama. 100 Units.

CMST 20400. Problems in the Study of Gender and Sexuality: Media Wars. 100 Units.
In our contemporary moment, we have become accustomed to terms such as 'counter-terrorism' that signal an effort to resist internal and external threats, and those suggesting that we live in an age of 'post-truth' dominated by 'corporate-media,' 'fake news,' and 'fact-challenged' journalism. Taking this platform as our starting place, this class explores how these terms and their use have been gendered; have situated both gender and sexuality as either weapons of resistance or objects of destruction. This class will be historically organized insofar as we will begin our discussion with ways that media - broadly conceived to include cinema, print and visual-cultural forms, television, and the internet - have aimed to 'counter' patriarchal, heteronormative, and hegemonic systems of representation of gender and sexuality.
Instructor(s): J. Wild; L. Janson Terms Offered: Spring
Equivalent Course(s): MAAD 20400, GNSE 31105, CMST 40400, GNSE 11005

CMST 20430. Gender, Sexuality, Imagination. 100 Units.
This course explores the relationships between theories of the imagination and those of gender and sexuality, with a particular emphasis on the relevance of this exploration to cinema and media studies.
Instructor(s): K.Keeling Terms Offered: Winter
Equivalent Course(s): CMST 30430

CMST 21004. Afrofuturism. 100 Units.
This course focuses on audio-visual cultural productions that have been or might be considered under the rubric of "Afrofuturism," with particular attention to the aesthetic, social, political, and/or cultural contributions and interventions they make.
Instructor(s): K.Keeling Terms Offered: Winter

CMST 21200. Politics of Film in Twentieth-Century American History. 100 Units.
This course examines selected themes in twentieth-century American political history through both the literature written by historians and filmic representations by Hollywood and documentary filmmakers. We will read one historical interpretation and view one film on themes like the following: Woodrow Wilson and World War I, the emergence of Pacific Rim cities like Los Angeles, Roosevelt's New Deal, the Japanese-American experience in World War II, McCarthyism and the Korean War, the Cold War and the nuclear balance of terror, radical movements of the 1960s, and multiculturalism in the 1990s.
Equivalent Course(s): HIST 18500

CMST 21703. Weimar Cinema. 100 Units.
German films between the end of World War I and the establishment of the Third Reich in 1933 are extraordinarily eclectic and intensely inventive, encompassing horror film, socially conscious dramas, expressionist fantasies, experimental documentary, early proto-fascist and anti-fascist films, and that ur-German invention, the mountain film. We will consider some of the most important works of the period, including films by Fritz Lang, Ernst Lubitsch, G.W. Pabst, F.W. Murnau, Arnold Fanck, Walter Ruttman, and Josef von Sternberg, examining their context, style, reception, formal achievements and historical significance.
Instructor(s): David Levin Terms Offered: Spring
Equivalent Course(s): GRMN 37710, GRMN 27710

CMST 21810. Post-War American Avant-Garde. 100 Units.
In the 1940's the American avant garde cinema gained a new identity with the work of filmmakers like Maya Deren, and Kenneth Anger. Working primarily in 16mm, exhibiting mainly in non-commercial theaters, pursuing new models of sexuality, perception and political action, a generation of filmmakers formulated an alternative cinema culture and a new visionary aesthetic. This tradition gained further definition in the following, with journals, new critical discourses and a network of exhibition. Film modes moved through the mythic and dream-like cinema of Stan Brakhage, Bruce Baillie, the underground cinema of Ken Jacobs, Andy Warhol and Jack Smith, and the structural films of Hollis Frampton, Michael Snow and Ernie Gehr. The course will trace these developments and examine its legacy.
Instructor(s): T. Gunning Terms Offered: Autumn
Prerequisite(s): CMST 10100, ARTH 20000, ENGL 10800, ARTV 25300, or consent of instructor.
Equivalent Course(s): ARTH 31810, CMST 31810, ARTH 21810
CMST 22507. Cinema and the Holocaust. 100 Units.
Focuses on cinematic responses by several leading film directors from East & Central Europe to a central event of 20th century history -- the Holocaust. Nazis began a cinematic documentation of WWII at its onset, positioning cameras in places of actual atrocities. Documentary footage produced was framed by hostile propagandistic schemes; contrary to this 'method', Holocaust feature films are all but a representation of Jewish genocide produced after the actual traumatic events. This class aims at discussing the challenge of representing the Jewish genocide which has often been defined as un-representable. Because of this challenge, Holocaust films raise questions of ethical responsibility for cinematic production & a search for relevant artistic means with which to engage post-traumatic representation. Therefore, among major tropes we will analyze voyeuristic evocation of death & suffering; a truthful representation of violence versus purported necessity of its cinematic aestheticization; intertwined notions of chance & hope as conditions of survival versus hagiographic representation of victims. The main goal is to grasp the potential of cinema for deepening our understanding of the Holocaust, the course simultaneously explores extensive & continuous cinematic production of the genre & its historical development in various European countries, to mention the impact of censorship by official ideologies in the Soviet Union, Poland, Hungary, & Czechoslovakia during the Cold War.
Instructor(s): Bozena Shallcross Terms Offered: Winter
Note(s): Course requirements: film screenings, class participation, reading assignments, one class presentation, and a final project. All readings for the core texts are in English; they can be downloaded from Canvas.
Equivalent Course(s): CMST 32507, REES 27027, JWSC 29550, REES 37027

CMST 23406. Contemporary French Cinema. 100 Units.
After examining the legacy of the New Wave, as well as the cultural and economic contexts for the development of film production in France today, we will screen works by a new generation of filmmakers who have been instrumental in creating innovative approaches to cinematic narrative, form, and style. We will study feature films by Catherine Breillat, Leos Carax, Claire Denis, Bruno Dumont, Alain Guiraudie, Nicolas Philibert among others. Course readings will include interviews with filmmakers, analyses of their films, as well as contributions by Marc Augé, André Bazin, Jean Baudrillard, Gilles Deleuze, Hammid Naficy, Jean-François Lyotard, Laura Mulvey, Stuart Hall, and Linda Williams, which will provide theoretical frameworks for considerations of modernity and postmodernity, gender, sexuality, postcolonialism and ethnicity.
Instructor(s): D. Bluber Terms Offered: Spring
Equivalent Course(s): GNSE 23406, FREN 23406

CMST 23412. Philippe Parreno’s Media Temporalities. 100 Units.
In the 2013 exhibition "Anywhere, Anywhere Out of the World, the French artist Philippe Parreno (b. 1964) turned the monumental space of the Palais de Tokyo in Paris into a living, evolving organism, where music, light, films, images, and performances led visitors through a precisely choreographed journey of discovery, based on the idiosyncratic body of work that he had created since the early 1990s. This course is devoted to an in-depth study of Parreno’s work and the highly original form of media thinking that informs it. Rather than focusing on the properties of distinct media or on multimodal forms or presentation, his works explore the new forms of life and social existence that result from the various ways in which 20th- and 21st-century media technologies store, manipulate, and produce time. This is a form of thinking and artistic creation that addresses the realities of formats, programs, and platforms rather than media apparatuses and messages, and that engages everything from architecture and design to social situations, natural worlds, and virtual beings. (The course will be taught in collaboration with Jörn Schafaff).
Instructor(s): I. Blom Terms Offered: Autumn
Equivalent Course(s): ARTH 31320, MAAD 21320, ARTH 21320, CMST 33412

CMST 23500. Pasolini. 100 Units.
This course examines each aspect of Pasolini’s artistic production according to the most recent literary and cultural theories, including Gender Studies. We shall analyze his poetry (in particular "Le Ceneri di Gramsci" and "Poesie informa di rosa"), some of his novels ("Ragazzi di vita," "Una vita violenta," "Teorema," "Petrolio"), and his numerous essays on the relationship between standard Italian and dialects, semiotics and cinema, and the role of intellectuals in contemporary Western culture. We shall also discuss the following films: "Accattone," "La ricotta," "Edipo Re," "Teorema," and "Salo".
Instructor(s): A. Maggi Terms Offered: Winter
Equivalent Course(s): ARTH 31320, MAAD 21320, ARTH 21320, CMST 33412

CMST 23805. Opera in the Age of its Mechanical Reproducibility. 100 Units.
Focuses on the seminal works of such composers as Berlioz, Verdi, and Wagner, and the idiosyncratic body of work he had created since the early 1990s. This course is devoted to an in-depth study of Parreno’s work and the highly original form of media thinking that informs it. Rather than focusing on the properties of distinct media or on multimodal forms or presentation, his works explore the new forms of life and social existence that result from the various ways in which 20th- and 21st-century media technologies store, manipulate, and produce time. This is a form of thinking and artistic creation that addresses the realities of formats, programs, and platforms rather than media apparatuses and messages, and that engages everything from architecture and design to social situations, natural worlds, and virtual beings. (The course will be taught in collaboration with Jörn Schafaff).
Instructor(s): I. Blom Terms Offered: Autumn
Equivalent Course(s): ARTH 31320, MAAD 21320, ARTH 21320, CMST 33412

CMST 23820. Unsettling Encounters: Colonial Latin America in Film. 100 Units.
This course explores a selection of foundational texts of Latin American literature in conversation with films about colonial Latin America by American and European directors. We will engage questions of how, when, and why images remember historical moments, and will consider the possibilities and limitations of using film to represent history. Students will learn and practice techniques of textual analysis and film criticism while discussing themes such as visual literacy, cultural imperialism, and economic colonialism.
Equivalent Course(s): CRES 24420, SPAN 24420, LACS 24420
CMST 23904. Topics in Latin American Cinema and Media. 100 Units.
This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened each week, and technical and structural issues relating to the work will be explored. The workshop will also develop the written portion of the creative thesis. The course is limited to seniors from CMS and DoVA, and MAPH students working on a creative thesis.
Instructor(s): J. Hoffman Terms Offered: Winter
Prerequisite(s): CMST 23930; CMST 23931; departmental approval of senior creative thesis project.
Equivalent Course(s): LACS 23904, LACS 33904, SPAN 23904, SPAN 33904, CMST 33904

CMST 23905. Creative Thesis Workshop. 100 Units.
This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened each week, and technical and structural issues relating to the work will be explored. The workshop will also develop the written portion of the creative thesis. The class is limited to seniors from CMS and DOVA, and MAPH students working on a creative thesis.
Instructor(s): J. Hoffman Terms Offered: Spring, Winter
Prerequisite(s): CMST 23930; CMST 23931 or 27600; departmental approval of senior creative thesis project.
Equivalent Course(s): ARTV 23905, ARTV 33905, CMST 33905

CMST 23906. Latin American Cinema: 1930 to the Present. 100 Units.
Equivalent Course(s): LACS 23906

CMST 23930. Documentary Production I. 100 Units.
This course is intended to develop skills in documentary production so that students may apply for Documentary Production II. Documentary Production I focuses on the making of independent documentary video. Examples of various styles of documentary will be screened and discussed. Issues embedded in the documentary genre, such as the ethics and politics of representation and the shifting lines between fact and fiction will be explored. Pre-production methodologies, production, and post-production techniques will be taught. Students will be expected to develop an idea for a documentary video, crews will be formed, and each crew will produce a five-minute documentary. Students will also be expected to purchase an external hard drive.
Instructor(s): J. Hoffman Terms Offered: Autumn
Note(s): Prior or concurrent enrollment in CMST 10100 recommended for undergraduate students.
Equivalent Course(s): HMRT 25106, MAAD 23930, ARTV 33930, CMST 33930, ARTV 23930, HMRT 35106

CMST 23931. Documentary Production II. 100 Units.
This course focuses on the shaping and crafting of a nonfiction video. Students are expected to write a treatment detailing their project. Production techniques focus on the handheld camera versus tripod, interviewing and microphone placement, and lighting for the interview. Post-production covers editing techniques and distribution strategies. Students then screen final projects in a public space.
Instructor(s): J. Hoffman Terms Offered: Winter
Prerequisite(s): CMST 23930, HMRT 25106, or ARTV 23930
Equivalent Course(s): ARTV 33931, HMRT 35107, MAAD 23931, ARTV 23931, HMRT 25107, CMST 33931

CMST 24107. Bombay to Bollywood. 100 Units.
This course maps the transformation of the Hindi film industry in India. Starting out as a regional film production center, how did the Bombay film industry and Hindi cinema gain the reputation of being the leader of Indian cinema? This despite the fact that most critical acclaim, by the state and film critics, was reserved for “art cinema.” Through an analysis of Hindi films from the 1950s to the present we map the main trends of this complex artistic/industrial complex to arrive at an understanding of the deep connect between cinema and other social imaginaries.
Instructor(s): R. Majumdar Terms Offered: Winter
Equivalent Course(s): HIST 26709, HIST 36709, GNSE 20509, SALL 30509, CMST 34107, SALL 20509

CMST 24112. Screening India: Bollywood and Beyond. 100 Units.
Cinema is, unarguably, the medium most apposite for thinking through the complexities of democratic politics, especially so in a place like India. While Indian cinema has recently gained international currency through the song and dance ensembles of Bollywood, there remains much more to be said about that body of films. Moreover, Bollywood is a small (though very important) part of Indian cinema. Through a close analysis of a wide range of films in Hindi, Bengali, Kannada, and Urdu, this course will ask if Indian cinema can be thought of as a form of knowledge of the twentieth century.
Instructor(s): R. Majumdar Terms Offered: Spring
Equivalent Course(s): CMST 34112, HIST 26808, SALL 20511, KNOW 24112, SALL 30511, HIST 36808, KNOW 34112
CMST 24201. Cinema in Africa. 100 Units.
This course examines Africa in film as well as films produced in Africa. It places cinema in Sub Saharan Africa in its social, cultural, and aesthetic contexts ranging from neocolonial to postcolonial, Western to Southern Africa, documentary to fiction, art cinema to TV. We will begin with La Noire de... (1966), ground-breaking film by the "father" of African cinema, Ousmane Sembene, contrasted w/ a South African film, African Jim (1959) that more closely resembles African American musical film, and anti-colonial and anti apartheid films from Lionel Rogosin’s Come Back Africa (1959) to Sarah Maldoror’s Sambizanga, Ousmane Sembenes Camp de Thiaroye (1984), and Jean Marie Teno'sss Afrique, Je te Plumerai (1995). The rest of the course will examine cinematic representations of tensions between urban and rural, traditional and modern life, and the different implications of these tensions for men and women, Western and Southern Africa, in fiction, documentary and ethnographic film, including 21st century work where available.
Instructor(s): Loren Kruger
Prerequisite(s): Second-year standing or above in the College; recommended for advanced undergrads and grad students in CMST, CRES, African studies, English and/or Comparative Lit with interests in race and representation, Africa and the world
Equivalent Course(s): ENGL 27600, CMLT 42900, CMST 34201, CRES 34201, CMLT 22900, CRES 24201, ENGL 48601

CMST 24400. From Post-War to Post-Wall: A History of Polish Film. 100 Units.
This course will explore post-World War II film from Poland-approaching the works both as examples of the cinematic art in the region and as a lens through which to view developments and transformations in East European culture. We will view ten films by most renowned directors from Poland. The course will assess what the end of World War II, joining the Eastern Bloc, the fall of communism, and finally the entry into post-Soviet Europe have meant for the film culture and the Polish national film tradition. We will also consider how Eastern European cinematic discourse is undergoing-or should undergo-revision, viewing it as an increasingly transnational phenomenon, rather than the example of a national film industry. The films will be viewed in the original language with English subtitles.
Instructor(s): Kinga Kosmala Terms Offered: Spring

CMST 24414. Soviet Science Fiction. 100 Units.
In the Soviet Union, science fiction played an integral part in intellectual debates about the best way to engage with the new realities of the twentieth century. This literary and cinematic genre was thought capable of reinventing the lives, realities and even beliefs of the Soviets. This course will study the cultural, historical, and political contexts of science fiction from the Soviet Union through literature such as Evgenii Zamiatin’s dystopian novel We (the inspiration for George Orwell’s 1984), Ivan Efremov’s The Andromeda Nebula (1956), and the work Arkady and Boris Strugatsky, as well as through films such as Jakov Protazanov’s Aelita (1924), the first Soviet science fiction film, along with later imaginings of space travel such as Pavel Klushantsev’s Road to the Stars (1957), and Andrei Tarkovsky’s Solaris (1972)-a mysterious, human drama set in space. The primary goal of the course is to study how Soviet writers and filmmakers utilizes science fiction to interpret and/or comment upon their present historical moment? What alternatives to Soviet reality were proposed through science fiction? Lastly, how did science fiction texts and films relate to scientific research in the Soviet Union, especially the Soviet space program?
Equivalent Course(s): REES 24414

CMST 24506. Poetics of Visual Style in Postwar Eastern Europe. 100 Units.
CMST 24521. Film and Revolution. 100 Units.
On the fiftieth anniversary of 1968 our course couples the study of revolutionary films (and films about revolution) with seminal readings on revolutionary ideology and on the theory of film and video. The goal will be to articulate the mechanics of revolution and its representation in time-based media. Students will produce a video or videos adapting the rich archive of revolutionary film for today’s situation. The films screened will be drawn primarily from Soviet and US cinema, from the 1920s to the present day, proceeding more or less chronologically. We begin with newsreels and a “poetic documentary” by Dziga Vertov; they will be paired with classic readings from revolutionary theory, from Karl Marx and Vladimir Lenin to Fidel Castro and Bill Ayres, and from film theory, including Vertov, Andre Bazin and Jean-Luc Godard. Readings will acquaint students with contemporary assessments of the emancipatory potential of film.
Instructor(s): R. Bird; C. Smith Terms Offered: Autumn
Equivalent Course(s): REES 36071, REES 26071, CMST 34521
CMST 24530. Cowboys and Tramps in Film and Literature. 100 Units.
The late 19th and early 20th centuries saw the invention of two distinctly American literary archetypes: the cowboy and the hobo. Based on historical conditions of labor, economics, and westward expansion, the cowboy and the hobo, though both itinerant workers primarily employed seasonally in agriculture and ranching, were depicted very differently in literature and, later, film, during the decades in which they held influence over America’s imagination and mythologization of itself. Evoking responses from fear to admiration and pity to envy, the cowboy and the hobo, both as historical figures and as fictional types, reflected the evolving realities of-and the broad range of attitudes toward-labor, masculinity, and place in a modernizing America. This course will examine literary and cinematic representations of hoboes, tramps, cowboys, and gunslingers from the late 1800s to the mid-1900s, tracing their historical and cultural contexts. We will address pulp and dime novels as well as literary masterpieces, stage plays, poems, and feature films from the silent and sound eras, paying special attention to the effects of different media and art forms on the depiction and mythologization of these figures. Other themes include violence and the state, the American West, technology (trains, automation in agriculture, weapons), immigration and migration, race, and material culture. Authors and directors include Jack London, Charlie Chaplin, John Ford, Preston Sturges, Jack Kerouac, Hart Crane, Bret Harte, Terrence Malick, and Martin Scorsese.
Instructor(s): Matt Hauske Terms Offered: Spring 2014
Note(s): Current MAPH students and 3rd and 4th years in the College. All others by instructor consent only.
Screenings Thursday 3:30-6:30.
Equivalent Course(s): CMST 34520, ENGL 25801, MAPH 34510
CMST 24531. Cowboy Modernity. 100 Units.
Equivalent Course(s): MAPH 35514, CMST 34531
CMST 24550. Central Asian Cinema. 100 Units.
Nowhere has the advent of modernity been more closely entwined with cinema than in Central Asia, a contested entity which for our purposes stretches from Turkey in the West to Kyrgyzstan in the East, though our emphasis will be squarely on Soviet and post-Soviet Central Asia (especially Uzbekistan and Kazakhstan). This course will trace the encounter with cinematic modernity through the analysis of individual films by major directors, including (but not limited to) Shukhrat Abbasov, Melis Ubukeev, Ali Khamraev, Tolomush Okeev, Sergei Paradzhanov, Gulshad Omarova. In addition to situating the films in their cultural and historical situations, close attention will be paid to the sources of Central Asian cinema in cinemas both adjacent and distant; to the ways in which cinema enables a distinct encounter with modernity; and to the cinematic construction of Central Asia as a cultural entity.
Instructor(s): R. Bird Terms Offered: Autumn
Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.
Equivalent Course(s): CMST 34550, REES 23157
CMST 24568. The Underground: Alienation, Mobilization, Resistance. 100 Units.
The ancient and multivalent image of the underground has crystallized over the last two centuries to denote sites of disaffection from-and strategies of resistance to-dominant social, political and cultural systems. We will trace the development of this metaphor from the Underground Railroad in the mid-1800s and the French Resistance during World War II to the Weather Underground in the 1960s-1970s, while also considering it as a literary and artistic concept, from Fyodor Dostoevsky’s Notes from the Underground and Ellison’s Invisible Man to Chris Marker’s film La Jetée and Andrei Tarkovsky’s Stalker. Alongside with such literary and cinematic tales, drawing theoretical guidance from refuseniks from Henry David Thoreau to Guy Debord, this course investigates how countercultural spaces become-or fail to become-sites of political resistance, and also how dissenting ideologies give rise to countercultural spaces. We ask about the relation between social deviance (the failure to meet social norms, whether willingly or unwittingly) and political resistance, especially in the conditions of late capitalism and neo-colonialism, when countercultural literature, film and music (rock, punk, hip-hop, DIY aesthetics etc.) get absorbed into-and coopted by-the hegemonic socio-economic system. In closing we will also consider contemporary forms of disdissence-from Pussy Riot to Black Lives Matter-that rely both on the vulnerability of individual bodies and global communication networks.
Equivalent Course(s): CMST 34568, SIGN 26012, REES 26068, REES 36068
CMST 24603. Topics in EALC: Ghosts & the Fantastic in Literature and Film. 100 Units.
What is a ghost? How and why are ghosts represented in particular forms in a particular culture at particular historical moments and how do these change as stories travel between cultures? This course will explore the complex meanings, both literal and figurative, of ghosts and the fantastic in traditional Chinese, Japanese, and Korean tales, plays, and films . Issues to be explored include: 1) the relationship between the supernatural, gender, and sexuality; 2) the confrontation of death and mortality; 3) collective anxieties over the loss of the historical past 4) and the visualization (and exorcism) of ghosts through performance.
Instructor(s): J. Zeitlin Terms Offered: Autumn
Note(s): This course can replace what used to be the Concentrators Seminar to fulfill a requirement as an EALC major.
Equivalent Course(s): EALC 10600, SIGN 26006
CMST 24606. China’s New Documentary Cinema. 100 Units.
Since the early 1990s, the “new documentary” has emerged as one of the most prominent phenomena in Chinese film and video, widely circulating at international film festivals and eliciting considerable critical debate. This course examines the styles and functions of China’s “new documentary” over the last fifteen years, paying particular attention to the institutional, cultural, economic, and political conditions that underpin its flourishing. This overview will lead us to consider questions that concern the recent explosion of the documentary form worldwide, and to explore the tensions and imbalances that characterize the global circulation of the genre. We will address such issues as: what is “new” about China’s recent documentary cinema; the “national” and “transnational” dimensions of documentary filmmaking, and the ways in which these dimensions intersect in its production and circulation; the extent to which the international demand for “unofficial” images from China has contributed to its growth; the politics involved in documentary filmmaking, and the forms and meanings of “independent” cinema in the wake of intensified globalization; the links between Chinese documentary and the global rise of documentary filmmaking, and the ways in which they challenge extant concepts and theorizations of the genre.
Instructor(s): P. Iovene
Equivalent Course(s): CMST 44606, EALC 35402, EALC 24502

CMST 24913. Making Sense of a Moving World: Japanese Cinema Through 1945. 100 Units.
The aim of this course is to explore a variety of filmmaking practices in relation to historical and cultural trends in Japan from the 1910s to the end of the Second World War. While we will watch films of the great auteurs such as Mizoguchi, Ozu, and Naruse, the increasing number of subtitled films and DVDs of prewar Japanese cinema allows for unprecedented access to a wide variety of filmmaking practices. Hence, in addition to auteur films, we will watch old-school period films and adaptations from popular literature, high speed nihilistic action films, socialist “tendency” films, critical documentaries, melodramas, experimental film and animation, and wartime propaganda. Along with the films, we will read writings on film by a range of thinkers and artists to engage with a variety of issues, including gender, realism, modernism, propaganda, human/animal, violence, and mass culture. We will look at the ways cinema, as both a participant in and a unique reflection on modernity, fundamentally transformed the relationship of Japan to the world.
Instructor(s): Phil Kaffen
Terms Offered: Spring
Equivalent Course(s): CMST 34913

CMST 25100. Avant-Garde in East Central Europe. 100 Units.
The avant-gardes of the “other” Europe are the mainstay of this course, which focuses especially, but not exclusively, on the interwar avant-gardes of Austria, Czechoslovakia, Hungary, Poland, Romania, Slovenia, and Yugoslavia. A comparative framework is employed whenever lucrative to comprehend the East/Central European movements in the wider context of the European avant-garde. The course also traces the development and legacy (political and artistic) of these avant-gardes in their contemporary scenes. Plastic, verbal, and performative arts (including film) are studied.
Instructor(s): Malyne Sternstein
Terms Offered: Spring
Equivalent Course(s): ARTH 25500, ARTH 35500, REES 23141, CMST 35100, REES 33141

CMST 25102. Narratives Suspense in European/Russian Lit/Film. 100 Units.
This course examines the nature and creation of suspense in literature and film as an introduction to narrative theory. We will question how and why stories are created, as well as what motivates us to continue reading, watching, and listening to stories. We will explore how particular genres (such as detective stories and thrillers) and the mediums of literature and film influence our understanding of suspense and narrative more broadly. Close readings of primary sources will be supplemented with critical and theoretical readings. Literary readings will include work by John Buchan, Arthur Conan Doyle, Feodor Dostoevsky, Graham Greene, Bohumil Hrabal, and J.M. Coetzee. We will also explore Alfred Hitchcock’s take on 39 Steps and the Czech New Wave manifesto film, Pearls of the Deep. With theoretical readings by: Roland Barthes, Viktor Shklovsky, Erich Auerbach, Paul Ricoeur, and others.
Equivalent Course(s): ENGL 46901, REES 23137, CMST 35102, REES 33137, ENGL 26901, HUMA 26901, CMLT 22100

CMST 25514. Symbolism and Cinema. 100 Units.
In his 1896 essay on cinema, Russian writer Maxim Gorky described the new medium to “madness or symbolism.” The connection between cinema and symbolism was not surprising insofar as symbolism was a dominant aesthetic paradigm throughout Europe at the time. However it does suggest (perhaps surprisingly) that from the very beginning cinema was seen as a means of visualizing the non-rational, uncanny and even invisible. This course examines the relationship between symbolism and cinema with particular attention to French and Russian writings and films. Examining how symbolist aesthetics became applied to the cinematic medium, we will pay particular attention the resources it provided for conceptualizing the uncanny and the mystical. We will question whether there exists a distinct symbolist tradition in film history and how it relates to notions of poetic or experimental cinema. Films will represent a broad cross-section of European (and some American) cinema, from Jean Epstein to Sergei Eisenstein and Alexander Dovzhenko, and from Stan Brakhage to Andrei Tarkovsky.
Instructor(s): R. Bird
Equivalent Course(s): REES 26019, CMST 35514, REES 36019
CMST 25600. Magic and the Cinema. 100 Units.
No description available.
Equivalent Course(s): CMST 35600, ARTH 26200, ARTH 36200

CMST 25951. American Television: From Broadcast Networks to the Internet. 100 Units.
The idea of electromechanically transmitted moving images dates back to the nineteenth century and the first
technological demonstration of televised moving images took place in the 1920s. While this course touches upon the
early history of television, we will focus our attention on the era between the commercialization of television in
the United States (in the early 1950s) and the rise of internet-based television via services such as Hulu (in the 2000s).
As we will see, the history of television in these years, intersects with numerous other media, such as radio, film, video, digital games, and the novel. Alongside a study of the medium of television and its role in
American culture, we will attend carefully to the form of TV narrative as it changes from an early episodic format
to the complex long-form serial narratives that attained maturity in the 1990s. Through historical, formal, and
cultural analyses, we will attempt to make sense of the recent renaissance of television narrative characterized by
such serial programs as The Sopranos, The Wire, Breaking Bad, and Mad Men. The course combines theoretical
texts with close readings of particular television shows. Requirements include engaged participation in class
discussion, weekly blog entries, a mid-term paper, and a substantive final research paper. There will be no exams.
Instructor(s): P. Jagoda Terms Offered: Autumn
Equivalent Course(s): ENGL 25951

CMST 25953. Transmedia Game. 100 Units.
This experimental course explores the emerging game genre of "transmedia" or "alternate reality" gaming.
Transmedia games use the real world as their platform while incorporating text, video, audio, social media,
websites, and other forms. We will approach new media theory through the history, aesthetics, and design of
transmedia games. Course requirements include weekly blog entry responses to theoretical readings; an
analytical midterm paper; and collaborative participation in a single narrative-based transmedia game project.
No preexisting technical expertise is required but a background in any of the following areas will help: creative
writing, literary or media theory, web design, visual art, computer programming, performance, and game design.
Instructor(s): P. Jagoda Terms Offered: Autumn
Equivalent Course(s): CRWR 26003, ARTV 25401, ARTV 35401, CMST 35953, ENGL 25953, ENGL 32311, TAPS 28457, CRWR 46003

CMST 25954. Alternate Reality Games: Theory and Production. 100 Units.
Games are one of the most prominent and influential media of our time. This experimental course explores the
emerging genre of "alternate reality" or "transmedia" gaming. Throughout the quarter, we will approach new media theory through the history, aesthetics, and design of transmedia games. These games build on the
narrative strategies of novels, the performative role-playing of theater, the branching techniques of electronic
literature, the procedural qualities of video games, and the team dynamics of sports. Beyond the subject
matter, students will design modules of an Alternate Reality Game in small groups. Students need not have
a background in media or technology, but a wide-ranging imagination, interest in new media culture, or arts
practice will make for a more exciting quarter.
Instructor(s): Patrick Jagoda, Heidi Coleman Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing. Instructor consent required. To apply, submit writing through
online form at http://bigproblems.uchicago.edu; see course description. Once given consent, attendance on the
first day is mandatory. Questions: mb31@uchicago.edu.
Note(s): English majors: this course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): ARTV 20700, CMST 35954, MAAD 25954, BPRO 28700, ENGL 32314, TAPS 28466, ENGL 25970, ARTV 30700

CMST 26200. Brecht and Beyond. 100 Units.
Breath is indisputably the most influential playwright in the 20th century, but his influence on film theory and
practice and on cultural theory generally is also considerable. In this course we will range the variety of
Brecht’s own theatre, from the anarchic plays of the 1920’s to the agitprop Lehrstück and film esp Kühle
Wampe) to the classical parable plays, as well as the work of his heirs in German theatre (Heiner Müller, Peter
Weiss) and film (RW Fassbinder, Alexander Kluge), in French film (Jean-Luc Godard) and cultural theory (the
Situationists and May 68), film and theatre in Britain (such as Caryl Churchill or Mike Leigh), theatre and film
in Africa, from South Africa to Senegal, and if possible a film or play from the US that engages with Brechtian
theory and/or practice. (Drama)
Instructor(s): Loren Kruger Terms Offered: Spring
Prerequisite(s): TAPS and/or Hum Core required; no first years.
Equivalent Course(s): CMLT 20800, TAPS 28435, ENGL 24400

CMST 26303. Chris Marker. 100 Units.
CMST 26402. Orson Welles. 100 Units.
Course description unavailable.
Terms Offered: Spring
Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.
Equivalent Course(s): CMST 36402
CMST 26403. Post WWII American Mise en Scene Directors. 100 Units.
This course will treat the style of a number of American Hollywood feature film directors during the two decades after World War II, including Nicholas Ray, Anthony Mann, Otto Preminger, and others. Those directors were singled out at that time by the critics writing for the French journal Cahiers du Cinema as auteurs, directors with a consistent style. Critics in France, England, and the USA used the term mise en scene to discuss their use of framing, performance, editing, and camera movement and especially their use of new technologies such as wide screen and color. This course will explore the concept of directors' style as well as the mode of close analysis criticism that grew out of this concept.
Equivalent Course(s): AMER 26403, CMST 36403

CMST 26405. D.W. Griffith. 100 Units.
Equivalent Course(s): AMER 36405, AMER 26405, CMST 36405, FNDL 26405

CMST 26500. The Films of Alfred Hitchcock. 100 Units.
No single filmmaker has equaled Alfred Hitchcock's combination of popular success, critical commentary, and widespread influence on other filmmakers. Currently, his work is so familiar it threatens to be taken for granted. This course will reveal Hitchcock as the filmmaker who systematically used the stylistics of late silent film to forge a dialectical approach to the so-called Classical Style. Hitchcock devised a relation among narrative, spectator and character point of view, yielding a configuration of suspense, sensation and perception. Tracing Hitchcock's career chronologically, we will follow his intertwining of sexual desire and gender politics, and his reshaping the melodrama according to Freudian concepts of repression, memory, interpretation and ab-reaction, as he navigates from silent film to sound and from Great Britain to Hollywood.
Equivalent Course(s): ARTH 38405, ARTH 28405, CMST 36500, FNDL 26501

CMST 26503. Scandinavian Cinema in the Classic Period (1910-1960) 100 Units.
During the 1910s Scandinavian cinema was among the most popular cinemas in the world. The best directors, actresses, and actors developed a mastery of cinematic expression and screen appearance never seen before in cinema. Erotically charged melodramas and comedies were the most popular genres, but also poetic masterpieces such as The Passion of Joan of Arc are key works from this era. The course will explore the breathtaking appearances of such celebrated female stars as Asta Nielsen and Greta Garbo, and analyze silent masterpieces such as Blom's early science fiction films, the dramas of Christensen, Stiller, Sjostrom, and Dreyer, and the early films of Tancred Ibsen and Ingmar Bergman. All readings are in English.
Instructor(s): E. Rossaak Terms Offered: Autumn
Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.
Equivalent Course(s): CMST 36503

CMST 26504. Ingmar Bergman: Cinema & Theater. 100 Units.
This course will focus on cinematographic representations of theatrical and other artistic practices, primarily exemplified by many of Ingmar Bergman's films (e.g. The Seventh Seal and Fanny and Alexander) but also in the work of other film-directors. It will explore historical and theoretical issues related to the mutual interactions between cinema and theatre also discussing cinematographic techniques in playwriting as exemplified in plays by Henrik Ibsen (e.g. Peer Gynt) and August Strindberg (e.g. A Dream Play and The Ghost Sonata). Throughout most of his creative career Bergman worked both in theatre and film and even if he is mostly known outside of Sweden as a film director, his theatrical career was as innovative. The work of the film-auteur and the theatre director are for Bergman closely connected, not only through the actors he worked with - during summers for the screen and during the theatre seasons in stage productions - but also through the choice of themes, which are often in direct dialogue with each other in the two media. Generating complex meta-aesthetic, inter-medial discourses, depicting and problematizing the work and role of the artist in a broad range of social and ideological contexts. Interested 3rd and 4th year undergraduates allowed by instructor consent. ATTENDANCE AT FIRST CLASS SESSION IS MANDATORY.
Note(s): Interested third- and fourth-year undergraduates allowed by instructor consent. Attendance at first class session is mandatory.
Equivalent Course(s): CMST 36504

CMST 26601. The Soviet Visual Experience. 100 Units.
The Soviet Union was a world in pictures, enabled and shaped by the media revolutions that accompanied every major period in its history, from the rise of cinema to the dawn of the internet. We will try to see communism as history and as promise, and to see how this relates to our own desire for social change in our own worlds. We will examine the interaction between Marxism, state power and image culture by focusing on key moments from the entire lifespan of the USSR (1917-1991) and from across the range of media, from graphic art and film to their reflections in literature and aesthetic theory. In addition to class readings and discussions, we will be able to engage directly with a vast array of material at exhibits of graphic art (three on campus, three more across the city) and film series that will be conducted in fall 2011 as part of the city-wide Soviet Arts Experience.
Instructor(s): R. Bird Terms Offered: Autumn
Equivalent Course(s): CMST 36601, REES 26017, REES 36017
CMST 26705. Kieslowski: The Decalogue. 100 Units.
In this class, we study the monumental series "The Decalogue" by one of the most influential filmmakers from Poland, Krzysztof Kieślowski. Without mechanically relating the films to the Ten Commandments, Kieślowski explores the relevance of the biblical moral rules to the state of modern man forced to make ethical choices. Each part of the series contests the absolutism of moral axioms through narrative twists and reversals in a wide, universalized sphere. An analysis of the films will be accompanied by readings from Kieślowski's own writings and interviews, including criticism by Zizek, Insdorf, and others.
Equivalent Course(s): REES 37026, REES 27026, CMST 36705, FNDL 24003

CMST 27005. Filming the Police. 100 Units.
This course examines documentary film.
Instructor(s): S. Skvirsy
Terms Offered: Winter
Equivalent Course(s): CMST 37005

CMST 27011. Experimental Captures. 100 Units.
This production-based class will explore the possibilities and limits of capturing the world with imaging approaches that go beyond the conventional camera. What new and experimental image-based artworks can be created with technologies such as laser scanning, structured light projection, time of flight cameras, photogrammetry, stereography, motion capture, sensor augmented cameras or light field photography? This hands-on course welcomes students with production experience while being designed to keep established tools and commercial practices off-kilter and constantly in question.
Instructor(s): M. Downie
Terms Offered: Spring
Equivalent Course(s): CMST 37011, ARTV 27923, ARTV 37923

CMST 27110. Digital Cinema. 100 Units.
Since the 1970s, movies have become increasingly dependent on digital technologies. This course explores a range of issues related to the digitization of cinema’s production, distribution, and exhibition, including the cultural contexts and aesthetic practices surrounding these technological shifts as well as their experiential and political dimensions. In particular, we will explore such topics as digital cinematography’s relation to cinematic realism, emerging trends in editing practices, the political implications of digital special effects, and the ways that other digital media influence cinematic techniques. Texts discussed include works by Lev Manovich, Stephen Prince, Kristen Whissel, Hito Steyerl, Steven Shaviro, and Vivian Sobchack. Screenings include works by Lana and Lilly Wachowski, Agnes Varda, Bong Joon-Ho, Michael Bay, Brad Bird, and Leos Carax.
Equivalent Course(s): MAAD 27110

CMST 27112. Cinema and Movement. 100 Units.
That movies move is one of the most basic facts about the medium. This course investigates various aesthetic dimensions of movement throughout the history of the moving image—from early cinema and the avant garde to Hollywood musicals and Disney cartoons. Combining philosophical, critical, and historical readings with careful analysis of films, we will cover topics that include early spectators’ fascination with the moving image itself, the relation between the natural perception of movement and cinematic movement, the history and poetics of camera movement, different technologies for recording and simulating movement (including cel animation and CGI), and the problems that movement has posed as an object of aesthetic analysis. Texts discussed include works by Gilles Deleuze, Henri Bergson, Vivian Sobchack, Kristin Thompson, and Arthur Danto. Screenings include works by Busby Berkeley, Maya Deren, Max Ophuls, Chuck Jones, Chris Marker, Chantal Akerman, and Gus Van Sant.
Instructor(s): J. Schonig
Terms Offered: Autumn

CMST 27201. Zizek on Film. 100 Units.
Slavoj Zizek has used film as the great expositor of his theories of ideology, perversion, sexuality, politics, nostalgia, and otherness. In this discussion-heavy course we will watch a lot of film from the directorial subjects of his main discussions (Chaplin, Rossellini, Lynch, Haneke, Kieslowski, Tarkovsky, von Trier, Hitchcock, and others) alongside Zizek’s theoretical writings on their film. The course examines why for the man who has been called the “Elvis of cultural theory” film is such a perfect lens through which to examine social situatedness and intersubjective “aporia.” There is no “paperwork” assigned for the course. The course is conducted seminar style and participants are expected to be vocal, prepared, and somewhat ornery.
Instructor(s): M. Sternstein
Equivalent Course(s): ENGL 18600

CMST 27205. Film Aesthetics. 100 Units.
The main questions to be discussed are: the bearing of cinema on philosophy; or in what sense, if any, is cinema a form of philosophical thought? What sort of distinctive aesthetic object is a film, or what is the “ontology” of film? What, in particular, distinguishes a “realist” narrative film? What is a “Hollywood” film? What is a Hollywood genre? Authors to be read include, among others, Bazin, Cavell, Perkins, Wilson, Rothman. Films to be seen and discussed, among others, include films by Bresson, Ford, Ophuls, Cukor, Hitchcock, and the Dardenne brothers.
Instructor(s): J. Conant, R. Pippin
Terms Offered: Spring
Equivalent Course(s): CMST 37205, PHIL 20208, PHIL 30208, SCTH 38112
CMST 27230. Modern Film Theory. 100 Units.
This course will examine influential writings on photography, film, and film narrative published in the post-war period in the context of semiology, structuralism, and narratology. We will examine how questions of form, structure, and narrative in film and photography are addressed by critics writing from the end of World War II until the early seventies, especially in France and Italy. In what ways can the image be considered a sign? How do images come to have meaning in a denotative or connotative sense? What are the principal codes organizing images as narrative media and how do spectators recognize those codes? Readings will include work by Roland Barthes, Christian Metz, Jean Mitry, Noël Burch, Raymond Bellour, Umberto Eco, Pier Paolo Pasolini, and David Bordwell, among others.
Instructor(s): D.N. Rodowick Terms Offered: Winter
Prerequisite(s): CMST 10100, ARTH 20000, ENGL 10800, ARTV 25300, or consent of instructor.
Equivalent Course(s): CMST 37230

CMST 27700. Advanced Photography. 100 Units.
Equivalent Course(s): CMST 37700

CMST 27800. Theories of Media. 100 Units.
This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat in which images proliferate and take on a "life of their own." The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato’s Allegory of the Cave and Cratylus, Aristotle’s Poetics, and modern texts such as Marshall McLuhan’s Understanding Media, Regis Debray’s Mediology, and Friedrich Kittler’s Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of concepts such as the “unmediated” or “immediate”? How do media become intelligible and concrete in the form of “metapictures” or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become “mixed” in hybrid, intermedial formations? We will also look at recent films such as The Matrix and Existentz that project fantasies of a world of total mediation and hyperreality.
Instructor(s): W. J. T. Mitchell Terms Offered: Winter
Prerequisite(s): Any 100-level ARTH or COVA course, or consent of instructor.
Equivalent Course(s): ENGL 32800, AMER 30800, ARTH 35900, ENGL 12800, ARTH 25900, CMST 37800, ARTV 20400

CMST 27803. The Body of Cinema: Hypnoses, Emotions, Animalities. 100 Units.
Equivalent Course(s): CMST 47803, ENGL 37803

CMST 27805. Framing, Re-framing, and Un-framing Cinema. 100 Units.
By cinema, we mean the art of the moving image, which is not limited to the material support of a flexible band called film. This art reaches back to early devices to trick the eye into seeing motion and looks forward to new media and new modes of presentation. With the technological possibility of breaking images into tiny pixels and reassembling them and of viewing them in new way that this computerized image allows, we now face the most radical transformation of the moving image since the very beginnings of cinema. A collaboration between the OpenEndedGroup (Marc Downie and Paul Kaiser), artists who have created new modes of the moving image for more than decade, and film scholar Tom Gunning, this course will use this moment of new technologies to explore and expand the moving image before it becomes too rigidly determined by the powerful industrial forces now propelling it forward. This course will be intensely experimental as we see how we might use new computer algorithms to take apart and re-experience classic films of the past. By using new tools, developed for and during this class, students will make new experiences inside virtual reality environments for watching, analyzing, and recombining films and that are unlike any other. These tools will enable students, regardless of previous programming experience, to participate in this crucial technological and cultural juncture.
Equivalent Course(s): ARTV 30805, CMST 37805, ARTV 20805

CMST 27810. Cinema and New Media. 100 Units.
Over the past two decades, new media such as television, computers and the web, digital image production, and video games have begun to transform, and even supplant, the social and cultural prominence of cinema. This course will look at how these media work: the history of their development, the changes they have brought about in a broader media culture, their political implications, and their social status and significance (e.g., the place they occupy in culture, the kinds of interactions they make possible). The focus will equally be on the ways in which cinema has responded to the changing digital landscape, which will be explored through both blockbuster and experimental films as well as video and web-based art. Readings will be taken from the history of film theory, recent work in media history and archeology, and theoretical studies of digital media and technology.
Instructor(s): D. Morgan Terms Offered: Autumn
CMST 27911. Augmented Reality Production. 100 Units.
Focusing on experimental moving-image approaches at a crucial moment in the emerging medium of augmented reality, this class will explore and interrogate each stage of production of AR works. Students in this production-based class will examine the techniques and opportunities of this new kind of moving image. During this class we'll study the construction of examples across a gamut from locative media, journalism, and gameplay-based works to museum installations. Students will complete a series of critical essays and sketches towards a final augmented reality project using a custom set of software tools developed in and for the class.
Instructor(s): M. Downie Terms Offered: Autumn
Equivalent Course(s): CMST 37911, ARTV 37921, ARTV 27921

CMST 27915. Introduction to Videogame Studies: Art, Play, and Society. 100 Units.
This course is intended as an introduction to the study of videogames in the humanities. Topics include videogame form (visual style, spatial design, sound, and genre); videogames as a narrative medium; embodiment and hapticity in videogame play; issues of identity/identification, performance, and access related to gender, sexuality, race and ethnicity, ability, and class; and rhetorical, educational, and political uses of videogames. Just as the videogame medium has drawn from older forms of art and play, so the emerging field of videogame studies has grown out of and in conversation with surrounding disciplines. With this in mind, readings and topics of discussion will be drawn both from videogame studies proper and from other fields in the humanities - including, but not limited to, English, art history, and cinema and media studies. Undergraduates should be prepared for an MA-level reading load but will write final papers of the standard length for upper-level undergraduate courses (8-10 pages versus 12-15 for MA students). MA students interested in pursuing a particular research topic in-depth will be given supplemental readings. This course will also be designed to take advantage of the University of Chicago’s videogame collection, and will require game play both individually and as part of group play sessions.
Equivalent Course(s): ENGL 24515, MAPH 34515

CMST 27916. Critical Videogame Studies. 100 Units.
Since the 1960s, games have arguably blossomed into the world’s most profitable and experimental medium. This course attends specifically to video games, including popular arcade and console games, experimental art games, and educational serious games. Students will analyze both the formal properties and sociopolitical dynamics of video games. Readings by theorists including Ian Bogost, Roger Caillois, Nick Dyer-Witheford, Mary Flanagan, Jane McGonigal, Lisa Nakamura, and Katie Salen will help us think about the growing field of video game studies. This is a 2018-19 Signature Course in the College. (Theory)
Instructor(s): Patrick Jagoda Terms Offered: Autumn
Equivalent Course(s): SIGN 26038, ENGL 12320

CMST 27920. Virtual Reality Production. 100 Units.
Focusing on experimental moving-image approaches at a crucial moment in the emerging medium of virtual reality, this class will explore and interrogate each stage of production for VR. By hacking their way around the barriers and conventions of current software and hardware to create new optical experiences, students will design, construct and deploy new ways of capturing the world with cameras and develop new strategies and interactive logics for placing images into virtual spaces. Underpinning these explorations will be a careful discussion, dissection and reconstruction of techniques found in the emerging VR “canon” that spans new modes of journalism and documentary, computer games, and narrative "VR cinema.” Film production and computer programming experience is welcome but not a prerequisite for the course. Students will be expected to complete short “sketches” of approaches in VR towards a final short VR experience.
Equivalent Course(s): MAAD 27920, CMST 37920, ARTV 27920, ARTV 37920

CMST 28006. Minimalist Experiment in Film and Video. 100 Units.
This multilevel studio will investigate minimalist strategies in artists’ film and video from the late 1960s to the present day. Emphasis will be placed on works made with limited means and/or with “amateur” formats such as Super-8 and 16mm film, camcorders, Flip cameras, SLR video, and iPhone or iPad. Our aim is to imagine how to produce complex results from economical means. Important texts will be paired with in class discussion of works by artists such as Andy Warhol, Yoko Ono, Kurt Kren, Jack Goldstein, Larry Gottheim, Bruce Baillie, James Benning, John Baldessari, Morgan Fisher, Stan Douglas, Matthew Buckingham, Sam Taylor-Wood, and others.
Equivalent Course(s): ARTV 33815, CMST 38006, ARTV 23805

CMST 28010. Sound / Image Mapping. 100 Units.
This class will examine the history and production of “hard” sound-image relationships through the lens of computational form. Through studying the range of digital and sound-image tools that have sought to couple the senses - from 19th century color organs and dreams of synesthesia, through music videos and contemporary new media installations, to recent advances in "machine listening" - students will complete a series of critical essays and sketches leading towards a final project using custom software developed in and for the class.
Instructor(s): M. Downie Terms Offered: Winter
Equivalent Course(s): ARTV 27922
CMST 28100. Issues in Film Music. 100 Units.
This course explores the role of film music in the history of cinema. What role does music play as part of the
narrative (source music) and as nondiegetic music ( underscoring)? How does music of different styles and
provenance contribute to the semiotic universe of film? And how did film music assume a central voice in
twentieth-century culture? We study music composed for films (original scores) as well as pre-existent music
(e.g., popular and classical music). The twenty films covered in the course may include classical Hollywood
cinema, documentaries, foreign (e.g., non-Western) films, experimental films, musicals, and cartoons.
Instructor(s): B. Hoeckner
Note(s): This course typically is offered in alternate years.
Equivalent Course(s): MUSI 22901, CMST 38100, MUSI 30901

CMST 28118. Listening to Movies. 100 Units.
This course shifts our critical attention from watching movies to listening to them. Amid a strong emphasis
on cinema-ranging from musical accompaniment during the silent era to sound in experimental films; or from
classical Hollywood underscoring to Bollywood musical numbers-we will consider the soundtrack of moving
pictures within a growing variety of audiovisual media, including television, music videos, and computer games.
Interactive lectures (Mondays and Wednesdays) and discussion sections (Fridays) combine a historical overview
with transhistorical perspectives. Supplemented by screenings and readings, the course will address a variety
issues and topics: aesthetic and psychological (such as representation, narration, affect); cultural and political
(such as race, ethnicity, propaganda); social and economic (such as technology, production, dissemination).
Equivalent Course(s): MUSI 20918, SIGN 26021

CMST 28310. Kafka and Performance. 100 Units.
This laboratory seminar is devoted to exploring the texts of Franz Kafka through the lens of performance. In
addition to weekly scenic experiments and extensive critical readings (on Kafka as well as performance theory)
we will explore the rich history of adapting Kafka in film, theater, puppetry, opera, and performance.
Equivalent Course(s): CMST 38310, TAPS 22110, GRMN 32110, FNDL 22115, GRMN 23110, TAPS 32110

CMST 28500-28600. History of International Cinema I-II.
This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is
strongly recommended but not required.

CMST 28500. History of International Cinema I: Silent Era. 100 Units.
This course provides a survey of the history of cinema from its emergence in the mid-1890s to the transition
to sound in the late 1920s. We will examine the cinema as a set of aesthetic, social, technological, national,
cultural, and industrial practices as they were exercised and developed during this 30-year span. Especially
important for our examination will be the exchange of film techniques, practices, and cultures in an
international context. We will also pursue questions related to the historiography of the cinema, and
examine early attempts to theorize and account for the cinema as an aesthetic and social phenomenon.
Instructor(s): A. Field Terms Offered: Autumn
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or
minoring in Cinema and Media Studies.
Note(s): This is the first part of a two-quarter course.
Equivalent Course(s): ARTV 20002, CMST 48500, ENGL 48700, ARTH 38500, CMLT 32400, ENGL 29300,
ARTH 28500, CMLT 22400, MAPH 33600

CMST 28600. History of International Cinema II: Sound Era to 1960. 100 Units.
The center of this course is film style, from the classical scene breakdown to the introduction of deep focus,
stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development
of a film culture is also discussed. Texts include Thompson and Bordwell’s Film History: An Introduction;
and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini,
Bresson, Ozzi, Antonioni, and Renoir.
Instructor(s): R. Bird Terms Offered: Winter
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or
minoring in Cinema and Media Studies.
Note(s): CMST 28500/48500 strongly recommended
Equivalent Course(s): REES 45005, REES 25005, CMST 48600, ENGL 29600, ARTH 28600, ARTH 38600,
CMLT 32500, ARTV 20003, ENGL 48900, CMLT 22500, MAPH 33700
CMST 28600. History of International Cinema II: Sound Era to 1960. 100 Units.
The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's Film History: An Introduction; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.
Instructor(s): R.Bird Terms Offered: Winter
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or minoring in Cinema and Media Studies.
Note(s): CMST 28500/48500 strongly recommended
Equivalent Course(s): REES 45005, REES 25005, CMST 48600, ARTH 28600, ARTH 38600, CMLT 32500, ARTV 20003, ENGL 48900, CMLT 22500, MAPH 33700

CMST 28700. History of International Cinema, Part III: 1960 to Present. 100 Units.
This course will continue the study of cinema around the world from the late 1950s through the 1990s. We will focus on New Cinemas in France, Czechoslovakia, Germany, the United States, the United Kingdom, and other countries. We will pay special attention to experimental stylistic developments, women directors, and well-known auteurs. After the New Cinema era we will examine various developments in world cinema, including the rise of Bollywood, East Asian film cultures, and other movements.
Instructor(s): J.Lastra Terms Offered: Spring
Note(s): This course follows the subject matter taught in CMST 28500/48500 and CMST 28600/48600, but these are not prerequisites.
Equivalent Course(s): CMST 38700

CMST 28810. Advanced Study Theater: Games & Performance. 100 Units.
No description available
Equivalent Course(s): TAPS 38810, TAPS 28810, ENGL 21118

CMST 28921. Introduction to 16mm Filmmaking. 100 Units.
The goal of this intensive laboratory course is to give its students a working knowledge of film production using the 16mm gauge. The course will emphasize how students can use 16mm technology towards successful cinematography and image design (for use in both analog and digital postproduction scenarios) and how to develop their ideas through constructing meaning through moving pictures. Through a series of group exercises, students will put their hands on equipment and solve technical and aesthetic problems, learning to operate and care for the 16mm Bolex film camera; prime lenses; Sekonic light meter; Sachtler tripod; and Arri light kit and accessories. For a final project, students will plan and produce footage for an individual or small group short film. The first half the class will be highly structured, with demonstrations, in-class shoots and lectures. As the semester continues, class time will open up to more of a workshop format to address the specific concerns and issues that arise in the production of the final projects. This course is made possible by the Charles Roven Fund for Cinema and Media Studies.
Equivalent Course(s): CMST 38921, ARTV 23808, ARTV 33808

CMST 29002. Motion Pictures in the Human Sciences. 100 Units.
This course will examine the relationship between moving images, particularly motion-picture films, and the human sciences, broadly construed, from the early days of cinema to the advent of functional magnetic resonance imaging (fMRI). It will use primary source documents alongside screenings to allow students to study what the moving image meant to researchers wishing to develop knowledge of mind and behavior, and what they thought film could do that still photography and unmediated human observation could not. The kinds of motion pictures we will study will vary widely, from infant development studies to psychiatric films, from documentaries to research films, and from films made by scientists or clinicians as part of their laboratory or therapeutic work to experimental films made by seasoned filmmakers. We will explore how people used the recordings they made in their own studies, in communications with other scientists, and for didactic and other purposes. We will also discuss how researchers’ claims about mental processes—perception, memory, consciousness, and interpersonal influence—drew on their understandings of particular technologies.
Instructor(s): A. Winter Terms Offered: Spring
Equivalent Course(s): HIPS 25208, HIST 25208, CHSS 35208, HIST 35208, CMST 39002

CMST 29300. Aesthetics: Phil/Photo/Film. 100 Units.
Equivalent Course(s): CMST 39300, ARTH 27301, ARTH 37301, PHIL 31301, PHIL 21100

CMST 29700. Reading and Research CMST. 100 Units.
This course is primarily intended for students who are majoring in Cinema and Media Studies and who can best meet program requirements by studying under a faculty member’s individual supervision. The subject matter, course of study, and requirements are arranged with the instructor prior to registration.
Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of faculty adviser and Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Form. This course may be counted toward distribution requirements for the major.
CMST 29800. Senior Colloquium. 100 Units.
This seminar is designed to provide fourth-year students with a sense of the variety of methods and approaches in the field (e.g., formal analysis, cultural history, industrial history, reception studies, psychoanalysis). Students present material related to their BA project, which is discussed in relation to the issues of the course.
Instructor(s): J. Lastra Terms Offered: Autumn
Prerequisite(s): CMST 10100: Introduction to Film. Required of seniors majoring in Cinema and Media Studies.

CMST 29900. B.A. Essay: CMST. 000 Units.
This course provides guided research on the topic proposed by their senior paper. Students arrange the program of study and a schedule of meetings with their senior paper advisor.
Terms Offered: Winter, Spring
Prerequisite(s): Consent of instructor. Required of students majoring in Cinema and Media Studies.
Note(s): Students are required to submit the College Reading and Research Form. This course may not be counted toward requirements for the major or as a free-elective credit.

For the most up-to-date listing of Cinema and Media Studies courses, please visit the Courses page on the Cinema and Media Studies website, at cms.uchicago.edu/courses.
Classical Studies

Department Website: http://classics.uchicago.edu

Programs of Study

The BA degree in Classical Studies allows students to explore Greek and Roman antiquity in a variety of ways and provides excellent preparation for careers that require strong skills in interpretation and writing, such as teaching, scholarly research, law, and publishing, and in the humanities in general. Students may choose from the following three variants based on their preparation, interests, and goals:

1. The Language and Literature Variant combines the study of Greek and Latin texts with coverage of diverse areas, including art and archaeology, history, philosophy, religion, and science.
2. The Language Intensive Variant focuses on languages with the aim of reading a larger selection of texts in the original languages; it is designed especially for those who wish to pursue graduate studies in classics.
3. The Greek and Roman Cultures Variant emphasizes courses in art and archaeology, history, material culture, and texts in translation.

Students in other fields of study may also complete a minor in Classical Studies. Information follows the description of the major.

Language and Literature Variant

The Language and Literature variant combines the study of Greek and Latin texts with coverage of diverse areas, including art and archaeology, history, philosophy, religion, and science. It allows students to focus their language study exclusively on Greek or on Latin, or they may study both languages with an emphasis on one or the other.

1. Six courses (or the equivalent) in Greek and/or Latin, including the intermediate level (20100-20200-20300) or above in at least one of those languages. The program assumes that, in addition to the requirements for the major, students have completed or have credit for an initial year of language study in either Latin or Greek. Beginning-level courses may count in the major only if the student has already taken an intermediate (or higher) sequence in the other language. Examples of ways to satisfy the language requirement include: LATN 20100-20200-20300 Intermediate Latin I-II-III AND LATN 21100 Roman Elegy-LATN 21200 Roman Novel-LATN 21300 Vergil; OR LATN 20100-20200-20300 Intermediate Latin I-II-III AND GREK 10100-10200-10300 Introduction to Attic Greek I-II-III.
2. Six courses in Greek or Roman art, history, philosophy, religion, science, material culture, or classical literature in translation, with courses divided between at least two of those fields and with approval of the director of undergraduate studies. Any course that carries a Classical Civilization listing, or a Classics listing between 30100 and 39000, meets this requirement. Other eligible courses are offered in disciplines such as Art History, Interdisciplinary Studies in the Humanities, Philosophy, and Political Science. These courses should be chosen in consultation with the director of undergraduate studies.
3. By the end of the Spring Quarter of their third year, students are required to submit to the director of undergraduate studies a research skills paper of around 10–12 pages as a Word or PDF file in an email attachment. The paper, which will normally substitute for a final paper in a Greek (above 20300), Latin (above 20300), Classical Civilization, or Classics course, is designed to prepare students for the BA paper. Students will be expected to develop a reasoned argument on a particular topic, based not only on primary materials (ancient literary texts; material culture; etc.) but also on research of relevant secondary bibliography. Students should declare at the start of the quarter if they wish to take a certain course in conjunction with the research skills paper and should work closely throughout the quarter with the faculty instructor, who must approve the paper as satisfying the requirement.
4. CLCV 29800 BA Paper Seminar, a one-quarter course spread over Autumn and Winter Quarters. See BA Paper Seminar and BA Paper for more information.

Summary of Requirements: Language and Literature Variant

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<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Six courses in Greek or Latin</td>
<td>600</td>
</tr>
<tr>
<td>Six courses in Greek or Roman art, history, philosophy, science, religion,</td>
<td>600</td>
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<tr>
<td>material culture, or classical literature in translation</td>
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<tr>
<td>CLCV 29800 BA Paper Seminar</td>
<td>100</td>
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<td>Total Units</td>
<td>1300</td>
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</table>

* Must include the intermediate level (20100-20200-20300) or above in at least one of those two languages.

+ Courses must be divided between at least two of those fields.
**LANGUAGE INTENSIVE VARIANT**

The Language Intensive Variant is designed for students who expect to continue Classical Studies at the graduate level. It aims to provide the level of linguistic proficiency in both Greek and Latin that is commonly expected of applicants to rigorous graduate programs. The program assumes that, in addition to the requirements for the major, students have completed, or have credit for, a year of language study in either Greek or Latin. Students must also use some of their general electives to meet the language requirements of this program variant.

No course that is used to meet one of the following requirements may be used simultaneously to meet a requirement under any other category.

1. Six courses (or the equivalent) in one classical language (Greek or Latin) at the 20000 level or above.
2. Six courses (or the equivalent) in the other classical language, three of which may be at the introductory level.
3. Four courses in Greek or Roman art, history, philosophy, religion, science, material culture, or classical literature in translation, with courses divided between at least two of those fields, and with approval of the director of undergraduate studies. Any course that carries a Classical Civilization listing, or a Classics listing between 30100 and 39000, meets this requirement. Other eligible courses are offered in disciplines such as Art History, Interdisciplinary Studies in the Humanities, Philosophy, and Political Science. These courses should be chosen in consultation with the director of undergraduate studies.
4. By the end of the Spring Quarter of their third year, students are required to submit to the director of undergraduate studies a research skills paper of around 10–12 pages as a Word or PDF file in an email attachment. The paper, which will normally substitute for a final paper in a Greek (above 20300), Latin (above 20300), Classical Civilization, or Classics course, is designed to prepare students for the BA paper. Students will be expected to develop a reasoned argument on a particular topic, based not only on primary materials (ancient literary texts; material culture; etc.) but also on research of relevant secondary bibliography. Students should declare at the start of the quarter if they wish to take a certain course in conjunction with the research skills paper and should work closely throughout the quarter with the faculty instructor, who must approve the paper as satisfying the requirement.
5. CCLV 29800 BA Paper Seminar, a one-quarter course spread over Autumn and Winter Quarters. See BA Paper Seminar and BA Paper for more information.

**Summary of Requirements: Language Intensive Variant**

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<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Six courses in Greek *</td>
<td>600</td>
</tr>
<tr>
<td>Six courses in Latin *</td>
<td>600</td>
</tr>
<tr>
<td>4 courses in Greek or Roman art, history, philosophy, religion, science, material culture, or classical literature in translation *</td>
<td>400</td>
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<tr>
<td>CCLV 29800 BA Paper Seminar</td>
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<td><strong>Total Units</strong></td>
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</tr>
</tbody>
</table>

* Six courses in one classical language (Greek or Latin) at the 20000 level or above, and six courses in the other language, three of which may be at the introductory level.

+ Courses must be divided between at least two of those fields.

**GREEK AND ROMAN CULTURES VARIANT**

This variant is designed for students who are interested in ancient Greece and Rome but wish to focus more on history (political, intellectual, religious, social) and material culture than on language and literature. Because the program allows many courses taught in other departments to count toward the major, it is especially suited to students who declare their major late or who wish to complete two majors.

The program assumes that, in addition to requirements for the major, students have met the general education requirement in civilization studies by taking two or three courses in a sequence related to the Ancient Mediterranean World: HIST 16700-16800-16900 Ancient Mediterranean World I-II-III; Rome: Antiquity to the Baroque sequence (taught in Rome); or Athens: Greek Antiquity and Its Legacy sequence (taught in Athens). Students who have met the general education requirement in civilization studies with a different sequence should complete one of these three sequences, which may then count toward the nine courses in classical civilization required for the major.

No course that is used to meet one of the following requirements may be used simultaneously to meet a requirement under any other category.

1. Three courses in Greek or Latin (or the equivalent) at a level appropriate to the student’s prior competency, including at least one course at or above the 10300 level.
2. Nine courses in Greek or Roman art, history, philosophy, religion, science, material culture, or classical literature in translation, with courses divided between at least four of those fields, and with approval of the director of undergraduate studies. Any course that carries a Classical Civilization listing, or a Classics listing between 30100 and 39000, meets this requirement. Any course that carries a Classical Civilization listing or a Classics listing between 30100 and 39000 meets this requirement. Other eligible courses are offered in disciplines such as Art History, Interdisciplinary Studies in the Humanities, Philosophy, and Political Science. These courses should be chosen in consultation with the director of undergraduate studies.

3. By the end of the Spring Quarter of their third year, students are required to submit to the director of undergraduate studies a research skills paper of around 10-12 pages as a Word or PDF file in an email attachment. The paper, which will normally substitute for a final paper in a Greek (above 20300), Latin (above 20300), Classical Civilization, or Classics course, is designed to prepare students for the BA paper. Students will be expected to develop a reasoned argument on a particular topic, based not only on primary materials (ancient literary texts; material culture; etc.) but also on research of relevant secondary bibliography. Students should declare at the start of the quarter if they wish to take a certain course in conjunction with the research skills paper and should work closely throughout the quarter with the faculty instructor, who must approve the paper as satisfying the requirement.

4. CLCV 29800 BA Paper Seminar, a one-quarter course spread over Autumn and Winter Quarters. See BA Paper Seminar and BA Paper for more information.

Summary of Requirements: Greek and Roman Cultures Variant

<table>
<thead>
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<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>3 courses in Greek or Latin</td>
<td>300</td>
</tr>
<tr>
<td>9 courses in Greek or Roman art, history, philosophy, religion, science, material culture, or classical literature in translation *</td>
<td>900</td>
</tr>
<tr>
<td>CLCV 29800 BA Paper Seminar</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>1300</strong></td>
</tr>
</tbody>
</table>

* Courses must be divided between at least four of those fields.

BA Paper Seminar and BA Paper

Candidates for the BA degree in all variants of the Classical Studies major are required to write a substantial BA paper. The purpose of the BA paper is to enable students to improve their research and writing skills and to give them an opportunity to focus their knowledge of the field upon an issue of their own choosing.

In their third year, by Monday of eighth week of Spring Quarter, students must submit to the director of undergraduate studies a short statement proposing an area of research. The statement should include an abstract of a paragraph or more, outlining the problem that you wish to tackle and sketching the argument you hope to elaborate in response. You can, if you wish, discuss questions of method or earlier scholarship. You should make reference here with as much specificity as possible to the primary sources on which you will draw to substantiate your claim.

The statement must be approved in writing by a member of the Classics faculty who agrees to be the director of the BA paper. In certain cases, students may have two co-chairs, including one member of the Classics faculty and one faculty member from another department. Classics faculty at the level of associate professor and above may advise up to three BA papers, while assistant professors may advise as many as two papers. Students needing assistance in finding a faculty member with whom to work should consult with the director of undergraduate studies.

Students may register for CLCV 29800 BA Paper Seminar in either Autumn or Winter Quarter of their fourth year, but they are expected to participate in seminar meetings throughout both quarters. The focus of the seminar is to discuss research problems and compose preliminary drafts of their BA papers. Participants in the regular seminar meetings are expected to exchange criticism and ideas with each other and with the preceptor, as well as to take account of comments from their faculty readers. The grade for the BA Paper Seminar is identical to the grade for the BA paper and, therefore, is not reported to the Registrar until the paper has been submitted in Spring Quarter. The grade for the BA paper depends on participation in the seminar as well as on the quality of the paper. At the end of Autumn Quarter, a provisional grade will be assigned by the preceptor and communicated to the student via the director of undergraduate studies. Once the BA paper has been submitted, the final grade will be determined jointly by the preceptor and faculty director.

The deadline for submitting the BA paper in final form is Friday of third week of Spring Quarter. This deadline represents the formal submission, which is final; students should expect to submit and defend substantial drafts much earlier. Both hard copies and digital copies are to be submitted to the faculty director, seminar preceptor, and director of undergraduate studies, unless otherwise indicated. Students who fail to meet the deadline may not be able to graduate in that quarter and will not be eligible for honors consideration.

Students who undertake a double major may meet the requirement for a BA paper in Classical Studies by making it part of a single BA paper that is designed to meet the requirements of both majors. This combined paper must have a substantial focus on texts or issues of the classical period, and must have a Classics faculty...
member as a reader. CLCV 29800 BA Paper Seminar (the two-quarter BA Paper Seminar) is required of all students majoring in Classical Studies, whether as a double major or as a single major. The use of a single essay to meet the requirement for a BA paper in two majors requires approval from directors of undergraduate studies in both majors. A consent form, to be signed by the directors of undergraduate studies, is available from the College advisers. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

GRADING

All courses taken to meet requirements in the major or minor must be taken for quality grades.

The first-year sequences in Greek and Latin (GREK 10100-10200-10300 Introduction to Attic Greek I-II-III and LATN 10100-10200-10300 Introduction to Classical Latin I-II-III) and the courses in Greek and Latin composition (GREK 34400 Greek Prose Composition and LATN 34400 Latin Prose Composition) are open for P/F grading for students not using these courses to meet language requirements for the major.

HONORS

To be recommended for honors, a student (1) must maintain an overall GPA of 3.25 or higher and a GPA of 3.5 or higher in the major and (2) must also demonstrate superior ability in the BA paper to interpret Greek or Latin source material and to develop a coherent argument. For a student to be recommended for honors, the BA paper must be judged worthy of honors by the faculty director, preceptor, and an additional faculty committee. Before the end of the Winter Quarter, the director of undergraduate studies will consult with both the faculty director and the BA preceptor to ascertain which students in the BA Seminar are likely to be nominated for honors and which papers will be forwarded to the faculty committee.

MINOR PROGRAM IN CLASSICAL STUDIES

The minor in Classical Studies requires a total of seven courses in Greek, Latin, or classical civilization. Students may choose one of two variants: a language variant that includes three courses at the 20000 level or higher in one language, or a classical civilization variant.

Students must meet with the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the director of undergraduate studies. The director’s approval for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.

CLCV courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements.

Courses in the minor must be taken for quality grades and more than half of the requirements for the minor must be courses completed at the University of Chicago.

The following groups of courses would comprise a minor in the areas indicated. Other programs may be designed in consultation with the director of undergraduate studies. Minor program requirements are subject to revision.

**Greek (or Latin) Sample Variant**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GREK 10100-10200-10300</td>
<td>Introduction to Attic Greek I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>GREK 20100-20200-20300</td>
<td>Intermediate Greek I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>CLCV 21200</td>
<td>History and Theory of Drama I</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>700</strong></td>
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</tbody>
</table>

* Language variant of the minor requires three courses at the 20000 level or higher in Greek or Latin.  
** or, for example, CLCV 21400 Marg Populations Of Rom Empire

**Greek (or Latin) Sample Variant**

One of the following sequences:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>GREK 20100-20200-20300</td>
<td>Intermediate Greek I-II-III</td>
</tr>
<tr>
<td>LATN 20100-20200-20300</td>
<td>Intermediate Latin I-II-III</td>
</tr>
<tr>
<td>CLCV 20700-20800-20900</td>
<td>Ancient Mediterranean World I-II-III</td>
</tr>
<tr>
<td>CLCV 21400</td>
<td>Marg Populations Of Rom Empire</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>700</strong></td>
</tr>
</tbody>
</table>

** or, for example, CLCV 21200 History and Theory of Drama I
**Prizes and Grants**

The Arthur Adkins Summer Research Fellowship is expected to be worth $5,000 this year. The fellowship is targeted to third-year undergraduates who are bound for graduate school, and it provides means and opportunity for the writing of a superior research paper on any aspect of the ancient world from the Bronze Age through Late Antiquity. It may be used for travel to classical sites and collections or to other research centers, and/or for living expenses during a summer devoted to research between the third and fourth year. Applicants must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, a statement (2–3 pages) outlining their project and its relationship to existing knowledge in the field, a plan of research together with a provisional budget for the summer, and a letter from a faculty supervisor. A written report of what was accomplished during the period of the fellowship must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

*This fellowship is not limited to Classical Studies majors and minors, or even to students of Greek and Latin, and although it may be used for research abroad, it does not require such research. But it does require that a student have a well-developed research project by the time of application.*

The David Greene Fellowship is expected to be worth $5,000 this year. The fellowship is targeted to undergraduates whose intellectual interests in the classical world have led them to an area of knowledge which they are unable to pursue during the regular academic year, and it allows them an opportunity to explore that interest through independent study during the summer before graduation. The independent study may involve training in a new discipline such as paleography or numismatics, first-hand experience of ancient sites and artifacts, or ancillary language study. It may be carried out under the auspices of an organized program like the American School of Classical Studies at Athens or the American Academy in Rome, or it may be tailored entirely according to the student’s own plan. Applicants must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, project statement (2–3 pages), a provisional budget, and a faculty letter of recommendation. A written report of what was accomplished during the period of the fellowship must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

*This fellowship is not limited to Classical Studies majors and minors, or even to students of Greek and Latin, and it need not directly involve the study of classics, but applicants must be able to demonstrate a background of interest in the classical world.*

The Pausanias Summer Research Fellowship is expected to be worth $5,000 this year. The fellowship provides support to an undergraduate student in Classical Studies for research abroad in sites of interest for classical studies. It may be used to pursue a project of the student’s own design or to participate in appropriate institutional programs abroad. Applicants must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, project statement (2–3 pages), provisional budget, and a faculty letter of recommendation. A written report of what was accomplished during the period of the fellowship must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

*This fellowship is limited to Classical Studies majors and minors.*

The John G. Hawthorne Travel Prize is expected to be worth $5,000 this year. The prize is given to an outstanding undergraduate student of classical languages, literature, or civilization for travel to Greece or Italy or for study of classical materials in other countries. It may be used to pursue a project of the student’s own design or to participate in appropriate programs conducted in Greece or Italy. Applicants must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, project statement (2–3 pages), provisional budget, and a faculty letter of recommendation. A written report of what was accomplished during the period of the prize must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

*This prize is open to any student who has taken a GREK, LATN, or CLCV course in the College, and may be used for travel in Greece and/or Italy, or for classics-related study there or in other appropriate locations.*

The Leon Golden Undergraduate Research Fellowship is expected to be worth $5,000 this year. The fellowship is intended to enable undergraduates majoring in Classical Studies to develop an original research project in the field or to pursue training in ancillary studies that will enrich their work in classics. Applicants...
must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, a statement (2–3 pages) outlining their project together with a provisional budget, and a letter from a faculty supervisor. A written report of what was accomplished during the period of the fellowship must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

This fellowship is limited to Classical Studies majors, and it requires that a student have a well-developed project by the time of application.

The Nancy P. Helmbold Travel Award is expected to be worth $5,000 this year. It is awarded to an outstanding undergraduate student of Greek and/or Latin for travel to Greece or Italy. Applicants must submit to the Classics Secretary (by Monday, April 8, 2019) a transcript, an itinerary or project statement (2–3 pages), proposed budget, and a faculty letter of recommendation. A written report of what was accomplished during the period of the award must be submitted to the director of undergraduate studies by the first week of the following Autumn Quarter.

This award requires a student to have taken a GREK or LATN course (not merely a CLCV course) in the College. It may or may not be used for study in Greece and/or Italy.

The Paul Shorey Foreign Travel Grant is expected to be worth $3,000 this year. The grant is given to a student of Greek or Latin who has been accepted to participate in the Athens Program or the Rome Program of the College, and it is to be used to defray costs incurred in the program. The terms of the grant stipulate that it is to be awarded to a “needy and deserving” student. Students who have been accepted into one of the programs and who wish to be considered for the Shorey grant are invited to submit statements explaining their need in the first week of Spring Quarter.

The Classics Prize is a cash award of $500 made annually to the student who graduates with the best record of achievement in the Classical Studies major.

Examples of past successful application statements for the summer awards are available from the undergraduate prize coordinator, Peter White, (https://classics.uchicago.edu/faculty/white) or the director of undergraduate studies, Sofia Torallas Tovar (https://classics.uchicago.edu/faculty/tovar).

Offered through the Society for Classical Studies (SCS):

The Lionel Pearson Fellowship seeks to contribute to the training of American and Canadian classicists by providing for a period of study at an English or Scottish university. The competition is open to students majoring in Classics, or closely related fields. Fellows must undertake a course of study that broadens and develops their knowledge of Greek and Latin literature in the original languages; candidates should therefore have a strong background in the classical languages. Normally, the recipient will hold the fellowship in the academic year immediately after graduating with a bachelor’s degree. The term of the fellowship is one year. The recipient may use the fellowship for part of a longer program of study, but under no circumstances will support from the fellowship extend beyond one year. Fellows are responsible for seeking and obtaining admission to the English or Scottish university where they intend to study.

The maximum amount of the fellowship will be $24,000, which may be used to offset academic fees, travel expenses, housing and subsistence costs, and book purchases. The fellowship amount ($24,000) is the maximum that the SCS can award, but the Faculties of Classics of both Oxford and Cambridge Universities have generously offered to support the tuition expenses of any Pearson Fellow enrolled at their institution. In these instances funds provided by the SCS should be adequate to offset the fellow’s other expenses, and the SCS will attempt (but it cannot guarantee) to obtain a similar accommodation from another institution in the UK should the fellow attend a university other than Oxford or Cambridge. Note: The SCS cannot guarantee tuition support from other Faculties at Oxford and Cambridge (such as Philosophy or History). Students should be aware that if they can pursue their preferred course of study under the rubric of Classics, it would be to their advantage.

Candidates for the fellowship require nomination by the director of undergraduate studies by the end of the Spring Quarter for a rising fourth-year student. The Department of Classics may only nominate one student, and therefore requests that interested students submit the following materials by Friday of eighth week in the Spring Quarter of their third year:

- A current copy of your transcript
- One paragraph on why you would like to be nominated for the Pearson Fellowship, briefly suggesting what you might like to do with it. This should include which university or universities you are interested in attending, with whom you would like to work, and what kind of topic you would like to research and/or why you think a year doing so in the UK would be especially beneficial for you.

CLASSICAL CIVILIZATION COURSES

CLCV 14113. Introduction to Roman Art and Archaeology. 100 Units.
This course offers a survey of the art and archaeology of the Roman world from the founding of Rome in the eighth century BC to the Christianization of the Empire in the fourth century AD. Students will witness the transformation of Rome from a humble village of huts surrounded by marshland in central Italy into the centripetal force of a powerful Empire that spanned mind-bogglingly distant reaches of space and time. Throughout the course, we will consider how the built environments and artifacts produced by an incredible diversity of peoples and places can make visible larger trends of historical, political, and cultural change. What, we will begin and end by asking, is Roman about Roman art?
Instructor(s): P. Crowley Terms Offered: Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): ARTH 14105

CLCV 15000. Myth and Its Critics. 100 Units.
Myth is essential to how humans make sense of the world: our foundational stories explain the nature of the world; they justify and explore social and sexual difference; they teach and test the limits of human agency. The course will survey contexts and uses of myth-making in the ancient Mediterranean world. We will also explore the many traditions of critique and anxiety about myth-making, among philosophers, literary critics and religious authorities.
Instructor(s): C. Ando Terms Offered: Spring
Equivalent Course(s): HIST 17000, SIGN 26037

CLCV 20118. Changing, Resting, Living: Aristotle’s Natural Philosophy. 100 Units.
How can many things be one thing? Aristotle’s answer to this question treats living things--plants and animals--as the paradigm cases of unified multiplicities. In this course, we will investigate how such things are held together and what makes it possible for them to change over time. Readings will be from Aristotle’s Physics, Metaphysics, De Anima, Parts of Animals, On Generation and Corruption, and De Motu Animalium. (B)
Instructor(s): A. Callard Terms Offered: Winter
Prerequisite(s): Students who are not enrolled by the start of term but wish to enroll must (a) email the instructor before the course begins and (b) attend the first class.
Equivalent Course(s): CLAS 30118, PHIL 30102, PHIL 20102

CLCV 20216. Egypt in Late Antiquity. 100 Units.
Egypt in Late Antiquity was a melting pot of cultures, languages, and religions. With the native Egyptians subject to a series of foreign masters (Greek and Roman), each with their own languages and religious practices, Egyptian society was marked by a rich and richly documented diversity. In this course we will pay special attention to the contact of languages and of religions, discussing on the basis of primary sources in translation different aspects characteristic of this period: the crises of the Roman Empire and their effects in Egypt, the emergence of Christianity and the decline of paganism, the development of monastic communities. The course will end at the Islamic conquest.
Equivalent Course(s): NEHC 20287, CLAS 35716, HREL 30287, NEHC 30287

CLCV 20400. Who Were the Greeks? 100 Units.
If the current resurgence of interest in ethnic studies is a direct reflection of a contemporary upsurge in ethnic conflict throughout the world, it remains the case that notions of peoplehood and belonging have been of periodic importance throughout history. This course will study the various expressions of Greek identity within shifting political, social, and cultural contexts from prehistory to the present day, though with a strong emphasis on classical antiquity. Particular attention will be given to theoretical issues such as anthropological definitions of ethnicity, the difference between ethnic and cultural identities, methods for studying ethnicity in historical societies, and the intersection of ethnicity with politics. Equivalent Course(s): CLAS 30400, CLCV 20400, HIST 30701, ANCM 30400
Instructor(s): J. Hall Terms Offered: Autumn
Equivalent Course(s): HIST 30701, ANCM 30400, CLAS 30400, HIST 20701

CLCV 20700-20800-20900. Ancient Mediterranean World I-II-III.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. This sequence surveys the social, economic, and political history of Greece to the death of Alexander the Great (323 BC), the Roman Republic (509 to 27 BC), and late antiquity (27 BC to the fifth century AD).

CLCV 20700. Anc Mediterr World-I: Greece. 100 Units.
This course surveys the social, economic, and political history of Greece from prehistory to the Hellenistic period. The main topics considered include the development of the institutions of the Greek city-state, the Persian Wars and the rivalry of Athens and Sparta, the social and economic consequences of the Peloponnesian War, and the eclipse and defeat of the city-states by the Macedonians.
Instructor(s): J. Hall, Staff Terms Offered: Autumn
Equivalent Course(s): HIST 16700
CLCV 20800. Anc Mediterr World-2: Rome. 100 Units.
This quarter surveys the social, economic, and political history of Rome, from its prehistoric beginnings in
the twelfth century BCE to the end of the Severan dynasty in 235 CE. Throughout, the focus is upon the
dynamism and adaptability of Roman society, as it moved from a monarchy to a republic to an empire,
and the implications of these political changes for structures of competition and cooperation within the
community. Instructor(s): C. Ando, Staff Terms Offered: Winter Note(s): This sequence meets the general
education requirement in civilization studies.
Instructor(s): C. Ando, M. Andrews, Staff Terms Offered: Winter
Equivalent Course(s): HIST 16800

CLCV 20900. Ancient Mediterranean World III. 100 Units.
This course will survey the social, political, and cultural history of the late antique Mediterranean from
Constantine I to Charlemagne. Through close reading and discussion of primary sources, we will examine
(among other topics) the rise and spread of Christianity and Islam, changing conceptions of Roman identity,
and the inheritance of the classical world, as well as some implications of these topics for subsequent
European history.
Instructor(s): R. Payne, staff Terms Offered: Spring
Equivalent Course(s): HIST 16900

CLCV 20800. Anc Mediterr World-2: Rome. 100 Units.
This quarter surveys the social, economic, and political history of Rome, from its prehistoric beginnings in
the twelfth century BCE to the end of the Severan dynasty in 235 CE. Throughout, the focus is upon the
dynamism and adaptability of Roman society, as it moved from a monarchy to a republic to an empire, and the implications
of these political changes for structures of competition and cooperation within the community. Instructor(s): C.
Ando, Staff Terms Offered: Winter Note(s): This sequence meets the general education requirement in civilization
studies.
Instructor(s): C. Ando, M. Andrews, Staff Terms Offered: Winter
Equivalent Course(s): HIST 16800

CLCV 20900. Ancient Mediterranean World III. 100 Units.
This course will survey the social, political, and cultural history of the late antique Mediterranean from
Constantine I to Charlemagne. Through close reading and discussion of primary sources, we will examine
(among other topics) the rise and spread of Christianity and Islam, changing conceptions of Roman identity,
and the inheritance of the classical world, as well as some implications of these topics for subsequent
European history.
Instructor(s): R. Payne, staff Terms Offered: Spring
Equivalent Course(s): HIST 16900

CLCV 21500. Medieval Book: History, Typology, Function. 100 Units.
The Medieval Book: History, Typology, Function. The course will survey the cultural setting of books and book-
learning from end of Antiquity to the Age of Print. We shall consider the new and varied historical impulses that
shaped medieval techniques of writing, reading, and ordering of knowledge, and also the details of physical
construction, textual presentation, and decoration, which often survived the transition from script to print culture
To illustrate our discussions, we shall make use of holdings in Regenstein Special Collections and also take a
special trip to the Newberry Library.
Instructor(s): M. Allen Terms Offered: Spring
Equivalent Course(s): CLAS 31500

CLCV 21700. Archaeology for Anc Historians. 100 Units.
This course is intended to act not as an introduction to Classical archaeology but as a methods course
illuminating the potential contribution of material cultural evidence to ancient historians while at the same time
alerting them to the possible misapplications. Theoretical reflections on the relationship between history and
archaeology will be interspersed with specific case studies from the Graeco-Roman world.
Instructor(s): J. Hall Terms Offered: Winter
Equivalent Course(s): HIST 20901, ANCM 31700, CLAS 31700, HIST 39800

CLCV 21717. Sophocles, Ajax. 100 Units.
A close literary and philological analysis of one of the most remarkable and perplexing of all Greek tragedies. We
will consider the play’s portrayal of the nature and limits of one form of male heroism against the background
of earlier poetry and contemporary history; and we will attempt constantly for elate philological and literary
approaches to one another in order to understand better not only Sophocles’ play but also the strengths and
limitations of the ways in which scholars try to come closer to it.
Equivalent Course(s): CLAS 31717, SCTH 31613
CLCV 21718. Socrates, Plato and Aristotle on Courage. 100 Units.
What is courage? Is it: doing what you should do, even when you are afraid? Can you be courageous without being afraid? Can you be courageous and know that you are doing the right thing? Can you be courageous if you are not in fact doing the right thing? Can you have precisely the correct amount of fear and still fail to be courageous? Could you be courageous if you weren’t afraid to die? Courage is, arguably, the queen of the virtues. In this class, we will use some Socratic dialogues (Laches, Protagoras, Republic, Phaedo) and some Aristotelian treatises (Nicomachean Ethics, Eudemian Ethics) as partners in inquiry into the answers to the questions listed above. (A) Instructor(s): A. Callard Terms Offered: Autumn Prerequisite(s): Students who are not enrolled by the start of term but wish to enroll must (a) email the instructor before the course begins and (b) attend the first class. Equivalent Course(s): PHIL 21717, PHIL 31717, CLAS 31718

CLCV 21807. Greek Art and Archaeology. 100 Units.
This course examines the art and archaeology of ancient Greece from ca. 1000 BCE - ca. 200 BCE. Participants will learn a lot of facts about the Greek world; they will see the Greeks emerge from poverty and anarchy to form a distinctive political and social system based on city-states, and they will see that system grow unstable and collapse. They will see the emergence of distinctive forms of sculpture, architecture, pottery, and urban design - many of which are still in use today. Along with these facts, they will acquire a conceptual toolkit for looking at works of art and for thinking about the relation of art to social life. Instructor(s): S. Estrin Terms Offered: Autumn Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts. Equivalent Course(s): ARTH 14107

CLCV 21915. The Present Past in Greece Since 1769. 100 Units.
This discussion-based course will explore how conceptions of the ancient past have been mobilized and imagined in the political, social, and cultural discourses of modern Greece from the lead up to the War of Independence through to the present day. Among the themes that will be addressed are ethnicity and nationalism, theories of history, the production of archaeological knowledge, and the politics of display. Instructor(s): J. Hall Terms Offered: Winter Equivalent Course(s): ANCM 31915, HIST 21006, CLAS 31915, HIST 31006

CLCV 22115. Carolingian Renaissance. 100 Units.
The Carolingian Renaissance flowered thanks to the leadership of a new royal (AD 751) and then (from Christmas 800) imperial dynasty. Expansive political and cultural initiatives reshaped Europe into a distinct space, not least, though paradoxically, through its fragmentation after AD 843. We shall study the actors and trends at play, the important role of Classical models and Latin book culture, and consider the relevant sources in all their physical, textual, and imaginative variety. Instructor(s): M. Allen Terms Offered: Winter Equivalent Course(s): RLST 21610, HIST 22115, CLAS 32115, HIST 32115, HCHR 34304

CLCV 22117. Fate and Duty: European Tragedy from Aeschylus to Brecht. 100 Units.
This class will explore the development of European drama from Attic tragedy and comedy and their reception in Ancient Rome and French Neoclassicism to the transformation of dramatic form in 18-20th c. European literatures. The focus will be on the evolution of plot, characterization, time-and-space of dramatic action, ethical notions (free will, guilt, conscience), as well as on representations of affect. All readings in English. No prerequisites. Equivalent Course(s): REES 22402, CLAS 32117, GRMN 22402, CMLT 22402

CLCV 22216. Italian Renaissance: Dante, Machiavelli, and the Wars of Popes and Kings. 100 Units.
This course will consider Florence, Rome, and the Italian city-states in the age of plagues and cathedrals, Dante and Machiavelli, Medici and Borgia (1250-1600), with a focus on literature, philosophy, primary sources, the revival of antiquity, and the papacy’s entanglement with pan-European politics. We will examine humanism, patronage, politics, corruption, assassination, feuds, art, music, magic, censorship, education, science, heresy, and the roots of the Reformation. Writing assignments focus on higher-level writing skills, with a creative writing component linked to our in-class live-action-role-played (LARP) reenactment of a Renaissance papal election. This is a Department of History Gateway course. Instructor(s): A. Palmer Terms Offered: Spring Prerequisite(s): Graduate students by consent only; register for the course as HIST 90000 (sect 53) Reading and Research: History. Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages Equivalent Course(s): KNOW 12203, RLST 22203, SIGN 26034, ITAL 16000, HIST 12203
CLCV 22514. Markets and Moral Economies. 100 Units.
This course examines the ways in which economic behavior in the Roman Empire was informed by, and itself came to inform, social and religious mores and practices. We will explore the interrelationship between culture and economy from the accession of Augustus to late antiquity and the conversion of the empire to Christianity. Particular attention will be given to Roman attitudes towards labor, the ethical issues surrounding buying and selling, and alternative allocative mechanisms to the market. Of constant concern will be the tension between the perspectives and prejudices of elites, which stand behind so much surviving literary evidence, and the realities of everyday commerce and economic life as they can be glimpsed in the archaeological and epigraphic record.
Instructor(s): L. Gardnier Terms Offered: Autumn
Equivalent Course(s): CLAS 32514

CLCV 22518. Humor in Antiquity. 100 Units.
Satire, spoof, social comedy—much of what we think of as funny today was also funny to the Greeks and Romans. In this course we will look at highlights of Greco-Roman humorous writing, with a special focus on dramatic comedy (Aristophanes, Menander, Plautus, Terence) and on satire (Horace, Persius, Juvenal). We will also look at some more recondite gems, including Lucian’s comic essays and the cheeky biographies of the Roman emperors. Topics include the way that comedy comments on power and society, and the way that comic tropes persist or differ across time and genre.
Instructor(s): A. Horne Terms Offered: Autumn

CLCV 22700. Ancient Philos/Hist Philos-1. 100 Units.
An examination of ancient Greek philosophical texts that are foundational for Western philosophy, especially the work of Plato and Aristotle. Topics will include: the nature and possibility of knowledge and its role in human life; the nature of the soul; virtue; happiness and the human good.
Instructor(s): G. Richardson Lear Terms Offered: Autumn
Prerequisite(s): Completion of the general education requirement in humanities.
Equivalent Course(s): PHIL 25000

CLCV 22718. Sports and Leisure in the Ancient World. 100 Units.
For many of the ancients, leisure was more than a pastime: it was the most serious business of life. This course examines Greco-Roman reflections on athletics—the games—alongside philosophical discussions of leisure. Our goal is to study a wide range of perspectives on the use of non-work time, from the flippant (Ovid) to the deathly serious (Pindar, Aristotle). The unifying theme is that, for almost every figure we study, leisure is not only more important than work, but requires deeper reflection to do well. Ancient readings will be supplemented by selections from modern writers on leisure.
Instructor(s): A. Horne Terms Offered: Autumn

CLCV 22914. The Italian Renaissance. 100 Units.
Florence, Rome, and the Italian city-states in the age of plagues and cathedrals, Dante and Machiavelli, Medici and Borgia (1250-1600), with a focus on literature and primary sources, the recovery of lost texts and technologies of the ancient world, and the role of the Church in Renaissance culture and politics. Humanism, patronage, translation, cultural immersion, dynastic and papal politics, corruption, assassination, art, music, magic, censorship, religion, education, science, heresy, and the roots of the Reformation. Assignments include creative writing, reproducing historical artifacts, and a live reenactment of a papal election. First-year students and non-history majors welcome.
Instructor(s): A. Palmer Terms Offered: Spring
Equivalent Course(s): HIST 32900, ITAL 32914, KNOW 31405, HCHR 32900, HIST 22900, ITAL 22914, CLAS 32914, RLST 22900, KNOW 21405

CLCV 22917. How to Build a Global Empire. 100 Units.
Empire is arguably the oldest, most durable, and most diffused form of governance in human history that reached its zenith with the global empires of Spain, Portugal and Britain. But how do you build a global empire? What political, social, economic, and cultural factors contribute to their formation and longevity? What effects do they have on the colonizer and the colonized? What is the difference between a state, an empire, and a “global” empire? We will consider these questions and more in case studies that will treat the global empires of Rome, Portugal, and Britain, concluding with a discussion of the modern resonances of this first “Age of Empires.”
Equivalent Course(s): LACS 26128, KNOW 23002, HIST 26128

CLCV 23400. Boethius: Consolation of Philosophy. 100 Units.
The Consolation of Philosophy, which Boethius wrote in prison after a life of study and public service, offers a view on Roman politics and culture after Rome ceased to be an imperial capital. The Consolation is also a poignant testament from a man divided between Christianity and philosophy. About 70 pages of the text are read in Latin, and all of it in English. Secondary readings provide historical and religious context for the early sixth century AD.
Instructor(s): Peter White Terms Offered: Spring
Prerequisite(s): Latin 20300 or equivalent
Equivalent Course(s): CLAS 33400
CLCV 23608. Aristophanes' Athens. 100 Units.
This course will focus on nine of Aristophanes' plays in translation (Acharnians; Wasps; Clouds; Peace; Birds; Lysistrata; Thesmophoriazousai; Frogs; and Ploutos) in order to determine the value Old Comedy possesses for reconstructing sociohistorical structures, norms, expectations, and concerns. Among the topics to be addressed are the performative, ritual, and political contexts of Attic comedy, the constituency of audiences, the relationship of comedy to satire, the use of dramatic stereotypes, freedom of speech, and the limits of dissent.
Instructor(s): J. Hall Terms Offered: Winter
Equivalent Course(s): HIST 30803, HIST 20803, CLAS 33608, ANCM 33900

CLCV 23712. Aquinas: On God, Being and Evil. 100 Units.
This course considers sections from Saint Thomas Aquinas's Summa Theologica. Among the topics considered are God's existence; the relationship between God and Being; and human nature.
Instructor(s): S. Meredith Terms Offered: Spring
Equivalent Course(s): RLST 23605, FNDL 20700

CLCV 24017. The Spartan Divergence. 100 Units.
Sparta was a Greek city, but of what type? The ancient tradition, or at least the larger part of it, paints the portrait of an ideal city-state. The city was supposed to be stable and moderately prosperous. Its citizens were allegedly models of virtue. For many centuries the city did not experience revolutions and its army was invincible on the battlefield. This success was attributed to its perfect institutions. Following the track opened by Ollier's Spartan Mirage, modern scholarship has scrupulously and successfully deconstructed this image of an ideal city. But what do we find if we go beyond the looking glass? Was Sparta really a city "like all the others"? This class will show that we must go deeper into our evidence in order to make sense of the extraordinary success followed by the brutal collapse of this very special city-state.
Equivalent Course(s): HIST 20307, HIST 30307, CLAS 34017

CLCV 24116. History of Skepticism, Pre-socratic Greece to Enlightenment. 100 Units.
Doubt has been a fundamental tool from the foundations of Western philosophy, used by radicals and orthodox thinkers, skeptics and system-builders, theologians and scientists. Philosophical skepticism and its evolving palette of intellectual tools shaped the ancient philosophical schools of Greece and Rome, the solidification of early Christian doctrine, the scholastic debates of the later Middle Ages, the neoclassical explosions of the Renaissance, the "new philosophy" of the seventeenth century, the radical projects of the Enlightenment, and the advent of the modern scientific method. This course reviews the history of systematic philosophical doubt, focusing on primary source readings from Sextus Empiricus and Cicero to William of Ockham and the Averroist controversies, to Montaigne, Descartes, Bacon, and Diderot. Undergraduate writing assignments focus on polishing advanced writing ability through short assignments targeting concision, critical thinking, and journalistic writing skills with creative elements. Enrolled graduate students will be invited to additional graduate-only discussions and have supplementary assignments, including secondary source and historiographical readings and self-designed customized research papers. Both undergraduates and graduate students from outside the Department of History are welcome.
Instructor(s): A. Palmer Terms Offered: Autumn
Equivalent Course(s): HIST 39314, CLAS 34116, HIST 29314

CLCV 24118. Coptic Bible. 100 Units.
The Coptic versions of the Bible present one of the earliest translations of Christian scripture as the new religion spread. Understanding how the Bible (canonical and non-canonical) was read and used in Egypt at this early stage implies studying the development of Christian communities in those agitated times, as well as paying attention to questions of literacy and linguistic environment, book production, Bible (both Greek and Coptic) on papyrus, and translation and interpretation in Antiquity. The course will draw on materials assembled from my work on the critical edition of the Gospel of Mark, but will also look into other materials like the Coptic Old Testament, and non-canonical scriptures such as Nag Hammadi and the Gnostic scriptures. No previous knowledge of Coptic is required. A brief introduction to the Coptic language will be part of the class, and parallel sessions of additional language instruction will be planned for those who are interested in learning more.
Instructor(s): S. Torallas Terms Offered: Autumn
Equivalent Course(s): BIBL 31418, NEHC 24118, RLST 21450, CLAS 34118, NEHC 34118

CLCV 24306. Byzantine Empire: 330-610. 100 Units.
A lecture course, with limited discussion, of the formation of early Byzantine government, society, and culture. Although a survey of events and changes, including external relations, many of the latest scholarly controversies will also receive scrutiny. There will be some discussion of relevant archaeology and topography. Readings will include some primary sources in translation and examples of modern scholarly interpretations. Final examination and a short paper. Equivalent Course(s): CLAS 34306,CLCV 24306,HIST 31701,ANCM 34306
Instructor(s): W. Kaegi Terms Offered: Autumn
Equivalent Course(s): HIST 21701, HIST 31701, ANCM 34306, CLAS 34306
CLCV 24309. Byzantium and Islam. 100 Units.
This lecture/discussion course covers selected Byzantine-Islamic experiences from the emergence of Islam in the seventh century through the middle of the eleventh century. With no single textbook, this course is not a narrative survey. Topics include diplomatic (political), military, economic, cultural, and religious relations that range from subtle influences and adaptations to open polemics. Readings include modern scholarly interpretations and primary source readings. Texts in English.
Instructor(s): W. Kaegi Terms Offered: Spring
Equivalent Course(s): HIST 32001, CLAS 34309, HIST 22001

CLCV 24406. War & Society in Graeco Roman World. 100 Units.
This course studies the interplay between warfare and the political, social, and economic structures of the ancient Mediterranean world. We explore such topics as the motivations for and ideology of armed conflict, the relationship between military organization and civic structure, and the impact of hegemonic and imperial expansion on both the conquerors and the conquered. Readings incorporate foundational modern perspectives, but they emphasize ancient sources in translation.
Instructor(s): C. Hawkins Terms Offered: Winter
Equivalent Course(s): CLAS 34406, HIST 30402, HIST 20402, ANCM 34410

CLCV 24818. The Body and Embodiment in Ancient Greek Art. 100 Units.
Whether naked or clothed, male or female, mortal or divine, the body takes pride of place in the visual worlds constructed by ancient Greek artists. Yet this emphasis on depicting the body begs the question: What is a body that exists as an image? What, in other words, is a body that is not embodied? This problem, articulated already in our ancient sources, serves as the starting point for this course’s investigation of the relationship between images of the body in Greek art and the experiences such images solicited from their viewers. It examines, on the one hand, how Greek art promoted the body as a social construct—through artistic practices that configured the body’s appearance, like distinctive techniques, styles, and iconography; through conceptual categories that ascribed identities, like gender, class, and race; and through contexts that integrated depictions of the body into lived experience, like sanctuaries, cemeteries, and domestic settings. But we will give equal attention to the viewer’s subjective experience of embodiment, including its sensorial and affective dimensions, and the ways in which that experience is negotiated and articulated as a function of works of art. Finally, we will turn to the legacy of the Greek body in more recent centuries and consider its enduring impact as a visual paradigm today.
Instructor(s): S. Estrin Terms Offered: Winter
Equivalent Course(s): ARTH 34810, ARTH 24810, CLAS 34818

CLCV 24918. Early Traveling Writing: Pausanias in Roman Greece. 100 Units.
Through a close reading of Pausanias, who wrote his Description of Greece during the Roman imperial period, this course explores ancient forms of travel writing and associated interests in the places, peoples, myths, ruins, and material objects of the Mediterranean world. Moving from the apparent ethnographic lens of earlier Greek literature to Roman imperialist expeditions, readings and discussions will examine the sociopolitical contexts out of which Pausanias emerged as a literary author, and his legacies in and relationship to the wide array of genres of modern travel writing, from Lewis and Clark to John Steinbeck. Key topics will include: movement through space, tourism, nature, landscape, town and country, sites and spectacles, myth, ritual, and acts of remembering and forgetting.
Instructor(s): C. Kearns Terms Offered: Spring
Equivalent Course(s): ANCM 34918, CLAS 34918, FNDL 24918

CLCV 25117. Philo of Alexandria. 100 Units.
In this course we will read the Greek text of Philo’s de opificio mundi, with other brief excerpts here and there in the Philonic corpus. Our aim will be to use this treatise to elucidate the thought and character of one of the most prolific theological writers of the first century. We will seek to understand Philo as a Greek author and the nature and origins of his style, Philo as a proponent of Platonism, and Philo as a Jew in the context of Alexandrian Judaism. We will also examine his use of the allegorical method as an exegetical tool, and its implications for pagan, Jewish and early Christian approaches to sacred texts.
Instructor(s): D. Martinez Terms Offered: Autumn
Prerequisite(s): At least two years of Greek.
Equivalent Course(s): CLAS 35117, BIBL 44003

CLCV 25218. Mediterranean Islands: Odd and Insular Histories. 100 Units.
Islands, and Mediterranean islands in particular, have long provoked curiosity and intrigue, and have persisted as places for thinking about utopia, incongruity, distinctiveness, or backwardness since antiquity. This course interrogates the representations of islands in ancient thought as well as their own archaeological and historical records in order to trace their often elliptical categorization in modern scholarship. Are islands unique because they are isolated, or rather because they become crossroads of interaction? From the mythical island of the Cyclopes, to the Aegean archipelagos, to the large masses like Sicily or Cyprus, discussions will explore approaches to insularity, isolation, connectivity, and identity using a wide range of textual and material evidence and theoretical insights from geography, anthropology, history, literature, and environmental science.
Instructor(s): C. Kearns Terms Offered: Winter
Equivalent Course(s): CLAS 35218
CLCV 25417. Censorship from the Inquisition to the Present. 100 Units.
Collaborative research seminar on the history of censorship and information control, with a focus on the history of books and information technologies. The class will meet in Special Collections, and students will work with the professor to prepare an exhibit, The History of Censorship, to be held in the Special Collections exhibit space in the spring. Students will work with rare books and archival materials, design exhibit cases, write exhibit labels, and contribute to the exhibit catalog. Half the course will focus on censorship in early modern Europe, including the Inquisition, the spread of the printing press, and clandestine literature in the Renaissance and Enlightenment. Special focus on the effects of censorship on classical literature, both newly rediscovered works like Lucretius and lost books of Plato, and authors like Pliny the Elder and Seneca who had been available in the Middle Ages but became newly controversial in the Renaissance. The other half of the course will look at modern and contemporary censorship issues, from wartime censorship, to the censorship of comic books, to digital-rights management, to free speech on our own campus. Students may choose whether to focus their own research and exhibit cases on classical, early modern, modern, or contemporary censorship. This course is part of the College Course Cluster, The Renaissance.
Equivalent Course(s): CLAS 35417, HIST 25421, CHSS 35421, RLST 22121, SIGN 26010, KNOW 21403, HIST 35421, HREL 34309, HIPS 25421, KNOW 31403

CLCV 25700-25800-25900. Ancient Empires I-II-III.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered. Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.

CLCV 25700. Ancient Empires I. 100 Units.
The first course of this three-course sequence focuses on the Hittite Empire.
Instructor(s): H. Haroutunian Terms Offered: Autumn
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 20011, HIST 15602

CLCV 25800. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): HIST 15603, NEHC 20012

CLCV 25900. Ancient Empires-3: The Roman Empire. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, NEHC 20013, NEHC 20013, HIST 15604

CLCV 25800. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): HIST 15603, NEHC 20012
CLCV 25806. The Epigraphy of the Greek World. 100 Units.
Greek inscriptions provide us with a unique and specific approach to the ancient Greek world. This class will investigate both private and public inscriptions of ancient Greek city-states, from the Archaic to the Imperial period. It will allow us to explore both new forms of expression of the Greek language and specific and highly diversified cultural features. The class is open to students with Greek proficiency at the intermediary level or higher.
Instructor(s): A. Bresson Terms Offered: Spring
Equivalent Course(s): HIST 35809, HIST 20309, CLAS 35806

CLCV 25818. Stoic Ethics Through Roman Eyes. 100 Units.
The major ideas of the Stoic school about virtue, appropriate action, emotion, and how to live in harmony with the rational structure of the universe are preserved in Greek only in fragmentary texts and incomplete summaries. But the Roman philosophers give us much more, and we will study closely a group of key texts from Cicero and Seneca, including Cicero’s De Finibus book III, his Tusculan Disputations book IV, a group of Seneca’s letters, and, finally, a short extract from Cicero’s De Officiis, to get a sense of Stoic political thought. For fun we will also read a few letters of Cicero’s where he makes it clear that he is unable to follow the Stoics in the crises of his own life. We will try to understand why Stoicism had such deep and wide influence at Rome, influencing statesmen, poets, and many others, and becoming so to speak the religion of the Roman world. (A)
Instructor(s): M. Nussbaum Terms Offered: Winter
Prerequisite(s): Ability to read the material in Latin at a sufficiently high level, usually about two-three years at the college level. Assignment will usually be about 8 Oxford Classical Text pages per week, and in-class translation will be the norm.
Equivalent Course(s): PHIL 25818, RETH 35818, PHIL 35818, PLSC 35818, CLAS 35818, PLSC 25818

CLCV 25900. Ancient Empires-3: The Roman Empire,Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, NEHC 20013, NEHC 20013, HIST 15604

CLCV 25900. Ancient Empires-3: The Roman Empire,Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, NEHC 20013, NEHC 20013, HIST 15604

CLCV 26011. Ancient Views of the Economy. 100 Units.
The ancient economy is a topic that for a long period had fallen into neglect. But for a few years it has experienced an exceptional revival in the field of ancient studies. This is why it is time to revisit classical authors and examine what they can tell us on the economic world they were living in. Starting with Herodotus, moving on with Thucydides, Ps-Iamblichus, Xenophon, Plato, Aristotle, Polybius, Livy and Cicero, this course will provide a general outlook of what the writers of the Classical and Hellenistic period (for Greece) or Republican period (for Rome) can teach us on the topic. It will show certain continuities between some of them but will also be explicit on the vivid debates that could oppose others. Beyond the economic paradigm, it will also provide a new approach to a series of ancient authors.
Instructor(s): A. Bresson Terms Offered: Winter
Equivalent Course(s): CLAS 36011
CLCV 26017. Gods and God in Imperial Asia Minor (1-300 CE) 100 Units.
Roman Asia Minor in the Imperial period provides an extraordinary case of religious plurality and creativity. Pagans, Jews, Christians, even already Christian heretics, interacted in the same space. The frontiers between Jewish and Christian communities were, at least at the beginning, more fluid than was long thought. But even the frontiers between paganism and Judaism or Christianity were certainly not as rigid as was later imagined. This does not mean, however, that there were no tensions between the various groups. This class will examine the various aspects of this religious diversity as well as the social and political factors that may explain the religious equilibrium prevailing at that time in Asia Minor.
Instructor(s): A. Bresson Terms Offered: Spring
Equivalent Course(s): HREL 36017, CLAS 36017, HIST 20308, HIST 30308

CLCV 26037. Myth and Its Critics. 100 Units.
Myth is essential to how humans make sense of the world: our foundational stories explain the nature of the world; they justify and explore social and sexual difference; they teach and test the limits of human agency. The course will survey contexts and uses of myth-making in the ancient Mediterranean world. We will also explore the many traditions of critique and anxiety about myth-making, among philosophers, literary critics and religious authorities.
Equivalent Course(s): SIGN 15000

CLCV 26216. Pagans and Christians: Greek Backgrounds to Early Christianity. 100 Units.
This course will examine some of the Greco-Roman roots of early Christianity. We will focus on affinities between Christianity and the classical tradition as well as ways in which the Christian faith may be considered radically different. Some of the more important issues that we will analyze are: 1. "The spell of Homer." How the Homeric poems exerted immeasurable influence on the religious attitudes and practices of the Greeks. 2. The theme of creation in Greek and Roman authors such as Hesiod and Ovid. The Orphic account of human origins. The Early Christian theme of Christ as creator/savior. 3. Greek and Roman conceptions of the afterlife. The response to the Homeric orientation in the form of the great mystery cults of Demeter, Dionysus, and Orpheus. The views of the philosophers (esp. Plato). The New Testament conception of resurrection. 4. Greek and Roman conceptions of sacrifice, the crucifixion of Christ as archetypal sacrifice and early Christian reflection upon it. 5. The world of ancient magic and the Christian response.
Instructor(s): David Martinez Terms Offered: Spring
Equivalent Course(s): RLST 20505

CLCV 26517. Ancient Greek Aesthetics. 100 Units.
The ancient Greek philosophical tradition contains an enormously rich and influential body of reflection on the practice of poetry. We will focus our attention on Plato and Aristotle, but will also spend some time with Longinus and Plotinus. Topics will include: the analysis of poetry in terms of mimesis and image; poetry-making as an exercise of craft, divine inspiration, or some other sort of knowledge; the emotional effect on the audience; the role of poetry in forming moral character and, more broadly, its place in society; the relation between poetry, rhetoric, and philosophy; aesthetic values of beauty, wonder, truth, and grace. (A) (IV)
Equivalent Course(s): SCTH 39911, PHIL 39911, CLAS 36517, PHIL 29911

CLCV 26518. Introduction to Women and Gender in the Ancient World. 100 Units.
This course provides an introduction to aspects of women’s lives in the cultures of the ancient Mediterranean: primarily Greece and Rome, but drawing occasionally on examples also from the Near East and Egypt. We will examine not only what women actually did and did not do in these societies, but also how they were perceived by their male contemporaries and what value to society they were believed to have. The course will focus on how women are reflected in the material and visual cultures, but it will also incorporate historical and literary evidence, as well. Through such a comparative and interdisciplinary approach, we will examine the complexities and ambiguities of women’s lives in the ancient Mediterranean and begin to understand the roots of modern conceptions and perceptions of women in the Western world today.
Instructor(s): M. Andrews Terms Offered: Winter
Equivalent Course(s): HIST 17001, GNSE 17001

CLCV 26601. The Ancient City: The Greek World. 100 Units.
This annually offered course focuses on the development and transformation of cities in the ancient Mediterranean world. Among the issues to be discussed are how one defines a city and whether ancient cities satisfy those definitional criteria; what factors account for the emergence of cities; and what elements give rise to a particularly urban way of life. Theoretical reflections will be interspersed with specific case-studies. This year the focus will be on the cities of the Greek world and will consider topics such as the relationship between the city and the polis and the degree to which Athens was a typical Greek city.
Equivalent Course(s): HIST 16601
CLCV 26618. Cities and Urban Space in the Ancient World. 100 Units.
Cities have been features in human landscapes for nearly six thousand years. This course will explore how cities became such a dominant feature of settlement patterns in the ancient Mediterranean and Near East, ca. 4,000 BCE-350 CE. Was there an "Urban Revolution," and how did it start? What various physical forms did cities assume, and why did cities physically differ (or not) from each other? What functions did cities have in different cultures of the past, and what cultural value did "urban" life have? How do past perspectives on cities compare with contemporary ones? Working thematically and using theoretical and comparative approaches, this course will address various aspects of ancient urban space and its occupation, with each topic backed up by in-depth analysis of concrete case studies.
Instructor(s): M. Andrews Terms Offered: Spring
Equivalent Course(s): CLAS 36618, HIST 30805, HIST 20805

CLCV 26811. Plotinus. 100 Units.
We will read selections from the Enneads of Plotinus with an emphasis on the nature of beauty and its role in spiritual ascent. We will consider the relationship between spiritual vocation and the beauty of the world, the proper orientation to human embodiment as a condition for the successful pursuit of the contemplative life, and the power of language to communicate the ecstatic accomplishment of this life. (IV)
Instructor(s): G. Lear, M. Payne Terms Offered: Spring
Equivalent Course(s): FNDL 27906, CLAS 36811, PHIIL 35720, SCTH 34201, PHIIL 25720

CLCV 26916. Aztecs and Romans: Antiquity in the Making of Modern Mexico. 100 Units.
Modern Mexico stands in the shadow of two vibrant premodern urban societies: the Mexica (commonly known as the Aztecs) and the Romans. In this course, we will examine how Mesoamerican and Mediterranean antiquities overlapped and interacted in shaping the culture, politics, and society of the area we call Mexico from the late colonial period to the twenty-first century. Topics will include creole patriotism, the political thought of the early Mexican Republic and the Mexican Revolution of 1910, nationalist archaeology, indigenismo, mestizaje, and neoclassical and neo-Aztec art and architecture. All readings will be in translation.
Equivalent Course(s): LACS 26123, HIST 26123, KNOW 23001

CLCV 27200. Virgil: The Aeneid in Translation. 100 Units.
Description unavailable.
Equivalent Course(s): CLAS 37200, CMLT 28001, CMLT 38001, FNDL 26611

CLCV 27506. Archaic Greece. 100 Units.
In order to understand the institutions, ideals, and practices that characterized Greek city-states in the Classical period, it is necessary to look to their genesis and evolution during the preceding Archaic period (ca. 700-480 BC). This course will examine the emergence and early development of the Greek city-states through a consideration of ancient written sources, inscriptions, material artifacts, and artistic representations as well as more recent secondary treatments of the period. General topics to be covered will include periodization, the rise of the polis, religion, warfare, the advent and uses of literacy, tyranny, and the emergence of civic ideology.
Instructor(s): J. Hall Terms Offered: Autumn
Equivalent Course(s): HIST 20303, CLAS 37506, HIST 30303, ANCM 37506

CLCV 29110. Ancient Myth. 100 Units.
Description unavailable.

CLCV 29700. Reading Course: Classical Civ. 100 Units.
No description available. Prerequisite(s): Consent of faculty sponsor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Course Form.
Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Consent of faculty sponsor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Course Form.

CLCV 29800. BA Paper Seminar. 100 Units.
This seminar is designed to teach students the research and writing skills necessary for writing their BA paper. Lectures cover classical bibliography, research tools, and electronic databases. Students discuss research problems and compose preliminary drafts of their BA papers. They are expected to exchange criticism and ideas in regular seminar meetings with the preceptor and with other students who are writing papers, as well as to take account of comments from their faculty readers. The grade for the BA Paper Seminar is identical to the grade for the BA paper and, therefore, is not reported until the BA paper has been submitted in Spring Quarter. The grade for the BA paper depends on participation in the seminar as well as on the quality of the paper. Students may register for this seminar in either Autumn or Winter Quarter, but they are expected to participate in meetings throughout both quarters.
Instructor(s): Staff Terms Offered: Autumn Winter
Prerequisite(s): Fourth-year standing
GREEK COURSES

GREK 10100-10200-10300. Introduction to Attic Greek I-II-III.
This sequence covers the introductory Greek grammar in twenty-two weeks and is intended for students who have more complex schedules or believe that the slower pace allows them to better assimilate the material. Like GREK 11100-11200-11300, this sequence prepares students to move into the intermediate sequence (GREK 20100-20200-20300).

GREK 10100. Introduction to Attic Greek I. 100 Units.
This course introduces the basic rules of ancient Greek. Class time is spent on the explanation of grammar, translation from Greek to English and from English to Greek, and discussion of student work.
Instructor(s): Staff Terms Offered: Autumn
Note(s): Knowledge of Greek not required.

GREK 10200. Introduction To Attic Greek II. 100 Units.
Study of the introductory textbook continues through this quarter, covering further verbal morphology (participle, subjunctive, optative) and syntax of complex clauses. Students apply and improve their understanding of Greek through reading brief passages from classical prose authors, including Plato and Xenophon.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): GREK 10100

GREK 10300. Introduction to Attic Greek III: Prose. 100 Units.
Concurrently with finishing the final chapters of the textbook in the beginning of the quarter, students read a continuous prose text (Lysias 1). This is followed by extensive review of the year's grammar and vocabulary and further reading (Plato's Crito). The aim is familiarity with Greek idiom and sentence structure.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): GREK 10200

GREK 20100-20200-20300. Intermediate Greek I-II-III.
This sequence is aimed at students who have completed one of the introductory sequences and at entering students with extensive previous training, as evidenced by a placement exam. As a whole, it provides students with an overview of important genres and with the linguistic skills to read independently, and/or to proceed to advanced courses in the language.

GREK 20100. Intermediate Greek I: Plato. 100 Units.
We read Plato's text with a view to understanding both the grammatical constructions and the artistry of the language. We also give attention to the dramatic qualities of the dialogue. Grammatical exercises reinforce the learning of syntax.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): GREK 10300, 11300 or equivalent
GREK 20200. Intermediate Greek II: Sophocles. 100 Units.
This course includes analysis and translation of the Greek text, discussion of Sophoclean language and dramatic technique, and relevant trends in fifth-century Athenian intellectual history.
Terms Offered: Winter
Prerequisite(s): GREK 20100 or equivalent

GREK 20300. Intermediate Greek III. 100 Units.
This course is a close reading of two books of Homer, one from the Iliad and one from the Odyssey, with an emphasis on language, meter, and literary tropes.
Terms Offered: Spring
Prerequisite(s): GREK 20200 or equivalent

GREK 20223. Summer Intensive Intermediate Ancient Greek. 300 Units.
Summer Intensive Intermediate Greek combines extensive reading of texts with a comprehensive review of Classical grammar and syntax; it prepares students for advanced courses in Greek and for the use of Greek texts in their research. Texts studied are taken from a variety of representative and important Classical authors, and typically include Plato and Herodotus, Demosthenes, or Thucydides. The backbone of the review sessions is Mastronarde's Introduction to Ancient Greek combined with sight reading skill practice. The program meets during both mornings and afternoons for approximately five hours a day. Students are responsible for considerable amounts of class preparation in the evenings, requiring a full-time commitment for the duration of the course. This course equips students to continue with advanced course work or independent reading in Ancient Greek in all its varieties. Summer Intermediate Greek corresponds to a full year's worth of instruction at the University of Chicago.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17
Prerequisite(s): Successful completion of GREK 10300 or the equivalent placement.

GREK 20200. Intermediate Greek II: Sophocles. 100 Units.
This course includes analysis and translation of the Greek text, discussion of Sophoclean language and dramatic technique, and relevant trends in fifth-century Athenian intellectual history.
Terms Offered: Winter
Prerequisite(s): GREK 20100 or equivalent

GREK 20300. Intermediate Greek III. 100 Units.
This course is a close reading of two books of Homer, one from the Iliad and one from the Odyssey, with an emphasis on language, meter, and literary tropes.
Terms Offered: Spring
Prerequisite(s): GREK 20200 or equivalent

GREK 21216. Greek Philosophy. 100 Units.
The Phaedrus is one of the most fascinating and compelling of Plato's Dialogues. Beginning with a playful treatment of the theme of erotic passion, it continues with a consideration of the nature of inspiration, love, and knowledge. The centerpiece is one the the most famous of the Platonic myths, the moving description of the charioteer and its allegory of the vision, fall, and incarnation of the soul.
Terms Offered: Will be offered 2016-17
Prerequisite(s): GREK 20300 or equivalent
Equivalent Course(s): BIBL 31200, RLST 21200, GREK 31216, FNDL 21005

GREK 21300. Greek Tragedy. 100 Units.
This course is an introduction to Aeschylean drama, seen through the special problems posed by one play, Prometheus Bound. Lectures and discussions are concerned with the play, the development and early form of Attic drama, and philosophical material. Modern Aeschylean scholars are also read and discussed.
Instructor(s): E. Asmis Terms Offered: Autumn. Not offered 2017-18
Prerequisite(s): GREK 20300 or equivalent
Equivalent Course(s): GREK 31300

GREK 21700. Lyric and Epinician Poetry. 100 Units.
This course will examine instances of Greek lyric genres throughout the archaic and classical periods, focusing on the structure, themes and sounds of the poetry and investigating their performative and historical contexts. Readings will include Alcman, Sappho, Alcaeus, Anacreon, Ibycus, Alcaeus, Simonides, Bacchylides, Pindar and Timotheus. In Greek.
Instructor(s): M. Payne Terms Offered: Autumn
Prerequisite(s): GREK 20300 or equivalent
Equivalent Course(s): GREK 31700
GREK 21800. Greek Epic. 100 Units.
This course is a reading of sections from Homer's Iliad. We will focus on character, emotions, and relationality in the poem, with an eye to evaluating the poem's many perspectives on mortality, relations with the divine, conceptions of the polis, and the nature of excellence.
Instructor(s): E. Austin Terms Offered: Winter. Topic: Homer
Prerequisite(s): Two years or more of Greek.
Equivalent Course(s): GREK 31800

GREK 21900. Greek Oratory. 100 Units.
With Isocrates, Greek artistic prose reached its technical perfection," says L. R. Palmer in The Greek Language. Yet Isocrates has not found nearly so prominent a place in the university curriculum as have Demosthenes and Lytias. This course will attempt to give the great orator his due. We will start with his speech on Helen, comparing it with Gorgias' famous Encomium. We will also read the ad Demonicum, which became something of a handbook in later Hellenistic and Roman-period schools, and the Panegyrics. We will consider carefully Isocratean language and diction, and why it has merited such sustained praise among connoisseurs of Greek prose style, ancient and modern. We will also emphasize the centrality of Isocrates' contribution to Greek paideia.
Instructor(s): D. Martinez Terms Offered: Spring
Prerequisite(s): Two years or more of Greek.
Equivalent Course(s): GREK 31900

GREK 22300. Greek Tragedy: Hellenistic/Imperial Literature. 100 Units.
This course features selections from the poetry and/or prose of the Hellenistic and Imperial periods. This year we will read selections from Hellenistic poetry, with a particular focus on the Hymns of Callimachus.
Terms Offered: Spring. Will be offered 2020-21
Prerequisite(s): GREK 20300 or equivalent
Equivalent Course(s): GREK 32300

GREK 22400. Greek Comedy: Aristophanes. 100 Units.
We will read in Greek Menander's Dyskolos, with an eye to understanding "New Comedy" and its robust afterlife in Renaissance Europe and modern sitcoms. We will also devote some time to reading and assessing fragments from Menander's contemporaries. Coursework will include translation as well as secondary readings.
Terms Offered: Will be offered 2020-21
Equivalent Course(s): CLAS 32400, GREK 32400, HIST 20403, HIST 30403

GREK 22515. Greek Historians: Thucydides. 100 Units.
In this course we will read book 1 of Thucydides, his description of the run-up to the Peloponnesian War, in Greek. We will pay attention to Thucydides' style and approach to historiography, sinking our teeth into this difficult but endlessly fascinating text.
Instructor(s): D. Martinez Terms Offered: Autumn. Will be offered 2020-21
Prerequisite(s): At least two years of Greek.
Equivalent Course(s): FNDL 22517, GREK 32515

GREK 23915. The Greek Magical Papryi. 100 Units.
No description available.
Equivalent Course(s): BIBL 45603, GREK 33915

GREK 24600. Philo of Alexandria. 100 Units.
In this course we will read the Greek text of Philo's de opificio mundi, with other brief excerpts here and there in the Philonic corpus. Our aim will be to use this treatise to elucidate the thought and character of one of the most prolific theological writers of the first century. We will seek to understand Philo as a Greek author and the nature and origins of his style, Philo as a proponent of Platonism, and Philo as a Jew in the context of Alexandrian Judaism. We will also examine his use of the allegorical method as an exegetical tool, and its implications for pagan, Jewish and early Christian approaches to sacred texts.
Equivalent Course(s): BIBL 44500, GREK 34600

GREK 24718. Longinus' On the Sublime. 100 Units.
Composed around the first or second century C.E., Longinus' On the Sublime marks a new direction in ancient aesthetics and later had a profound influence on the aesthetics of the Romantic period and afterward. It was a watershed between viewing art as imitation and viewing it as self-expression. Great literature was now seen as producing ecstasy, not instruction; and the hearer was thought to share in the creativity of the author. We will read most of this text in Greek, with a view to understanding what is so innovative about it.
Terms Offered: Winter
Prerequisite(s): 2 years of Greek
Equivalent Course(s): GREK 34718, FNDL 24718
GREK 25116. Reading Greek Literature in the Papyri. 100 Units.
The earliest--and often the only--witnesses for Greek literary works are the papyri. This makes their testimony of
great importance for literary history and interpretation, but that testimony does not come without problems. In
this course we will cover some of the concepts and techniques needed to recover the literary treasure contained
in this highly complex material: from the history of book forms, the textual tradition of literary works, and the
creation of the canons to more philological aspects such as editorial practice, Textkritik, and paleography. Our
literary corpus will include biblical texts, paraliterary (school and magical) texts, and translations of Egyptian
texts into Greek. We will work with photographs of the papyri, and every part of the course will be based on
practice. As appropriate we will also work with the University of Chicago’s collections of papyri.
Prerequisite(s): at least two years of Greek
Equivalent Course(s): GREK 35116, BIBL 36916, HCHR 36916

GREK 26517. Indo-European Linguistic Paleontology. 100 Units.
Linguistic paleontology is a method of inspecting reconstructed linguistic data (including early lexical
borrowings) in order to derive information about the original geographical location ("homeland"), natural
environment (terrain, flora, fauna), economy, and material and spiritual culture of the speakers of a
protolanguage. In this course we will examine the reconstructed lexicon of Proto-Indo-European and correlate
it with evidence from archaeology to formulate hypotheses about PIE homeland and economic and cultural
practices. Time permitting, we may apply these methods to other language families outside Indo-European as
well.
Equivalent Course(s): LING 31320, LING 21320, GREK 36517, CLAS 37415

GREK 29700. Reading Course: Greek. 100 Units.
No description available. Prerequisite(s): Students are required to submit the College Reading and Research
Course Form.
Instructor(s): Staff Terms Offered: Autumn Winter
Prerequisite(s): Students are required to submit the College Reading and Research Course Form.

LATN COURSES

LATN 10100-10200-10300. Introduction to Classical Latin I-II-III.
This sequence covers the introductory Latin grammar in twenty-two weeks and is intended for students who
have more complex schedules or believe that the slower pace allows them to better assimilate the material.
Like LATN 11100-11200-11300, this sequence prepares students to move into the intermediate sequence (LATN
20100-20200-20300).

LATN 10100. Introduction to Classical Latin I. 100 Units.
This course introduces students to the rudiments of ancient Latin. Class time is spent on the explanation of
grammar, translation from Latin to English and from English to Latin, and discussion of student work.
Instructor(s): Staff Terms Offered: Autumn

LATN 10200. Introduction to Classical Latin II. 100 Units.
This course continues through the basic text begun in LATN 10100.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): LATN 10100

LATN 10300. Introduction to Classical Latin III. 100 Units.
After finishing the text, the course involves reading in Latin prose and poetry, during which reading the
students consolidate the grammar and vocabulary taught in LATN 10100 and 10200.
Terms Offered: Spring
Prerequisite(s): LATN 10200

LATN 10123. Summer Intensive Introductory Latin. 300 Units.
Summer Intensive Introductory Latin offers a comprehensive introduction to Classical Latin language in eight
weeks, using Keller and Russell’s Learn to Read Latin. In daily classes, students learn new grammatical concepts
and morphology, practice reading and translating increasingly complex Latin texts, and complete exercises in
Latin to gain an active command of the language. Students will also read unadapted Latin from classical authors,
including Caesar, Sallust, and Cicero. By the end of the summer Latin course, students will be thoroughly
familiar with Latin idiom and sentence structure and will be able to proceed to reading courses in the language.
Summer Introductory Latin is an intensive course that requires a full-time commitment on the part of the
student, meeting approximately five hours per day and demanding independent review and memorization in the
evenings.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17

LATN 10200. Introduction to Classical Latin II. 100 Units.
This course continues through the basic text begun in LATN 10100.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): LATN 10100
LATN 10300. Introduction to Classical Latin III. 100 Units.
After finishing the text, the course involves reading in Latin prose and poetry, during which reading the students consolidate the grammar and vocabulary taught in LATN 10100 and 10200.
Terms Offered: Spring
Prerequisite(s): LATN 10200

LATN 11100. Accelerated Introduction to Classical Latin I. 100 Units.
This course covers the first half of the introductory Latin textbook. Classes are devoted to the presentation of grammar, discussion of problems in learning Latin, and written exercises.
Instructor(s): C. Shelton Terms Offered: Winter

LATN 11200. Accelerated Introduction to Classical Latin II. 100 Units.
This course begins with the completion of the basic text begun in LATN 11100 and concludes with readings from Cicero, Caesar, or other prose texts in Latin.
Instructor(s): C. Shelton. Terms Offered: Spring
Prerequisite(s): LATN 11100

LATN 20100-20200-20300. Intermediate Latin I-II-III.
This sequence is aimed at students who have completed one of the introductory sequences and at entering students with extensive previous training, as evidenced by a placement exam. As a whole, it provides students with an overview of important genres and with the linguistic skills to read independently, and/or to proceed to advanced courses in the language.

LATN 20100. Intermediate Latin I: Cicero. 100 Units.
Readings concentrate on Cicero's Catalinarian Orations, the famous group of speeches he delivered in 63 BC against L. Sergius Catilina, who was plotting to overthrow the Roman government. Some discussion of the history and culture of the period; study of problems of grammar as necessary.
Terms Offered: Autumn
Prerequisite(s): LATN 10300 or 11300, or equivalent

LATN 20200. Intermediate Latin II: Aeneid. 100 Units.
This course is a reading of selections from the Metamorphoses, with emphasis on Ovid's language, versification, and literary art.
Instructor(s): E. Austin Terms Offered: Winter
Prerequisite(s): LATN 20100 or equivalent

LATN 20300. Intermediate Latin III: 100 Units.
This course is a reading of selections from the first six books of the Aeneid, with emphasis on Vergil's language, versification, and literary art. Students also are required to read the whole of the epic in an English translation.
Terms Offered: Spring
Prerequisite(s): LATN 20200 or equivalent

LATN 20123. Summer Intensive Intermediate Latin. 300 Units.
Summer Intermediate Latin combines extensive reading of texts with a comprehensive review of Classical grammar and syntax; it prepares students for advanced courses in Latin and for the use of Latin texts in the course of their research. Texts studied are taken from a variety of representative and important authors, which may include Cicero, Seneca, Pliny, and others. The backbone of the review sessions is Keller and Russell, Learn to Read Latin, with supplementary exercises in composition. The program meets during both mornings and afternoons for approximately five hours a day. Students are responsible for considerable amounts of class preparation during the evenings, requiring a full-time commitment for the duration of the course. Summer Intermediate Latin equips students to continue with advanced course work or independent reading in Latin in all its varieties. Summer Intermediate Latin corresponds to a full year's worth of instruction at the University of Chicago.
Terms Offered: Summer. Summer 2017 dates: 6/19/17-7/28/17
Prerequisite(s): Successful completion of LATN 10300 or equivalent placement.

LATN 20200. Intermediate Latin II: Aeneid. 100 Units.
This course is a reading of selections from the Metamorphoses, with emphasis on Ovid's language, versification, and literary art.
Instructor(s): E. Austin Terms Offered: Winter
Prerequisite(s): LATN 20100 or equivalent

LATN 20300. Intermediate Latin III: 100 Units.
This course is a reading of selections from the first six books of the Aeneid, with emphasis on Vergil's language, versification, and literary art. Students also are required to read the whole of the epic in an English translation.
Terms Offered: Spring
Prerequisite(s): LATN 20200 or equivalent
LATN 21100. Roman Elegy. 100 Units.
This course examines the development of the Latin elegy from Catullus to Ovid. Our major themes are the use of motifs and topics and their relationship to the problem of poetic persona.
Terms Offered: Will be offered 2019-20
Equivalent Course(s): LATN 31100, CMLT 31101, CMLT 2110

LATN 21200. Roman Novel. 100 Units.
We shall read from various Latin texts that participate in the tradition of the Ancient novel.
Terms Offered: Will be offered 2019-20
Equivalent Course(s): FNDL 21204, LATN 31200

LATN 21300. Vergil. 100 Units.
This course will survey the main interpretive issues surrounding Vergil’s Aeneid through a selection of readings from books 1-12. You will also be required to read the entire epic in English translation. Class time will be given to translation of the Latin, discussion of the secondary readings, and attention to the epic’s larger themes and meanings in the literary and cultural context of Augustan Rome.
Instructor(s): Staff
Equivalent Course(s): LATN 31300

LATN 21500. Roman Satire. 100 Units.
The object of this course is to study the emergence of satire as a Roman literary genre with a recognized subject matter and style. Readings include Horace Satires 1.1, 4, 6, and 10 and 2.1, 5 and 7; Persius 1 and 5; and Juvenal 1 and 3.
Terms Offered: Will be offered 2020-21.
Equivalent Course(s): LATN 31500

LATN 21600. Roman Oratory. 100 Units.
Cicero’s first speech, in defense of a client charged with parricide, receives a close reading in Latin and in English. The speech is considered in relation to theories set out in Cicero’s rhetorical writings, in relation to the role of the criminal courts in Late Republican Rome, and in relation to other defense speeches by Cicero.
Equivalent Course(s): LATN 31600

LATN 21700. Post-Virgilian Epic. 100 Units.
We will read several books of Lucan’s Bellum Civile in Latin and the entire poem in translation. Discussion topics will include the historical context of the epic, its self-portrayal as anti-epic, the use of rhetoric, hyperbole, and paradox as ideological tools, and the narrator’s intrusive voice. Requirements: 4 quizzes, midterm paper, final exam.
Terms Offered: Autumn Spring
Prerequisite(s): LATN 20300 or equivalent
Equivalent Course(s): LATN 31700

LATN 21800. Roman Historian. 100 Units.
Primary readings are drawn from the Tiberian books of the Annals, in which Tacitus describes the consolidation of the imperial regime after the death of Augustus. Parallel accounts and secondary readings are used to help bring out the methods of selecting and ordering data and the stylistic effects that typify a Tacitean narrative.
Instructor(s): P. White
Terms Offered: Spring
Prerequisite(s): LATN 20300 or equivalent
Note(s): Topic: Tacitus.
Equivalent Course(s): LATN 31800

LATN 21900. Roman Comedy. 100 Units.
Plautus’ Pseudolus is read in Latin, along with secondary readings that explain the social context and the theatrical conventions of Roman comedy. Class meetings are devoted less to translation than to study of the language, plot construction, and stage techniques at work in the Pseudolus.
Instructor(s): D. Wray
Terms Offered: Spring
Prerequisite(s): LATN 20300 or equivalent
Equivalent Course(s): LATN 31900

LATN 22100. Lucretius. 100 Units.
We will read selections of Lucretius’ magisterial account of a universe composed of atoms. The focus of our inquiry is: how did Lucretius convert a seemingly dry philosophical doctrine about the physical composition of the universe into a gripping message of personal salvation? The selections include Lucretius’ vision of an infinite universe, of heaven, and of the hell that humans have created for themselves on earth.
Terms Offered: Autumn. This course will be offered 2020-21.
Equivalent Course(s): LATN 32100

LATN 24615. Augustine: Early Philosophical Works. 100 Units.
Equivalent Course(s): LATN 34615
LATN 26000. Latin Paleography. 100 Units.
The course will emphasize the development of Latin handwriting, primarily as book scripts, from its origins
to the waning of the Carolingian minuscule, ca. AD 1100. By mastering the foundational types of writing, the
students will develop skills for reading all Latin-based scripts, including those used for vernacular languages and
the subsequent Goths and their derivatives down to the sixteenth century.
Instructor(s): M. Allen Terms Offered: Winter
Equivalent Course(s): LATN 36000

LATN 26118. Cicero’s “De Oratore. 100 Units.
De oratore, composed in the mid-50s BCE, was Cicero’s first major work of non-oratorical prose. A dialogue
responding to Plato’s Phaedrus and Gorgias, it offers simultaneously a theory of rhetoric, a claim for the
importance of oratory as a form of civic engagement, and an exploration of the role of Greek culture in Roman
life. In this course we will read most of the first book of De oratore in Latin and the remainder of the work in
English while examining Cicero’s arguments in the context of the long-running ancient battle between rhetoric
and philosophy. We will also look at the dialogue as a representation of Roman aristocratic culture in the late
Republic.
Instructor(s): J. Zetzel Terms Offered: Autumn
Equivalent Course(s): LATN 36118

LATN 27017. Einhard. 100 Units.
Einhard’s Life of Charlemagne combined Ciceronian rhetorical theory, the modeling of Suetonius, and personal
reminiscences to create one of the best-sellers of the Middle Ages. That work has a situational logic and stylistic
place among Einhard’s other activities and literate creations, including letters, epigraphy, theological reflection,
and hagiographical narrative. We shall consider the inspirations, styles, and goals of the courtier, biographer,
and pious lay retiree, who stands emblematically as both a “typical” and nonpareil figure of the Carolingian
Renaissance.
Equivalent Course(s): LATN 37017

LATN 29700. Reading Course. 100 Units.
Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Students are required to submit the College Reading and Research Course Form.
Comparative Human Development

Department Website: http://humdev.uchicago.edu

PROGRAM OF STUDY

The program in Comparative Human Development (CHDV) focuses on the study of persons over the course of life; on the social, cultural, biological, and psychological processes that jointly influence development; and on growth over time in different social and cultural settings. The study of human development also offers a unique lens through which we consider broad questions of the social sciences, like the processes and impacts of social change, and the interactions of biology and culture. Faculty members in Comparative Human Development with diverse backgrounds in anthropology, biology, psychology, and sociology conduct research on topics that include (but are not limited to): the social and phenomenological experience of mental illness; comparative education; the impact of socioeconomic context on growth and development; the influence of social interaction on biological functioning; the tensions inherent in living in multicultural societies; the experience and development of psychotherapists in Western and non-Western countries; and the ways in which youth in developing countries are forging new conceptions of adulthood. Given this interdisciplinary scope, the program in Comparative Human Development provides an excellent preparation for students interested in advanced postgraduate study at the frontiers of several social science disciplines, or in careers and professions that require a broad and integrated understanding of human experience and behavior—e.g., mental health, education, social work, health care, or human resource and organizational work in community or corporate settings.

Advising

The first point of contact for undergraduates is the preceptor. Preceptors can be emailed at humdev-preceptors@lists.uchicago.edu. Additional contact information for the year-specific preceptor can be found in Contacts at the bottom of this page, along with the undergraduate chair and administrator contact information.

Electronic Communication

Upon declaring a Comparative Human Development major, undergraduates should promptly join the department undergraduate email listserv to receive important announcements. Students request to join the listserv by logging in with their CNet ID at https://lists.uchicago.edu and subscribing to humdev-undergrad@listhost.uchicago.edu.

PROGRAM REQUIREMENTS

The requirements below are in effect as of Autumn 2017. Current CHDV majors in the Classes of 2018 or 2019 who wish to follow the previous requirements should work with the preceptor to fashion a program of study.

The undergraduate program in Comparative Human Development has the following components:

Core Courses

CHDV 20000 Introduction to Human Development and CHDV 20100 Human Development Research Designs in Social Sciences, a two-quarter introductory sequence in Comparative Human Development, should be completed prior to the Spring Quarter of a student's third year. CHDV 20000 Introduction to Human Development focuses on theories of development, with particular reference to the development of the self in a social and cultural context. CHDV 20100 Human Development Research Designs in Social Sciences focuses on modes of research and inquiry in human development, including basic concepts of research design and different methods used in studying human development (e.g., ethnography, experiments, surveys, discourse analysis, narrative inquiry, and animal models). Consideration is given to the advantages and limitations of each approach in answering particular questions concerning person and culture.

Methods

Students must complete one Methods course. It may focus on qualitative or quantitative methods or may be a research methods course from a related department, such as Statistics.

The following are courses since 2012 that have fulfilled the Methods requirement without a petition. (Please note courses in this list may not be offered this academic year.)

Courses that are not on the following list may be petitioned to count for Methods (see Petitions).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>ANTH 21420</td>
<td>Ethnographic Methods</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20151</td>
<td>Introduction to Quantitative Modeling in Biology (Basic)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20172</td>
<td>Mathematical Modeling for Pre-Med Students</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25419</td>
<td>Infectious Disease Epidemiology; Networks and Modeling</td>
<td>100</td>
</tr>
<tr>
<td>CHDV 20101</td>
<td>Applied Statistics in Human Development Research</td>
<td>100</td>
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<tr>
<td>CHDV 26228</td>
<td>Ethnographic Methods</td>
<td>100</td>
</tr>
<tr>
<td>CHDV 30102</td>
<td>Introduction to Causal Inference</td>
<td>100</td>
</tr>
<tr>
<td>CHDV 32411</td>
<td>Mediation, Moderation, and Spillover Effects</td>
<td>100</td>
</tr>
</tbody>
</table>
Electives

All CHDV majors are required to take nine CHDV elective courses. We encourage students to take their elective courses across the four areas of Comparative Human Development, given the department's commitment to transdisciplinary scholarship. All CHDV course numbers are labeled to describe the areas in which they are most closely aligned. The four areas are the following:

1. **Comparative Behavioral Biology**: includes courses on the biopsychology of attachment; evolutionary social psychology; evolution of parenting; biological psychology; primate behavior and ecology; behavioral endocrinology.

2. **Life Course Development**: includes courses on social and psychological development through the life course, including courses on childhood, adolescence, adulthood, and aging; education and development; introduction to language development; the role of early experience in development; sexual and gender identity; the study of lives and families in social and cultural context.

3. **Culture and Community**: includes courses on cultural psychology; psychological anthropology; social psychology; cross-cultural child development; language, culture, and thought; language socialization; education in ethnic and cultural context; psychiatric and psychodynamic anthropology; memory and culture.

4. **Mental Health and Personality**: includes courses on personality theory and research; social and cultural foundations of mental and physical health; modern psychotherapies and their supporting institutions; psychology of well-being; conflict understanding and resolution; core concepts and current directions in psychopathology; emotion, mind, and rationality; body image in health and disorder; advanced concepts in psychoanalysis.

Petitions

Student petitions will be accepted only in very limited circumstances to request that courses not taught or cross-listed in CHDV count toward CHDV major requirements. These limited circumstances may include a relevant course offered during study abroad if a CHDV course is not available. Students may petition for one relevant course per quarter of study abroad to count toward the CHD major, but only one, barring unusual circumstances. Only university-level courses credited by the University of Chicago or study abroad may be petitioned for CHDV requirements; no other form of credit (including Advanced Placement) is allowed. Petitions should be completed using the CHDV petition form found at humdev.uchicago.edu/page/undergraduate-studies. Petitions should include a copy of the course syllabus, since the course title alone is often not sufficient for evaluating a petition.

BA Honors Guidelines

Students with qualifying GPAs may seek to graduate with honors by successfully completing a BA honors paper that reflects scholarly proficiency in an area of study within Comparative Human Development and successfully completing two required accompanying courses: the CHDV 29800 BA Honors Seminar in the Spring Quarter of their third year and CHDV 29900 Honors Paper Preparation in the Autumn Quarter of their fourth year. CHDV 29800 BA Honors Seminar can count as one of the nine elective courses required for the major. CHDV 29900 Honors Paper Preparation may not count toward major requirements; it may be used for general elective credit only. Qualified students who wish to seek CHDV honors and who plan to study abroad should plan their travel in order to ensure they are in residence at the University of Chicago during the Spring Quarter of their third year and the Autumn Quarter of their fourth year in order to take the two courses required for BA honors.
The honors paper should reflect original research of an empirical, scholarly, or theoretical nature and must be rated as worthy of honors by the student's BA Honors Committee. This committee shall consist of two University faculty members: a supervisor (who must be a CHDV faculty member or associate faculty member) and a second reader (who must be a University of Chicago faculty member or associate faculty member). The paper should be about 30 to 40 pages in length. The grade given for it will become the grade of record for the Honors Paper Preparation course (CHDV 29900 Honors Paper Preparation). To receive departmental honors upon graduation, students (1) must have attained a cumulative overall GPA of 3.25 or higher and a major GPA higher than 3.5 by the end of the quarter prior to the quarter of graduation, and (2) must have completed a meritorious BA honors paper under the supervision of a CHDV faculty member and received a high grade on their BA honors paper.

Permission to undertake a BA honors paper will be granted by the CHDV undergraduate chair to students who (1) have successfully completed CHDV 29800 BA Honors Seminar and (2) have filed a properly completed BA Honors Paper Proposal Form with the departmental secretary no later than tenth week of Spring Quarter of the third year.

**BA Honors Seminar**

The CHDV 29800 BA Honors Seminar aims to help qualified students formulate a suitable proposal and find a CHDV faculty supervisor. Qualified students who wish to seek departmental honors must register for the CHDV 29800 BA Honors Seminar during Spring Quarter of their third year. Permission to register for CHDV 29800 BA Honors Seminar will be granted to students with a GPA that, at the end of Autumn Quarter of the third year, shows promise of meeting the standards set for honors (see above). This course is a pre-field course where students develop a ten-page research proposal and find both a CHDV supervisor and a second reader (who may be outside of the department). As part of the proposal, they learn to develop an academic “problem” while reviewing the necessary academic literature. They also decide on the discipline and methods (interviewing, ethnography, experimental design) they will use to tackle their research question.

**Honors Paper Preparation Course**

The CHDV 29900 Honors Paper Preparation course helps students successfully complete work on their BA honors paper. In order to complete honors, students who successfully took CHDV 29800 in Spring Quarter of their third year must also register for CHDV 29900 Honors Paper Preparation during Autumn Quarter of their fourth year. This courses is required but does not count as one of the required major electives. This course is a pre-field course where students develop a ten-page research proposal and find both a CHDV supervisor and a second reader (who may be outside of the department). As part of the proposal, they learn to develop an academic “problem” while viewing the necessary academic literature. They also decide on the discipline and methods (interviewing, ethnography, experimental design) they will use to tackle their research question.

**BA Honors Paper for Dual Majors**

In very special circumstances, students may be able to write a longer BA honors paper that meets the requirements for a dual major (with prior approval from the undergraduate program chairs in both departments). Students should consult with both chairs before the end of Spring Quarter of their third year. A consent form, available from the student's College adviser, must be signed by both chairs and returned to the College adviser, with copies filed in both departmental offices, by the end of Autumn Quarter of the student's graduation year.

**Honors Paper Due Date**

Honors papers are due by the end of fifth week of the quarter in which a student plans to graduate (typically in Spring Quarter).

**SUMMARY OF REQUIREMENTS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHDV 20000</td>
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<td>CHDV 20100</td>
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<tr>
<td>One Methods Course</td>
<td>100</td>
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<tr>
<td>Nine Elective Courses*</td>
<td>900</td>
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<td><strong>Total Units</strong></td>
<td>1200</td>
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* Students applying for CHDV honors must register for CHDV 29800 BA Honors Seminar and CHDV 29900 Honors Paper Preparation. CHDV 29800 may be counted as one of the nine required program electives; however, CHDV 29900 does not count toward the major and is used for general elective credit only.

**GRADING**

All courses required for the major in Comparative Human Development must be taken for quality grades.
The courses below are a guide. For up-to-date course plans, please visit Class Search (http://registrar.uchicago.edu/classes) or the Anticipated Courses List at humdev.uchicago.edu/page/courses.

COMPARATIVE HUMAN DEVELOPMENT COURSES

CHDV 20000. Introduction to Human Development. 100 Units.
This course introduces the study of lives in context. The nature of human development from infancy through old age is explored through theory and empirical findings from various disciplines. Readings and discussions emphasize the interrelations of biological, psychological, and sociocultural forces at different points of the life cycle.
Instructor(s): E. Raikhel
Terms Offered: Autumn
Prerequisite(s): CHDV majors or intended majors.
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): PSYC 20850

CHDV 20100. Human Development Research Designs in Social Sciences. 100 Units.
This course aims to expose students to a variety of examples of well-designed social research addressing questions of great interest and importance. One goal is clarify what it means to do "interesting" research. A second goal is to appreciate the features of good research design. A third goal is to examine the variety of research methodologies in the social sciences, including ethnography, clinical case interviewing, survey research, experimental studies of cognition and social behavior, behavior observations, longitudinal research, and model building. The general emphasis is on what might be called the aesthetics of well-designed research.
Instructor(s): Mueller, Anna
Terms Offered: Winter
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): PSYC 21100

CHDV 20305. Inequality in Urban Spaces. 100 Units.
The problems confronting urban schools are bound to the social, economic, and political conditions of the urban environments in which schools reside. Thus, this course will explore social, economic, and political issues, with an emphasis on issues of race and class as they have affected the distribution of equal educational opportunities in urban schools. We will focus on the ways in which family, school, and neighborhood characteristics intersect to shape the divergent outcomes of low- and middle-income children residing with any given neighborhood.
Students will tackle an important issue affecting the residents and schools in one Chicago neighborhood. This course is part of the College Course Cluster: Urban Design.
Instructor(s): M. Keels
Terms Offered: Autumn
Note(s): CHDV Distribution: B; 2*
Equivalent Course(s): PBPL 20305, CRES 20305, CHDV 40315

CHDV 21000. Cultural Psychology. 100 Units.
There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning.
Instructor(s): R. Shweder
Terms Offered: Autumn
Prerequisite(s): Undergraduates must be in third or fourth year.
Note(s): CHDV Distribution: B, C
Equivalent Course(s): GNSE 21001, AMER 33000, CHDV 31000, ANTH 35110, GNSE 31000, PSYC 23000, ANTH 24320, PSYC 33000
CHDV 21401. Introduction to African Civilization II. 100 Units.
The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers' policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*. Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): CRES 20802, ANTH 20702, HIST 10102

CHDV 22350. Social Neuroscience. 100 Units.
Social species, by definition, create emergent organizations beyond the individual - structures ranging from dyads and families to groups and cultures. Social neuroscience is the interdisciplinary field devoted to the study of neural, hormonal, cellular, and genetic mechanisms, and to the study of the associations and influences between social and biological levels of organization. The course provides a valuable interdisciplinary framework for students in psychology, neuroscience, behavioral economics, and comparative human development. Many aspects of social cognition will be examined, including but not limited to attachment, attraction, altruism, contagion, cooperation, competition, dominance, empathy, isolation, morality, and social decision-making. Instructor(s): J. Decety Terms Offered: Spring
Equivalent Course(s): NSCI 21000, ECON 21830, PSYC 22350, BIOS 24137

CHDV 23204. Medical Anthropology. 100 Units.
This course introduces students to the central concepts and methods of medical anthropology. Drawing on a number of classic and contemporary texts, we will consider both the specificity of local medical cultures and the processes which increasingly link these systems of knowledge and practice. We will study the social and political economic shaping of illness and suffering and will examine medical and healing systems-including biomedicine-as social institutions and as sources of epistemological authority. Topics covered will include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; structural violence; modernity and the distribution of risk; the meanings and effects of new medical technologies; and global health. Instructor(s): E. Raikhel Terms Offered: Winter
Prerequisite(s): SOSC sequence
Note(s): CHDV Distribution: C, D; 4
Equivalent Course(s): ANTH 24330, CHDV 43204, ANTH 40330, HIPS 27301

CHDV 23249. Animal Behavior. 100 Units.
This course introduces the mechanism, ecology, and evolution of behavior, primarily in nonhuman species, at the individual and group level. Topics include the genetic basis of behavior, developmental pathways, communication, physiology and behavior, foraging behavior, kin selection, mating systems and sexual selection, and the ecological and social context of behavior. A major emphasis is placed on understanding and evaluating scientific studies and their field and lab techniques. Instructor(s): S. Pruett-Jones (even years), J. Mateo (odd years) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence.
Note(s): CHDV Distribution: A
Equivalent Course(s): BIOS 23249, PSYC 23249

CHDV 23900. Introduction to Language Development. 100 Units.
This course addresses the major issues involved in first-language acquisition. We deal with the child’s production and perception of speech sounds (phonology), the acquisition of the lexicon (semantics), the comprehension and production of structured word combinations (syntax), and the ability to use language to communicate (pragmatics). Instructor(s): S. Goldin-Meadow Terms Offered: Winter
Equivalent Course(s): CHDV 31600, LING 31600, PSYC 23200, PSYC 33200, LING 21600

CHDV 26000. Social Psychology. 100 Units.
This course examines social psychological theory and research that is based on both classic and contemporary contributions. Topics include conformity and deviance, the attitude-change process, social role and personality, social cognition, and political psychology. Instructor(s): W. Goldstein Terms Offered: Autumn
Equivalent Course(s): PSYC 26000
CHDV 26901. Psychology for Citizens. 100 Units.
This course will examine aspects of the psychology of judgment and decision making that are relevant to public life and citizenship. Judgment and decision making are involved when people evaluate information about electoral candidates or policy options, when they vote, and when they choose to behave in ways that affect the collective good. Topics considered in the course will include the following. (1) What is good for people? What do we know about happiness? Can/should happiness be a goal of public policy? (2) How do people evaluate information and make decisions? Why does public opinion remain so divided on so many issues? (3) How can people influence others and be influenced (e.g., by policy makers)? Beyond persuasion and coercion, what are more subtle means of influence? (4) How do individuals’ behaviors affect the collective good? What do we know about pro-social behavior (e.g., altruism/charitable giving) and anti-social behavior (e.g., cheating)? (5) How do people perceive and get along with each other? What affects tolerance and intolerance?
Instructor(s): W. Goldstein Terms Offered: Winter
Equivalent Course(s): PSYC 25901

CHDV 27802. Seminar: Challenging Legends and Other Received Truths: A Socratic Practicum. 100 Units.
This seminar is an experiment in honoring the skeptical intellectual tradition. That intellectual tradition, which has its home in the great universities of the world, aims to achieve accuracy and impartiality in human understanding through a principled commitment to explore the other side, even when that requires the articulation of an unpopular, politically incorrect, or against the current point of view. While it may be a matter for debate whether the intellectual virtues we associate with skepticism are at risk of being sacrificed in the academy these days, this seminar engages a social science and public policy literature that raises skeptical doubts about “received wisdom” on a variety of consequential fronts. Warning to prospective seminar participants: “... a good university, like Socrates, will be upsetting” (The University of Chicago “Kalven Committee Report,” November 11, 1967).
Instructor(s): R. Shweder Terms Offered: Winter
Prerequisite(s): Open to graduate students and to 3rd and 4th year College students.
Note(s): CHDV Distribution: M, M
Equivalent Course(s): CHDV 37802

CHDV 27860. History of Evolutionary Behavioral Sciences. 100 Units.
This course will consist in lectures and discussion sessions about the historical and conceptual foundations of evolutionary behavioral sciences (evolutionary anthropology, evolutionary psychology, ethology, comparative behavioral biology), covering the period from the publication of Charles Darwin’s The Origin of Species up to the present day. Topics will include new theoretical developments, controversies, interdisciplinary expansions, and the relationships between evolutionary behavioral sciences and other disciplines in the sciences and the humanities.
Instructor(s): D. Maestripieri Terms Offered: Autumn 2018
Prerequisite(s): N/A
Equivalent Course(s): CHDV 37860, KNOW 27860, HIPS 27860, CHSS 37860

CHDV 28301. Disability and Design. 100 Units.
Disability is often an afterthought, an unexpected tragedy to be mitigated, accommodated, or overcome. In cultural, political, and educational spheres, disabilities are non-normative, marginal, even invisible. This runs counter to many of our lived experiences of difference where, in fact, disabilities of all kinds are the “new normal.” In this interdisciplinary course, we center both the category and experience of disability. Moreover, we consider the stakes of explicitly designing for different kinds of bodies and minds. Rather than approaching disability as a problem to be accommodated, we consider the affordances that disability offers for design. This course begins by situating us in the growing discipline of Disability Studies and the activist (and intersectional) Disability Justice movement. We then move to four two-week units in specific areas where disability meets design: architecture, infrastructure, and public space; education and the classroom; economics, employment, and public policy; and aesthetics. Traversing from architecture to art, and from education to economic policy, this course asks how we can design for access.
Instructor(s): M. Friedner, J. Iverson Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): BPRO 28300, MUSI 25719

CHDV 29700. Undergraduate Reading and Research. 100 Units.
Select section from faculty list on web.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Students are required to submit the College Reading and Research Course Form.
Note(s): Must be taken for a quality grade.

CHDV 29800. BA Honors Seminar. 100 Units.
Required for students seeking departmental honors, this seminar is designed to help develop an honors paper project that will be approved and supervised by a HD faculty member. A course preceptor will guide students through the process of research design and proposal writing.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Consent of the undergraduate program chair.
Note(s): Eligible students should plan to take the BA Honors Seminar in the Spring Quarter of their third year.
CHDV 29900. Honors Paper Preparation. 100 Units.
The CHDV 29900 Honors Paper Preparation course helps students successfully complete work on their BA honors paper. In order to complete honors, students who successfully took CHDV 29800 in Spring Quarter of their third year must register for CHDV 29900 Honors Paper Preparation during Autumn Quarter of their fourth year, as a 13th required course. Students are encouraged to collect their data over the summer; then this course scaffolds the process of analyzing data (such as transcription and coding) and writing up BA papers (such as tips on describing methods and peer review). The grade assigned by their thesis supervisor on the final BA paper is retroactively assigned as the grade for this course.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): CHDV 29800 and an approved honors paper. Students are required to submit the College Reading and Research Course Form.

★★★★
The major in Comparative Literature leads to a BA degree and is designed to attract students who wish to pursue an interdisciplinary plan of course work focused on the study of literature as written in various languages and in various parts of the world.

One student might come to the University of Chicago with a strong background in languages other than English and want to work in two or more literatures (one of which can be English). Another student might have a strong interest in literary study and wish to address general, generic, and/or transnational questions that go beyond the boundaries of national literature offered in other literature departments. Or, a student might wish to pursue an in-depth study of the interrelationship of literature and culture, as well as issues that transcend the traditional demarcations of national literary history and area studies.

These descriptions of academic interest are not mutually exclusive. Each student will work with the Director of Undergraduate Studies to design a plan of course work that will suit his or her individual goals and that will take advantage of the rich offerings of the University.

PROGRAM REQUIREMENTS

The requirements outlined below are in effect as of Autumn Quarter 2018 and will apply to all students in the Class of 2020 and beyond. Students in the Classes of 2018 and 2019 may request to switch to the new requirements if the updated program suits their interests and fits within their graduation plans.

Students interested in applying to the major in Comparative Literature should review the following guidelines and consult with the Director of Undergraduate Studies in Comparative Literature. These guidelines are to assist students in developing a balanced and cohesive interdisciplinary plan of study.

The major is comprised of seven literature courses selected in consultation with the Director of Undergraduate Studies, one foundational course in comparative literary theory and methodology, two courses in literary theory, methods, or special topics in Comparative Literature, and a BA project workshop that serves as a capstone to the major.

A student works with the Director of Undergraduate Studies to identify a primary field (four courses) and secondary field (three courses). A student wishing to work in two literatures might choose two literatures as the primary and secondary fields (note: the second literature can be English). The secondary field might be a particular national literature or a portion of such a literature (e.g., poetry, drama, novel); another discipline (e.g., mathematics, history, film, performance studies, music); or literary theory.

Study abroad offers an attractive means of fulfilling various aims of this program. More than half of the major requirements must be satisfied by courses bearing University of Chicago numbers.

SUMMARY OF REQUIREMENTS

Three foreign language courses at the intermediate level or above (See Foreign Language Requirement for details) 300
Four courses in a literature other than English, one of which can be in a closely related field 400
Three courses in a secondary field, which can be literature in another language (including English), another discipline (e.g., mathematics, performance studies, music), or literary theory 300
CMLT 20109 Comparative Methods in the Humanities 100
Two 20000-level courses in literary theory, methods, or special topics in Comparative Literature 200
CMLT 29801 B.A. Project and Workshop: Comparative Literature (See BA Project for details) 100

Total Units 1400

Foreign Language Requirement

The Comparative Literature major requires three language courses in a single language at the intermediate level or above. Students who come in with advanced proficiency in a language other than English may instead substitute three courses in a third language, at any level. Though students must demonstrate proficiency through at least the second-year sequence in a foreign language, they are encouraged to continue their language study beyond the minimum required for the major. The Department of Comparative Literature works closely with the University of Chicago Language Center and will help students achieve their individual goals in language acquisition by suggesting programs of study that will add to their language expertise as appropriate.

BA Project

The BA capstone project is to be completed in the student’s last year of study. The project should be approved by the Director of Undergraduate Studies and is supervised by a faculty member of the student’s choice in Comparative Literature. It may be co-advised by a faculty member from another department. Students
must complete their formal application to the major by spring of third year and should identify a faculty advisor at that time.

One obvious choice for a BA project is a substantial essay in comparative literary study. This option should not, however, rule out other possibilities. Alternative examples are a translation from a foreign literature with accompanying commentary or a written project based on research done abroad in another language and culture relating to comparative interests. Students are urged to base their project on comparative concepts and to make use of the language proficiency that they will develop as they meet the program’s requirements. Visit complit.uchicago.edu/undergraduate for more details on the BA project.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with approval from both program chairs. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of third year, when neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Participation in the Program

Students should express their interest in the major as early as possible. The first step is to meet with the Director of Undergraduate Studies to consult about a program of study. Applicants must submit an application form which consists of a list of completed courses and a list of courses in which they are currently registered. Special mention should be made of language courses or other language training that affirms a student’s level of language proficiency. Each proposal will be evaluated on the basis of the interest of the student and his or her achievement in the languages needed to meet the goals of the intended course of study. Students will be notified by email of their acceptance to the program. Finally, students will need to formalize their declaration through my.uchicago.edu with the assistance of the College adviser.

Comparative Literature majors should demonstrate literary proficiency in a language (other than English) that is relevant to their proposed course of study (as indicated in requirement number one above). This requirement must be met at the time of application or shortly thereafter. Proficiency is measured by the completion of a second-year sequence (or above) in the language or by demonstration of an equivalent skill. Language ability is essential to work in comparative literature of whatever sort. The Department of Comparative Literature works closely with the University of Chicago Language Center and will help students achieve their individual goals in language acquisition by suggesting programs of study that will add to their language expertise as appropriate.

GRADING

All courses to be used in the major must be taken for a quality grade of B– or higher, except for CMLT 29801, which is graded on a Pass/Fail basis.

HONORS

To be eligible for honors in Comparative Literature, students must earn an overall cumulative GPA of 3.25 or higher, and a GPA of 3.5 or higher in the major. They must also complete a BA essay or project that is judged exceptional in intellectual and/or creative merit by the first and second readers.

ADVISING

Students must consult on an ongoing basis with the Director of Undergraduate Studies for selection and approval of course work for the major. Students will need to regularly provide documentation of any approvals for the major to their College adviser for the necessary processing. Further advice and counseling will be available from the preceptor for the program and from the faculty member who supervises the student’s BA project.

COMPARATIVE LITERATURE COURSES

CMLT 20109. Comparative Methods in the Humanities. 100 Units.

This course introduces models of comparative analysis across national literatures, genres, and media by focusing on poetry in different languages and cultures and in relation to other discursive and artistic forms. We will examine a wide variety of poetic and critical texts in order to explore such topics as the specificity of poetry and of poetic kinds; orality and folk, art, and popular song; poetry’s relation to prose (from philosophy to autobiography to journalism); transnational imitation and translation; poetry and globalization; ekphrasis and poetry’s relations to visual arts; and poetry and film. Readings will likely include poems by Sappho, Horace, Dante, Li Bai, Du Fu, Ronsard, Shakespeare, Milton, Basho, Goethe, Wordsworth, Robert Browning, and Dylan; and critical writings by Longinus, Plutarch, Montaigne, Li Zhi, Wordsworth, Auerbach, Jakobson, Adorno, Pasolini, Zumthor, Culler, and Damrosch.

Instructor(s): Joshua Scodel Terms Offered: Spring
 Equivalent Course(s): ENGL 28918
CMLT 23112. Trans Performativity. 100 Units.
In this course we will explore how these dialogues and conflicts between gender studies, queer theory, and trans studies have developed and transformed our understandings of categories like "gender," "sex" and "trans." Some guiding questions will be: how do we, and should we, conceive the materiality of the body? How do assumptions about 'nature' and the 'natural' determine how we view categories of identity, and what are the political ramifications of these determinations? Why, within certain discourses, has the fluidity of gender been promoted, while the fluidity of race remains controversial and generally unsupported? How do we account for these different receptions, and what kind of opportunities do they make available for politically engaged communities? How can we simultaneously value performative theories of gender, while also maintaining a certain stability of identity as developed within trans criticism, even when these two discourses seem in direct conflict?
Equivalent Course(s): GNSE 23112, ENGL 23112

CMLT 23212. Art, Ekphrasis, and Myth in Early Modern Spanish Theater. 100 Units.
In the early modern age, the verbal had a strong visual component. Poets and playwrights utilized the sense of sight since it was the highest of the Platonic senses and a mnemonic key to lead spectators to remember vividly what they had read or heard, long before spectacle plays were in fashion. One important technique for visualization was ekphrasis, the description of an art work within a text. Often, to perform was to imitate the affects, sentiments and poses of a painting. For this purpose, playwrights such as Cervantes, Lope de Vega and Calderón often turned to the mythological canvases of the Italian Renaissance along with the portraits of great rulers and images of battle. The class will examine the uses of art onstage: mnemonic, mimetic, political, religious comic, tragic, lyric and licentious. It will also delve into different forms of ekphrasis from the notional to the dramatic and from the fragmented to the reversed. Although the course will focus on Spanish plays of the early modern period, it will also include ancient treatises by Cicero, and Pliny as well as Renaissance mnemonic treatises by Delia Porta. The course will be in English. Reading knowledge of Spanish is required since plays will be read in the original. Those taking the class for credit in Spanish must write their final paper in Spanish.
Instructor(s): Frederick de Armas Terms Offered: Autumn
Equivalent Course(s): SPAN 33201, CMLT 33212, SPAN 23201

CMLT 24105. Letters to Zion. 100 Units.
This seminar centers the question: what do we mean when we describe Jewish authors and thinkers from the past as Zionist, anti-Zionist, or non-Zionist? We will approach this question by reading three correspondences: Kafka’s letters to Felice Bauer, and the correspondences between Gershom Scholem and Hannah Arendt and between Paul Celan and Ilana Shmueli. In each case, the question of Zionism and of Israel looms in the background of the exchange in some way. Our key question is: can we definitively determine the position of each of these letter-writers on the question of Zionism? And do we want to? Or does the form of the correspondence rather open a possibility for a more flexible, complex account of their positions, allowing us to think of them as changing and evolving, indeed as dialogic? In addition to the letters themselves, we will read other texts by these authors and about them, as well as background reading on the letter as genre and as historical document. We will also take note of the fact that these are all exchanges that cross the gender divide and ask how the question of Zionist ideology intersects with issues of gender in Jewish history.
Instructor(s): Na’ama Rokem Terms Offered: Autumn
Equivalent Course(s): CMLT 34105, JWSC 24105

CMLT 26210. Oedipus in Zion: The Oedipal Figure in Modern Hebrew Literature. 100 Units.
Historians often refer to the emergence of Zionism as an "Oedipal Revolution. Hence, the secular son’s rebellion against his orthodox father is understood as the thrust that triggered the modern Jewish revolution. Alan Mintz aptly described the inter-generational rift between fathers and sons at the turn of the 20th century as a tragic yet inevitable consequence of modernity, underscoring the psychological difficulties and political dilemmas that haunted the sons who were "banished form their father’s table. This seminar will focus on the (highly androcentric) oedipal figure in literary theory and explore its prominence in modern Hebrew literature. Freud’s preoccupation with the Oedipus complex at the turn of the century coincided with the emergence of a powerful oedipal narrative in modern Hebrew culture. This confluence provides a fascinating backdrop to the "invention" of the Oedipus complex. We will read a variety of literary texts which rework the oedipal figure from the late 19th century to the 1980s and beyond.
Instructor(s): Michael Gluzman
Equivalent Course(s): CMLT 36210, JWSC 26210
CMLT 26660. The Rise of the Global New Right. 100 Units.
This course traces the intellectual genealogies of the rise of a Global New Right in relation to the contexts of late capitalist neoliberalism, the fall of the Soviet Union, as well as the rise of social media. The course will explore the intertwining political and intellectual histories of the Russian Eurasianist movement, Hungarian Jobbik, the American Traditional Workers Party, the French GRECE, Greek Golden Dawn, and others through their published essays, blogs, vlogs and social media. Perhaps most importantly, the course asks: can we use f-word (fascism) to describe this problem? In order to pose this question we will explore the aesthetic concerns of the New Right in relation to postmodern theory, and the affective politics of nationalism. This course thus frames the rise of a global new right interdisciplinary and comparatively as a historical, geopolitical and aesthetic problem.
Instructor(s): Leah Feldman
Terms Offered: Winter
Equivalent Course(s): REES 36660, SIGN 26050, CMLT 36660, ENGL 26660, ENGL 36660, REES 26660

CMLT 26912. 20th Century Russian & South East European Emigre Literature. 100 Units.
Being alienated from myself, as painful as that may be, provides me with that exquisite distance within which perverse pleasure begins, as well as the possibility of my imagining and thinking,” writes Julia Kristeva in “Strangers to Ourselves,” the book from which this course takes its title. The authors whose works we are going to examine often alternate between nostalgia and the exhilaration of being set free into the breathless possibilities of new lives. Leaving home does not simply mean movement in space. Separated from the sensory boundaries that defined their old selves, immigrants inhabit a warped, fragmentary, disjointed time. Immigrant writers struggle for breath-speech, language, voice, the very stuff of their craft resounds somewhere else. Join us as we explore the pain, the struggle, the failure, and the triumph of emigration and exile. Vladimir Nabokov, Joseph Brodsky, Marina Tsvetaeva, Nina Berberova, Julia Kristeva, Alexander Hemon, Dubravka Ugrešić, Norman Manea, Miroslav Penkov, Ilija Trojanow, Tea Obreht.
Instructor(s): Angelina Ilieva
Terms Offered: Autumn
Equivalent Course(s): REES 29010, REES 39010, CMLT 36912

CMLT 28110. Queer Jewish Literature. 100 Units.
Spanning medieval Hebrew to contemporary Yiddish, this course will explore the intersections of Jewish literature and queer theory, homophobia and antisemitism. While centered on literary studies, the syllabus will also include film, visual art, and music. Literary authors will include Bashevis Singer, Qalonymus ben Qalonymus, Irena Klepfisz, and others. Theorists will include Eve Sedgwick, Zohar Weiman-Kelman, Sander Gilman, and others. Readings will be in English translation.
Instructor(s): Anna Elena Torres
Terms Offered: Winter
Equivalent Course(s): GNSE 38110, JWSC 28110, CMLT 38110, GNSE 28110

CMLT 29023. Returning the Gaze: The West and the Rest. 100 Units.
Aware of being observed. And judged. Inferior... Abject… Angry... Proud… This course provides insight into identity dynamics between the "West," as the center of economic power and self-proclaimed normative humanity, and the "Rest," as the poor, backward, volatile periphery. We investigate the relationship between South East European self-representations and the imagined Western gaze. Inherent in the act of looking at oneself through the eyes of another is the privileging of that other's standard. We will contemplate the responses to this existential position of identifying symbolically with a normative site outside of oneself-self-consciousness, defiance, arrogance, self-exoticization-and consider how these responses have been incorporated in the texture of the national, gender, and social identities in the region. Orhan Pamuk, Ivo Andrić, Nikos Kazantzakis, Aleko Konstantinov, Emir Kusturica, Milcho Manchevski.
Instructor(s): Angelina Ilieva
Terms Offered: Autumn
Equivalent Course(s): NEHC 39023, CMLT 39023, NEHC 29023, HIST 23609, REES 39023, HIST 33609, REES 29023
Comparative Race and Ethnic Studies

Department Website: http://csrpc.uchicago.edu

Program of Study

The BA program in Comparative Race and Ethnic Studies offers an interdisciplinary curriculum through which students can examine the histories, languages, and cultures of the racial and ethnic groups in and of themselves, in relationship to each other, and, particularly, in structural contexts of power. Focusing on genocide, slavery, conquest, confinement, immigration, and the diaspora of peoples around the globe, Comparative Race and Ethnic Studies examines the material, artistic, and literary expressions of peoples who originated in Africa, Latin America, Asia, and Europe, who moved voluntarily or were forcefully bound over to the Americas and here evolved stigmatized identities, which were tied to the cultures and histories of their natal lands in complicated ways.

A student who obtains a BA in Comparative Race and Ethnic Studies will be well prepared for admission to graduate programs in the humanities and social sciences, to professional schools in law, medicine, public health, social work, business, or international affairs, and to careers in education, journalism, politics, creative writing, and the nonprofit sector. A degree in Comparative Race and Ethnic Studies offers training designed to impart fundamental skills in critical thinking, comparative analysis, social theory, research methods, and written expression.

Areas of specialization include: Africa Past and Present, African American Studies, Latino/a Studies, Asian American Studies, and Native American Studies. This major/minor is also available to students interested in the study of Africa in a comparative framework.

Program Requirements

Students are encouraged to meet the general education requirement in the humanities and/or social sciences before declaring their major. Students must meet with the student affairs administrator to discuss a plan of study as soon as they declare their major (no later than the end of Spring Quarter of their third year). Students are also required to consult with the student affairs administrator to chart their progression through their course of study.

A. Civilization Requirement

The major requires eleven to twelve courses, depending on whether the student counts two or three civilization studies courses chosen from those listed below. The CRES civilization requirement can only be fulfilled by taking courses from those listed below (other civilization sequences may be approved by petition). Courses can be taken in any order, but they must be in the same sequence. For example, a student can take Colonizations III and then Colonizations I, but they cannot fulfill the civilization requirement by taking Colonizations III and Introduction to Latin American Civilization I. If a student has counted all three civilization courses towards general education, then a CRES elective must be added.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRES 24001</td>
<td>Colonizations I</td>
<td>300</td>
</tr>
<tr>
<td>CRES 24002</td>
<td>Colonizations II</td>
<td></td>
</tr>
<tr>
<td>CRES 24003</td>
<td>Colonizations III</td>
<td></td>
</tr>
<tr>
<td>SOSC 22552</td>
<td>African Civ in Paris I</td>
<td></td>
</tr>
<tr>
<td>SOSC 22553</td>
<td>African Civ in Paris II</td>
<td></td>
</tr>
<tr>
<td>LACS 16101</td>
<td>Introduction to Latin American Civilization I</td>
<td></td>
</tr>
<tr>
<td>LACS 16200</td>
<td>Introduction to Latin American Civilization II</td>
<td></td>
</tr>
<tr>
<td>SOSC 19019</td>
<td>Latin American Civilization in Oaxaca I</td>
<td></td>
</tr>
<tr>
<td>SOSC 19020</td>
<td>Latin American Civilization in Oaxaca II</td>
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<tr>
<td>HIST 10101</td>
<td>Introduction to African Civilization I</td>
<td></td>
</tr>
<tr>
<td>HIST 10102</td>
<td>Introduction to African Civilization II</td>
<td></td>
</tr>
<tr>
<td>SALT 20100</td>
<td>Introduction to the Civilizations of South Asia I</td>
<td>200</td>
</tr>
</tbody>
</table>

SALT 20100 | Introduction to the Civilizations of South Asia I |
Comparative Race and Ethnic Studies

SALC 20200 Introduction to the Civilizations of South Asia II
EALC 10800-10900-11000 Introduction to the Civilizations of East Asia I-II-III
EALC 10800 Intro To East Asian Civilization I
EALC 10900 Intro to East Asian Civilization II
EALC 11000 Intro to East Asian Civilization III
Jewish Civilization* JWSC 12000 Jewish Civilization I: Ancient Beginnings to Early Medieval Period
JWSC 12001 Jewish Civilization II: Late Medieval to Modern Period

* Consult the Jewish Studies page of this catalog for specifics.

B. Research Project or Essay Requirement

A substantial essay or project is to be completed in the student's fourth year under the supervision of a Comparative Race and Ethnic Studies adviser, who is a member of the program's core faculty. Students must choose an essay adviser and submit a formal BA proposal to the student affairs administrator by the end of their third year of study. BA essays are due on May 1 of their fourth year or by fifth week of their quarter of graduation.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the required consent of both program chairs. Students should also consult with the chairs by the earliest BA proposal deadline or, if one program fails to publish a deadline, by the end of their third year. A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

C. BA Colloquium Requirement

Students must attend a BA colloquium that begins with a general meeting and individual meetings during the second half of Spring Quarter of their third year and continues through Autumn, Winter, and Spring Quarters of their fourth year. They may register for CRES 29800 BA Colloquium: Theory and Methods in Comparative Race and Ethnic Studies in any one of those quarters, though most majors register for it during Autumn Quarter. They submit a completed thesis during Spring Quarter of their fourth year. (Students who plan to graduate before the Spring Quarter of their fourth year will need to register for the BA Colloquium earlier and should meet with the student affairs administrator to plan an appropriate program). This course is designed to introduce students to a range of qualitative research methods and to help determine which method would fit a research project of their own design in the field of race and ethnic studies. It functions as a research workshop in which students identify a research topic, develop a research question, and explore a range of methods that may or may not be appropriate for the research project.

D. Requirements for the Major and the Minor

THE MAJOR

Students have two ways to fulfill the elective requirements for the major:

Option 1 allows students to focus four courses on one specific area of specialization—Africa Past and Present, African American Studies, Asian American Studies, Latina/o Studies, or Native American Studies (other diasporic communities may qualify by petition)—and a second four-course cluster drawn from a different area or four comparative courses. For example, one may choose to take four courses focused on African American Studies and choose a second four courses focused exclusively on Asian American Studies or four courses in the Comparative/General Studies category.

Option 2 is designed for students who wish to explore comparative race and ethnic studies primarily through a disciplinary (e.g., anthropology, English, history) or interdisciplinary program focus (e.g., gender studies, Latin American studies), or who wish to graduate with a double major in Comparative Race and Ethnic Studies. Accordingly, one four-course cluster of electives must be focused on one area (Africa Past and Present, African American Studies, Asian American Studies, Latina/o Studies, Native American Studies). A second cluster of four courses should fall within a specific discipline or interdisciplinary area.

The requirements for Options 1 and 2 are virtually identical: one or two civilization studies courses, eight electives, a BA colloquium, and a BA essay. The BA program in CRES consists of eleven to twelve courses, of which at least seven courses must be chosen from those listed or cross-listed as CRES courses. One upper-level language course may be used to meet the major requirements. The course requires approval by the student affairs administrator.

SUMMARY OF REQUIREMENTS: MAJOR IN COMPARATIVE RACE AND ETHNIC STUDIES

<table>
<thead>
<tr>
<th>Requirement Description</th>
<th>Course Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–2 course(s) of a single civilization sequence</td>
<td>100-200</td>
</tr>
<tr>
<td>4 courses in one specific area of specialization</td>
<td>400</td>
</tr>
<tr>
<td>4 courses in a second area of specialization or 4 comparative courses</td>
<td>400</td>
</tr>
</tbody>
</table>
CRES 29800 BA Colloquium: Theory and Methods in Comparative Race and Ethnic Studies 100
CRES 29900 Preparation for the BA Essay 100
Total Units 1100-1200

* If the first two quarters of a civilization studies sequence are taken to fulfill the general education requirement, the third quarter will count towards the major; if a non-CRES civilization sequence is used to fulfill the general education requirement, then two quarters must be included in the major. If a student has counted all three civilization courses towards general education, then a CRES elective must be added.
** Africa Past and Present, African American Studies, Latina/o Studies, Asian American Studies, or Native American Studies.
*** Students completing a second major may choose four courses within a single discipline or interdisciplinary field (e.g., history, gender and sexuality studies, sociology, political science) that focus on race and ethnic issues.

Sample CRES Major Specializing in Asian American Studies

CRES 24003 Colonizations III 100
CRES 26913 The Politics of Immigration: Race, Rights, and Activism 100
CRES 24305 Autobiog Writ: Gender & Modern Korea 100
CRES 14400 Japan and the West: 19th Century 100
CRES 20104 Urban Structure and Process 100
CRES 20173 Inequality in American Society 100
CRES 28703 Baseball and American Culture, 1840 to Present 100
CRES 29800 BA Colloquium: Theory and Methods in Comparative Race and Ethnic Studies 100
CRES 29900 Preparation for the BA Essay 100
Total Units 900

* Only one civilization course was required, because this student took Colonizations I and II to meet the general education requirement.

THE MINOR

The minor in Comparative Race and Ethnic Studies consists of five to seven courses, depending upon whether the two civilization studies courses are taken for general education. Credit toward the minor for courses taken at any other institution must be discussed with the director of undergraduate studies in advance of registration. Language courses may not be used to fulfill the CRES minor requirements. Students must receive the student affairs administrator's approval of the minor program on a form obtained from their College adviser. This form must then be returned to their College adviser by the end of Spring Quarter of their third year.

Courses in the minor program may not be (1) double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers. Courses taken to complete a minor are counted toward electives.

SUMMARY OF REQUIREMENTS: MINOR IN COMPARATIVE RACE AND ETHNIC STUDIES

Up to 2 courses of a single civilization sequence 000-200
4 courses in one specific area of specialization (Africa Past and Present, African American Studies, Latina/o Studies, Asian American Studies, or Native American Studies) 400
1 comparative course 100
Total Units 500-700

* Depending on whether the civilization studies courses are taken to meet the general education requirement.

Sample CRES Minor Specializing in African American Studies

CRES 16101 Introduction to Latin American Civilization I 100
CRES 16102 Introduction to Latin American Civilization II 100
CRES 22150 Contemporary African American Politics 100
CRES 24601 Martin and Malcolm: Life and Belief 100
CRES 25102 The Politics of Blackness in the Americas 100
Total Units 500
Grading

All courses must be taken for a quality grade unless a course only offers a P/F grading option.

Honors

The BA with honors is awarded to all students who meet the following requirements: a GPA of at least 3.25 overall and 3.5 in the major, and a grade of A- or above on the BA essay.

Advising

Each student must choose an adviser who is a member of the Comparative Race and Ethnic Studies core faculty listed below by the time the BA essay proposal is turned in at the end of the third year. Students are expected to have consulted with the student affairs administrator to identify a faculty adviser and to design their program of study by the beginning of their third year (after the declaration of the major). Students may continue to seek advice from both the student affairs administrator and their faculty adviser while completing their programs of study.

Degree Listing

Students who major or minor in Comparative Race and Ethnic Studies will have their area of specialization listed on their transcript. Thus a student with an African American Studies focus will have the degree listed as “Comparative Race and Ethnic Studies, with African American Studies.” The same will apply for those students who focus on Africa Past and Present, Asian American Studies, Latina/o Studies, and Native American Studies.

Courses: Africa Past and Present

**CRES 20701. Introduction to African Civilization I. 100 Units.**

Part one of the sequence takes a historical approach. We consider how different types of historical evidence-documentary, oral, and material-can be used to investigate processes of change and transformation in Africa from the early Iron Age through the emergence of the Atlantic world in the fifteenth century. We will investigate state formation in comparative perspective and examine case studies from the Swahili coast, the empires of Ghana and Mali, and Great Zimbabwe. The course also examines the diffusion of Islam, European contact, and the trans-Atlantic slave trade.

Instructor(s): E. Osborn Terms Offered: Autumn
Equivalent Course(s): HIST 10101, ANTH 20701

**CRES 20802. Introduction to African Civilization II. 100 Units.**

The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers' policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*. Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): ANTH 20702, HIST 10102, CHDV 21401

**CRES 22706. Slavery and Freedom in the Atlantic World. 100 Units.**

Equivalent Course(s): HIST 22706

**CRES 24813. South African Fictions and Factions. 100 Units.**

This course examines the intersection of narrative in print and film (fiction and documentary) in Southern Africa since mid-20th-century decolonization. We begin with Cry, the Beloved Country, a best seller written by South African Alan Paton while in the US, and the original film version by a Hungarian-born, British-based director (Zoltan Korda) and an American screenwriter (John Howard Lawson), which together show both the international impact of South African stories and the important elements missed by overseas audiences. We will continue with fictional and nonfictional narrative responses to apartheid and decolonization in film and in print, and examine the power and the limits of what critic Louise Bethlehem has called the “rhetoric of urgency” on local and international audiences. We will conclude with writing and film that grapples with the complexities of the post-apartheid world, whose challenges, from crime and corruption to AIDS and the particular problems faced by women and gender minorities, elude the heroic formulas of the anti-apartheid struggle era. (B)
Equivalent Course(s): CMST 24813, CMLT 24813, ENGL 24813
**COURSES: AFRICAN AMERICAN STUDIES**  

**CRES 20104. Urban Structure and Process. 100 Units.**  
This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past American experience as a way of developing urban policy both in this country and elsewhere.  
Instructor(s): O. McRoberts Terms Offered: Spring  
Equivalent Course(s): SOSC 25100, SOCI 20104, SOCI 30104, GEOG 22700, GEOG 32700

**CRES 22150. Contemporary African American Politics. 100 Units.**  
This course explores the issues, actions, and arguments that comprise black politics today. Our specific task is to explore the question of how do African Americans currently engage in politics and political struggles in the United States. This analysis is rooted in a discussion of contemporary issues, including the election of the first African American president, Barack Obama, the emergence of the Movement for Black Lives, the exponential incarceration of black people, and the intersection of identities and the role black feminism in shaping the radical freedom tradition in black politics. Throughout the course we attempt to situate the politics of African Americans into the larger design we call American politics. Is there such a thing as black politics? If there is, what does it tell us more generally about American politics?  
Instructor(s): C. Cohen Terms Offered: Winter  
Equivalent Course(s): PLSC 22150, LLSO 25902

**CRES 24601. Martin and Malcolm: Life and Belief. 100 Units.**  
This course examines the religious, social, cultural, political, and personal factors behind the two most prominent public leaders and public intellectuals emerging from the African American community in the 1950s and 1960s: Malcolm X and Martin Luther King Jr. We review their autobiographies, domestic trends within the United States, and larger international forces operating during their times. Their life stories provide the contexts for the sharp differences and surprising commonalities in their political thought and religious beliefs. The operative question is: What can Malcolm and Martin tell us about America during one of the most dynamic periods in the nation’s personality metamorphosis? We use documentary videos of each man’s speeches and of the social contexts in which they lived. (B)  
Instructor(s): D. Hopkins Terms Offered: Spring  
Equivalent Course(s): RLST 24601

**CRES 25405. Child Poverty and Chicago Schools. 100 Units.**  
This discussion- and debate-based course begins with a sociological and historical examination of child poverty, focusing on its origin, experience, and perpetuation in disadvantaged Chicago communities. Class meetings will involve debating school reform efforts, such as “turnaround” schools, charter schools, Promise Neighborhoods, and stepped-up teacher evaluations. Further, the barriers that have contributed to the failure of previous reform initiatives-barriers that include social isolation, violence, and the educational system itself-will be identified and analyzed in-depth.  
Instructor(s): C. Broughton Terms Offered: Spring  
Prerequisite(s): 2nd year standing required; attendance on the first day of class is required or registration will be dropped.  
Equivalent Course(s): PBPL 25405

**CRES 27502. Africans in the Early Americas. 100 Units.**  
During the era of the transatlantic slave trade, more than 350,000 Africans were forcibly trafficked to what is now the United States. The experiences of these men and women and their descendants—particularly their exploitation under a system of racialized slavery—profoundly shaped the course of US history up to and including the present day. These individuals were significant, but they were also only one part of the more than 12 million people who came from Africa to the Americas in the colonial period. Focusing on the diverse experiences of Africans and their descendants—as slaves, but also as colonizers, soldiers, revolutionaries, family members, and free men and women—this course surveys the history of Africans in the Americas from the late fifteenth through the late nineteenth century. Adopting a broad geographic and temporal perspective allows for an exploration of the evolving relationships between labor, gender, and race in North, Central, and South America, including the Spanish, French, and English Caribbean. In this course we will ask: How did the experiences of Africans in the colonial and early republican United States compare with those of Africans in other parts of early America? How might learning about and comparing the experiences of free and enslaved Africans and Afro-descended peoples in different parts of the Americas re-shape our understanding of the multiple origins, meanings, and possibilities of race and national belonging?  
Instructor(s): T. Murphy Terms Offered: Winter  
Equivalent Course(s): HIST 29004, LACS 27502

**COURSES: ASIAN AMERICAN STUDIES**

**CRES 10800-10900-11000. Introduction to the Civilizations of East Asia I-II-III.**  
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
CRES 10800. Intro To East Asian Civilization I. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on
the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): G. Alitto Terms Offered: Autumn Summer
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15100, EALC 10800, SOSC 23500

CRES 10900. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter
sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these
cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, SOSC 23600, EALC 10900

CRES 11000. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on
the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, EALC 11000, SOSC 23700

CRES 10900. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter
sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these
cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15200, SOSC 23600, EALC 10900

CRES 11000. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on
the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and
societies from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F
discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): HIST 15300, EALC 11000, SOSC 23700

CRES 24255. Everyday Maoism: Work, Daily Life, and Material Culture in Socialist China. 100 Units.
The history of Maoist China is usually told as a sequence of political campaigns: land and marriage reform,
nationalization of industry, anti-rightist campaign, Great Leap Forward, Cultural Revolution, etc. Yet for the
majority of the Chinese population, socialism was as much about material changes as about politics: about the
two-story brick houses, electric lights and telephones (loushang louxia, diandeng dianhua) that the revolution
had promised; about new work regimes and new consumption patterns-or, to the contrary, about the absence
of such change. If we want to understand what socialism meant for different groups of people, we have to look
at the "new objects" of socialist modernity, at changes in dress codes and apartment layouts, at electrification
and city planning. We have to analyze workplaces and labor processes in order to understand how socialism
changed the way people worked. We also have to look at the rationing of consumer goods and its effects on
people's daily lives. The course has a strong comparative dimension: we will look at the literature on socialism
in the Soviet Union and Eastern Europe, to see how Chinese socialism differed from its cousins. Another aim is
methodological. How can we understand the lives of people who wrote little and were rarely written about? To
which extent can we read people's life experiences out of material objects?
Instructor(s): J. Eyferth Terms Offered: Spring
Equivalent Course(s): EALC 24255, HIST 24507, HIST 34507, EALC 34255
CRES 24706. Edo/Tokyo: Society and the City in Japan. 100 Units.
This course will explore the cultural and cultural history of Edo/Tokyo from its origins in the early seventeenth century through circa 1945. Issues to be explored include the configuration of urban space and its transformation over time in relation to issues of status, class, and political authority; the formation of the “city person” as a form of identity; and the tensions between the real city of lived experience and the imagined city of art and literature. We will pay particular attention to two periods of transformation, the 1870s when the modernizing state made Tokyo its capital, and the period of reconstruction after the devastating earthquake of 1923. Assignments include a final research paper of approximately 15 to 18 pages.
Instructor(s): S. Burns
Equivalent Course(s): EALC 34706, CRES 34706, HIST 24706, HIST 34706, EALC 24706

CRES 26913. The Politics of Immigration: Race, Rights, and Activism. 100 Units.
Equivalent Course(s): PLSC 36913, PLSC 26913

CRES 27900. Asian Wars of the Twentieth Century. 100 Units.
This course examines the political, economic, social, cultural, racial, and military aspects of the major Asian wars of the twentieth century: the Pacific War, the Korean War, and the Vietnam War. At the beginning of the course we pay particular attention to just war doctrines and then use two to three books for each war (along with several films) to examine alternative approaches to understanding the origins of these wars, their conduct, and their consequences.
Instructor(s): B. Cumings Terms Offered: Spring
Equivalent Course(s): HIST 37900, HIST 27900, EALC 37907, EALC 27907

COURSES: LATIN@O STUDIES

CRES 16101-16102-16103. Introduction to Latin American Civilization I-II-III.
Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

CRES 16101. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): LACS 16100, SOSC 26100, LACS 34600, ANTH 23101, HIST 36101, HIST 16101

CRES 16102. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, HIST 16102, LACS 34700, ANTH 23102, LACS 16200, HIST 36102

CRES 16103. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, ANTH 23103, HIST 16103, SOSC 26300

CRES 16102. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, HIST 16102, LACS 34700, ANTH 23102, LACS 16200, HIST 36102

CRES 16103. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, ANTH 23103, HIST 16103, SOSC 26300

CRES 21903. Intro. a las lit. hispánicas: textos hispanoamericanos desde la colonia a la independencia. 100 Units.
This course examines an array of representative texts written in Spanish America from the colonial period to the late nineteenth century, underscoring not only their aesthetic qualities but also the historical conditions that made their production possible. Among authors studied are Christopher Columbus, Hernán Cortés, Sor Juana Inés de la Cruz, Simón Bolívar, and José Martí.
Instructor(s): L. Brewer-García Terms Offered: Autumn
Prerequisite(s): SPAN 20300 or consent of instructor
Equivalent Course(s): SPAN 21903, LACS 21903
CRES 27101. Intro to Brazilian Culture: Essay, Fiction, Cinema and Music. 100 Units.
During the twentieth century, culture, social thought, music and cinema were completely intertwined in Brazil. This class is an introduction to Brazilian culture through these four types of cultural production and their interaction. We will read authors such as Euclides da Cunha, Gilberto Freyre, Mario de Andrade, Clarice Lispector, and listen to samba, bossa nova, and tropicalism.
Instructor(s): A. Melo Terms Offered: Spring
Equivalent Course(s): LACS 27105, LACS 37105, PORT 27100, PORT 37100

CRES 27303. Topics in US-Mexico Borderlands History. 100 Units.
This course explores the history of the U.S.-Mexican borderlands, from its native past to its present, as a geographical place and as a site of contested sovereignties. It is organized around major themes in the history of the region, including indigenous and European imperialism, settler colonialism, nationalism, migration, labor, and citizenship. Special attention will also be given to the themes of cultural hybridity, transculturation, and the fluidity of social identities defined by the categories of class, ethnicity, gender, nationality, and race. The structure of this course emphasizes the interaction of historical forces across imperial, national, and cultural boundaries, highlighting the dynamism of borderlands as historical phenomena and as a method of interpreting and understanding the past. Students enrolled in this course will gain critical thinking and analytical skills as well as a broader understanding of topics in U.S. and Mexican history that continue to influence contemporary political debates. They will be encouraged to look beyond the rigid dichotomies that often divide the borderlands and investigate the full spectrum of cultural, economic, and social relationships that bring people together as well as those that push them apart. Students will also learn to look for common patterns that emerge across time and space while remaining attentive to the nuances of local identities, cultures, and histories.
Instructor(s): R. Gutiérrez Terms Offered: Autumn

CRES 27504. Racism without Race. 100 Units.
In early 2010 a member of staff at the Regenstein library contacted the police to report an unruly student. The police arrived at the scene and charged the student with criminal trespass and resisting arrest. The student was put in a choke hold and handcuffed before being taken to the local police station where he was held in a cell overnight. According to witnesses, the library staff member's response was unwarranted and so too were the actions taken by the police officers. Individuals later interviewed for the Chicago Maroon described the student's treatment as an instance of 'racial profiling.' How are we to make sense of this incident and other similar to it? There is strong evidence to suggest that the reactions of the authority figures involved were shaped by their attitudes toward skin color. It would seem farfetched, however, to conclude that these reactions reflected an ideology of racial differentiation or what we might call 'traditional' race ideology: the view that human beings can be classified scientifically according to race and that some races are better than, or superior to, others. Theories of race and racial difference have largely been discredited and there are no longer any official institutions, respected academics or public individuals who espouse these. How then do we explain the continued salience of skin color, and what value is there in applying terms such as 'race' and 'racism' to describe it? The following course seeks to reframe the way we go about analyzing contemporary forms of social differentiation based on skin color. It looks at skin color as a culturally recognizable sign, which, like other signs, acquires significance only within the context of a broader set of semiotic ideologies and practices. This means directing our attention to the ways in which color-as-sign takes on meaning in the world we live. Such an approach offers a conceptual framework for a comparative study of past and present forms of discrimination based on skin color while also remaining sensitive to the particularities that define these.
Instructor(s): Y. Hilal
Equivalent Course(s): ANTH 22155

CRES 28000. United States Latinos: Origins and Histories. 100 Units.
An examination of the diverse social, economic, political, and cultural histories of those who are now commonly identified as Latinos in the United States. Particular emphasis will be placed on the formative historical experiences of Mexican Americans and mainland Puerto Ricans, although some consideration will also be given to the histories of other Latino groups, i.e., Cubans, Central Americans, and Dominicans. Topics include cultural and geographic origins and ties; imperialism and colonization; the economics of migration and employment; legal status; work, women, and the family; racism and other forms of discrimination; the politics of national identity; language and popular culture; and the place of Latinos in US society. Equivalent Course(s): AMER 28001, CRES 28000, GNSE 28202, HIST 38000, LACS 28000, LACS 38000, CRES 38000, GNSE 38202, AMER 38001
Instructor(s): R. Gutiérrez Terms Offered: Autumn
Equivalent Course(s): GNSE 38202, HIST 38000, LACS 28000, HIST 28000, AMER 38001, GNSE 28202, LACS 38000, CRES 38000, AMER 28001

CRES 29000. Latin American Religions, New and Old. 100 Units.
This course will consider select pre-twentieth-century issues, such as the transformations of Christianity in colonial society and the Catholic Church as a state institution. It will emphasize twentieth-century developments: religious rebellions; conversion to evangelical Protestant churches; Afro-diasporan religions; reformist and revolutionary Catholicism; new and New Age religions.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): HCHR 39200, MAPS 39200, CRES 39000, LACS 39000, HIST 39000, LACS 29000, HIST 29000, RLST 21401
CRES 36500. Hist of Mexico 1876, to Present. 100 Units.
From the Porfiriato and the Revolution to the present, a survey of Mexican society and politics, with emphasis on the connections between economic developments, social justice, and political organization. Topics include fin de siècle modernization and the agrarian problem; causes and consequences of the Revolution of 1910; the making of the modern Mexican state; relations with the United States; industrialism and land reform; urbanization and migration; ethnicity, culture, and nationalism; economic crises, neoliberalism, and social inequality; political reforms and electoral democracy; the zapatista rebellion in Chiapas; and the end of PRI rule.
Instructor(s): E. Kourí and M. Tenorio Terms Offered: Autumn
Equivalent Course(s): LLSO 26500, LACS 26500, HIST 26500, LACS 36500, CRES 26500, HIST 36500

COURSES: NATIVE AMERICAN STUDIES

CRES 27501. Urban Indians: Native Americans and the City. 100 Units.
The majority of Native Americans in the United States now live in urban areas and this has been the case for more than half a century, but discussions about cities rarely acknowledge their presence beyond (sometimes) lumping them in with catchall categories often labeled "Other." In this course, students will encounter and examine the distinct experiences and contributions of Native Americans in cities, large and small, past and present. We’ll look, first, at the context in which the population shift away from rural and reservation spaces took place and discuss the ways in which being/becoming "urban" and the process of "urbanization" may not be as straightforward as expected. Students will then dive into studies of the daily struggles and successes of Native American city-dwellers, with an emphasis on mid-20th-century Chicago. Readings and in-class activities will explore issues related to: housing, work, stereotypes and discrimination, cultural survival and traditionalism, physical and mental health, the rise of pan-Indianism, activism, schooling, class divisions, multi/locality, generational differences, identity and intersectionality, representation and the arts, and the very recognition or lack thereof mentioned above. The knowledge and analytic skills developed in this course will therefore serve as an uncommon window into Native American studies and urban studies, as well as broader race- and place-conscious work in the social sciences and humanities.
Instructor(s): A. Jenkins Terms Offered: Winter

COURSES: COMPARATIVE/GENERAL STUDIES

CRES 10200. Introduction to World Music. 100 Units.
This course is a selected survey of classical, popular, and folk music traditions from around the world. The goals are not only to expand our skills as listeners but also to redefine what we consider music to be and, in the process, stimulate a fresh approach to our own diverse musical traditions. In addition, the role of music as ritual, aesthetic experience, mode of communication, and artistic expression is explored.
Instructor(s): section 1 - Woo Chan Lee; section 2 - Ameera Nimjee Terms Offered: Autumn Spring Winter. Autumn 2018: section 1 - MW 3:00-4:20 GoH 402 section 2 - TR 2:00-3:20 GoH 402 Note(s): Background in music not required. Students must confirm enrollment by attending one of the first two sessions of class. This course meets the general education requirement in the dramatic, musical, and visual arts. Equivalent Course(s): MUSI 10200

CRES 20104. Urban Structure and Process. 100 Units.
This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past American experience as a way of developing urban policy both in this country and elsewhere.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): SOSC 25100, SOCI 20104, SOCI 30104, GEOG 22700, GEOG 32700

CRES 20140. Qualitative Field Methods. 100 Units.
This course introduces techniques of, and approaches to, ethnographic field research. We emphasize quality of attention and awareness of perspective as foundational aspects of the craft. Students conduct research at a site, compose and share field notes, and produce a final paper distilling sociological insight from the fieldwork.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): CHDV 20140, SOCI 20140
CRES 20207. Race, Ethnicity, and Human Development. 100 Units.
Twenty-first century practices of relevance to education, social services, health care and public policy deserve buttressing by cultural and context linked perspectives about human development as experienced by diverse groups. Although generally unacknowledged as such post-Brown v. 1954, the conditions purported to support human development for diverse citizens remain problematic. The consequent interpretative shortcomings serve to increase human vulnerability. Specifically, given the problem of evident unacknowledged privilege for some as well as the insufficient access to resources experienced by others, the dilemma skews our interpretation of behavior, design of research, choice of theory, and determination of policy and practice. The course is based upon the premise that the study of human development is enhanced by examining the experiences of diverse groups, without one group standing as the “standard” against which others are compared and evaluated. Accordingly, the course provides an encompassing theoretical framework for examining the processes of human development for diverse humans while also highlighting the critical role of context and culture.
Instructor(s): M. Spencer Terms Offered: Autumn
Prerequisite(s): Students should have one course in either Human Development or Psychology.
Note(s): CHDV Distribution, B*, C
Equivalent Course(s): CHDV 20207

CRES 21903. Intro. a las lit. hispánicas: textos hispanoamericanos desde la colonia a la independencia. 100 Units.
This course examines an array of representative texts written in Spanish America from the colonial period to the late nineteenth century, underscoring not only their aesthetic qualities but also the historical conditions that made their production possible. Among authors studied are Christopher Columbus, Hernán Cortés, Sor Juana Inés de la Cruz, Simón Bolívar, and José Martí.
Instructor(s): L. Brewer-Garcia Terms Offered: Autumn
Prerequisite(s): SPAN 20300 or consent of instructor
Equivalent Course(s): SPAN 21903, LACS 21903

CRES 22706. Slavery and Freedom in the Atlantic World. 100 Units.
Equivalent Course(s): HIST 22706

CRES 24001-24002-24003. Colonizations I-II-III.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world.

CRES 24001. Colonizations I. 100 Units.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world. Themes of slavery, colonization, and the making of the Atlantic world are covered in the first quarter. Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24001, SOSC 24001, HIST 18301

CRES 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24002, SOSC 24002, HIST 18302

CRES 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): HIST 18303, SOSC 24003, ANTH 24003, SALC 20702
CRES 24002. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24002, SOSC 24002, HIST 18302

CRES 24003. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): HIST 18303, SOSC 24003, ANTH 24003, SALC 20702

CRES 27302. Gender, Sexuality, Indigenous Women in the Colonial Encounter. 100 Units.
This course is premised on the belief that the history of gender and sexuality in colonial contexts is just as crucial and revealing as other more geopolitical, military, or diplomatic topics. In this sense, laws regulating marriage or Europeans exchanging of postcards of “exotic women” are just as significant as land annexations or military technology. Through the quarter, we will think through not only what the history of imperialism tells us about gender and sexuality, but also what this type of analysis reveals about colonialism and empire. What was the relationship between the socio-political organization of European empires and ideologies of gender and sexuality in both colony and metropole? We will also consider intersectional questions, such as the connections between regulating intimacy and the creation of race-based imperial hierarchies. To gain historical precision in examining these more abstract or theoretical questions, we will anchor our readings and discussion around particular indigenous women and their contexts. While the study of gender and sexuality in a colonial context has come a long way in recent years, the majority of sources for examining gender and colonialism are about white women. To push back against this absence, we will take a case study approach to consider the lives and narratives surrounding indigenous women in colonial cultures.
Instructor(s): E. Francese Terms Offered: Autumn, TBD

CRES 27503. Reading the Border: Gender, Texts, and Performance. 100 Units.
Course description unavailable.
Terms Offered: Spring
Equivalent Course(s): LACS 27503, GNSE 27503

CRES 27605. United States Legal History. 100 Units.
This course focuses on the connections between law and society in modern America. It explores how legal doctrines and constitutional rules have defined individual rights and social relations in both the public and private spheres. It also examines political struggles that have transformed American law. Topics to be addressed include the meaning of rights; the regulation of property, work, race, and sexual relations; civil disobedience; and legal theory as cultural history. Readings include legal cases, judicial rulings, short stories, and legal and historical scholarship.
Instructor(s): A. Stanley Terms Offered: Autumn
Equivalent Course(s): GNSE 27605, HMRT 37605, HMRT 27601, AMER 27605, GNSE 37605, LLSO 28010, CRES 37605, HIST 37605, HIST 27605

CRES 28011. Religions of the African Diaspora. 100 Units.
This course is intended as an introduction to religions of the African Diaspora. We will engage a range of themes relevant to the history, beliefs and practices, world-views, and communities of African-derived religions around the globe, including issues of race and race-making, class, gender, sexuality, the body, and representations in the media. We will begin with a discussion of the central terms and major challenges of the field. With those concerns in mind, we will trace the historical movements of Africans across the globe, examining the spread and development of religions through key themes and case studies. We will address a large number traditions, including Santeria, Condomble, Vodoun, Palo, Obeah, Christianity, Islam, and Judaism.
Equivalent Course(s): RLST 28011

CRES 29302. Human Rights II: History and Theory. 100 Units.
This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.
Instructor(s): TBA Terms Offered: Winter
Equivalent Course(s): HIST 39302, LLSO 27100, HIST 29302, INRE 31700, HMRT 20200, HMRT 30200
CRES 29800. BA Colloquium: Theory and Methods in Comparative Race and Ethnic Studies. 100 Units.
Please note: Students are encouraged to register for the BA Colloquium in the Spring Quarter of their third year. Third-year CRES majors will meet with the BA preceptor during the second half of Spring Quarter to get started on proposals, identifying a faculty adviser, and other preparatory tasks. This course is designed to introduce students to a range of qualitative research methods and to help determine which method would fit a research project of their own design in the field of race and ethnic studies. It functions as a research workshop in which students identify a research topic, develop a research question, and explore a range of methods that may or may not be appropriate for the research project. Students read each other’s work and work through ideas that can serve as the proposal for a BA project.

Instructor(s): Staff
Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of instructor and director of undergraduate studies
Note(s): Students are required to register for CRES 29800 in Spring Quarter of their third year.

CRES 29900. Preparation for the BA Essay. 100 Units.
Students may register for Preparation for the BA Essay during any quarter of their fourth year. Students should consult the CRES entry in the Time Schedules to locate the section numbers for faculty advisers.

Terms Offered: Autumn,Winter,Spring
Prerequisite(s): CRES 29800; consent of the faculty supervisor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Course Form. Must be taken for a quality grade.

These courses are for reference only. Please see Class Search (http://registrar.uchicago.edu/classes) for specific offerings. See the Center for the Study of Race, Politics, and Culture webpage for further information.
# Computational and Applied Mathematics

## Program of Study

The Departments of Computer Science, Mathematics, and Statistics offer a BS in Computational and Applied Mathematics. The program is designed for students who intend to specialize in computational and/or applied mathematics, as well as students who want to acquire a strong quantitative background to be applied in such varied areas as physics, biological sciences, engineering, operations research, economics, and finance.

## Summary of Requirements

### General Education

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 12100 &amp; CHEM 12200</td>
<td>Honors General Chemistry I and Honors General Chemistry II (or higher)</td>
</tr>
<tr>
<td>OR PHYS 13100-13200</td>
<td>Mechanics; Electricity and Magnetism (or higher)</td>
</tr>
<tr>
<td>OR MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>OR MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>OR MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
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### Total Units

400

### Major

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>or MATH 15910</td>
<td>Introduction to Proofs in Analysis</td>
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<th>Requirement</th>
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<tbody>
<tr>
<td>MATH 20300-20400-20500</td>
<td>Analysis in Rn I-II-III</td>
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<tr>
<td>or MATH 20700-20800-20900</td>
<td>Honors Analysis in Rn I-II-III</td>
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<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>STAT 24300</td>
<td>Numerical Linear Algebra</td>
</tr>
<tr>
<td>or MATH 20250</td>
<td>Abstract Linear Algebra</td>
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<th>Requirement</th>
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<tbody>
<tr>
<td>CMSC 12100-12200</td>
<td>Computer Science with Applications I-II</td>
</tr>
<tr>
<td>CMSC 15100-15200</td>
<td>Introduction to Computer Science I-II</td>
</tr>
<tr>
<td>CMSC 16100-16200</td>
<td>Honors Introduction to Computer Science I-II</td>
</tr>
<tr>
<td>CMSC 27100</td>
<td>Discrete Mathematics</td>
</tr>
<tr>
<td>CMSC 27200</td>
<td>Theory of Algorithms</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
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<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>MATH 21100</td>
<td>Basic Numerical Analysis</td>
</tr>
<tr>
<td>MATH 21200</td>
<td>Advanced Numerical Analysis</td>
</tr>
<tr>
<td>STAT 24400-24500</td>
<td>Statistical Theory and Methods I-II</td>
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<table>
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<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>STAT 25100</td>
<td>Introduction to Mathematical Probability</td>
</tr>
<tr>
<td>STAT 25150</td>
<td>Introduction to Mathematical Probability-A</td>
</tr>
<tr>
<td>MATH 23500</td>
<td>Markov Chains, Martingales, and Brownian Motion</td>
</tr>
<tr>
<td>STAT 28000</td>
<td>Optimization</td>
</tr>
</tbody>
</table>

Three approved electives (see Elective Courses below) | 300 |

### Total Units

1800
Students with AP credit for PHYS 12100-12200 may substitute quantitative courses in other scientific departments with permission of the director of undergraduate studies; whether these other courses count as electives within the major or as general electives will be determined by the director of undergraduate studies.

Credit may be granted by examination.

Students who take MATH 13100-13200 or MATH 15100-15200 must also take the third quarter of the sequence as a prerequisite for MATH 15910; however, neither MATH 13300 nor MATH 15300 will be counted toward the major.

Students may substitute a higher-level Computer Science course in discrete mathematics or algorithms with approval of the director of undergraduate studies.

Students who take STAT 25100 or STAT 25150 may take MATH 23500 as one of their electives with approval of the director of undergraduate studies. STAT 31200 may be substituted for MATH 23500.

ELECTIVE COURSES

Students will propose a coherent set of three courses to complete the major program. These will be chosen to complete a specialization. Possibilities include: preparation for PhD programs in applied mathematics, scientific computing, machine learning, operations research, economics and finance, physical sciences, or biological sciences. These are intended to be mathematical and computational courses that complement the program and at least at the mathematical level of the advanced classes in the required courses. The program must be approved by the undergraduate adviser, who will also serve as a resource for suggested mentors and programs in different areas.

GRADING

Students must receive quality grades in all courses required in the degree program. To qualify for the BS degree, students must complete the 18 courses above with (1) a GPA of 2.0 or higher and (2) no grade lower than C-.

HONORS

A BS with honors in Computational and Applied Mathematics requires an overall GPA of at least 3.0, a GPA in the required courses for the major of at least 3.25, and the completion of an honors paper written under the supervision of a faculty member and approved by the undergraduate adviser for the major. Students planning to complete an honors paper should submit a short proposal to the undergraduate adviser for approval by the Computational and Applied Mathematics board by the end of the student’s third year. The proposal must be approved by the board no later than the end of fifth week of the Autumn Quarter of the student’s fourth year.
COMPUTATIONAL NEUROSCIENCE

Department Website: http://neuroscience.uchicago.edu

Computational neuroscience is a relatively new interdisciplinary area of inquiry that is concerned with how components of animal and human nervous systems interact to produce behaviors. It relies on quantitative and modeling approaches to understand the function of the nervous system and to design human-made devices that duplicate behaviors. Course work in computational neuroscience can prepare students for graduate studies in neurobiology or psychology, in the mathematical or engineering sciences, or in areas of medicine such as neurology or psychiatry. It can lead either to traditional academic careers or to opportunities in the corporate world.

An undergraduate degree in computational neuroscience is not available at the University of Chicago, but a minor in computational neuroscience is offered by the Biological Sciences Collegiate Division. This minor is a good option for students who are majoring in biological sciences and are interested in mathematical approaches to biology; or for students who are majoring in computer science, mathematics, physics, psychology, or statistics and are interested in neuroscience. For details, see the Biological Sciences section in this catalog.

Students electing this minor must have completed, or placed out of, the equivalent of a year of collegiate-level calculus and must have completed the general education requirement for the biological sciences.

SUMMARY OF REQUIREMENTS FOR THE MINOR IN COMPUTATIONAL NEUROSCIENCE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 24231</td>
<td>Methods in Computational Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24232</td>
<td>Computational Approaches to Cognitive Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24408</td>
<td>Modeling and Signal Analysis for Neuroscientists</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 26210-26211</td>
<td>Mathematical Methods for Biological Sciences I-II</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>500</td>
</tr>
</tbody>
</table>

Instead of completing a formal minor, students can easily fashion an organized course of study in computational neuroscience by selecting appropriate general education courses and electives.

For updated information on computational neuroscience activities and undergraduate programs, visit neuroscience.uchicago.edu.

SUGGESTED GENERAL EDUCATION COURSES

Students majoring in biological sciences typically take BIOS 20150 How Can We Understand the Biosphere? and BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>200</td>
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<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
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<tr>
<td>SOSC 14100-14200-14300</td>
<td>Mind I-II-III</td>
<td>300</td>
</tr>
</tbody>
</table>

COMPUTATIONAL NEUROSCIENCE COURSES

BIOS 24231. Methods in Computational Neuroscience. 100 Units.
Topics include (but are not limited to): Hodgkin-Huxley equations, Cable theory, Single neuron models, Information theory, Signal Detection theory, Reverse correlation, Relating neural responses to behavior, and Rate vs. temporal codes.
Instructor(s): S. Bensmaia Terms Offered: Winter. L.
Prerequisite(s): BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.
Equivalent Course(s): CPNS 34231, PSYC 24231

BIOS 24232. Computational Approaches to Cognitive Neuroscience. 100 Units.
This course is concerned with the relationship of the nervous system to higher order behaviors (e.g., perception, object recognition, action, attention, learning, memory, and decision making). Psychophysical, functional imaging, and electrophysiological methods are introduced. Mathematical and statistical methods (e.g. neural networks and algorithms for studying neural encoding in individual neurons and decoding in populations of neurons) are discussed. Weekly lab sections allow students to program cognitive neuroscientific experiments and simulations.
Instructor(s): N. Hatsopoulos Terms Offered: Spring. L.
Prerequisite(s): BIOS 26210, a course in systems neuroscience, and knowledge using Matlab, or consent of instructor.
Equivalent Course(s): ORGB 34650, CPNS 33200, PSYC 34410
BIOS 24408. Modeling and Signal Analysis for Neuroscientists. 100 Units.
The course provides an introduction into signal analysis and modeling for neuroscientists. We cover linear and nonlinear techniques and model both single neurons and neuronal networks. The goal is to provide students with the mathematical background to understand the literature in this field, the principles of analysis and simulation software, and allow them to construct their own tools. Several of the 90-minute lectures include demonstrations and/or exercises in Matlab.
Instructor(s): W. van Drongelen Terms Offered: Spring. L.
Prerequisite(s): Undergraduates: Biology Major - BIOS 26210 and 26211, or consent of instructor. Neuroscience Major - NSCI 20130
Equivalent Course(s): NSCI 24000, CPNS 32111

BIOS 26210-26211. Mathematical Methods for Biological Sciences I-II.

BIOS 26210. Mathematical Methods for Biological Sciences I. 100 Units.
This course builds on the introduction to modeling course biology students take in the first year (BIOS 20151 or 152). It begins with a review of one-variable ordinary differential equations as models for biological processes changing with time, and proceeds to develop basic dynamical systems theory. Analytic skills include stability analysis, phase portraits, limit cycles, and bifurcations. Linear algebra concepts are introduced and developed, and Fourier methods are applied to data analysis. The methods are applied to diverse areas of biology, such as ecology, neuroscience, regulatory networks, and molecular structure. The students learn computations methods to implement the models in MATLAB.
Instructor(s): D. Kondrashov Terms Offered: Autumn. L.
Prerequisite(s): BIOS 20151 or BIOS 20152 and three quarters of a Biological Sciences Fundamentals sequence or consent of the instructor
Equivalent Course(s): PSYC 36210, CPNS 31000

BIOS 26211. Mathematical Methods for Biological Sciences II. 100 Units.
This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g., Markov Chain, Monte Carlo, and Gillespie algorithm. Students complete an independent project on a topic of their interest.
Instructor(s): D. Kondrashov Terms Offered: Winter. L.
Prerequisite(s): BIOS 26210 or equivalent.
Equivalent Course(s): CPNS 31100, PSYC 36211

BIOS 26211. Mathematical Methods for Biological Sciences II. 100 Units.
This course is a continuation of BIOS 26210. The topics start with optimization problems, such as nonlinear least squares fitting, principal component analysis and sequence alignment. Stochastic models are introduced, such as Markov chains, birth-death processes, and diffusion processes, with applications including hidden Markov models, tumor population modeling, and networks of chemical reactions. In computer labs, students learn optimization methods and stochastic algorithms, e.g., Markov Chain, Monte Carlo, and Gillespie algorithm. Students complete an independent project on a topic of their interest.
Instructor(s): D. Kondrashov Terms Offered: Winter. L.
Prerequisite(s): BIOS 26210 or equivalent.
Equivalent Course(s): CPNS 31100, PSYC 36211

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The computer science program prepares students for careers in computer science by offering BA and BS degrees, as well as combined BA/MS and BS/MS degrees. Students who earn the BA are prepared either for graduate study in computer science or a career in industry. Students who earn the BS degree build strength in an additional field by following an approved course of study in a related area. The department also offers a minor. Furthermore, a computer science major or minor serves as an excellent foundation for work in other areas, including but not limited to mathematics, the natural sciences, social sciences, public administration, and the arts.

PROGRAM REQUIREMENTS

Both the BA and BS in computer science require fulfillment of the mathematical sciences requirement in general education by completing an approved two-quarter calculus sequence. The physical sciences requirement in general education must be satisfied by completing an approved two-quarter sequence in either chemistry or physics. Both BA and BS students take at least fourteen computer science courses chosen from an approved program. BS students also take three courses in an approved related field outside computer science.

Approved Programs

The computer science department counselor is responsible for approval of specific courses and sequences, and responds as needed to changing course offerings in our program and other programs. Students should consult the department counselor with questions about specific courses they are considering taking to meet the requirements. The department counselor maintains a website with up-to-date program details at http://major-advising.cs.uchicago.edu.

Approved Computer Science Program

There is one approved general program for both the BA and BS degrees, comprised of introductory courses, a sequence in Theory, and a sequence in Programming Languages and Systems, followed by advanced electives. Students may substitute upper-level or graduate courses in similar topics for those on the list that follows with the approval of the department counselor. Students who matriculated prior to Autumn 2016 may choose to follow these requirements; otherwise they should consult the archived catalog from their year of matriculation for the degree requirements in computer science. All students who matriculated in Autumn 2016 or later should follow this program.

The course information in this catalog, with respect to who is teaching which course and in which quarter(s), is subject to change during the academic year. For up-to-date information on our course offerings, please consult http://course-info.cs.uchicago.edu.

Students considering a computer science major are strongly advised to register for an introductory sequence, starting either with CMSC 15100 or CMSC 16100, in their first year. Incoming students should note that while CMSC 12100 can be used as the first course in the major, it is not open to first-year students, and it is not intended as an entry point for students who already know they want to major in computer science. Students who decide to pursue a computer science major or minor after completing CMSC 12100 may continue with either CMSC 15200-15400 or CMSC 12200-12300-15400. Note that CMSC 12200 does not meet the prerequisites for CMSC 15400.

1. Introductory Sequence (three courses required):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 15100</td>
<td>Intro To Computer Science-1</td>
<td>100</td>
</tr>
<tr>
<td>or CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
<td></td>
</tr>
<tr>
<td>or CMSC 12100</td>
<td>Computer Science with Applications I</td>
<td></td>
</tr>
<tr>
<td>CMSC 15200</td>
<td>Intro To Computer Science-2</td>
<td>100</td>
</tr>
<tr>
<td>or CMSC 16200</td>
<td>Honors Introduction to Computer Science II</td>
<td></td>
</tr>
<tr>
<td>CMSC 15400</td>
<td>Introduction to Computer Systems</td>
<td>100</td>
</tr>
</tbody>
</table>

Students may only receive credit for one introductory programming sequence: CMSC 10500-10600 Fundamentals of Computer Programming I-II, CMSC 12100-12200 Computer Science with Applications I-II, CMSC 15100-15200 Introduction to Computer Science I-II, or CMSC 16100-16200 Honors Introduction to Computer Science I-II. Exceptions must be approved by the department counselor prior to taking the second sequence.

Students may count only one of CMSC 12100 Computer Science with Applications I, CMSC 15100 Intro To Computer Science-1, and CMSC 16100 Honors Introduction to Computer Science I towards the 4200 units of credit required for graduation. The same is true for CMSC 12200 Computer Science with Applications II, CMSC 15200 Intro To Computer Science-2, and CMSC 16200 Honors Introduction to Computer Science II. Additionally, students who have taken CMSC 15200 or 16200 may not register for CMSC 12100.
2. Programming Languages and Systems Sequence (three courses required):

Three of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 22001</td>
<td>Software Construction</td>
</tr>
<tr>
<td>CMSC 22100</td>
<td>Programming Languages</td>
</tr>
<tr>
<td>CMSC 22200</td>
<td>Computer Architecture</td>
</tr>
<tr>
<td>CMSC 22300</td>
<td>Functional Programming</td>
</tr>
<tr>
<td>CMSC 22600</td>
<td>Compilers for Computer Languages</td>
</tr>
<tr>
<td>CMSC 23000</td>
<td>Operating Systems</td>
</tr>
<tr>
<td>CMSC 23010</td>
<td>Parallel Computing</td>
</tr>
<tr>
<td>CMSC 23200</td>
<td>Introduction to Computer Security</td>
</tr>
<tr>
<td>CMSC 23300</td>
<td>Networks and Distributed Systems</td>
</tr>
<tr>
<td>CMSC 23310</td>
<td>Advanced Distributed Systems</td>
</tr>
<tr>
<td>CMSC 23400</td>
<td>Mobile Computing</td>
</tr>
<tr>
<td>CMSC 23500</td>
<td>Introduction to Database Systems</td>
</tr>
<tr>
<td>CMSC 23700</td>
<td>Introduction to Computer Graphics</td>
</tr>
<tr>
<td>CMSC 23710</td>
<td>Scientific Visualization</td>
</tr>
<tr>
<td>CMSC 23800</td>
<td>Game Construction</td>
</tr>
</tbody>
</table>

3. Theory Sequence (three courses required):

Two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 27100</td>
<td>Discrete Mathematics</td>
</tr>
<tr>
<td>or CMSC 27130</td>
<td>Honors Discrete Mathematics</td>
</tr>
<tr>
<td>CMSC 27200</td>
<td>Theory of Algorithms</td>
</tr>
<tr>
<td>or CMSC 27230</td>
<td>Honors Theory of Algorithms</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 27410</td>
<td>Honors Combinatorics</td>
</tr>
<tr>
<td>CMSC 27500</td>
<td>Graph Theory</td>
</tr>
<tr>
<td>CMSC 27502</td>
<td>Advanced Algorithms</td>
</tr>
<tr>
<td>CMSC 27700</td>
<td>Mathematical Logic-I</td>
</tr>
<tr>
<td>CMSC 28000</td>
<td>Introduction to Formal Languages</td>
</tr>
<tr>
<td>CMSC 28100</td>
<td>Introduction to Complexity Theory</td>
</tr>
<tr>
<td>CMSC 28400</td>
<td>Introduction to Cryptography</td>
</tr>
</tbody>
</table>

The graduate versions of Discrete Mathematics and/or Theory of Algorithms can be substituted for their undergraduate counterparts. We strongly encourage all majors to complete their theory courses by the end of their third year.

4. Electives (five courses required):

The major requires five additional elective Computer Science courses numbered 20000 or above. Students may enroll in CMSC 29700 Reading and Research in Computer Science and CMSC 29900 Bachelor’s Thesis for multiple quarters, but only one of each may be counted as a major elective.

**SUMMARY OF REQUIREMENTS**

**GENERAL EDUCATION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (or higher) *</td>
<td>200</td>
</tr>
<tr>
<td>One of the following sequences:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 10100 &amp; CHEM 10200</td>
<td>Introductory General Chemistry I and Introductory General Chemistry II *</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II *</td>
<td></td>
</tr>
<tr>
<td>CHEM 12100 &amp; CHEM 12200</td>
<td>Honors General Chemistry I and Honors General Chemistry II *</td>
<td></td>
</tr>
<tr>
<td>PHYS 13100-13200</td>
<td>Mechanics, Electricity and Magnetism (or higher) §</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 400
Credit may be granted by examination.

Students with AP credit for PHYS 12100-12200 may use that to satisfy the general education requirement for the Physical Sciences. However, if a student is fulfilling this requirement through course enrollments, only PHYS 13100-13200 (or higher) will be accepted.

MAJOR

<table>
<thead>
<tr>
<th>Section</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Sequence (see above)</td>
<td>300</td>
</tr>
<tr>
<td>Programming Languages and Systems Sequence</td>
<td>300</td>
</tr>
<tr>
<td>Theory Sequence</td>
<td>300</td>
</tr>
<tr>
<td>Five electives numbered CMSC 20000 or above</td>
<td>500</td>
</tr>
<tr>
<td>Plus the following requirements:</td>
<td>0-300</td>
</tr>
<tr>
<td>BA (no other courses required)</td>
<td></td>
</tr>
<tr>
<td>BS (three courses in an approved program in a related field)</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>1400-1700</td>
</tr>
</tbody>
</table>

Students who matriculated prior to Autumn 2016 may choose to follow these requirements; otherwise they should consult the archived catalog from their year of matriculation for the degree requirements in computer science. All students who matriculated in Autumn 2016 or later should follow this program.

While a student may enroll in CMSC 29700 or CMSC 29900 for multiple quarters, only one instance of each may be counted toward the major.

GRADING

Computer science majors must take courses in the major for quality grades. A grade of C- or higher must be received in each course in the major. Any 20000-level computer science course taken as an elective beyond requirements for the major may, with consent of instructor, be taken for P/F grading.

Non-majors may take courses either for quality grades or, subject to College regulations and with consent of instructor, for P/F grading. A Pass grade is given only for work of C- quality or higher. Courses fulfilling general education requirements must be taken for quality grades.

Incompletes are typically given in the Department of Computer Science only to students who have done at least 60 percent of the course’s work of a passing quality and who are unable to complete all course work by the end of the quarter. Other restrictions on Incompletes are the province of individual instructors, many of whom do not permit Incompletes. To receive an Incomplete, students must make arrangements in advance with the instructor; a consent form to be signed by the instructor is available from the College adviser.

HONORS

Students can earn a BA or BS degree with honors by attaining a grade of B or higher in all courses in the major and a grade of B or higher in three approved graduate computer science courses (30000-level and above). These courses may be courses taken for the major or as electives.

Students may also earn a BA or BS degree with honors by attaining the same minimum B grade in all courses in the major and by writing a successful bachelor’s thesis as part of CMSC 29900 Bachelor’s Thesis. This thesis must be based on an approved research project that is directed by a faculty member and approved by the department counselor.

RECOMMENDED Introductory Sequences in Computer Science

The Department of Computer Science offers different introductory pathways into the program. In consultation with their College adviser and the Computer Science Department advisers, students should choose their introductory courses carefully. Some guidelines follow.

- Students interested in a technical introduction to computer science, without assuming prior experience or unusually strong preparation in mathematics, are encouraged to take CMSC 15100-15200 Introduction to Computer Science I-II.
- Students with programming experience and strong preparation in mathematics should consider CMSC 16100-16200 Honors Introduction to Computer Science I-II.
- Students majoring in quantitative fields other than computer science, including other sciences, mathematics, and economics, should consider CMSC 12100-12200 Computer Science with Applications I-II, possibly followed by CMSC 12300 Computer Science with Applications III.
- Students in the humanities and social sciences may consider CMSC 11000 Multimedia Programming as an Interdisciplinary Art I.
- Students interested in only one or two quarters of study should consider CMSC 12100-12200 Computer Science with Applications I-II. For students intending to pursue advanced study, we recommend CMSC 15100 Intro To Computer Science-I or CMSC 16100 Honors Introduction to Computer Science I as the first course.
• Students who are interested in a short pathway to writing simple web software should consider CMSC 10100 Introduction to Programming for the World Wide Web.

• Students may only receive credit for one introductory programming sequence: CMSC 12100-12200 Computer Science with Applications I-II, CMSC 15100-15200 Introduction to Computer Science I-II, or CMSC 16100-16200 Honors Introduction to Computer Science I-II. Exceptions must be approved by the department counselor prior to taking the second sequence.

• Students who have credit for any of the following courses (or equivalent) may not take CMSC 10200 Introduction to Programming for the World Wide Web II for credit: CMSC 10600 Fundamentals Of Programming-2, CMSC 12100 Computer Science with Applications I, CMSC 15200 Intro To Computer Science-2, or CMSC 16200 Honors Introduction to Computer Science II.

Please be aware that course information is volatile, and the catalog does not necessarily reflect the latest changes. Students should consult http://course-info.cs.uchicago.edu for up-to-date information.

MINOR PROGRAM IN COMPUTER SCIENCE

The minor in computer science requires seven courses. The introductory sequence of three courses is followed by four approved upper-level courses. Courses in the minor must be taken for quality grades, with a grade of C- or higher in each course. Students may not use AP credit for computer science to meet requirements for the minor.

No courses in the minor can be double counted with the student’s major(s) or with other minors; nor can they be counted toward general education requirements. More than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers. The minor advisor must approve the student’s minor consent form and the student must submit that form to their College adviser by the end of Spring Quarter of their third year.

Introductory Courses

Students must choose three courses from the following (one course each from Areas A, B, and C). Please note that not all possible pathways through these courses are valid: for example, CMSC 15200 is not a prerequisite for CMSC 12300. Please consult the prerequisite information below and/or talk to the minor advisor to discuss viable plans.

<table>
<thead>
<tr>
<th>Area A:</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 12100</td>
<td>Computer Science with Applications I</td>
</tr>
<tr>
<td>CMSC 15100</td>
<td>Intro To Computer Science-1</td>
</tr>
<tr>
<td>CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area B:</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 12200</td>
<td>Computer Science with Applications II</td>
</tr>
<tr>
<td>CMSC 15200</td>
<td>Intro To Computer Science-2</td>
</tr>
<tr>
<td>CMSC 16200</td>
<td>Honors Introduction to Computer Science II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area C:</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 12300</td>
<td>Computer Science with Applications III</td>
</tr>
<tr>
<td>CMSC 15400</td>
<td>Introduction to Computer Systems</td>
</tr>
</tbody>
</table>

Upper-Level Courses

The computer science minor must include four courses chosen from among all 20000-level CMSC courses and above. CMSC 12300 may be used as an elective if a student has used CMSC 15400 as the Area C introductory course. A 20000-level course must replace each 10000-level course in the list above that was used to meet general education requirements.

JOINT BA/MS OR BS/MS PROGRAM

Outstanding undergraduates may apply to complete an MS in computer science along with a BA or BS (generalized to “Bx”) during their four years at the College. Students must be admitted to the joint MS program. There are three different paths to a Bx/MS: a research-oriented program for computer science majors, a professionally oriented program for computer science majors, and a professionally oriented program for non-majors.

For full details on these programs, including how to apply, please refer to the relevant section under Joint Degree Programs elsewhere in the catalog.

GRADUATE COURSES

Graduate courses and seminars offered by the Department of Computer Science are open to College students with consent of instructor and department counselor. For more information, consult the department counselor.
CMSC 10100. Introduction to Programming for the World Wide Web I. 100 Units.
This course teaches the basics of constructing and maintaining a site on the World Wide Web. We discuss Internet terminology and how the Internet and its associated technologies work. Topics include programming websites, hypertext markup language (HTML5), Cascading Style Sheets (CSS3), and Common Gateway Interface (CGI) scripts (using PHP). The primary programming emphasis will be on using JavaScript to add client-side functionality.
Instructor(s): W. Sterner Terms Offered: Winter
Note(s): This course does not meet the general education requirement in the mathematical sciences.

CMSC 10200. Introduction to Programming for the World Wide Web II. 100 Units.
This course introduces computer programming in Java with a focus on designing and implementing software for the World Wide Web. We first introduce the fundamentals of programming, giving particular attention to basic object-oriented techniques. We employ Java Server Pages to develop programs that interact with users through web browsers. Finally, we study relational databases and, integrating that study with general-purpose Java programming, build database-backed web applications.
Instructor(s): Staff Terms Offered: TBD
Prerequisite(s): Placement into MATH 13100 or equivalent, and knowledge of HTML.
Note(s): This course meets the general education requirement in the mathematical sciences. May not be taken for credit by students who have credit for CMSC 12100, 15200, or 16200.

CMSC 11000-11100. Multimedia Programming as an Interdisciplinary Art I-II.
Either course in this sequence meets the general education requirement in the mathematical sciences. Like other classic Chicago general education courses, this sequence provides students with both practical programming skills and core ideas in computer science in interdisciplinary applications. Students learn how to perform in a multi-platform (Mac/Linux/Windows) environment using a high-level prototyping language (revTalk) that allows for the quick creation of useful multimedia applications. As a classic Core course in the Chicago tradition, the course presents introductory techniques of problem solving, algorithm construction, program coding, and debugging as interdisciplinary arts adaptable to a wide range of disciplines with their specialized problems.

CMSC 11000. Multimed Prog: Interdisc Art-1. 100 Units.
Either course in this sequence meets the general education requirement in the mathematical sciences. Like other classic Chicago general education courses, this sequence provides students with both practical programming skills and core ideas in computer science in interdisciplinary applications. Students learn how to perform in a multi-platform (Mac/Linux/Windows) environment using a high-level prototyping framework (LiveCode) that allows for the quick creation of useful "apps" for all platforms - mobile, tablet, and desktop. LiveCode is a free application that can be installed on student computers. As a classic Core course in the Chicago tradition, the course presents introductory techniques of problem solving, algorithm construction, program coding, and debugging as interdisciplinary arts adaptable to a wide range of disciplines with their specialized problems especially since programming is an integral part of almost all disciplines. The first course moves through a sequence from step-by-step introductory labs, to labs that require independent analysis and solution, to a student-designed final project. (The second course (CMSC 11100) consists of several scientific and humanistic projects such as Turing Machines, biological modeling, and language manipulation with another final project. It will not be offered in academic year 2016-17.)
Instructor(s): W. Sterner Terms Offered: Winter
Prerequisite(s): Placement into MATH 13100 or higher, or by consent.
Note(s): This course meets the general education requirement in the mathematical sciences.

CMSC 11100. Multimedia Programming as an Interdisciplinary Art II. 100 Units.
The second course consists of several scientific and humanistic projects such as Turing Machines, biological modeling, and language manipulation with another final project.
Terms Offered: Spring
Prerequisite(s): Placement into MATH 13100 or higher, or by consent.
Note(s): This course meets the general education requirement in the mathematical sciences.

CMSC 11710. Networks. 100 Units.
Networks help explain phenomena in such technological, social, and biological domains as the spread of opinions, knowledge, and infectious diseases. Networks also help us understand properties of financial markets, food webs, and web technologies. At the same time, the structure and evolution of networks is determined by the set of interactions in the domain. Our study of networks will employ formalisms such as graph theory, game theory, information networks, and network dynamics, with the goal of building formal models and translating their observed properties into qualitative explanations.
Instructor(s): J. Simon Terms Offered: Spring
Prerequisite(s): Completion of the general education requirement in the mathematical sciences, and familiarity with basic concepts of probability at the high school level.
Note(s): Necessary mathematical concepts will be presented in class.
CMSC 11800. Introduction to Data Science - I. 100 Units.
Data science provides tools for gaining insight into specific problems using data, through computation, statistics and visualization. This course introduces students to all aspects of a data analysis process, from posing questions, designing data collection strategies, management and processing of data, exploratory tools and visualization, statistical inference, prediction, interpretation and communication of results. Simple techniques for data analysis are used to illustrate both effective and fallacious uses of data science tools. Although this course is designed to be at the level of mathematical sciences courses in the Core, with little background required, we expect the students to develop computational skills that will allow them to analyze data. Computation will be done using Python and Jupyter Notebook.
Instructor(s): Michael J. Franklin, Dan Nicolae Terms Offered: Autumn. Note: This course will be crosslisted with STAT 11800.
Prerequisite(s): None
Equivalent Course(s): STAT 11800

CMSC 11900. Introduction to Data Science II. 100 Units.
This course is the second quarter of a two-quarter systematic introduction to the foundations of data science, as well as to practical considerations in data analysis. A broad background on probability and statistical methodology as well as a basic proficiency in RStudio will be provided. More advanced topics on data privacy and ethics, reproducibility in science, data encryption, and basic machine learning will be introduced. We will explore these concepts with real-world problems from different domains.
Terms Offered: Winter
Equivalent Course(s): STAT 11900

CMSC 12100-12200-12300. Computer Science with Applications I-II-III.
This three-quarter sequence teaches computational thinking and skills to students who are majoring in the sciences, mathematics, and economics, etc. Lectures cover topics in (1) programming, such as recursion, abstract data types, and processing data; (2) computer science, such as clustering methods, event-driven simulation, and theory of computation; and to a lesser extent (3) numerical computation, such as approximating functions and their derivatives and integrals, solving systems of linear equations, and simple Monte Carlo techniques.
CMSC 12100. Computer Science with Applications I. 100 Units.
This course is the first in a three-quarter sequence that teaches computational thinking and skills to students in the sciences, mathematics, economics, etc. The course will cover abstraction and decomposition, simple modeling, basic algorithms, and programming in Python. Applications from a wide variety of fields serve both as examples in lectures and as the basis for programming assignments. In recent offerings, students have written programs to simulate a model of housing segregation, determine the number of machines needed at a polling place, and analyze tweets from presidential debates.
Instructor(s): B. Sotomayor, B. Ur Terms Offered: Autumn
Prerequisite(s): Placement into MATH 15100 or completion of MATH 13100.
Note(s): This course meets the general education requirement in the mathematical sciences.
CMSC 12200. Computer Science with Applications II. 100 Units.
This course is the second in a three-quarter sequence that teaches computational thinking and skills to students in the sciences, mathematics, economics, etc. Lectures cover topics in (1) data representation, (2) basics of relational databases, (3) shell scripting, (4) data analysis algorithms, such as clustering and decision trees, and (5) data structures, such as hash tables and heaps. Applications and datasets from a wide variety of fields serve both as examples in lectures and as the basis for programming assignments. In recent offerings, students have written a course search engine and a system to do speaker identification. Students will program in Python and do a quarter-long programming project.
Instructor(s): A. Rogers, M. Wachs Terms Offered: Winter
Prerequisite(s): CMSC 12100.
Note(s): This course meets the general education requirement in the mathematical sciences.
CMSC 12300. Computer Science with Applications III. 100 Units.
The course revolves around core ideas behind the management and computation of large volumes of data ("Big Data"). Topics include (1) Statistical methods for large data analysis, (2) Parallelism and concurrency, including models of parallelism and synchronization primitives, and (3) Distributed computing, including distributed architectures and the algorithms and techniques that enable these architectures to be fault-tolerant, reliable, and scalable. Students will continue to use Python, and will also learn C and distributed computing tools and platforms, including Amazon AWS and Hadoop. This course includes a project where students will have to formulate hypotheses about a large dataset, develop statistical models to test those hypotheses, implement a prototype that performs an initial exploration of the data, and a final system to process the entire dataset.
Instructor(s): M. Wachs Terms Offered: Spring
Prerequisite(s): CMSC 12200.
CMSC 12200. Computer Science with Applications II. 100 Units.
This course is the second in a three-quarter sequence that teaches computational thinking and skills to students in the sciences, mathematics, economics, etc. Lectures cover topics in (1) data representation, (2) basics of relational databases, (3) shell scripting, (4) data analysis algorithms, such as clustering and decision trees, and (5) data structures, such as hash tables and heaps. Applications and datasets from a wide variety of fields serve both as examples in lectures and as the basis for programming assignments. In recent offerings, students have written a course search engine and a system to do speaker identification. Students will program in Python and do a quarter-long programming project.
Instructor(s): A. Rogers, M. Wachs Terms Offered: Winter
Prerequisite(s): CMSC 12100.
Note(s): This course meets the general education requirement in the mathematical sciences.

CMSC 12300. Computer Science with Applications III. 100 Units.
The course revolves around core ideas behind the management and computation of large volumes of data ("Big Data"). Topics include (1) Statistical methods for large data analysis, (2) Parallelism and concurrency, including models of parallelism and synchronization primitives, and (3) Distributed computing, including distributed architectures and the algorithms and techniques that enable these architectures to be fault-tolerant, reliable, and scalable. Students will continue to use Python, and will also learn C and distributed computing tools and platforms, including Amazon AWS and Hadoop. This course includes a project where students will have to formulate hypotheses about a large dataset, develop statistical models to test those hypotheses, implement a prototype that performs an initial exploration of the data, and a final system to process the entire dataset.
Instructor(s): M. Wachs Terms Offered: Spring
Prerequisite(s): CMSC 12200.

CMSC 15100-15200. Introduction to Computer Science I-II.
This sequence, which is recommended for all students planning to take more advanced courses in computer science, introduces computer science mostly through the study of programming in functional (Scheme) and imperative (C) programming languages. Topics include program design, control and data abstraction, recursion and induction, higher-order programming, types and polymorphism, time and space analysis, memory management, and data structures including lists, trees, and graphs. NOTE: Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.
Instructor(s): A. Shaw (Aut), M. Wachs (Aut), J. Reppy (Win) Terms Offered: Autumn, Summer, Winter
Prerequisite(s): Placement into MATH 15100 or completion of MATH 13100.
Note(s): This course meets the general education requirement in the mathematical sciences. Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.

CMSC 15200. Intro To Computer Science-2. 100 Units.
This sequence, which is recommended for all students planning to take more advanced courses in computer science, introduces computer science mostly through the study of programming in functional (Scheme) and imperative (C) programming languages. Topics include program design, control and data abstraction, recursion and induction, higher-order programming, types and polymorphism, time and space analysis, memory management, and data structures including lists, trees, and graphs. NOTE: Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.
Instructor(s): A. Feldman (Winter), D. Franklin (Winter, Spring), A. Shaw (Winter) Terms Offered: Spring, Summer, Winter
Prerequisite(s): CMSC 15100, CMSC 16100, CMSC 12100, or CMSC 10500.
Note(s): This course meets the general education requirement in the mathematical sciences. Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.
CMSC 15200. Intro To Computer Science I-II. 100 Units.
This sequence, which is recommended for all students planning to take more advanced courses in computer science, introduces computer science mostly through the study of programming in functional (Scheme) and imperative (C) programming languages. Topics include program design, control and data abstraction, recursion and induction, higher-order programming, types and polymorphism, time and space analysis, memory management, and data structures including lists, trees, and graphs. NOTE: Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.
Instructor(s): A. Feldman (Winter), D. Franklin (Winter, Spring), A. Shaw (Winter) Terms Offered: Spring, Summer, Winter
Prerequisite(s): CMSC 15100, CMSC 16100, CMSC 12100, or CMSC 10500.
Note(s): This course meets the general education requirement in the mathematical sciences. Non-majors may use either course in this sequence to meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15100-15200 or 16100-16200 to meet requirements for the major.

CMSC 15400. Introduction to Computer Systems. 100 Units.
This course covers the basics of computer systems from a programmer’s perspective. Topics include data representation, machine language programming, exceptions, code optimization, performance measurement, memory systems, and system-level I/O. Extensive programming required.
Instructor(s): H. Gunawi (Spring), H. Hoffmann (Spring), M. Wachs (Autumn, Spring) Terms Offered: Autumn, Spring
Prerequisite(s): CMSC 12100, 15100, or 16100, and CMSC 15200, 16200, or 12300.
Note(s): Required of students who are majoring in Computer Science.

CMSC 16100-16200. Honors Introduction to Computer Science I-II.
Both courses in this sequence meet the general education requirement in the mathematical sciences; students who are majoring in Computer Science must use either CMSC 15200 or 16200 to meet requirements for the major.

CMSC 16100. Honors Introduction to Computer Science I. 100 Units.
Programming in a functional language (currently Haskell), including higher-order functions, type definition, algebraic data types, modules, parsing, I/O, and monads. Basic data structures, including lists, binary search trees, and tree balancing. Basic mathematics for reasoning about programs, including induction, inductive definition, propositional logic, and proofs.
Instructor(s): R. Chugh, S. Kurtz Terms Offered: Autumn
Prerequisite(s): Placement into MATH 16100 or equivalent and programming experience, or by consent.
Note(s): This course meets the general education requirement in the mathematical sciences.

CMSC 16200. Honors Introduction to Computer Science II. 100 Units.
This course emphasizes the C Programming Language, but not in isolation. Instead, C is developed as a part of a larger programming toolkit that includes the shell (specifically ksh), shell programming, and standard Unix utilities (including awk). Nonshell scripting languages, in particular perl and python, are introduced, as well as interpreter (#!) files that use the command-line version of DrScheme. We cover various standard data structures, both abstractly, and in terms of concrete implementations—primarily in C, but also from time to time in other contexts like scheme and ksh. The course uses a team programming approach. There is a mixture of individual programming assignments that focus on current lecture material, together with team programming assignments that can be tackled using any Unix technology. Team projects are assessed based on correctness, elegance, and quality of documentation. We teach the "Unix way" of breaking a complex computational problem into smaller pieces, most or all of which can be solved using pre-existing, well-debugged, and documented components, and then composed in a variety of ways.
Instructor(s): F. Chong Terms Offered: Winter
Prerequisite(s): CMSC 16100, or CMSC 15100 and by consent.
Note(s): Students who have taken CMSC 15100 may take 16200 with consent of instructor. This course meets the general education requirement in the mathematical sciences.
CMSC 16200. Honors Introduction to Computer Science II. 100 Units.
This course emphasizes the C Programming Language, but not in isolation. Instead, C is developed as a part of a larger programming toolkit that includes the shell (specifically ksh), shell programming, and standard Unix utilities (including awk). Nonshell scripting languages, in particular perl and python, are introduced, as well as interpreter (#!) files that use the command-line version of DrScheme. We cover various standard data structures, both abstractly, and in terms of concrete implementations—primarily in C, but also from time to time in other contexts like scheme and ksh. The course uses a team programming approach. There is a mixture of individual programming assignments that focus on current lecture material, together with team programming assignments that can be tackled using any Unix technology. Team projects are assessed based on correctness, elegance, and quality of documentation. We teach the "Unix way" of breaking a complex computational problem into smaller pieces, most or all of which can be solved using pre-existing, well-debugged, and documented components, and then composed in a variety of ways.
Instructor(s): F. Chong Terms Offered: Winter
Prerequisite(s): CMSC 16100, or CMSC 15100 and by consent.
Note(s): Students who have taken CMSC 15100 may take 16200 with consent of instructor. This course meets the general education requirement in the mathematical sciences.

CMSC 20900. Computers for Learning. 100 Units.
Over time, technology has occupied an increasing role in education, with mixed results. Massive Open Online Courses (MOOCs) were created to bring education to those without access to universities, yet most of the students who succeed in them are those who are already successful in the current educational model. This course covers technology, psychology (e.g., motivation, engagement), and pedagogy (e.g., constructivism) as they apply to educational technology so that students can design and build an educational learning application. Labs focus on developing expertise in technology, and readings supplement lecture discussions on the human components of education.
Instructor(s): D. Franklin Terms Offered: Autumn
Prerequisite(s): CMSC 15400
Equivalent Course(s): MAAD 20900

CMSC 21010. Mathematical Foundations. 100 Units.
This course is an introduction to formal tools and techniques which can be used to better understand linguistic phenomena. A major goal of this course is to enable students to formalize and evaluate theoretical claims.
Equivalent Course(s): LING 21010, LING 31010, CMSC 31010

CMSC 22000. Introduction to Software Development. 100 Units.
This course focuses on imparting a number of skills and industry best practices that are valuable in the development of large software projects, such as source control techniques and workflows, issue tracking, code reviews, testing, continuous integration, working with existing codebases, integrating APIs and frameworks, generating documentation, deployment, and logging and monitoring. The course also emphasizes the importance of collaboration in real-world software development, including interpersonal collaboration and team management. The course will be organized primarily around the development of a class-wide software project, with students organized into teams. Collaboration both within and across teams will be essential to the success of the project.
Instructor(s): B. Sotomayor Terms Offered: Spring
Prerequisite(s): CMSC 12200, CMSC 15200, or CMSC 16200

CMSC 22001. Software Construction. 100 Units.
Large software systems are difficult to build. The course discusses both the empirical aspects of software engineering and the underlying theory. Topics will include, among others, software specifications, software design, software architecture, software testing, software reliability, and software maintenance. Students will be expected to actively participate in team projects in this course.
Instructor(s): S. Lu Terms Offered: Autumn
Prerequisite(s): CMSC 15400.

CMSC 22010. Digital Fabrication. 100 Units.
Digital fabrication involves translation of a digital design into a physical object. While digital fabrication has been around for decades, only now has it become possible for individuals to take advantage of this technology through low cost 3D printers and open source tools for 3D design and modeling. In this course we will cover the foundations of 3D object design including computational geometry, the type of models that can and can't be fabricated, the uses and applications of digital fabrication, the algorithms, methods and tools for conversion of 3D models to representations that can be directly manufactured using computer controlled machines, the concepts and technology used in additive manufacturing (aka 3D printing) and the research and practical challenges of developing self-replicating machines. We will have several 3D printers available for use during the class and students will design and fabricate several parts during the course.
Instructor(s): R. Stevens Terms Offered: TBD
Prerequisite(s): CMSC 15400 and some experience with 3D modeling concepts.
CMSC 22100. Programming Languages. 100 Units.
Programming language design aims at the closest possible correspondence between the structures of a program and the task it performs. This course is an introduction to scientific programming language design, whereby design choices are made according to rigorous and well-founded lines of reasoning. The curriculum emphasizes the lambda calculus, type systems, formal semantics, logic and proof, and includes a light introduction to machine assisted formal reasoning. While this course is not a survey of different programming languages, we examine the design decisions embodied by various popular languages when viewed as formal systems.
Instructor(s): A. Shaw Terms Offered: Spring
Prerequisite(s): CMSC 15400.

CMSC 22200. Computer Architecture. 100 Units.
This course is a survey of contemporary computer organization covering CPU design, instruction sets, control, processors, busses, ALU, memory, pipelined computers, multiprocessors, networking, and case studies. We focus on the techniques of quantitative analysis and evaluation of modern computing systems, such as the selection of appropriate benchmarks to reveal and compare the performance of alternative design choices in system design. We emphasize major component subsystems of high-performance computers: pipelining, instruction-level parallelism, memory hierarchies, input/output, and network-oriented interconnections.
Instructor(s): F. Chong (Spring), Y. Li (Autumn) Terms Offered: Autumn,Spring
Prerequisite(s): CMSC 15400.

CMSC 22300. Functional Programming. 100 Units.
We will explore various aspects of advanced functional programming in this course. Topics will vary from quarter to quarter and may include: untyped and typed programming; pure and impure programming; eager and lazy semantics; "object-functional programming"; functional reactive programming; and concurrent functional programming.
Instructor(s): R. Chugh Terms Offered: Winter
Prerequisite(s): CMSC 15400 required, CMSC 15100 or CMSC 16100 recommended.

CMSC 22600. Compilers for Computer Languages. 100 Units.
This course covers principles of modern compiler design and implementation. Topics include lexical analysis, parsing, type checking, optimization, and code generation. This is a project oriented course in which students will construct a fully working compiler, using Standard ML as the implementation language.
Prerequisite(s): CMSC 15400 required; CMSC 22100 recommended. (Note: Prior experience with ML programming not required.)
Note(s): This course is offered in alternate years.

CMSC 23000. Operating Systems. 100 Units.
This course provides an introduction to basic Operating System principles and concepts that form as fundamental building blocks for many modern systems from personal devices to Internet-scale services. Basic topics include processes, threads, concurrency, synchronization, memory management, virtual memory, segmentation, paging, caching, process and I/O scheduling, file systems, storage devices. The course will also cover special topics such as journaling/transactions, SSD, RAID, virtual machines, and data-center operating systems. The course project will revolve around the implementation of a mini x86 operating system kernel.
Instructor(s): H. Gunawi Terms Offered: Autumn
Prerequisite(s): CMSC 22200, CMSC 22600, CMSC 22610, CMSC 23300, CMSC 23400, CMSC 23500, CMSC 23700, CMSC 27310, or CMSC 23800 strongly recommended.

CMSC 23010. Parallel Computing. 100 Units.
This course provides an introduction to the concepts of parallel programming, with an emphasis on programming multicore processors. Topics include: Processes and threads, shared memory, message passing, direct-memory access (DMA), hardware mechanisms for parallel computing, synchronization and communication, patterns of parallel programming. The course will involve a substantial programming project implementing a parallel computations.
Instructor(s): H. Hoffmann Terms Offered: Winter
Prerequisite(s): CMSC 15400 and one of CMSC 2200, CMSC 22600, CMSC 22610, CMSC 23300, CMSC 23400, CMSC 23500, CMSC 23700, CMSC 27310, or CMSC 23800 strongly recommended.

CMSC 23200. Introduction to Computer Security. 100 Units.
This course introduces the principles and practice of computer security. It aims to teach how to model threats to computer systems and how to think like a potential attacker. It presents standard cryptographic functions and protocols and gives an overview of threats and defenses for software, host systems, networks, and the Web. It also touches on some of the legal, policy, and ethical issues surrounding computer security in areas such as privacy, surveillance, and the disclosure of security vulnerabilities. The goal of this course is to provide a foundation for further study in computer security and to help better understand how to design, build, and use computer systems more securely.
Instructor(s): A. Feldman Terms Offered: Autumn
Prerequisite(s): CMSC 15400.
CMSC 23210. Usable Security and Privacy. 100 Units.
Regardless of how secure a system is in theory, failing to consider how humans actually use the system leads
to disaster in practice. This course will examine how to design for security and privacy from a user-centered
perspective by combining insights from computer systems, human-computer interaction (HCI), and public
policy. We will introduce core security and privacy technologies, as well as HCI techniques for conducting robust
user studies. Topics will include usable authentication, user-centered web security, anonymity software, privacy
notifications, security warnings, and data-driven privacy tools in domains ranging from social media to the Internet
of Things. Students will complete weekly problem sets, as well as conduct novel research in a group capstone
project. No prior experience in security, privacy, or HCI is required.
Instructor(s): B. Ur Terms Offered: Spring
Prerequisite(s): CMSC 12300 or CMSC 15400.

CMSC 23280. Cryptocurrencies. 100 Units.
This course will cover both the computer science aspects and economic aspects of cryptocurrencies. Topics to
be discussed will include network and system building blocks, consensus protocols, cryptographic algorithms,
security and privacy issues, pricing of cryptocurrencies, bubbles, monetary policy issues and regulatory
concerns.
Instructor(s): D. Cash, H. Uhlig, B. Zhao Terms Offered: Winter
Prerequisite(s): CMSC 10500, 12100, 15100, or 16100 and ECON 10000 (ECON 19800) or ECON 10200 (ECON
19900)
Equivalent Course(s): ECON 23040

CMSC 23300. Networks and Distributed Systems. 100 Units.
This course focuses on the principles and techniques used in the development of networked and distributed
software. Topics include programming with sockets; concurrent programming; data link layer (Ethernet, packet
switching, etc.); internet and routing protocols (IP, IPv6, ARP, etc.); end-to-end protocols (UDP, TCP); and other
commonly used network protocols and techniques. This is a project-oriented course in which students are
required to develop software in C on a UNIX environment.
Instructor(s): B. Sotomayor Terms Offered: Winter
Prerequisite(s): CMSC 23300 with at least a B+, or by consent.

CMSC 23310. Advanced Distributed Systems. 100 Units.
In recent years, large distributed systems have taken a prominent role not just in scientific inquiry, but also in
our daily lives. When we perform a search on Google, stream content from Netflix, place an order on Amazon,
or catch up on the latest comings-and-goings on Facebook, our seemingly minute requests are processed by
complex systems that sometimes include hundreds of thousands of computers, connected by both local
and wide area networks. Recent papers in the field of Distributed Systems have described several solutions
(such as MapReduce, BigTable, Dynamo, Cassandra, etc.) for managing large-scale data and computation.
However, building and using these systems pose a number of more fundamental challenges: How do we keep
the system operating correctly even when individual machines fail? How do we ensure that all the machines
have a consistent view of the system's state? (And how do we ensure this in the presence of failures?) How
can we determine the order of events in a system where we can’t assume a single global clock? Many of these
fundamental problems were identified and solved over the course of several decades, starting in the 1970s. To
better appreciate the challenges of recent developments in the field of Distributed Systems, this course will guide
students through seminal work in Distributed Systems from the 1970s, '80s, and '90s, leading up to a discussion
of recent work in the field.
Instructor(s): B. Sotomayor Terms Offered: Not offered 2018-2019.
Prerequisite(s): CMSC 23300 with at least a B+, or by consent.

CMSC 23400. Mobile Computing. 100 Units.
Mobile computing is pervasive and changing nearly every aspect of society. Sensing, actuation, and mediation
capabilities of mobile devices are transforming all aspects of computing: uses, networking, interface, form,
etc. This course explores new technologies driving mobile computing and their implications for systems
and society. Current focus areas include new techniques to capture 3d models (depth sensors, stereo vision),
drones that enable targeted, adaptive, focused sensing, and new 3d interactive applications (augmented reality,
cyberphysical, and virtual reality). Labs expose students to software and hardware capabilities of mobile
computing systems, and develop the capability to envision radical new applications for a large-scale course
project.
Instructor(s): A. Chien Terms Offered: Winter
Prerequisite(s): CMSC 23300 with at least a B+, or by consent.

CMSC 23500. Introduction to Database Systems. 100 Units.
This course is an introduction to database design and implementation. Topics include DBMS architecture, entity-
relationship and relational models, relational algebra, concurrency control, recovery, indexing, physical data
organization, and modern database systems. The lab section guides students through the implementation of a
relational database management system, allowing students to see topics such as physical data organization and
DBMS architecture in practice, and exercise general skills such as software systems development.
Instructor(s): A. Elmore Terms Offered: Winter
Prerequisite(s): CMSC 15400.
CMSC 23700. Introduction to Computer Graphics. 100 Units.
This course introduces the basic concepts and techniques used in three-dimensional computer graphics. The course covers both the foundations of 3D graphics (coordinate systems and transformations, lighting, texture mapping, and basic geometric algorithms and data structures), and the practice of real-time rendering using programmable shaders. Students are required to complete both written assignments and programming projects using OpenGL.
Instructor(s): J. Reppy Terms Offered: Autumn
Prerequisite(s): CMSC 15400.
Note(s): This course is offered in alternate years.

CMSC 23710. Scientific Visualization. 100 Units.
Scientific visualization combines computer graphics, numerical methods, and mathematical models of the physical world to create a visual framework for understanding and solving scientific problems. The mathematical and algorithmic foundations of scientific visualization (for example, scalar, vector, and tensor fields) will be explained in the context of real-world data from scientific and biomedical domains. The course is also intended for students outside computer science who are experienced with programming and computing with scientific data. Programming projects will be in C and C++.
Instructor(s): G. Kindlmann Terms Offered: Winter
Prerequisite(s): CMSC 15400 and knowledge of linear algebra, or by consent.

CMSC 23800. Game Construction. 100 Units.
Computer games are one of the most exciting applications of computer technology. They also are large software systems that embody cutting-edge graphics, as well as techniques from AI, scientific simulation, networking, and databases. This course introduces the student to the basic algorithms and techniques used in computer-game construction. Students work in teams to design and create games using existing libraries for graphics, physics simulation, and so forth.
Instructor(s): J. Reppy Terms Offered: Not offered 2018-2019.
Prerequisite(s): CMSC 23700, CMSC 23000, CMSC 23300, CMSC 23500. Strong background in programming and expertise in at least two technical areas underlying computer games (e.g., AI, graphics, scientific computing, networking).
Equivalent Course(s): MPCS 53800

CMSC 23900. Data Visualization. 100 Units.
Data visualizations provide a visual setting in which to explore, understand, and explain datasets. This class describes mathematical and perceptual principles, methods, and applications of “data visualization” (as it is popularly understood to refer primarily to tabulated data). A range of data types and visual encodings will be presented and evaluated. Visualizations will be primarily web-based, using D3.js, and possibly other higher-level languages and libraries.
Instructor(s): G. Kindlmann Terms Offered: Spring
Prerequisite(s): CMSC 12200, CMSC 15200 or CMSC 16200.

CMSC 25010. Artificial Intelligence. 100 Units.
This course introduces the theoretical, technical, and philosophical issues of AI. The emphasis is on computational and mathematical modes of inquiry into the structure and function of intelligent systems. Topics include learning and inference, speech and language, vision and robotics, search and reasoning.
Prerequisite(s): CMSC 15300, CMSC 15400

CMSC 25025. Machine Learning and Large-Scale Data Analysis. 100 Units.
This course is an introduction to machine learning and the analysis of large data sets using distributed computation and storage infrastructure. Basic machine learning methodology and relevant statistical theory will be presented in lectures. Homework exercises will give students hands-on experience with the methods on different types of data. Methods include algorithms for clustering, binary classification, and hierarchical Bayesian modeling. Data types include images, archives of scientific articles, online ad clickthrough logs, and public records of the City of Chicago. Programming will be based on Python and R, but previous exposure to these languages is not assumed.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CMSC 12200 and STAT 22200 or STAT 23400, or by consent.
Note(s): The prerequisites are under review and may change.
Equivalent Course(s): STAT 37601
CMSC 25050. Topics: Computer Vision. 100 Units.
This course covers deformable models for detecting objects in images. Topics include one-dimensional models to identify object contours and boundaries; two-dimensional models for image matching; and sparse models for efficient detection of objects in complex scenes. Mathematical tools needed to define the models and associated algorithms are developed. Applications include detecting contours in medical images, matching brains, and detecting faces in images. Neural network implementations of some of the algorithms are presented, and connections to the functions of the biological visual system are discussed.
Instructor(s): Y. Amit Terms Offered: Not offered in 2014-15
Equivalent Course(s): CMSC 35500, STAT 37900

CMSC 25400. Machine Learning. 100 Units.
This course offers a practical, problem-centered introduction to machine learning. Topics covered include the Perceptron and other online algorithms; boosting; graphical models and message passing; dimensionality reduction and manifold learning; SVMs and other kernel methods; artificial neural networks; and a short introduction to statistical learning theory. Weekly programming assignments give students the opportunity to try out each learning algorithm on real world datasets.
Instructor(s): R. Kondor Terms Offered: Autumn
Prerequisite(s): CMSC 15400 or CMSC 12300. STAT 22000 or STAT 23400 strongly recommended.
Equivalent Course(s): STAT 27725

CMSC 27100. Discrete Mathematics. 100 Units.
This course emphasizes mathematical discovery and rigorous proof, which are illustrated on a refreshing variety of accessible and useful topics. Basic counting is a recurring theme and provides the most important source for sequences, which is another recurring theme. Further topics include proof by induction; recurrences and Fibonacci numbers; graph theory and trees; number theory, congruences, and Fermat's little theorem; counting, factorials, and binomial coefficients; combinatorial probability; random variables, expected value, and variance; and limits of sequences, asymptotic equality, and rates of growth.
Instructor(s): S. Kurtz (Winter), J. Simon (Autumn) Terms Offered: Autumn,Winter
Prerequisite(s): CMSC 12300 or CMSC 15400, or MATH 16300 or higher, or by consent.
Note(s): This is a directed course in mathematical topics and techniques that is a prerequisite for courses such as CMSC 27200 and 27400.

CMSC 27130. Honors Discrete Mathematics. 100 Units.
We emphasize mathematical discovery and rigorous proof, which are illustrated on a refreshing variety of accessible and useful topics. Basic counting is a recurring theme and provides the most important source for sequences, which is another recurring theme. Further topics include proof by induction; recurrences and Fibonacci numbers; graph theory and trees; number theory, congruences, and Fermat's little theorem; counting, factorials, and binomial coefficients; combinatorial probability; random variables, expected value, and variance; and limits of sequences, asymptotic equality, and rates of growth. The honors version of Discrete Mathematics covers topics at a deeper level.
Instructor(s): A. Razborov Terms Offered: Autumn
Prerequisite(s): (CMSC 12300 or CMSC 15400), or MATH 16300 or higher, or by consent.

CMSC 27200. Theory of Algorithms. 100 Units.
This course covers design and analysis of efficient algorithms, with emphasis on ideas rather than on implementation. Algorithmic questions include sorting and searching, graph algorithms, elementary algorithmic number theory, combinatorial optimization, randomized algorithms, as well as techniques to deal with intractability, like approximation algorithms. Design techniques include “divide-and-conquer” methods, dynamic programming, greedy algorithms, and graph search, as well as the design of efficient data structures. Methods of algorithm analysis include asymptotic notation, evaluation of recurrent inequalities, amortized analysis, analysis of probabilistic algorithms, the concepts of polynomial-time algorithms, and of NP-completeness.
Instructor(s): J. Simon Terms Offered: Spring,Winter
Prerequisite(s): CMSC 27100 or CMSC 27130 or CMSC 37110, or by consent.

CMSC 27230. Honors Theory of Algorithms. 100 Units.
This course covers design and analysis of efficient algorithms, with emphasis on ideas rather than on implementation. Algorithmic questions include sorting and searching, discrete optimization, algorithmic graph theory, algorithmic number theory, and cryptography. Design techniques include divide-and-conquer methods, dynamic programming, greedy algorithms, and graph search, as well as the design of efficient data structures. Methods of algorithm analysis include asymptotic notation, evaluation of recurrent inequalities, the concepts of polynomial-time algorithms, and NP-completeness. The honors version of Theory of Algorithms covers topics at a deeper level.
Instructor(s): A. Drucker Terms Offered: Winter
Prerequisite(s): CMSC 27100 or CMSC 27130 or CMSC 37110 or consent of the instructor.
CMSC 27410. Honors Combinatorics. 100 Units.
Methods of enumeration, construction, and proof of existence of discrete structures are discussed in conjunction with the basic concepts of probability theory over a finite sample space. Enumeration techniques are applied to the calculation of probabilities, and, conversely, probabilistic arguments are used in the analysis of combinatorial structures. Other topics include basic counting, linear recurrences, generating functions, Latin squares, finite projective planes, graph theory, Ramsey theory, coloring graphs and set systems, random variables, independence, expected value, standard deviation, and Chebyshev’s and Chernoff’s inequalities.
Instructor(s): L. Babai Terms Offered: Spring
Prerequisite(s): MATH 15900 or MATH 25400, or CMSC 27100, or by consent. Experience with mathematical proofs.
Note(s): This course is offered in alternate years.
Equivalent Course(s): MATH 28410

CMSC 27500. Graph Theory. 100 Units.
This course covers the basics of the theory of finite graphs. Topics include shortest paths, spanning trees, counting techniques, matchings, Hamiltonian cycles, chromatic number, extremal graph theory, Turan’s theorem, planarity, Menger’s theorem, the max-flow/min-cut theorem, Ramsey theory, directed graphs, strongly connected components, directed acyclic graphs, and tournaments. Techniques studied include the probabilistic method.
Instructor(s): K. Mulmuley Terms Offered: Not offered 2017-2018.
Prerequisite(s): CMSC 27100, or MATH 20400 or higher.

CMSC 27530. Honors Graph Theory. 100 Units.
This course covers the basics of the theory of finite graphs. Topics include shortest paths, spanning trees, counting techniques, matchings, Hamiltonian cycles, chromatic number, extremal graph theory, Turan’s theorem, planarity, Menger’s theorem, the max-flow/min-cut theorem, Ramsey theory, directed graphs, strongly connected components, directed acyclic graphs, and tournaments. Techniques studied include the probabilistic method.
Instructor(s): Laszlo Babai Terms Offered: Spring
Prerequisite(s): CMSC 27100, CMSC 27130, or CMSC 37110, or MATH 20400 or MATH 20800.

CMSC 27600. Computational Biology. 100 Units.
This course serves as a general introduction to the basic algorithms used to understand current problems in biology. Topics may include sequence alignment algorithms to study DNA and protein sequences, algorithms and experiments for protein structure prediction, dynamics, and folding, clustering and machine learning methods for gene expression analysis, computational models of RNA structure, and DNA computing and self-assembly.
Terms Offered: Winter. Generally offered alternate years.
Prerequisite(s): Familiarity with basic discrete mathematics/statistics/algorithms and biology recommended but not required.

CMSC 27610. Digital Biology. 100 Units.
Explores the digital nature of biology at the molecular scale. Focuses on the role of hydrophobic effect in protein/ligand associations. Utilizes data-mining as a tool both to understand basic biophysics and to explain protein-ligand associations. Shows how such analog interactions can lead to digital devices (e.g., switches). No biochemistry background will be assumed.
Instructor(s): L. R. Scott Terms Offered: Spring
Prerequisite(s): MATH 15200 or higher, and CMSC 12200 or CMSC 15200 or CMSC 16200. High school chemistry helpful.
Note(s): High school chemistry is helpful.

CMSC 27700-27800. Mathematical Logic I-II.
Mathematical Logic I-II

CMSC 27700. Mathematical Logic-I. 100 Units.
This course introduces mathematical logic. Topics include propositional and predicate logic and the syntactic notion of proof versus the semantic notion of truth (e.g., soundness, completeness). We also discuss the Gödel completeness theorem, the compactness theorem, and applications of compactness to algebraic problems. Prerequisite(s): MATH 25400 or MATH 25700 or (CMSC 15400 and (MATH 15910 or MATH 15900 or MATH 19900 or MATH 16300)) Equivalent Course(s): CMSC 27700
Terms Offered: Autumn
Prerequisite(s): MATH 25400 or 25700; open to students who are majoring in computer science who have taken CMSC 15400 along with MATH 16300 or MATH 15900 or MATH 19900
Equivalent Course(s): MATH 27700

CMSC 27800. Mathematical Logic II. 100 Units.
Topics include number theory, Peano arithmetic, Turing compatibility, unsolvable problems, Gödel’s incompleteness theorem, undecidable theories (e.g., the theory of groups), quantifier elimination, and decidable theories (e.g., the theory of algebraically closed fields).
Terms Offered: Winter
Prerequisite(s): MATH 27700 or equivalent
Equivalent Course(s): MATH 27800
CMSC 27800. Mathematical Logic II. 100 Units.
Topics include number theory, Peano arithmetic, Turing compatibility, unsolvable problems, Gödel's incompleteness theorem, undecidable theories (e.g., the theory of groups), quantifier elimination, and decidable theories (e.g., the theory of algebraically closed fields).
Terms Offered: Winter
Prerequisite(s): MATH 27700 or equivalent
Equivalent Course(s): MATH 27800

CMSC 27900. Chaos, Complexity And Computers. 100 Units.
This course presents the mathematical bases for the complex, scale-independent behavior seen in chaotic dynamics and fractal patterns. It illustrates these principles from physical and biological phenomena. It explores these behaviors concretely using extensive computer simulation exercises, thus developing simulation and data analysis skills.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): PHYS 13300 or 14300; PHYS 25000 or prior programming experience.
Equivalent Course(s): PHYS 25100, MATH 29200

CMSC 28000. Introduction to Formal Languages. 100 Units.
This course is a basic introduction to computability theory and formal languages. Topics include automata theory, regular languages, context-free languages, and Turing machines.
Instructor(s): S. Kurtz
Terms Offered: Spring
Prerequisite(s): CMSC 12300 or CMSC 15400, or MATH 15900 or MATH 25500.
Equivalent Course(s): MATH 28000

CMSC 28100. Introduction to Complexity Theory. 100 Units.
Computability topics are discussed (e.g., the s-m-n theorem and the recursion theorem, resource-bounded computation). This course introduces complexity theory. Relationships between space and time, determinism and non-determinism, NP-completeness, and the P versus NP question are investigated.
Instructor(s): K. Mulmuley
Terms Offered: Autumn
Prerequisite(s): CMSC 27100, or MATH 15900 or MATH 25500; experience with mathematical proofs.
Equivalent Course(s): MATH 28100

CMSC 28130. Honors Introduction to Complexity Theory. 100 Units.
Computability topics are discussed (e.g., the s-m-n theorem and the recursion theorem, resource-bounded computation). This course introduces complexity theory. Relationships between space and time, determinism and non-determinism, NP-completeness, and the P versus NP question are investigated.
Instructor(s): Ketan Mulmuley
Terms Offered: Autumn
Prerequisite(s): CMSC 27100 or CMSC 27130, or MATH 15900 or MATH 19900 or MATH 25500; experience with mathematical proofs.

CMSC 28400. Introduction to Cryptography. 100 Units.
Cryptography is the use of algorithms to protect information from adversaries. Though its origins are ancient, cryptography now underlies everyday technologies including the Internet, wifi, cell phones, payment systems, and more. This course is an introduction to the design and analysis of cryptography, including how “security” is defined, how practical cryptographic algorithms work, and how to exploit flaws in cryptography. The course will cover algorithms for symmetric-key and public-key encryption, authentication, digital signatures, hash functions, and other primitives. Weekly problem sets will include both theoretical problems and programming tasks. No experience in security is required.
Instructor(s): David Cash
Terms Offered: Autumn

CMSC 28510. Introduction to Scientific Computing. 100 Units.
Basic processes of numerical computation are examined from both an experimental and theoretical point of view. This course deals with numerical linear algebra, approximation of functions, approximate integration and differentiation, Fourier transformation, solution of nonlinear equations, and the approximate solution of initial value problems for ordinary differential equations. We concentrate on a few widely used methods in each area covered.
Instructor(s): T. Dupont
Terms Offered: Autumn. Generally offered alternate years.
Prerequisite(s): A year of calculus (MATH 15300 or higher), a quarter of linear algebra (MATH 19620 or higher), and CMSC 10600 or higher; or consent of instructor

CMSC 28515. Introduction to Numerical Partial Differential Equations. 100 Units.
This course deals with finite element and finite difference methods for second-order elliptic equations (diffusion) and the associated parabolic and hyperbolic equations. Some methods for solving linear algebraic systems will be used. Scalar first-order hyperbolic equations will be considered.
CMSC 29512. Entrepreneurship in Technology. 100 Units.
The core theme for the Entrepreneurship in Technology course is that computer science students need exposure to the broad challenges of capturing opportunities and creating companies. Most of the skills required for this process have nothing to do with one's technical capacity. We'll explore creating a story, pitching the idea, raising money, hiring, marketing, selling, and more. Real-world examples, case-studies, and lessons-learned will be blended with fundamental concepts and principles. The course will involve a business plan, case-studies, and supplemental reading to provide students with significant insights into the resolve required to take an idea to market. Class discussion will also be a key part of the student experience.
Prerequisite(s): MPCS 51036 or 51040 or 51042 or 51043 or 51100
Note(s): Non-MPCS students need to complete a course request form.
Equivalent Course(s): MPCS 51250

CMSC 29700. Reading and Research in Computer Science. 100 Units.
Students do reading and research in an area of computer science under the guidance of a faculty member. A written report is typically required.
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): By consent of instructor and approval of department counselor.
Note(s): Open both to students who are majoring in Computer Science and to nonmajors. Students are required to submit the College Reading and Research Course Form.

CMSC 29900. Bachelor's Thesis. 100 Units.
Open to fourth-year students who are candidates for honors in Computer Science.
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): By consent of instructor and approval of department counselor.
THE COLLEGE

Creative Writing

Department Website: http://creativewriting.uchicago.edu

The Program in Creative Writing takes a comprehensive approach to the study of contemporary literature, criticism, and theory from a writer’s perspective, and provides rigorous training in the fundamental practices of creative writing. In our courses, students work with established poets and prose writers towards these pursuits, and both the major and minor in Creative Writing provide ample opportunities for interdisciplinary work across University departments. The program’s commitment to interdisciplinary work and academic rigor, coupled with an emphasis on teaching the elements of creative writing that underlie all genres, accounts for the program’s vitality and explains why Creative Writing at Chicago is currently the largest initiative in the humanities for the College.

The Program in Creative Writing offers workshops and seminars in poetry, fiction, and nonfiction, as well as an increasing number of translation workshops. The major seminars—including the Technical Seminars and Fundamentals in Creative Writing—are designed to build a critical and aesthetic foundation for students working in each primary genre. Students can pursue their creative writing interests within the formal requirements of the major in Creative Writing or through a joint minor in English and Creative Writing, which is open to students outside those two major programs. Students who do not wish to pursue a formal program in Creative Writing will have access to courses that satisfy the general education requirement in the arts and open-entry “beginning” workshops. They may also apply for advanced workshop courses. Our workshops and technical seminars are cross-listed with a graduate number and open to students in the graduate and professional schools.

Major in Creative Writing

Students who graduate with the bachelor of arts in Creative Writing will both be skilled in writing in a major literary genre and have a theoretically informed understanding of the aesthetic, historical, social, and political context of a range of contemporary writing. Students in the major will focus their studies on a primary genre chosen from fiction, poetry, and nonfiction.

The organization of the major recognizes the value of workshop courses, but incorporates that model into a broader education that furthers students’ knowledge of historical and contemporary literary practice, introduces them to aesthetic and literary theory, sharpens their critical attention, and fosters their creative enthusiasm. Valuable experience with group work and peer criticism, which comes from the practices and skills central to Creative Writing pedagogy, will prepare students for success in a range of fields in the public and private sectors.

Program Requirements

The Program in Creative Writing requires a total of 13 courses and completion of a BA thesis, as described below. Students who matriculated in 2016–17 or later may declare this major. Students planning to complete the major must meet with the Director of Undergraduate Studies and file a worksheet with the program by the end of the Autumn Quarter of the third year of study.

All interested students should speak with the Director of Undergraduate Studies or the Program Manager.

Students contemplating a major or minor in Creative Writing may choose to take one or two Creative Writing courses toward the general education requirement in the arts. These courses will not count towards major requirements, but they do offer an opportunity to test out the program while satisfying a general education requirement.

One (1) Fundamentals in Creative Writing course
CRWR 17000 to CRWR 17999

The Fundamentals in Creative Writing course is a cross-genre, one-quarter seminar to be taken by all students in the major. Every section of the course focuses on a current debate relevant to all forms of literary practice, such as mimesis, translation and appropriation, and art and the market. This course introduces students to a group of core texts from each major literary genre. The course is taught in a seminar format and will require a final paper. Fundamentals in Creative Writing is restricted to students who have declared the major, as its aims are to develop cohort solidarity, promote a culture of articulate exchange, and induct students into a reflection on practice that will serve their artistic and professional development. Students should plan to take the course as early as possible after declaring the major, ideally in the first or second quarter in the program. See Enrolling in Creative Writing Courses for additional details.

Two (2) Technical Seminars
Fiction: CRWR 20200 to CRWR 20299; Poetry: CRWR 20301 to CRWR 20399; Nonfiction: CRWR 20400 to CRWR 20499

Students in the major must take two technical seminars in their primary genre of fiction, poetry, or nonfiction. The aims of the seminars are to enlarge students’ technical resources through extensive reading and analysis of contemporary literature and to provide practice-based training in technical skills. Students submit papers that address technical questions, chiefly with reference to contemporary texts. For example, poetry
students may write on “the line,” where fiction students write on “point of view.” These courses may also count as electives in the minor. See Enrolling in Creative Writing Courses for additional details.

Three (3) Advanced Workshops
Fiction: CRWR 22100 to CRWR 22299; Poetry: CRWR 23100 to CRWR 23299; Nonfiction: CRWR 24001 to CRWR 24199

Students in the major must complete three Advanced Workshops, at least two of which must be in the student's primary genre. The Advanced Workshop is the characteristic pedagogical instrument of Creative Writing as an academic discipline. Workshop practice relies on an understanding of support that is dedicated to improving students' writing, not unconditional approval. Critique is the core value and activity of the workshop, and students will practice it under the guidance of the workshop instructor. Although Advanced Workshops begin with attention to exemplary texts, they typically focus on original student work. See Enrolling in Creative Writing Courses for additional details.

Credit for a Beginning Workshop: Students who have completed a Beginning Workshop in their primary genre and have received a grade of B+ or above will be able to count this course as one of the required Advanced Workshops. Because students must take at least two Advanced Workshops in their primary genre, any qualifying Beginning Workshop may only serve as the third required workshop. This means that students choosing to count a Beginning Workshop towards the major will not be able to count an Advanced Workshop from a genre that is not the primary genre towards the degree. Beginning Workshops offered by other institutions will not count towards the major. Beginning Workshops are open to all students during pre-registration.

One (1) Literary Genre Course
Students are required to take one introductory Literary Genre course related to their primary genre as an introduction to key texts and debates in the history of their chosen genre. This requirement can be met by a cross-listed English course or a comparable course in another literature. Depending on the student's genre, courses like ENGL 10400 Introduction to Poetry, ENGL 10700 Introduction To Fiction: Short Story, or ENGL 11004 History of the Novel may be eligible. Specific courses that are identified as filling this requirement will be listed at creativewriting.uchicago.edu.

Three (3) Literature Courses
Creative Writing majors are required to take three literature courses offered by other departments. These courses can be focused on the literature of any language, but one must involve the study of literature written before the twentieth century and one must center on theory. The Director of Undergraduate Studies will offer guidance and approve all qualifying courses. Specific courses that satisfy the distribution element of this requirement will be listed at creativewriting.uchicago.edu.

Two (2) Research Background Electives
Students take two courses outside the Creative Writing department to support the student's individual interests and thesis project. These courses must be selected in consultation with and approved by the Director of Undergraduate Studies. Depending on a student's interests, courses in e.g., Cinema and Media Studies or Visual Arts might be appropriate. Others may take additional literature course work. The students must provide documentation of these approvals to their College adviser.

BA Thesis and Workshop
Students work on their BA Projects throughout their fourth year. In Spring Quarter of the third year, students will submit a signed BA proposal form to the Program Manager. During Summer Quarter, students are responsible for completing independent reading and research related to their proposed project. Early in Autumn Quarter of their fourth year, students will be assigned a graduate student preceptor, who will lead a series of mandatory colloquia over the course of the quarter. In Winter Quarter, students will continue meeting with the graduate preceptor and must also enroll in the appropriate Thesis/Major Projects Workshop in their genre (CRWR 29200 Thesis/Major Projects: Fiction, CRWR 29300 Thesis/Major Projects: Poetry, or CRWR 29400 Thesis/Major Projects: Creative Nonfiction).

Students are not automatically enrolled in a workshop; they must receive the consent of the workshop instructor, who will also serve as the faculty advisor for their BA Project. Students should be aware that because of the high number of students wishing to write fiction for their BA Projects, students will not necessarily get their first choice of workshop instructor and faculty advisor. See Enrolling in Creative Writing Courses for additional details.

Students will work closely with their faculty advisor and with their peers in the workshops and will receive course credit as well as a final grade for the workshop. In consultation with their faculty advisor and graduate preceptor, students will revise and resubmit a near-final draft of the BA Project by the end of the second week of Spring Quarter. Students will submit the final version of their BA Project to their preceptor, faculty advisor, and the Director of Undergraduate Studies by the beginning of the fifth week of Spring Quarter.
Students graduating in other quarters must consult with the Director of Undergraduate Studies about an appropriate timeline before the end of Autumn Quarter of the third year of study. The Winter Thesis/Major Projects Workshop is mandatory.

Program Honors

The faculty in the Program in Creative Writing will award program honors based on their assessment of the BA theses, with input from graduate student preceptors. To be eligible, students must have an overall GPA of at least 3.6 and overall GPA of 3.25. Honors will be awarded only to the most exceptional projects from a given cohort; the majority of students will not receive this designation.

Summary of Requirements

One (1) Fundamentals in Creative Writing course *

Two (2) Technical Seminars (in the student’s primary genre) †

Three (3) Advanced Workshops (at least two in the student’s primary genre) §

One (1) Literary Genre Course

Three (3) Literature Courses

Two (2) Research Background Electives

One (1) BA Workshop, chosen from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 29200</td>
<td>Thesis/Major Projects: Fiction</td>
</tr>
<tr>
<td>CRWR 29300</td>
<td>Thesis/Major Projects: Poetry</td>
</tr>
<tr>
<td>CRWR 29400</td>
<td>Thesis/Major Projects: Creative Nonfiction</td>
</tr>
</tbody>
</table>

Total Units 1300

* CRWR 17000 to CRWR 17999
† Technical Seminars in Fiction: CRWR 20200 to CRWR 20299; Poetry: CRWR 20301 to CRWR 20399; Nonfiction: CRWR 20400 to CRWR 20499
§ Advanced Workshops in Fiction: CRWR 22100 to CRWR 22299; Poetry: CRWR 23100 to CRWR 23299; Nonfiction: 24001 to CRWR 24199. Beginning Workshops may count as the third workshop if they meet the stipulations listed under the Program Requirements.

Advising

Students considering the major should meet with the Director of Undergraduate Studies as early as possible to discuss program requirements and individual plans of study. Declaration of the major must be formalized through my.uchicago.edu.

The Program Manager and Director of Undergraduate Studies will provide guidance to students choosing courses to complete the major requirements. By Autumn Quarter of their third year, all students will be required to file a major program worksheet with the department, and the student’s final major program must be approved by the Director of Undergraduate Studies. Students will need to regularly provide documentation of any approvals for the major to their College advisers for the necessary processing.

Graduate student preceptor support will be available to students while they write BA theses and minor portfolios during their final year of study, and faculty instructors will serve as thesis advisors for the students in their winter workshops.

Courses outside the Department Taken for Program Credit

A maximum of three courses outside Creative Writing and the Department of English Language and Literature (or another literature) may count toward the total number of courses required by the major. Ordinarily, two of these courses will be Research Background Electives. Substitutions for a further course will be subject to approval, but students may not substitute non-literature courses for the Literature Course requirement.

For students double majoring, this means a maximum of three courses can count towards both majors (pending approval from both departments).

Double Majors in English Language and Literature and Creative Writing

When students choose a double major in Creative Writing and English Language and Literature, they may count up to four courses towards both majors. These four courses will typically include the three Literature Courses and the Literary Genre course, but in some cases one of the slots might be filled by a CRWR course (with Director of Undergraduate Studies approval). However, the two Research Background Electives required for the Creative Writing major should be taken outside of the Department of English Language and Literature.

This means that a maximum of four English Language and Literature courses, including the Literary Genre course, can count towards the Creative Writing major.

Students who are pursuing only the English Language and Literature major may count up to four CRWR courses towards the major in English as electives without a petition. However, when students are pursuing a
double major in English Language and Literature and Creative Writing, they must observe the shared four-course maximum, so any eligible CRWR courses beyond this cap must be counted towards English only.

**GRADING**

Students with a major in Creative Writing must receive quality grades (not P/F) in all courses counting toward the major or minor. Non-majors may take CRWR courses for P/F grading with consent of instructor.

**Sample Plan of Study for the Major**

<table>
<thead>
<tr>
<th>Fundamentals in Creative Writing</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 17000 Fundamentals in Creative Writing: Literary Empathy</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Seminars</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 20302 Technical Seminar in Poetry: Units of Composition</td>
<td></td>
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<tr>
<td>CRWR 20301 Technical Seminar in Poetry: Manifestos, Movements, Modes</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced Workshops</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 23113 Advanced Poetry Workshop: Waste, Surplus, Reuse</td>
<td></td>
</tr>
<tr>
<td>CRWR 23100 Advanced Poetry Workshop</td>
<td></td>
</tr>
<tr>
<td>CRWR 10306 Beginning Poetry Workshop *</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literary Genre Course</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 10400 Introduction to Poetry</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literature Courses</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 17515 Seventeenth-Century Verse *</td>
<td></td>
</tr>
<tr>
<td>ENGL 22903 Literature of the City: Between Utopia and Dystopia **</td>
<td></td>
</tr>
<tr>
<td>ENGL 28614 Contemporary Latina/o Poetry</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Electives</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 14503 Cinema in Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>ARTV 22502 Data and Algorithm in Art</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>BA Workshop</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 29300 Thesis/Major Projects: Poetry</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 1300

* Beginning Workshop is eligible because it met the conditions outlined in the Program Requirements (above).

* Satisfies period requirement (pre-20th century)

** Satisfies theory requirement

**MINOR IN ENGLISH AND CREATIVE WRITING**

Students who are not English Language and Literature or Creative Writing majors may complete a minor in English and Creative Writing. Such a minor requires six courses plus a portfolio of creative work. At least two of the required courses must be Creative Writing (CRWR) workshop courses, with at least one being an Advanced Workshop. Three of the remaining required courses may be taken in either the Department of English Language and Literature (ENGL) or the Program in Creative Writing (CRWR). This may include CRWR Technical Seminars or general education courses, as long as they are not already counted toward the general education requirement in the arts.

In addition, students must enroll in one of the following workshops offered during the Winter Quarter: CRWR 29200 Thesis/Major Projects: Fiction; CRWR 29300 Thesis/Major Projects: Poetry; CRWR 29400 Thesis/Major Projects: Creative Nonfiction. Finally, students must submit a portfolio of their work (e.g., a selection of poems, one or two short stories or chapters from a novel, two or three nonfiction pieces) to the Creative Writing Program Manager by the end of the fifth week in the quarter in which they plan to graduate. Students will work with a graduate student preceptor to compile and refine their final portfolios.

Students who elect the minor program in English and Creative Writing must meet with the program administrator for Creative Writing before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the administrator. The administrator’s approval for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.

Students completing this minor will be given enrollment preference for CRWR Advanced Workshops and Thesis/Major Projects Workshops, and they must follow all relevant admission procedures described at the Creative Writing (https://creativewriting.uchicago.edu) website. For details, see Enrolling in Creative Writing Courses.
Courses in the minor (1) may not be doubly counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades (not P/F), and at least half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor Program in English and Creative Writing

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two CRWR workshop courses</td>
<td>200</td>
</tr>
<tr>
<td>Three CRWR or ENGL electives</td>
<td>300</td>
</tr>
<tr>
<td>One Thesis/Major Projects Workshop +</td>
<td>100</td>
</tr>
<tr>
<td>A portfolio of the student’s work</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

* At least one must be an Advanced Workshop.

Minor to Major and Major to Minor

Student circumstances change, and thus a transfer between the major and minor programs may be desirable to students who begin a course of study in either program. Workshop courses (including Beginning Workshops) and one Technical Seminar may count towards the minor, but Fundamentals in Creative Writing will not. The Thesis/Major Projects Workshop will also function as a portfolio workshop for minors. Students should consult with their College adviser if considering such a transfer and must update their planned program of study with the Program Manager or Director of Undergraduate Studies in Creative Writing.

Sample Plan of Study for the Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRWR 10200 Beginning Fiction Workshop</td>
<td>100</td>
</tr>
<tr>
<td>CRWR 22110 Advanced Fiction: Exploring Your Boundaries</td>
<td>100</td>
</tr>
<tr>
<td>ENGL 16500 Shakespeare I: Histories and Comedies</td>
<td>100</td>
</tr>
<tr>
<td>ENGL 10706 Introduction to Fiction</td>
<td>100</td>
</tr>
<tr>
<td>ENGL 24526 Forms of Autobiography in the Twentieth and Twenty-First Centuries</td>
<td>100</td>
</tr>
<tr>
<td>CRWR 29200 Thesis/Major Projects: Fiction</td>
<td>100</td>
</tr>
<tr>
<td>A portfolio of the student’s work (two short stories)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

Applications for consent-only courses must be received by the deadlines listed below.

Creative Writing courses for the general education requirement in the arts

These multi-genre courses are introductions to topics in Creative Writing and satisfy the general education requirement in the arts in the College. General education courses are generally taught under two headings—“Reading as a Writer” and “Intro to Genres”—and will feature class critiques of students’ creative work. Open to all undergraduate students during pre-registration. These courses do not count towards the major in Creative Writing, but students in the major may use these courses to satisfy their general education requirement in the arts.

Beginning Workshops

These courses are intended for students who may or may not have writing experience, but are interested in gaining experience in a particular genre. Courses will be focused on the fundamentals of craft and will feature workshops of student writing. Open to all undergraduate students during pre-registration.

Fundamentals of Creative Writing courses

Focuses on a current debate relevant to all forms of literary practice and aims to develop cohort solidarity, promote a culture of exchange, and induct students into a reflection on practice that will service
their artistic and professional development. Open to declared majors only. Those students may apply to take the course by submitting a course application form, found at creativewriting.uchicago.edu.

Technical Seminars

These seminars enlarge students’ technical resources through extensive reading and analysis of contemporary literature and provide practice-based training in technical skills. Priority is given to declared majors. Those students may apply to take the course by submitting a course application form, found at creativewriting.uchicago.edu.

Advanced Workshops

These courses are intended for students with substantive writing experience in a particular genre. Advanced workshops will focus on class critiques of student writing with accompanying readings from exemplary literary texts. Priority is given to students in the major, minor, or the Creative Writing Option of the Master of Arts Program in the Humanities. All students may apply to take the course by submitting a course application form, found at creativewriting.uchicago.edu. A writing sample in the genre of the relevant course is required for faculty review. Specific submission requirements appear in the course descriptions.

Thesis/Major Projects

This course will revolve around workshops of student writing and also concentrate on the larger form students have chosen for their creative thesis. Priority is given to students in the major, minor, or the Creative Writing Option of the Master of Arts Program in the Humanities. All students may apply to take the course by submitting a course application form, found at creativewriting.uchicago.edu. A writing sample in the genre of the relevant course is required for faculty review. Specific submission requirements appear in the course descriptions.

Quarterly Deadlines to apply for consent-based CRWR courses

- Autumn Quarter, September 12
- Winter Quarter, November 16
- Spring Quarter, February 22

For more information on Creative Writing courses and opportunities, visit the Creative Writing (https://creativewriting.uchicago.edu) website.

Faculty and Visiting Lecturers

For a current listing of Creative Writing faculty, visit the Creative Writing (https://creativewriting.uchicago.edu/faculty) website.

Visit creativewriting.uchicago.edu for upcoming quarter course lists and schedules, the online submission form, and application instructions.

CREATIVE WRITING COURSES

**CRWR 10206. Beginning Fiction Workshop. 100 Units.**

Fiction writing is part magic and part mechanics. This course will pay homage to the magic but concentrate on how a story is built: the architecture of structure, the mechanisms of character development, the fluid dynamics of dialogue. We’ll take a close look at some of the building blocks that make up fiction writing: character, dialogue, plot, point of view, and setting. We’ll also read and discuss a variety of short stories, always with an eye to craft and to what you, as writers, can steal for your own work. That’s right, steal. Much of this course is devoted to learning how to steal the tools of great fiction writing, then to using those tools to realize your own vision. You’ll write extensively in and out of class, from weekly reading responses to writing exercises that build toward a polished piece of work. Finally, you will write a complete draft and one extensive revision of a short story or novel chapter. The last third of the course will be devoted to student workshops, where each student will turn in a draft of a story or chapter to be read and critiqued by the whole class.

Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 30206

**CRWR 10306. Beginning Poetry Workshop. 100 Units.**

This course will introduce students to the fundamentals of poetry in a creative writing workshop context. We will focus on a different topic each week—image, prosody, form, and so on—by reading extensively in the work of contemporary American poets and by composing our own literary exercises as well. We will also attend poetry readings and talks on poetry by visitors to our campus. The course will follow a workshop format, with peer critiques of student work and intensive readings across a spectrum of literary aesthetics.

Instructor(s): Staff. Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Open bid through my.uchicago.edu. Attendance on the first day is necessary.
Equivalent Course(s): CRWR 30306
CRWR 10406. Beginning Nonfiction Workshop. 100 Units.
A personal essay can employ a chain of events, but it’s essentially a train of thought. Like thought, it’s protean, able to take any shape and yet remain an essay. In this workshop you’ll write two drafts of your own essay, or attempt, at the form, while line editing and critiquing your classmates’ attempts. You’ll also do close readings, starting with “Why I Write,” by George Orwell, and “Why I Write,” by Joan Didion. Then James Baldwin’s “Autobiographical Notes.” Once we’ve had a taste of the present we’ll go back four thousand years to the essay’s beginnings in Babylon, following its evolution in Greece and Rome-Heracitus, Flutarch, Seneca-then Europe: Montaigne, Max Beerbohm, Walter Benjamin, and Natalia Ginzburg, returning to contemporary English-language writers, including Adrienne Rich and Margaret Atwood, ending with Didion’s “Goodbye to All That,” paired with Eula Biss’s contemporary cover version, also titled “Goodbye to All That.”
Instructor(s): Dan Raeburn; Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Open bid through my.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 30406

CRWR 12106. Intro to Genres: Science Fiction. 100 Units.
A monolith manifests in orbit around Jupiter, emitting a signal. A beacon? A man spontaneously discovers the ability to teleport. An evolutionary accident? The origin of human life proves to be malicious. Divine fate? Space travel is enabled by the ingestion of enormous quantities of a geriatric spice a messianic figure auspiciously learns to manipulate. A drug trip?! Among popular genres, science fiction is the riskiest conceptually and among the trickiest to master. The difference between an amazing idea and a rotten story is often slim. What makes good sci-fi work? And how best to write it? Let’s put on our gravity boots and solar visors and see what we can discover. In this course, you’ll read some novels (by Frank Herbert, Alfred Bester, and Ursula K. LeGuin), poetry (by Andrew Joron), a graphic novel (by Chris Ware), and screenplays (by Damon Lindelof, and Stanley Kubrick & Arthur C. Clarke). And all the while, you’ll try your hand at bending each other’s minds with your own science fiction.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): Open bid through my.uchicago.edu. Attendance on the first day is mandatory. Note(s): This course meets the general education requirement in the arts.

CRWR 12107. Reading as a Writer: Crime and Story. 100 Units.
If prostitution is the earliest profession, then crime is probably the earliest narrative engine. Crime has always been a driving force behind story, a vehicle not only of plot but of human psychology, social exploration, philosophical investigation, and just plain old suspense. There’s something about the darker side of human nature that invites explorations of characters pushed to their extremes. Through analyzing the writing techniques and processes-such as point of view, scene, setting, voice, narrative structure and research methodologies-of such writers and poets as Raymond Chandler, Patricia Highsmith, Walter Mosley, Joyce Carol Oates, Denis Johnson, Carolyn Forché, CK Williams, Nami Mun, James Ellroy, and Richard Price among others, students will examine how elements of crime in story can be transformed beyond simple genre. By examining writers’ choices, students will explore how they may use these techniques to develop such mechanisms of writing as point of view, poetics, dramatic movement and narrative structure in their own work.
Instructor(s): Augustus Rose Terms Offered: Winter
Prerequisite(s): Open bid through classes.uchicago.edu. Attendance on the first day is mandatory. This course meets the general education requirement in the arts.
Note(s): This course meets the general education requirement in the arts.

CRWR 12109. Introduction to Genres: Wizards. 100 Units.
Do you believe in wizards? Are you a wizard? Then pack up your talismans, fetishes, and gamelans into the mysterious little satchel you carry at your side and get ready for some incantatory magic. We will investigate the figure of the wizard as an archetype, a literary symbol, a vehicle for fantasy, and as a commanding reality, while considering such things as A Wizard of Earthsea, the figure of Merlin, The Teachings of Don Juan, The Teachings of Ogotemmeli, Harry Potter, Aleister Crowley, the poetry of W. B. Yeats, Nathaniel Mackey, Jay Wright, and Ronald Johnson, as well as some other things too secret to reveal at present, including the nature of esotericism.
Instructor(s): Peter O’Leary Terms Offered: Autumn
Prerequisite(s): Open bid through classes.uchicago.edu. Attendance on the first day is mandatory.
Note(s): This course meets the general education requirement in the arts.

CRWR 12127. Reading as a Writer: Hallucinations. 100 Units.
In this course we ask: How is historical material made—figured/disfigured by loss, desire, violence, suffering, exhaustion, death; by restlessness and the unbearable, abyssal, vertigo of living inside time? Where is the aperture of experience? The apparitions, which partition night, its many voices, bodies which are forgotten, and then remembered, why? What is the time of writing, of reading? This course goes a little back and a little forward between the two world wars, hoping to track an itinerary of history material, its incandescence, between situations of mourning and mystical experience. Students will be asked to keep a reading notebook as well as to produce weekly creative responses for class discussion.
Instructor(s): Lynn Xu Terms Offered: Winter
Prerequisite(s): Open bid through my.uchicago.edu. Attendance on the first day is mandatory. Satisfies the College Arts/Music/Drama Core requirement.
CRWR 12128. Reading as a Writer: The Sea. 100 Units.
What is the temporality of the sea? Its consciousness? Where does it begin? Or end? In this course, we will consider the sea both as a figure in our literary, critical, visual, political, historical, and ecological imaginations, as well as a body in itself, iridescent and gleaming at the end of the world. We will look at practices of burial at sea, the infamous "wine dark sea" of Homer, the Middle Passage, the hold and wake of the ship, necropolitics, the concept of sovereignty and bare life, stowaway and asylum seekers, piracy and floating armories, eco-materialism, the post-human and alien worlds of our oceanic origins, the moon . . . and so on. Students will be asked to keep a reading notebook as well as to produce weekly creative responses for class discussion. "And as you read /the sea is turning /its dark pages /turning /its dark pages" (Denise Levertov, from "The Reader").
Instructor(s): Lynn Xu Terms Offered: Autumn
Prerequisite(s): Open bid through my.uchicago.edu. Attendance on the first day is mandatory. Satisfies the College Arts/Music/Drama Core requirement.

CRWR 17000. Fundamentals in Creative Writing: Literary Empathy. 100 Units.
In this fundamentals course, students will investigate the complicated relationship between writers, fictional characters, and readers, toward determining what place literary empathy has in our conversation about contemporary literature. James Baldwin once observed that, "You think your pain and your heartbeat are unprecedented in the history of the world, but then you read. It was books that taught me that the things that tormented me most were the very things that connected me with all the people who were alive, or who had ever been alive." We will use weekly reading assignments including fiction, poetry, and creative non-fiction to ask questions about what Virginia Woolf described as the "elimination of the ego" and "perpetual union with another mind" that take place when we read. Students will write critical responses, creative exercises, and a final paper on a topic to be approved by the instructor. Readings include Baldwin, Bishop, Beard, Carson, Walcott, and Woolf.
Instructor(s): Rachel DeWoskin Terms Offered: Autumn
Prerequisite(s): Students apply for consent by filling out the CW Seminar Consent Form on creativewriting.uchicago.edu. Students must meet the course application deadline specified on the website. This course is open only to students who have declared the Major in Creative Writing. Attendance on the first day is mandatory.

CRWR 17001. Fundamentals in Creative Writing: Testimony. 100 Units.
To give testimony is to bear witness and to provide evidence. To give testimony is also to draw the reader or listener into an individual point of view. In this course, we will study the first-person voice in various forms of personal testimony. Drawing from a mix of memoirs, personal essays, letters, fiction, and other first-person narratives, we will analyze the techniques and rhetorical devices used by writers, standup comedians, memoirists intransporting the listener or reader into unknowable, unfamiliar experiences. Expect to engage with texts by authors such as Franz Kafka, Patricia Lockwood, Richard Pryor, and William Maxwell. We will compose our own personal writings through creative exercises. A critical paper is also due.
Instructor(s): Ling Ma Terms Offered: Winter
Prerequisite(s): Students apply for consent by filling out the application form on creativewriting.uchicago.edu. Students must meet the course application deadline specified on the website. This course is open only to students who have declared the Major in Creative Writing. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 37001

CRWR 18200. Poetry and the Human III. 100 Units.
This spring-quarter Arts course is related to the Humanities course "Poetry and the Human" and is intended as a potential sequel to its first two quarters, but can also be taken as a freestanding course. Through a combination of seminar discussions and creative writing workshop sessions, it focuses upon creative practice (form, flow, and voice) as way of approaching many of the questions raised over the Autumn and Winter terms. It considers the role of poetry in different traditions (Japanese, English, Persian, etc.) from aesthetic, philosophical, and performative angles. Students in the Poetry and the Human sequence (HUMA) will have priority registration for this course; other students may register for any remaining seats.
Instructor(s): Staff Terms Offered: Spring
Note(s): This course meets the general education requirement in the arts.

CRWR 20200. Technical Seminar in Fiction: Characterization. 100 Units.
This reading and writing seminar will acquaint students with one of the essential tools of fiction writers: characterization. We will read primary texts by authors including Baldwin, Flaubert, Munro, and Wharton, as well as critical work by Danticat, Forester, and Vargas Llosa, toward exploring how some of literature’s most famous characters are rendered. How do writers of fiction create contexts in which characters must struggle, and how does each character’s conflicts reveal his or her nature? Students will complete both creative and analytical writing exercises, reading responses, and a paper that focuses on characterization in a work of fiction.
Instructor(s): Rachel DeWoskin Terms Offered: Autumn
Prerequisite(s): Students apply for consent by filling out the CW Seminar Consent Form on creativewriting.uchicago.edu. Students must meet the course application deadline specified on the website. Equivalent Course(s): CRWR 40200
CRWR 20201. Technical Seminar in Fiction: Auto Fiction, Essayism, Truth. 100 Units.
This inter-genre readings course will be of special interest to student writers interested in both fiction and creative nonfiction. We'll look at hybrid works by W.G. Sebald, Teju Cole, Rachel Cusk, and Shelia Heti and also consider writers like Kathryn Harrison, Tobias Wolff, and Gregor von Rezzori, who have addressed the same subjects in both fiction and nonfiction. Finally, we'll dip into Robert Musil's notion of "essayism" as a modern mode of thought and the recent debate over the "lyric essay." We'll also look at journalistic and/or documentary works by Werner Herzog, Truman Capote, Tom Bissell, Katherine Boo, and Ryszard Kapuscinski. By exploring the interestingly smudged line between factual and fictional texts, we'll interrogate both genre categories and ways of perceiving and presenting what's true.
Instructor(s): Will Boast Terms Offered: Spring
Prerequisite(s): Students apply for consent by filling out the CW Seminar Consent Form on creativewriting.uchicago.edu. Students must meet the course application deadline specified on the website. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 40201

CRWR 20302. Technical Seminar in Poetry: Units of Composition. 100 Units.
This course aims to investigate, through a range of readings and writing exercises, various units of composition and the ways that they interact with each other in poems. We will study and imitate traditional formal approaches, such as the poetic foot, meter, caesuras, sprung rhythm, rhymed stanzas, and refrains. We also will study and imitate modernist and contemporary "units," such as the word (approached, for example, etymologically or connotatively), the free verse line, the variable foot, vers libre, serial form, the sentence (the "new" sentence, but also modulations of basic syntax), the paragraph, the page, and forms of call and response. This reading intensive course will draw from a selection of mostly modern and contemporary poetry, poetics, and criticism. Students will be expected to submit weekly technical exercises, complete several short critical responses, write a longer essay, and submit a final portfolio of revised material.
Equivalent Course(s): CRWR 40302

CRWR 20401. Technical Seminar in Nonfiction: The Synecdoche. 100 Units.
Every writer of personal nonfiction knows that ultimately the story isn't about them: it's about something larger, perhaps universal, and their personal story is merely a means to that end. The key to this paradox is the synecdoche, or the part that stands for the whole. It's the grain of sand that contains the universe, the one story that by implication tells other peoples' stories. When Anne Fadiman told the story of a Hmong immigrant to the United States, she told a larger story about immigration in general. So did Joan Didion, in Where I Was From; by telling the story of her family, she told the story of California, and by telling the story of California she told the story of the West and thus of America. Rian Malan did the same in My Traitor's Heart: by telling the story of his family he told the story of Apartheid, and thus of South Africa, and of our segregated world. Through weekly exercises and analytic essays you'll see how these and other writers locate the universal in their particulars, and you'll apply their examples to your own work.
Instructor(s): Dan Raeburn Terms Offered: Spring
Prerequisite(s): Instructor consent required. Apply via creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 40401

CRWR 21500. Advanced Translation Workshop: Prose Style. 100 Units.
Purple, lean, evocative, muscular, literary, exuberant, lucid, stilted, economical. These are all labels that critics and reviewers have used to characterize prose styles that call attention to themselves in distinct ways. Of course, what constitutes style not only changes over time, but also means different things in different literary traditions. How, then, do translators carry style over from one language and cultural milieu to another? And to what extent does style structure storytelling? We will explore these questions by reading a variety of modern and contemporary stylists who either write in English or translate into English, paying special attention to what stylistic devices are at work and what their implications are for narration, characterization, and world building. Further, we'll examine the range of choices that each writer and translator makes when constituting and reconstituting style, on a lexical, tonal, and syntactic scale. By pairing readings with generative exercises in stylistics and constrained writing, we will build toward the translation of a short work of contemporary fiction into English. To participate in this workshop, students should be able to comfortably read a literary text in a foreign language.
Terms Offered: Spring
Prerequisite(s): Instructor consent required. Apply via creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 41500
CRWR 22113. Advanced Fiction Workshop: The Love Story. 100 Units.
This advanced fiction workshop will examine the ways we write about love in fiction: romantic love, familial love, unconventional love, etc. Our basis will be the notion that love is ultimately self-knowledge, which lies at the core of all great fiction, and like self-knowledge it involves an endless and inexhaustible act of seeking. We will read and discuss stories centered on the topic of love, this act of seeking, and we will do writing exercises that help us write compellingly, convincingly, and unsentimentally about deeply sentimental things. Every student will also complete and workshop a full-length story that explores the idea of love on some level. They will additionally write a significant revision of this story, which they will either present for a second workshop or turn in at the end of the quarter. Please expect a rigorous but constructive workshop environment where being a critic and an editor is as essential as being a writer.
Instructor(s): Vu Tran Terms Offered: Autumn
Prerequisite(s): Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 42113

CRWR 22118. Advanced Fiction Workshop: Constructing a Full Length Novel. 100 Units.
In this advanced fiction workshop, students will work on novel-length projects, completing one to two polished chapters and an outline of a full novel. We will explore how to structure a book that is both propulsive and character-driven, and how to create a compelling, unique narrative voice. Works by James Baldwin, Edith Wharton, Ha Jin, Vladimir Nabokov, and Akhil Sharma will help us consider the crucial relationship between characters and their contexts.
Instructor(s): Rachel DeWoskin Terms Offered: Spring
Prerequisite(s): Instructor consent required. Apply via creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 42118

CRWR 22119. Advanced Fiction Workshop: Music in Fiction and Improvised Composition. 100 Units.
This workshop-based course is suitable for any student wishing to refine and expand their understanding of how fiction gets made, and will be of particular interest to those exploring new stylistic possibilities or working in both the disciplines of prose writing and music. We'll look at the Modernists' experiments with refrain, repetition, and pure verbal music, their attempts "to find out what's behind things," as Woolf put it. We'll consider literary improvisation as Ellison meant the term: the gathering of seemingly disparate materials to synthesize something wildly new. We'll explore how musicians are often allowed (or forced) to cross cultural boundaries through texts like Baldwin's "This Evening, This Morning, So Soon" and interviews with Wendy Carlos and Fred Hersch. We'll also look at the burgeoning field of rhythmology, and use it as a bridge to examine how music also borrows from fiction, through storytelling in song and a guest lecture from a Pulitzer-Prize-nominated composer.
Instructor(s): Will Boast Terms Offered: Winter
Prerequisite(s): Instructor consent required. Apply via creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 42119

CRWR 22121. Advanced Fiction Workshop: Young Adult Literature. 100 Units.
The books and stories we read as teenagers are often some of the most influential in developing our tastes as adult readers and writers of fiction. In this advanced workshop course, we'll discuss the genre of young adult literature through evaluation of your own writing: what are its defining characteristics, and what's the difference between writing for a young adult audience versus writing books and stories about teenagers but designed for adult readers? Students should be working on book-length projects involving teenaged protagonists, no matter the intended audience; please come to the first session with either work to submit or a sense of when you'd be able to sign up for a slot. We'll spend most of our time evaluating student work, learning how to become both generous and rigorous critics, and we'll also talk about the books that influenced us the most as young adult readers and the books we're reading today, from contemporary writers like John Green and Rainbow Rowell to classic authors like S. E. Hinton and Madeleine L'Engle. Students will read at least one or two novels during the quarter as well.
Terms Offered: Spring
Prerequisite(s): Instructor consent required. Apply via creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 42121
CRWR 24004. Advanced Nonfiction Workshop: Writing in Crisis. 100 Units.
In this course, we'll work to write about people and communities who are in crisis, on the verge of crisis, or looking back at crisis. We'll discuss reporting, interviewing, oral history, historical research, working from photography and video, and the ethical situation of the writer. We'll read works by writers such as Liu Xiaobo, Elena Poniatowska, Claudia Rankine, Rebecca Solnit, Edwidge Danticat, Ryszard Kapuscinski, Philip Gourevitch, Arundathi Roy, Leslie Marmon Silko, Rachel Carson, and Ta-Nehisi Coates, on subjects including migration, exile, prison, totalitarian regimes, dissidence, questions of reparation and reconciliation after systematic violence, and environmental activism. Students will undertake significant research and produce a substantial essay to be workshopped in class.
Instructor(s): Rachel Cohen Terms Offered: Autumn
Prerequisite(s): Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 44004

CRWR 29200. Thesis/Major Projects: Fiction. 100 Units.
This advanced fiction course is for BA and MA students writing a creative thesis or any advanced student working on a major fiction project. It is primarily a workshop, so please come to our first class with your project in progress (a story collection, a novel, or a novella), ready for you to discuss and to submit some part of for critique. As in any writing workshop, we will stress the fundamentals of craft like language, voice, and plot and character development, with an eye also on how to shape your work for the longer form you have chosen.
And as a supplement to our workshops, we will have brief student presentations on the writing life: our literary influences, potential avenues towards publication, etc.
Instructor(s): Vu Tran, Rachel DeWoskin, Will Boast, Ling Ma, Augustus Rose Terms Offered: Winter
Prerequisite(s): Required for students working on BA or MA thesis in fiction, as well as students completing a minor portfolio in fiction. Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Note(s): Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 49200

CRWR 29300. Thesis/Major Projects: Poetry. 100 Units.
This course is an advanced seminar intended primarily for students writing a Creative BA or MA thesis, as well as Creative Writing Minors completing the portfolio. Because it is a thesis seminar, the course will focus on various ways of organizing larger poetic "projects." We will consider the poetic sequence, the chapbook, and the poetry collection as ways of extending the practice of poetry beyond the individual lyric text. We will also problematize the notion of broad poetic "projects," considering the consequences of imposing a predetermined conceptual framework on the elusive, spontaneous, and subversive act of lyric writing. Because this class is designed as a poetry workshop, your fellow students' work will be the primary text over the course of the quarter.
Instructor(s): Lynn Xu Terms Offered: Winter
Prerequisite(s): Required for students working on a BA or MA thesis in poetry, as well as students completing a minor portfolio in poetry.
Note(s): Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 49300

CRWR 29400. Thesis/Major Projects: Creative Nonfiction. 100 Units.
This course is for students writing a creative BA or MA thesis in nonfiction, as well as Creative Writing Minors completing the portfolio. If space allows I'll also admit those who are working on a long piece of nonfiction on their own. It can be an extended essay, memoir, travelogue, literary journalism, or an interrelated collection thereof. It's a workshop, so come to the first day of class with your work underway and ready to submit. You'll edit your classmates' writing as diligently as you edit your own. I focus on editing because writing is, in essence, rewriting. Only by learning to edit other people's work will you gradually acquire the objectivity you need to skillfully edit your own. You'll profit not only from the advice you receive, but from the advice you learn to give. I will teach you to teach each other and thus yourselves, preparing you for the real life of the writer outside the academy.
Instructor(s): Dan Raeburn Terms Offered: Winter
Prerequisite(s): Required for students working on the BA/MA thesis in creative nonfiction, as well as Creative Writing Minors completing the portfolio in nonfiction. Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Note(s): Instructor consent required. Submit writing sample via www.creativewriting.uchicago.edu. Attendance on the first day is mandatory.
Equivalent Course(s): CRWR 49400
The minor in Digital Studies of Language, Culture, and History introduces students to computer programming and the use of cutting-edge software tools for representing, exploring, analyzing, and publishing the products of human language and culture. These products range from everyday speech and writing to historical documents and literary texts, and they encompass music and art as well as mundane objects, places, and institutions. The courses in this minor will help students not just to understand and use digital tools but to see digital computing as a cultural activity in its own right—an activity to be studied with respect to its historical development, social setting, cultural impact, and aesthetic qualities, as well as the ethical problems it creates in our increasingly digitized and networked world. This minor does not require a background in mathematics or computing but is designed for students who are majoring in the humanities or humanistic social sciences. It will also be of interest to students majoring in the sciences who want to acquire programming skills in the context of linguistic, cultural, and historical studies.

MINOR IN DIGITAL STUDIES OF LANGUAGE, CULTURE, AND HISTORY

Students must take seven courses to complete the minor in Digital Studies of Language, Culture, and History. They break down as follows:

1. One course in computer programming. Students are encouraged to take DIGS 20001 Introduction to Computer Programming, but the following are acceptable substitutes: CMSC 12100 Computer Science with Applications I, CMSC 15100 Intro To Computer Science-I, CMSC 16100 Honors Introduction to Computer Science I.

2. One course in statistics. Students are encouraged to take DIGS 20002 Basic Mathematics and Statistics for Digital Studies, but the following are acceptable substitutes: STAT 20000 Elementary Statistics, STAT 22000 Statistical Methods and Applications.

3. One course in data analysis using the R programming environment: DIGS 20004 Data Analysis for Linguistic, Cultural, and Historical Research. This course has the prerequisite of DIGS 20001 and DIGS 20002 (or equivalent courses in computer programming and statistics).

4. Two courses chosen from the following three courses. Note that each of these has as a prerequisite of DIGS 20001 (or an equivalent introduction to computer programming):
   - DIGS 20003 Data Management for Linguistic, Cultural, and Historical Research
   - DIGS 20005 Data Publication for Linguistic, Cultural, and Historical Research
   - DIGS 20006 Natural Language Processing

5. A required seminar course: DIGS 20007 Issues in Digital Studies of Language, Culture, and History

6. One elective course approved by the faculty director of the Digital Studies of Language, Culture, and History program. This will normally be a course in the humanities or social sciences that entails computational methods or explores the history and cultural significance of digital media or of computation in general. Suitable courses are offered in several different departments and programs.

Note that the particular courses on offer will vary from year to year and some courses may have prerequisites. Examples of potentially suitable courses include:

- CMST 25204 Media Ecology: Embodiment & Software
- CMST 27110 Digital Cinema
- CMST 27815 Introduction to Art, Technology, and Media
- CMST 27920 Virtual Reality Production
- ENGL 25980 Technorelations: Intimacy, Bodies, Machines
- ENGL 25990 Always Already New - Printed Books & Electronic Texts
- GEOG 20500 Introduction to Spatial Data Science
- GEOG 28201 Intro to Geographic Information Systems
- HIPS 25205 Computers, Minds, Intelligence & Data
- HIST 25415 History of Information
- HIST 25425 Censorship, Info Control, & Revolutions in Info Technology from the Printing Press to the Internet
- HIST 29523 Data History: Information Overload from the Enlightenment to Google
- LING 28600 Computational Linguistics
- MUSI 26618 Electronic Music I
SUMMARY OF REQUIREMENTS

DIGS 20001 Introduction to Computer Programming 100
  or CMSC 12100 Computer Science with Applications I
  or CMSC 15100 Intro To Computer Science-I
  or CMSC 16100 Honors Introduction to Computer Science I

DIGS 20002 Basic Mathematics and Statistics for Digital Studies 100
  or STAT 20000 Elementary Statistics
  or STAT 22000 Statistical Methods and Applications

DIGS 20004 Data Analysis for Linguistic, Cultural, and Historical Research 100

Two of the following three courses: 200
  DIGS 20003 Data Management for Linguistic, Cultural, and Historical Research
  DIGS 20005 Data Publication for Linguistic, Cultural, and Historical Research
  DIGS 20006 Natural Language Processing

DIGS 20007 Issues in Digital Studies of Language, Culture, and History 100

One elective, approved by the faculty director 100

Total Units 700

ADVISING AND GRADING

Courses in the minor may not be double counted with the student’s major(s), other minors, or general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Students who elect the minor must meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the minor. The director’s approval for the minor program should be submitted to a student’s College adviser by the deadline above using a form available from the adviser.

DIGITAL STUDIES OF LANGUAGE, CULTURE, AND HISTORY COURSES

DIGS 20001. Introduction to Computer Programming. 100 Units.
In this course, students learn computer programming and computational concepts using the Python programming language. The Python programming exercises involve topics in mathematics and statistics covered in DIGS 20002/30002 and are designed to reinforce comprehension of those topics; thus it is recommended that DIGS 20001/30001 and DIGS 20002/30002 be taken in the same quarter, if possible. No prior background in computing is required for this course. For students who are, or who have been, UChicago undergraduates, the following Computer Science courses may be substituted for this course: CMSC 12100, CMSC 15100, or CMSC 16100. This course (or an equivalent CMSC programming course) is a prerequisite for the other Digital Studies courses, with the exception of DIGS 20002/30002, which has no prerequisite. However, students in the M.A. program in Digital Studies or in the undergraduate minor in Digital Studies can be exempted from this course requirement if they pass an examination designed to test their knowledge of computer programming. Such students will instead take an additional elective course to fulfill their Digital Studies program requirements. This course is offered in Summer 2018 and thereafter will be offered in both Spring and Summer each year.
Terms Offered: Spring Summer
Equivalent Course(s): DIGS 30001

DIGS 20002. Basic Mathematics and Statistics for Digital Studies. 100 Units.
This course covers selected topics in mathematics which are relevant for computing and for the subsequent Digital Studies courses, and it provides an introduction to statistics with emphasis on the analysis of linguistic, cultural, and historical data. Comprehension of these topics is reinforced by the Python programming exercises in DIGS 20001/30001, thus it is recommended that DIGS 20001/30001 and DIGS 20002/30002 be taken in the same quarter, if possible. No prior background in mathematics beyond the high school level is required for this course. For students who are, or who have been, UChicago undergraduates, the following Statistics courses may be substituted for this course: STAT 20000 or STAT 22000. Other prior courses in statistics may also be accepted in lieu of this course, subject to the approval of the faculty director of the Digital Studies program. This course (or an equivalent statistics course) is a prerequisite for DIGS 20004/30004 and DIGS 20006/30006. This course is offered in Summer 2018 and thereafter will be offered in both Spring and Summer each year.
Terms Offered: Spring Summer
Equivalent Course(s): DIGS 30002
DIGS 20003. Data Management for Linguistic, Cultural, and Historical Research. 100 Units.
This course introduces students to concepts and techniques related to the representation and management of
digital data, with emphasis on the forms of data encountered in linguistic, cultural, and historical research.
The following topics are covered: (1) digital character encoding using the ASCII and Unicode standards and
digital typefaces (“fonts”) for displaying encoded characters; (2) the digital encoding of 2D images, 3D models,
sound, and video; (3) database models and querying languages, both relational and non-relational, with
attention to data-integration methods for combining and querying semi-structured and heterogeneous data;
and (4) cartographic concepts (e.g., coordinate systems and map projections) and the basics of geospatial data
management using Geographic Information Systems (GIS). DIGS 20001/30001, or an equivalent introduction to
programming, is a prerequisite for this course. This course is offered in the Autumn.
Terms Offered: Autumn
Prerequisite(s): DIGS 20001/30001, or an equivalent introduction to programming
Equivalent Course(s): DIGS 30003

DIGS 20004. Data Analysis for Linguistic, Cultural, and Historical Research. 100 Units.
This course builds on the introduction to statistics in DIGS 20002/30002 by introducing students to the R
language and R packages for data analysis. Topics covered include the basics of data mining, data visualization,
and high-performance computing (HPC) techniques for analyzing large datasets. This course provides a high-
level conceptual introduction to machine learning, social network analysis, and spatial data analysis. The goal is
to make students familiar with these methods and aware of their role in linguistic, cultural, and historical studies,
as a basis for further study of these methods. DIGS 20001/30001 and DIGS 20002/30002 (or their equivalents) are
prerequisites for this course. This course is offered in the Autumn.
Terms Offered: Autumn
Prerequisite(s): DIGS 20001/30001 and DIGS 20002/30002 (or their equivalents)
Equivalent Course(s): DIGS 30004

DIGS 20005. Data Publication for Linguistic, Cultural, and Historical Research. 100 Units.
This course introduces software techniques and tools for building end-user-facing apps that run in Web browsers
(via HTML5, CSS, and JavaScript). Students will learn how to use application programming interfaces (APIs) to
integrate Web services into their apps, making use of the analysis, visualization, and database services provided
by external systems. Attention will be paid to user-interface design for both research purposes and pedagogical
purposes. Students will learn how to use GitHub to manage software development. DIGS 20001/30001, or an
equivalent introduction to programming, is a prerequisite for this course. This course is offered in the Winter.
Terms Offered: Winter
Prerequisite(s): DIGS 20001/30001, or an equivalent introduction to programming
Equivalent Course(s): DIGS 30005

DIGS 20006. Natural Language Processing. 100 Units.
This course introduces software techniques and tools for natural language processing (NLP). The following
topics are covered: (1) textual markup and related software standards such as the Extensible Markup Language
(XML), as well as the Text Encoding Initiative’s XML tagging scheme; (2) character-string processing (with
or without markup tags); and (3) NLP methods for part-of-speech tagging, lemmatization, morphological
segmentation, sentence splitting, named entity recognition, co-reference resolution, sentiment analysis, and topic
modeling. This course also provides a high-level conceptual overview of recent work in machine translation
via neural networks and deep learning. Prerequisites for this course include DIGS 20001/30001 and DIGS
20002/30002 (or their equivalents), and also DIGS 20003/30003 and DIGS 20004/30004. This course is offered in the
Winter.
Terms Offered: Winter
Prerequisite(s): DIGS 20001/30001 and DIGS 20002/30002 (or their equivalents), DIGS 20003/30003, and DIGS
20004/30004
Equivalent Course(s): DIGS 30006

DIGS 20007. Issues in Digital Studies of Language, Culture, and History. 100 Units.
This is a discussion-oriented seminar that introduces students to theoretical debates in digital humanities,
broadly defined, with attention to underlying philosophical issues. It touches upon the history and theory of
digital computing within its social and institutional settings, as well as the history of the application of digital
computing to texts, images, sound, geospatial data, and other information relevant to cultural and historical
studies. Among other topics, this course introduces students to debates about the cultural impact of digital
media and about ethical issues related to the ownership, accessibility, and legitimate uses of digital data. DIGS
20001/30001, or an equivalent introduction to programming, is a prerequisite for this course. This course is
offered in the Winter.
Terms Offered: Winter
Prerequisite(s): DIGS 20001/30001, or an equivalent introduction to programming
Equivalent Course(s): DIGS 30007
The Department of East Asian Languages and Civilizations (EALC) offers a BA program in East Asian studies that introduces students to the traditional and modern civilizations of China, Japan, and Korea, and provides them with the opportunity to achieve a basic reading and speaking knowledge of Chinese, Japanese, and Korean. This program is interdisciplinary and students may take relevant courses in both the humanities and the social sciences.

Students in other fields of study may also complete a minor in EALC. Information follows the description of the major.

Before declaring their major in EALC, students must meet with the Director of Undergraduate Studies (typically before the end of their second year) to discuss their areas of interest.

**Program Requirements**

Students must complete 1300 units toward an EALC major. Up to 300 of those units may be granted via petition based on the completion of a higher-level language course. No courses may be double-counted toward general education requirements or minor requirements. **NOTE: The specific requirements described below will apply to students beginning with the Class of 2021.**

Students who plan to major in EALC are strongly encouraged (but not required) to meet the general education requirement in civilization studies by taking EALC 10800-10900-11000 Introduction to the Civilizations of East Asia I-II-III.

**Language Requirement**

To graduate with an EALC major, students must demonstrate competency in a primary East Asian language that is equivalent to the intermediate (second-year) level of the language. Credit for 20100-20200-20300 or the equivalent is required in the major.

**Topics in EALC**

All students are required to take three "Topics in EALC" courses (EALC 10500-10799). These courses are meant to introduce students to issues in East Asian studies.

**Electives in the Major**

Students are required to complete seven additional courses (700 units) in the major. Up to 300 units may be additional language credit. Many students will take an additional year of their primary East Asian language or a year of a secondary East Asian language. A beginning language sequence in the primary East Asian language cannot be counted toward the major; beginning sequences are acceptable for secondary languages. This language credit must be earned by registering for courses bearing University of Chicago course numbers.

Two quarters of Classical Chinese or Classical Japanese may count either as language or as content courses.

Students who complete their general education requirement in civilization studies with a sequence other than EALC 10800-10900-11000 Introduction to the Civilizations of East Asia I-II-III may take any of those courses as an elective in the major. Students may also take additional Topics in EALC courses as electives in the major.

A maximum of six approved courses taken while studying abroad may be counted toward program requirements by petition to the Director of Undergraduate Studies.

**Language Credit Earned by Petition**

Students with extant proficiency who place into and successfully complete a higher-level course (i.e., 20200 or higher) may petition to receive credit for the language courses between 20100 and the University of Chicago course completed. Credits granted via this petition process may be used toward major requirements, with limits.

Students may use up to 600 units total of language course work toward their major, but credit for no more than three of those courses (300 units) may be granted via petition on the basis of completing a higher-level course. No matter the language proficiency, all students must earn credit for at least 10 courses (1000 units) toward the major via course enrollment. The College also requires a minimum of 3800 units of credit earned by course enrollment.

**Summary of Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>Three courses in a second-year East Asian language</td>
<td>300</td>
</tr>
<tr>
<td>Three &quot;Topics in EALC&quot; courses</td>
<td>300</td>
</tr>
<tr>
<td>Seven elective courses related to East Asia</td>
<td>700</td>
</tr>
<tr>
<td>Total Units</td>
<td>1300</td>
</tr>
</tbody>
</table>
Credit may be granted by examination.

EALC 10500-10799

Up to three of which may be a further year of the same language or a year of a second East Asian language

Grading

Students must receive quality grades in all courses taken to meet requirements in the major. No P/F grades are offered in language courses.

Bachelor's Thesis and Honors

Students who have maintained an overall GPA of 3.25 or higher are eligible for honors. Students who do not wish to be considered for honors are not required to submit a bachelor's thesis for graduation. However, all students are eligible to write a bachelor's thesis upon submitting an acceptable proposal to the department. Students typically choose an adviser for their BA project in Spring Quarter of their third year. The project must be approved by both the adviser and the director of undergraduate studies early in the student's fourth year, typically by third week of Autumn Quarter. Interested students should consult the director of undergraduate studies for details concerning the proposal.

To be eligible for honors, students must enroll in Autumn and Winter Quarters of EALC 29500-29600 Senior Thesis Tutorial I-II. EALC 29500 Senior Thesis Tutorial I may count as one credit (100 units) toward the major; EALC 29600 Senior Thesis Tutorial II may count only as general elective credit. Registration in the second quarter of the BA thesis seminar and continuation of the BA thesis is contingent on satisfactory performance in the first quarter of the BA thesis seminar. The BA paper must be substantially complete by the end of Winter Quarter. The BA paper may draw on material from other courses in the major; however, to receive credit for the Senior Thesis Tutorial and to be considered for honors, the student must write a paper that represents significant additional work. The BA paper is read by two members of the department and, if judged to be of A quality, the student is recommended for graduation with honors. Length and scope of the project should be agreed upon in consultation with the adviser. Use of original language material is desirable but not required.

Students may not use the BA project or paper from another program for the optional BA in EALC. Students who wish to discuss an exception to this policy should consult the Director of Undergraduate Studies before the end of their third year. Consent to use a single paper or project requires the approval of both program chairs on a form available from the College adviser.

Minor Program in East Asian Languages and Civilizations

Students in other fields of study may complete a minor in EALC. The minor in EALC requires a total of seven courses chosen in consultation with the director of undergraduate studies. No more than three of these courses may be in an East Asian language (credit by petition may not be used for this language option). Students who plan to pursue an EALC minor are encouraged to take EALC 10800-10900-11000 Introduction to the Civilizations of East Asia I-II-III to meet the general education requirement in civilization studies.

Students who elect the minor program in EALC must meet with the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the minor by submitting a form obtained from their College adviser. Students choose courses in consultation with the director of undergraduate studies. The director's approval for the minor program should be submitted to the student's College adviser by the deadline above on a form obtained from the adviser.

Courses in the minor (1) may not be double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

East Asian Languages and Civilizations (EALC) Courses

EALC 10510. Topics in EALC: East Asian Popular Music. 100 Units.

This course surveys a variety of scholarly approaches to the study of popular music in East Asia since 1900, including questions of authenticity, gender, media technologies, circulation, and translation. The course will introduce a variety of musical genres from China, Japan, Korea, Hong Kong and Taiwan, ranging from forms considered 'traditional' to contemporary idol and hiphop music. All readings will be available in English, and no background in music is required or expected.

Instructor(s): M. Bourdaghs Terms Offered: Spring
EALC 10520. Topics in EALC: Gendered Bodies in East Asia. 100 Units.
An introductory course to the study of gender and sexuality in modern and contemporary East Asia, the course examines the ways in which Korea, Japan, and China have undergone the key changes during modernization during the past century. Focus is given to gendered body and its representations-visual, sound, textual, legal, artistic, and cultural traditions, both established and out-of-establishment, as students discuss issues such as identity, love, sex, family, citizenship, law, violence, war, religion, creativity, work, migration, gendered space, and politics, among others, the topics that involve the issue of embodiment in representations and display in varying degrees. Paying attention to the media specificity of the chosen texts, students will close-read and analytically and critically engage various aspects of the relationship between the substance and the medium of the selected texts.
Instructor(s): K. Choi

EALC 10600. Topics in EALC: Ghosts & the Fantastic in Literature and Film. 100 Units.
What is a ghost? How and why are ghosts represented in particular forms in a particular culture at particular historical moments and how do these change as stories travel between cultures? This course will explore the complex meanings, both literal and figurative, of ghosts and the fantastic in traditional Chinese, Japanese, and Korean tales, plays, and films. Issues to be explored include: 1) the relationship between the supernatural, gender, and sexuality; 2) the confrontation of death and mortality; 3) collective anxieties over the loss of the historical past 4) and the visualization (and exorcism) of ghosts through performance.
Instructor(s): J. Zeitlin Terms Offered: Autumn
Note(s): This course can replace what used to be the Concentrators Seminar to fulfill a requirement as an EALC major.
Equivalent Course(s): CMST 24603, SIGN 26006

EALC 10603. Topics in EALC: The Chinese Classics. 100 Units.
In this course we will explore the Chinese classics (Classics of Changes, Documents, Poetry, Spring and Autumn Annals, and the three Ritual classics) at different moments in their traditions: at the time of their first creation, at the time of their canonization as classics, at different moments throughout China's imperial history, and today. Because the Chinese classics have also been regarded as classics in both Korea and Japan, we will also consider their adaptation within those contexts.
Instructor(s): E. Shaughnessy

EALC 10704. Topics in EALC: The Modern Short Story in East Asia. 100 Units.
Why does the short story emerge as a major literary form across East Asia in the early 20th century? Which institutional, social, and political factors contributed to its diffusion? What are the main characteristics of the short story, how does it organize time and space, and how does it differ from earlier forms of short fiction? What do various authors hope to achieve by writing short stories? Has their writing changed with the rise of new media? Informed by these questions, this course explores the variety of forms that the short story takes in modern East Asia. We will read a selection of influential Chinese, Japanese, and Korean works from the early 20th century to the present, including those by Lu Xun, Shiga Naoya, Hwang Sun-wŏn, Miyamoto Yuriko, Xiao Hong, Na Hye-sŏk, Akutagawa Ryūnosuke, Hoshi Shin'ichi, Lin Bai, Han Shaogong, Yu Hua, and Murakami Haruki, along with theoretical and critical essays. Discussions will be organized around themes that allow for transregional comparisons. All readings in English translation.
Instructor(s): P. Iovene

EALC 10705. Topics in EALC: Imagining Environment. 100 Units.
This course introduces students to the fiction of East Asia through the themes of nature and environment. How have writers imagined the relation between the human and the non-human in the modern era? How have they drawn on indigenous ideas and attitudes? How have they responded to global environmental change and destruction? The course surveys a variety of sources for environmental imagings, including philosophical and religious attitudes; aesthetic practices; political ideas; and modern environmentalism. All readings are in English.
Instructor(s): H. Long

EALC 10710. Topics in EALC: Intertwined Literatures of Postwar Asia. 100 Units.
This course explores literature that illustrates the interconnectedness of Asia in the decade following the conclusion of the Second World War. While the surrender of Japan and the onset of the Cold War contributed to the re-entrenchment of fiercely independent national literatures in Asia, national frameworks tend to obscure the ongoing links across Asia evoked in the works of many writers dealing with this period. Further, the notion of the “postwar” tends to disregard the ways in which war’s effects continued to shape the Asian continent through Allied occupations and such widespread conflicts as the Chinese Civil War and the Korean War. By putting the postwar literatures of Asia in conversation with one another, we will aim to achieve a fuller understanding of these texts that have both depicted international circulation and spread through international communities themselves. Course materials include short stories, novels, plays, reportage, and autobiographical writings from Japan, China, Hong Kong, Tibet, Mongolia, Okinawa, and North and South Korea. All readings for this course are available in English; no knowledge of any Asian language is required.
Instructor(s): N. Lambrecht

EALC 10720. Topics in EALC: Literature of the Middle Ages. 100 Units.
This course will focus on the world of literature in the Middle Ages, a period of transition between the classical world and the modern. It will examine the impact and the role of literature in the Middle Ages, the period that saw the development of the short story, how it organizes time and space, and how it differs from earlier formulations. What do various authors hope to achieve by writing short stories? Has their writing changed with the rise of new media? Informed by these questions, this course explores the variety of forms that the short story takes in modern East Asia. We will read a selection of influential Chinese, Japanese, and Korean works from the early 20th century to the present, including those by Lu Xun, Shiga Naoya, Hwang Sun-wŏn, Miyamoto Yuriko, Xiao Hong, Na Hye-sŏk, Akutagawa Ryūnosuke, Hoshi Shin’ichi, Lin Bai, Han Shaogong, Yu Hua, and Murakami Haruki, along with theoretical and critical essays. Discussions will be organized around themes that allow for transregional comparisons. All readings in English translation.
Instructor(s): P. Iovene

EALC 10725. Topics in EALC: Gender and the Fantastic. 100 Units.
This course introduces students to the study of gender and sexuality in modern and contemporary East Asia, the course examines the ways in which Korea, Japan, and China have undergone the key changes during modernization during the past century. Focus is given to gendered body and its representations-visual, sound, textual, legal, artistic, and cultural traditions, both established and out-of-establishment, as students discuss issues such as identity, love, sex, family, citizenship, law, violence, war, religion, creativity, work, migration, gendered space, and politics, among others, the topics that involve the issue of embodiment in representations and display in varying degrees. Paying attention to the media specificity of the chosen texts, students will close-read and analytically and critically engage various aspects of the relationship between the substance and the medium of the selected texts.
Instructor(s): K. Choi
EALC 2235. Revolutionary Romance in Socialist China. 100 Units.
One of the goals of the socialist revolution was to transform social relations, not only those between classes but also family and romantic relations. One of the first laws that the Chinese Communist Party issued after the founding of the People's Republic was the New Marriage Law, which banned arranged marriages, concubinage, and arrangements involving minors. 1950s cinema and literature advertised romantic love as an important achievement of the new society. At the same time, loyalty to the Party and to the collectivity were also core values that the media emphasized. In this class, we will look at how literature and cinema instructed viewers on how to select one's object of love in Revolutionary China, and how love for a romantic partner, for the party, and for the people were differently foregrounded at specific historical moments. How did ideas of romantic love change from the 1940s to the 1980s, and how did cinema contribute to promoting them? What forms of intimacy and models of attachment characterized revolutionary romance? Which kind of person constituted an ideal romantic partner? Who was to be loved, how, and why? Should one orient one's passion toward one person, many, or none?
Instructor(s): P. Iovene Terms Offered: Winter
Equivalent Course(s): EALC 32235

EALC 2251. Social and Economic Institutions of Chinese Socialism, 1949 to 1980. 100 Units.
The socialist period (for our purposes here, c. 1949-1990) fundamentally transformed the institutions of Chinese social and economic life. Marriage and family were redefined; rural communities were reorganized on a collective basis; private property in land and other means of production was abolished. Industrialization created a new urban working class, whose access to welfare, consumer goods, and political rights depended to a large extent on their membership in work units (danwei). Migration between city and countryside came to a halt, and rural and urban society developed in different directions. This course will focus on the concrete details of how this society functioned. How did state planning work? What was it like to work in a socialist factory? What role did money and consumption play in a planned economy? Our readings are in English, but speakers of Chinese are encouraged to use Chinese materials (first-hand sources, if they can be found) for their final papers.
Instructor(s): J. Eyferth Terms Offered: Winter
Equivalent Course(s): HIST 34511, EALC 32451, HIST 24511

EALC 23001. Censorship in East Asia: The Case of Colonial Korea. 100 Units.
This course examines the operation and consequences of censorship in the Japanese Empire, with focus on its effects in colonial Korea. It begins with two basic premises: first, both the Japanese colonial authorities' measures of repression, and the Korean responses to them, can be understood as noticeably more staunch and sophisticated when compared to any other region of the Empire; and second, the censorship practices in Korea offers itself as a case that is in itself an effective point of comparison to better understand other censorship operations in general and the impact of these operations across different regions. With a view to probing an inter- and intra-relationship between censorship practices among a variety of imperial/colonial regions, this course studies the institutions related to censorship, the human agents involved in censorship—both external and internal—and texts and translations that were produced in and outside of Korea, and were subject to censorship. Overall, the course stresses the importance of establishing a comparative understanding of the functions of censorship, and on the basis of this comparative thinking we will strive to conceptualize the characteristics of Japanese colonial censorship in Korea.
Instructor(s): K. Choi Terms Offered: Winter
Equivalent Course(s): EALC 43000, CRES 33001

EALC 24201. China’s Eco-Environmental Challenges and Society’s Responses. 100 Units.
In nearly four decades of reform and opening policies, China’s economic achievements have come at a high cost for its ecological environment; air pollution, water pollution, and soil contamination, among other problems, are facts of life for most Chinese citizens. In addition, China is now the world’s biggest emitter of carbon dioxide and has recently acknowledged its contributions to global warming and the need for drastic mitigation of greenhouse gases. Facing these tremendous challenges, remarkable shifts in the way that Chinese society communicates and tackles these problems are occurring. This seminar will look, in particular, at relevant public debates, crucial policies, as well as popular initiatives and protest, to approach this wide topic. How is the relationship between humans/society and nature/environment conceptualized and communicated? Can we detect shifts from traditional to modern, even contemporary, Chinese approaches? And to what extent and how do political authorities, media, the general population and scientists in China interact in the face of the acknowledged risks that environmental pollution poses to communities, to China’s (economic) development and, not least, to individual health and well-being. Basic knowledge about modern Chinese society and politics as well as Chinese reading skills are helpful, but not a strict requirement for participation in this course.
Instructor(s): A.L. Ahlers Terms Offered: Autumn
Equivalent Course(s): ENST 24201, EALC 34201
How are instances such as the arrest of Gui Minhai, a publisher and Hong Kong business owner who was born in China but has a Swedish passport, in Thailand - apparently by Chinese authorities -, and the large-scale eviction of migrant workers in Beijing due to the lack of residency permits in their own country, related? They raise questions as to how citizenship, i.e. in this case membership in a community, a country/nation state, or a social system is defined and which rights and duties it entails, as well as what are the prerequisites for obtaining and losing it. In this class we will discuss concepts of citizenship and analyze their representations in modern Chinese society. This includes historical and conceptual-history dimensions and encompasses notions of citizenship that are pertaining to the local, national (incl. empire/civilization), and the global level. Over the course of the semester we will touch upon topics such as forms of inclusion into (and exclusion from) the emerging Chinese 'welfare' model ("social citizenship"), political representation and participation ("political citizenship"), law and rights ("legal citizenship"), domestic and international (im)migration, nationalism, and many more. Basic knowledge about Chinese society and politics as well as Chinese reading skills are helpful, but not a strict requirement for participation in this course.
Instructor(s): A. Ahlers Terms Offered: Spring
Note(s): Knowledge of Chinese helpful but not required.
Equivalent Course(s): EALC 34202

EALC 24411. The Science of Literature. 100 Units.
This course examines the modern history of literature as an object of scientific study. In particular, it introduces key moments in the conversation between quantitative methods and literary interpretation from the late-19th century to today. These include physiological theories of the novel; stylistics; book history; sociologies of reading; distant reading; and cultural analytics. At each moment we consider the intellectual contexts that encouraged dialogue between the sciences and literature; probe the theories and models by which this dialogue was framed; and consider its relevance to the practice of literary criticism today.
Instructor(s): H. Long Terms Offered: Spring
Equivalent Course(s): ENGL 34422, ENGL 24422, EALC 34411

EALC 24626. Japanese Cultures of the Cold War: Literature, Film, Music. 100 Units.
This course is an experiment in rethinking what has conventionally been studied and taught as "postwar Japanese culture" as instances of global Cold War culture. We will look at celebrated works of Japanese fiction, film and popular music from 1945 through 1990, but instead of considering them primarily in relation to the past events of World War Two, we will try to understand them in relation to the unfolding contemporary global situation of the Cold War. We will also look at English-language writing on Japan from during and after the Cold War period. Previous coursework on modern Japanese history or culture is helpful, but not required. All course readings will be in English.
Instructor(s): M. Bourdaghs Terms Offered: Winter
Equivalent Course(s): EALC 34626

EALC 25600. Gender and Modernity in Colonial Korea. 100 Units.
What are the salient forms, manifestations, and performances that can be discussed as aspects found at the intersection between gender experience and Korean colonial modernity? This seminar aims at identifying the characteristics of Japanese or colonially mediated modernization that Koreans experienced in the first half of the twentieth century in order to ultimately generate a broadly meaningful discussion on the texture of colonial cultural experience under its abiding colonial legacy. At the core of the class is a concern with gender. While considering the universal questions of modernized gender, gendered consciousness, and personal/private spaces, discussions will respond to the diverse interests and backgrounds of student participants so as to best facilitate comparative and theoretical discussions on colonial modernity and its postcolonial manifestations.
Instructor(s): K. Choi Terms Offered: Autumn
Equivalent Course(s): EALC 35600, GNSE 35600, GNSE 25600

EALC 26800. Korean Literature, Foreign Criticism. 100 Units.
Ever since the introduction of the modern/Western concept of "literature" to early twentieth-century Korea, literary production, consumption, and reproduction have gone hand in hand with the reception of the trends of "criticism" and "theory" propagated elsewhere, in the West in particular. This course examines the relationship between the ideas of "indigenous" and "foreign" as embodied by Korean writers in the fields of creative writing, journalism, and academia with a view to engaging and interrogating the idea of "national literature" and its institutional manifestations. It further examines artistic and theoretical endeavors by Korean writers and intellectuals to critically reflect upon and move beyond the unquestioned linguistic, ideological, and ethnological boundaries.
Instructor(s): K. Choi Terms Offered: Autumn
Equivalent Course(s): EALC 36800
EALC 27501. The Worlds of Honglou meng (Dream of the Red Chamber): Traditional Chinese Novel & Literary Culture. 100 Units.
Written by Cao Xueqin (1715–1763), Honglou meng (Dream of the Red Chambers) has been regarded as the greatest masterpiece of Chinese prose fiction. The novel not only displays the unprecedented usage of realistic language in portraying the quotidian life, but also shows intricate literary skills in narrative and lyricism. This class investigates the internal and external worlds of Honglou meng, and reflects on the ethics and aesthetics of novel in late imperial China. We will explore, on the one hand, literary choices that made the novel sophisticated, such as the narrative strategies, the complexity in characterization, and the high degree of intertextuality which shows the creative use of other literary genres (poetry, drama, riddle). On the other hand, reading alongside recent scholarship on material culture and gender studies, we examine the interactive relations between the novel and the fashion of exquisite domestic life in the late imperial society and answer these questions. In what ways did the fashion shape the novel text, and how such fashion affects the production and reception of the novel and influences the ways of reading?
Instructor(s): N. Feng Terms Offered: Winter
Note(s): Open to MAPH students. All readings are in English. Students with Chinese reading ability are encouraged to read the original texts. Optional discussion sessions for learning to read the Chinese text.
Equivalent Course(s): EALC 37501

EALC 28010. Archaeology of Anyang: Bronzes, Inscriptions, and World Heritage. 100 Units.
Anyang is one of the most important archaeological sites in China. The discoveries of inscribed oracle bones, the royal cemetery, clusters of palatial structures, and industrial-scale craft production precincts have all established that the site was indeed the last capital of the Shang dynasty recorded in traditional historiography. With almost continuous excavations since the late 1920s, work at Anyang has in many ways shaped and defined Chinese archaeology and the study of Early Bronze Age China. This course intends to examine the history of research, important archaeological finds, and the role of Anyang studies in the field of Chinese archaeology. While the emphasis is on archaeological finds and the related research, this course will also attempt to define Anyang in the modern social and cultural contexts in terms of world heritage, national and local identity, and the looting and illegal trade of antiquities.
Terms Offered: Winter
Equivalent Course(s): ANTH 36765, ANTH 26765, EALC 48010

EALC 28015. Archaeology of Bronze Age China. 100 Units.
Bronze Age in China conventionally refers to the time period from ca. 2000 BC to about 500 BC, during which bronze, an alloy of copper and other metals such as tin and lead, was the predominant medium used by the society, or to be more precise, the elite classes of the society. Bronze objects, in the forms of vessels, weapons, and musical instruments, were reserved for the upper ruling class of the society and were used mostly as paraphernalia during rituals and feasting. "Bronze Age" in China also indicates the emergence and eventual maturation of states with their bureaucratic systems, the presence of urban centers, a sophisticated writing system, and advanced craft producing industries, especially metal production. This course surveys the important archaeological finds of Bronze Age China and the theoretical issues such as state formation, craft production, writing, bureaucratic systems, urbanization, warfare, and inter-regional interaction, etc. It emphasizes a multi-disciplinary approach with readings and examples from anthropology, archaeology, art history, and epigraphy. This course will also visit the Smart Museum, the Field Museum, and the Art Institute of Chicago to take advantage of the local collections of ancient Chinese arts and archaeology.
Instructor(s): Y. Li Terms Offered: Spring
Equivalent Course(s): EALC 48015, ANTH 26760, ANTH 46760

EALC 29500-29600-29700. Senior Thesis Tutorial I-II-III.
One quarter of this sequence may be counted for credit in the major.
EALC 29500. Senior Thesis Tutorial I. 100 Units.
For this course students are required to obtain a "College Reading and Research Course Form" from their College adviser and have it signed both by their faculty reader and by the Director of Undergraduate Studies. Two quarters of this sequence may count as one credit for the EALC major, and are required for any undergraduate writing a B.A. Honors Thesis in EALC. It is highly recommended that students take this sequence autumn and winter, but a spring quarter course is offered for unusual circumstances.
Instructor(s): Consent of EALC Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Course Form.
EALC 29600. Senior Thesis Tutorial II. 100 Units.
Senior Thesis Tutorial II. PQ: signed consent form. For this course students are required to obtain a "College Reading and Research Course Form" from their College adviser and have it signed both by their faculty reader and by the Director of Undergraduate Studies. Two quarters of this sequence may count as one credit for the EALC major, and are required for any undergraduate writing a B.A. Honors Thesis in EALC. It is highly recommended that students take this sequence autumn and winter, but a spring quarter course is offered for unusual circumstances.
Terms Offered: Winter
Prerequisite(s): Consent of EALC Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Course Form.

EALC 29700. Senior Thesis Tutorial III. 100 Units.
The spring quarter section of the Senior Thesis Tutorial is devoted to making corrections and rewrites to the B.A. Paper, which is usually due to the Reader at the end of winter quarter.
Instructor(s): arranged Terms Offered: Spring
Prerequisite(s): EALC 29500 and/or EALC 29600
Note(s): Students continue to meet with the Preceptor for help with their papers.

EALC 29600. Senior Thesis Tutorial II. 100 Units.
Senior Thesis Tutorial II. PQ: signed consent form. For this course students are required to obtain a "College Reading and Research Course Form" from their College adviser and have it signed both by their faculty reader and by the Director of Undergraduate Studies. Two quarters of this sequence may count as one credit for the EALC major, and are required for any undergraduate writing a B.A. Honors Thesis in EALC. It is highly recommended that students take this sequence autumn and winter, but a spring quarter course is offered for unusual circumstances.
Terms Offered: Winter
Prerequisite(s): Consent of EALC Director of Undergraduate Studies
Note(s): Students are required to submit the College Reading and Research Course Form.

EALC 29700. Senior Thesis Tutorial III. 100 Units.
The spring quarter section of the Senior Thesis Tutorial is devoted to making corrections and rewrites to the B.A. Paper, which is usually due to the Reader at the end of winter quarter.
Instructor(s): arranged Terms Offered: Spring
Prerequisite(s): EALC 29500 and/or EALC 29600
Note(s): Students continue to meet with the Preceptor for help with their papers.

Chinese (CHIN) Courses

CHIN 10100-10200-10300. Elementary Modern Chinese I-II-III.
This three-quarter sequence introduces the fundamentals of modern Chinese. By the end of Spring Quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. In Spring Quarter, students are required to submit a video project for the Chinese Video Project Award. The class meets for five one-hour sessions a week. A drill session with the TA is held one hour a week in addition to scheduled class time. All courses in this sequence must be taken for a quality grade. No auditors permitted. Two sections.

CHIN 10100. Elementary Modern Chinese I. 100 Units.
This three-quarter sequence introduces the fundamentals of modern Chinese. By the end of Spring Quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. In Spring Quarter, students are required to submit a video project for the Chinese Video Project Award. The class meets for five one-hour sessions a week. A drill session with the TA is held one hour a week in addition to scheduled class time. All courses in this sequence must be taken for a quality grade. No auditors permitted.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Consent of EALC Director of Undergraduate Studies

CHIN 10200. Elementary Modern Chinese II. 100 Units.
Part 2 of this three-quarter sequence introduces the fundamentals of modern Chinese. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for five one-hour sessions each week. Additional small group discussions of 40 minutes per week will be arranged. Maximum enrollment for each section is 18.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 10100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
CHIN 10300. Elementary Modern Chinese III. 100 Units.
Part 3 of this three-quarter sequence introduces the fundamentals of modern Chinese. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for five one-hour sessions each week. Additional small group discussions of 40 minutes per week will be arranged. Maximum enrollment for each section is 18.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CHIN 10200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
Equivalent Course(s): CHIN 33300

CHIN 10123. Summer Intensive Introductory Chinese. 300 Units.
Summer Introductory Chinese is an eight-week course that introduces the fundamentals of Modern Chinese (Mandarin). Listening, speaking, reading, and writing are equally emphasized, along with accurate pronunciation. Class will meet for five three-hour periods a week, with additional speaking practice during the afternoon. This intensive summer Chinese course requires students to spend several additional hours per day preparing for class through drill sessions, independent study, and other activities. All students enrolled in summer Chinese will conclude the program by participating in an ACTFL Oral Proficiency Interview. Each student will then receive an independent, certified rating of speaking ability to document the student's speaking abilities.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17

CHIN 10200. Elementary Modern Chinese II. 100 Units.
Part 2 of this three-quarter sequence introduces the fundamentals of modern Chinese. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for five one-hour sessions each week. Additional small group discussions of 40 minutes per week will be arranged. Maximum enrollment for each section is 18.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 10100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

CHIN 10300. Elementary Modern Chinese III. 100 Units.
Part 3 of this three-quarter sequence introduces the fundamentals of modern Chinese. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for five one-hour sessions each week. Additional small group discussions of 40 minutes per week will be arranged. Maximum enrollment for each section is 18.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CHIN 10200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
Equivalent Course(s): CHIN 33300

CHIN 11100-11200-11300. First-Year Chinese for Bilingual Speakers I-II-III.
This three-quarter series is intended for bilingual speakers of Chinese. Our objectives include teaching students standard pronunciation and basic skills in reading and writing, while broadening their communication skills for a wider range of contexts and functions. The class meets for three one-hour sessions a week. Consultation with instructor encouraged prior to enrollment. All courses in this sequence must be taken for a quality grade.

CHIN 11100. First-Year Chinese for Bilingual Speakers I. 100 Units.
Part 1 of this three-quarter sequence introduces the fundamentals of modern Chinese to bilingual speakers. Bilingual Speakers are those who can speak Chinese but do not know how to read or write. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for three one-hour sessions each week MWF. Must be taken for a letter grade. No auditors permitted.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Consent of Director of Chinese Language Program
CHIN 11200. First-Year Chinese for Bilingual Speakers II. 100 Units.
Part 2 of this three-quarter sequence introduces the fundamentals of modern Chinese to bilingual speakers. Bilingual Speakers are those who can speak Chinese but do not know how to read or write. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for three one-hour sessions each week MWF.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 11100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

CHIN 11300. First-Yr. Chinese for Bilingual Speakers II. 100 Units.
Part 3 of this three-quarter sequence introduces the fundamentals of modern Chinese to bilingual speakers. Bilingual Speakers are those who can speak Chinese but do not know how to read or write. By the end of the spring quarter, students should have a basic knowledge of Chinese grammar and vocabulary. Listening, speaking, reading, and writing are equally emphasized. Accurate pronunciation is also stressed. A video project is required in spring quarter, which will be entered in the competition for the Chinese Video Project Award. Class meets for three one-hour sessions each week MWF.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CHIN 11200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

CHIN 15000. Chinese in Beijing. 100 Units.
CHIN 15001. Elementary Chinese in Beijing. 100 Units.
CHIN 15003. Intermediate Chinese in Beijing. 100 Units.
CHIN 15005. Advanced Chinese in Beijing. 100 Units.
CHIN 15007. Elementary Chinese in Hong Kong. 100 Units.
CHIN 15011. Advanced Chinese in Hong Kong. 100 Units.

CHIN 20100-20200-20300. Intermediate Modern Chinese I-II-III.
The goal of this sequence is to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. The class meets for three one-hour sessions each week. All courses in this sequence must be taken for a quality grade. No auditors permitted. Two sections.

CHIN 20100. Intermediate Modern Chinese I. 100 Units.
Part 1 of this sequence aims to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. Chinese computing skills are also taught. Class meets for five one-hour sessions each week.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): CHIN 10300, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
CHIN 20200. Intermediate Modern Chinese II. 100 Units.
Part 2 of this sequence aims to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. Chinese computing skills are also taught. Class meets for five one-hour sessions each week.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 20100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

CHIN 20300. Intermediate Modern Chinese III. 100 Units.
Part 3 of this sequence aims to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. Chinese computing skills are also taught. Class meets for five one-hour sessions each week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CHIN 20200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
Equivalent Course(s): CHIN 34300

CHIN 20200. Intermediate Modern Chinese II. 100 Units.
Part 2 of this sequence aims to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. Chinese computing skills are also taught. Class meets for five one-hour sessions each week.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 20100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

CHIN 20300. Intermediate Modern Chinese III. 100 Units.
Part 3 of this sequence aims to enhance students' reading, listening, speaking, and writing skills by dealing with topics at an intermediate linguistic level. In addition to mastering the content of the textbook, students are required to complete two language projects each quarter. Chinese computing skills are also taught. Class meets for five one-hour sessions each week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): CHIN 20200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.
Equivalent Course(s): CHIN 34300

CHIN 20401-20402-20403. Advanced Modern Chinese I-II-III.
The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures. We begin with discussion in Chinese on topics relevant to modern China and then shift to authentic Chinese texts in an effort to better prepare students to deal with original Chinese source materials. Discussion in Chinese required. The class meets for five one-hour sessions a week.

CHIN 20401. Advanced Modern Chinese-1. 100 Units.
For both graduates and undergraduates. The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures, and requires discussion in Chinese on topics relevant to modern China. Over the course of this sequence, the emphasis will shift to authentic Chinese texts in an effort to better prepare students to deal with original Chinese source materials. Class meets for five one-hour sessions each week.
Instructor(s): X. Wang Terms Offered: Autumn
Prerequisite(s): CHIN 20401 or placement, or consent of instructor
Note(s): No auditors. Must be taken for a quality grade.

CHIN 20402. Advanced Modern Chinese-2. 100 Units.
The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures, and requires discussion in Chinese on topics relevant to modern China. Over the course of this sequence, the emphasis will shift to authentic Chinese texts in an effort to better prepare students to deal with original Chinese source materials. Class meets for five one-hour sessions each week.
Instructor(s): Kuo, Wang Terms Offered: Winter
Prerequisite(s): CHIN 20401 or placement, or consent of instructor
Note(s): For both graduates and undergraduates. No auditors. Must be taken for a quality grade.
Equivalent Course(s): CHIN 30200
CHIN 20403. Advanced Modern Chinese-III. 100 Units.
For both graduates and undergraduates. The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures, and requires discussion in Chinese on topics relevant to modern China. Over the course of this sequence, the emphasis will shift to authentic Chinese texts in an effort to better prepare students to deal with original Chinese source materials. Class meets for five one-hour sessions each week.
Instructor(s): Kuo, Wang Terms Offered: Spring
Prerequisite(s): CHIN 20402, or placement, or consent of instructor
Note(s): For both graduates and undergraduates. No auditors. Must be taken for a quality grade.

CHIN 20508-20509-20510. Readings in Literary Chinese I-II-III.
This sequence involves advanced readings in classical Chinese with selections from philosophical and historical writings.

CHIN 20508. Readings in Literary Chinese I. 100 Units.
This course involves advanced readings in classical Chinese with selections from philosophical and historical writings.
Instructor(s): D. Harper Terms Offered: Autumn
Prerequisite(s): CHIN 21000, or placement, or consent of instructor
Equivalent Course(s): CHIN 40800

CHIN 20509. Readings In Literary Chinese-2. 100 Units.
CHIN 21000 or equivalent or consent of instructor. Reading and discussion nineteenth- and early twentieth-century historical political documents, including such forms as memorials, decrees, local gazetteers, diplomatic communications, essays, and the like. Open to undergrads
Prerequisite(s): CHIN 40800, or CHIN 20508, or placement, or consent of instructor
Note(s): Not offered every year; quarters vary.
Equivalent Course(s): CHIN 40900

CHIN 20510. Readings in Literary Chinese III. 100 Units.
Prerequisite(s): CHIN 40900, or CHIN 20509, or placement, or consent of instructor
Note(s): Not offered every year; quarters vary.
Equivalent Course(s): CHIN 41000

CHIN 20800-20900-21000. Elementary Literary Chinese I-II-III.
This sequence introduces the basic grammar of the written Chinese language from the time of the Confucian Analects to the literary movements at the beginning of the twentieth century. Students will read original texts of genres that include philosophy, memorials, and historical narratives. Spring Quarter is devoted exclusively to reading poetry. The class meets for two eighty-minute sessions a week. All courses in this sequence must be taken for a letter grade.

CHIN 20800. Elementary Literary Chinese I. 100 Units.
Must be taken for a letter grade. This course introduces the basic grammar of the written Chinese language from the time of the Confucian Analects to the literary movements at the beginning of the twentieth century. Students will read original texts of genres that include philosophy, memorials, and historical narratives. Spring Quarter is devoted exclusively to reading poetry.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): CHIN 20300, or placement, or consent of instructor

CHIN 20900. Elementary Literary Chinese II. 100 Units.
Must be taken for a letter grade. This sequence introduces the basic grammar of the written Chinese language from the time of the Confucian Analects to the literary movements at the beginning of the twentieth century. Students will read original texts of genres that include philosophy, memorials, and historical narratives. Spring Quarter is devoted exclusively to reading poetry.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): CHIN 20800, or placement, or consent of instructor
Equivalent Course(s): CHIN 30900
CHIN 21000. Elementary Literary Chinese III. 100 Units.
Must be taken for a letter grade. This course introduces students to the basic grammar of the written Chinese language from the time of the Confucian Analects of the literary movements at the beginning of the twentieth century. Students read original texts of various genres including philosophy, memorials, poetry, and historical narratives; and third quarter is devoted solely to reading poetry.
Instructor(s): D. Harper
Terms Offered: TBD
Prerequisite(s): CHIN 20900, or placement, or consent of instructor

CHIN 20900. Elementary Literary Chinese II. 100 Units.
Must be taken for a letter grade. This sequence introduces the basic grammar of the written Chinese language from the time of the Confucian Analects to the literary movements at the beginning of the twentieth century. Students will read original texts of genres that include philosophy, memorials, and historical narratives. Spring Quarter is devoted exclusively to reading poetry.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): CHIN 20800, or placement, or consent of instructor
Equivalent Course(s): CHIN 30900

CHIN 21000. Elementary Literary Chinese III. 100 Units.
Must be taken for a letter grade. This course introduces students to the basic grammar of the written Chinese language from the time of the Confucian Analects of the literary movements at the beginning of the twentieth century. Students read original texts of various genres including philosophy, memorials, poetry, and historical narratives; and third quarter is devoted solely to reading poetry.
Instructor(s): D. Harper
Terms Offered: TBD
Prerequisite(s): CHIN 20900, or placement, or consent of instructor

CHIN 22110. Second-Year Chinese for Bilingual Speakers I. 100 Units.
This three-quarter sequence is intended for bilingual/heritage speakers of Mandarin Chinese. Paralleled with the Intermediate sequence for non-heritage speakers, the goal of this sequence is to further develop students' reading, speaking, and writing skills by dealing with topics in personal settings and some academic or professional settings. Upon completing this sequence, students are expected to pass the Practical Proficiency Test to earn a certificate on their transcript. The class meets for three one-hour sessions a week. PQ: Chin 11300 or placement of 20100. Students must take a quality grade. No auditors permitted.
Instructor(s): Meng Li
Terms Offered: Autumn
Prerequisite(s): PQ: Chin 11300 or placement of 20100. Students must take a quality grade. No auditors.

CHIN 23110. Third-Year Chinese for Bilingual Speakers I. 100 Units.
This three-quarter series are intended for bilingual speakers of Chinese who already have intermediate level ability to understand and speak mandarin Chinese in daily communication, although they may have some accent or some difficulty using the language in formal settings. While all the communicative skills of listening, speaking, reading, and writing will be trained in CHIN23100, the emphasis will be on standard Mandarin pronunciation, discourse level discussion on topics about modern China, and advanced reading and writing. The class meets for three one-hour sessions a week.
Instructor(s): S. Xiang
Terms Offered: Autumn
Prerequisite(s): CHIN 22130 Second-Year Chinese for Bilingual Speakers-3 or placement exam

CHIN 30200. Advanced Modern Chinese-2. 100 Units.
The goal of this sequence is to help students develop advanced proficiency in reading, listening, speaking, and writing. This sequence emphasizes more advanced grammatical structures, and requires discussion in Chinese on topics relevant to modern China. Over the course of this sequence, the emphasis will shift to authentic Chinese texts in an effort to better prepare students to deal with orginal Chinese source materials. Class meets for five one-hour sessions each week.
Equivalent Course(s): CHIN 20402

CHIN 31100-31200-31300. Business Chinese I-II-III.
This three-quarter sequence aims at improving overall language skills and introduces business terminology. Students learn about companies and their services and/or products, the stock market, real estate market, insurance, and e-commerce. The class meets for three ninety-minute sessions a week.

CHIN 31100. Business Chinese I. 100 Units.
Part one of this three-quarter sequence aims at improving overall language skills and introduces business terminology. Students will learn about companies and their services and/or products, the stock market, real estate market, insurance, and e-commerce. Class meets for five one-hour sessions each week.
Terms Offered: Autumn
Prerequisite(s): CHIN 20300, or placement, or consent of instructor
Equivalent Course(s): CHIN 20701

CHIN 31200. Business Chinese II. 100 Units.
Terms Offered: Winter
Prerequisite(s): CHIN 20701, or CHIN 31100, or placement, or consent of instructor
Equivalent Course(s): CHIN 20702
CHIN 31300. Business Chinese III. 100 Units.
Terms Offered: Spring
Prerequisite(s): CHIN 20702, or CHIN 31200, or placement, or consent of instructor
Equivalent Course(s): CHIN 20703

CHIN 31200. Business Chinese II. 100 Units.
Terms Offered: Winter
Prerequisite(s): CHIN 20701, or CHIN 31100, or placement, or consent of instructor
Equivalent Course(s): CHIN 20702

CHIN 31300. Business Chinese III. 100 Units.
Terms Offered: Spring
Prerequisite(s): CHIN 20702, or CHIN 31200, or placement, or consent of instructor
Equivalent Course(s): CHIN 20703

JAPANESE (JAPN) COURSES

JAPN 10100-10200-10300. Elementary Modern Japanese I-II-III.
This is the first year of a three-year program, which is intended to provide students with a thorough grounding in modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading, and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute sessions a week. All courses in this sequence must be taken for a quality grade. No auditors permitted.

JAPN 10100. Elementary Modern Japanese-1. 100 Units.
This is the first year of a three-year program, which is intended to provide students with a thorough grounding in modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading, and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute sessions a week. All courses in this sequence must be taken for a quality grade. No auditors permitted.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Placement, or consent of instructor

JAPN 10200. Elementary Modern Japanese II. 100 Units.
Must be taken for a letter grade. No auditors permitted. This is the first year of a three-year program designed to provide students with a thorough grounding in Modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): JAPN 10100, or placement, or consent of instructor

JAPN 10300. Elementary Modern Japanese-III. 100 Units.
This is the first year of a three-year program designed to provide students with a thorough grounding in Modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 10200, or placement, or consent of instructor

JAPN 10200. Elementary Modern Japanese II. 100 Units.
Must be taken for a letter grade. No auditors permitted. This is the first year of a three-year program designed to provide students with a thorough grounding in Modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): JAPN 10100, or placement, or consent of instructor

JAPN 10300. Elementary Modern Japanese-III. 100 Units.
This is the first year of a three-year program designed to provide students with a thorough grounding in Modern Japanese. Grammar, idiomatic expressions, and vocabulary are learned through oral work, reading, and writing in and out of class. Daily practice in speaking, listening, reading and writing is crucial. Students should plan to continue their language study through at least the second-year level to make their skills practical. The class meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 10200, or placement, or consent of instructor
JAPN 20100-20200-20300. Intermediate Modern Japanese I-II-III.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing in
the latter half. Classes conducted mostly in Japanese. The class meets for five fifty-minute sessions a week. All
courses in this sequence must be taken for a quality grade. No auditors permitted.

JAPN 20100. Intermediate Modern Japanese I. 100 Units.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing
in the latter half. The course is conducted mostly in Japanese and meets for five fifty-minute periods a week.
Must be taken for a letter grade. No auditors permitted.
Terms Offered: Autumn
Prerequisite(s): JAPN 10300, or placement, or consent of instructor

JAPN 20200. Intermediate Modern Japanese II. 100 Units.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing
in the latter half. The course is conducted mostly in Japanese and meets for five fifty-minute periods a week.
Terms Offered: Winter
Prerequisite(s): JAPN 20100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade.

JAPN 20300. Intermediate Modern Japanese III. 100 Units.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing
in the latter half. The course is conducted mostly in Japanese and meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 20200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

JAPN 20200. Intermediate Modern Japanese II. 100 Units.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing in
the latter half. The course is conducted mostly in Japanese and meets for five fifty-minute periods a week.
Terms Offered: Winter
Prerequisite(s): JAPN 20100, or placement, or consent of instructor
Note(s): Must be taken for a letter grade.

JAPN 20300. Intermediate Modern Japanese III. 100 Units.
The emphasis on spoken language in the first half of the course gradually shifts toward reading and writing in
the latter half. The course is conducted mostly in Japanese and meets for five fifty-minute periods a week.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 20200, or placement, or consent of instructor
Note(s): Must be taken for a letter grade. No auditors permitted.

JAPN 20401-20402-20403. Advanced Modern Japanese I-II-III.
The third year marks the end of the basic modern language study. Our goal is to help students learn to
understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials
with some study aids. Classes conducted in Japanese. The class meets for three eighty-minute sessions a week.
All courses in this sequence must be taken for a quality grade.

JAPN 20401. Advanced Modern Japanese-1. 100 Units.
The third year marks the end of the basic modern language study. Our goal is to help students learn to
understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials
with some study aids. Classes conducted in Japanese. The class meets for three eighty-minute sessions a week.
All courses in this sequence must be taken for a quality grade.
Terms Offered: Autumn
Prerequisite(s): JAPN 20300, or placement, or consent of instructor
Equivalent Course(s): JAPN 30100

JAPN 20402. Advanced Modern Japanese II. 100 Units.
The third year marks the end of the basic modern language study. Our goal is to help students learn to
understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials
with some study aids. Classes conducted in Japanese. The class meets for three eighty-minute sessions a week.
All courses in this sequence must be taken for a quality grade.
Terms Offered: Winter
Prerequisite(s): JAPN 20401, or JAPN 30100, or placement, or consent of instructor
Equivalent Course(s): JAPN 30200
JAPN 20403. Advanced Modern Japanese III. 100 Units.
The third year marks the end of the basic modern language study. The purpose of the course is to help students learn to understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials with some study aids. All work in Japanese. The class meets for three eighty-minute periods a week.
Terms Offered: Spring
Prerequisite(s): JAPN 20402, or JAPN 30200, or placement, or consent of instructor
Equivalent Course(s): JAPN 30300

JAPN 20402. Advanced Modern Japanese II. 100 Units.
The third year marks the end of the basic modern language study. Our goal is to help students learn to understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials with some study aids. Classes conducted in Japanese. The class meets for three eighty-minute sessions a week.
All courses in this sequence must be taken for a quality grade.
Terms Offered: Winter
Prerequisite(s): JAPN 20401, or JAPN 30100, or placement, or consent of instructor
Equivalent Course(s): JAPN 30200

JAPN 20403. Advanced Modern Japanese III. 100 Units.
The third year marks the end of the basic modern language study. The purpose of the course is to help students learn to understand authentic written and spoken materials with reasonable ease. The texts are all authentic materials with some study aids. All work in Japanese. The class meets for three eighty-minute periods a week.
Terms Offered: Spring
Prerequisite(s): JAPN 20402, or JAPN 30200, or placement, or consent of instructor
Equivalent Course(s): JAPN 30300

JAPN 20600. 4th Year Modern Japanese-2. 100 Units.
Open to both undergraduates and graduates. This course is designed to improve Japanese reading, speaking, writing and listening ability to the advanced high level as measured by the ACTFL (American Council on the Teaching of Foreign Languages) Proficiency Guidelines. Weekly assignments will require students to tackle modern Japanese texts of varying length and difficulty. Organized around a range of thought-provoking themes (from brain death and organ transplants to Japanese values on work and religion), reading assignments will include academic theses in psychology and anthropology, literary texts, and popular journalism. After completing the readings, students will be encouraged to discuss each topic in class. Videos/DVDs will be used to improve listening comprehension skills. There will also be writing assignments.
Terms Offered: Winter
Prerequisite(s): JAPN 20500, or JAPN 40500, or placement, or consent of instructor
Equivalent Course(s): JAPN 40600

JAPN 21200-21300. Intermediate Modern Japanese through Japanimation I-II.
This sequence focuses on learning spoken Japanese that is aimed at native speakers. Our goals are to get students accustomed to that sort of authentic Japanese and to enable them to speak with high fluency. To keep the balance, writing and reading materials are provided. Students are encouraged to watch videos and practice their speaking.

JAPN 21200. Intermediate Modern Japanese Through Japanimation I. 100 Units.
This course focuses on learning spoken Japanese that is aimed at native speakers. The goals are getting accustomed to that sort of authentic Japanese and being able to speak with a high degree of fluency. To keep a balance, writing and reading materials are provided. Watching videos and practicing speaking are the keys to success in this course.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): JAPN 20100, or placement, or consent of instructor

JAPN 21300. Intermediate Modern Japanese through Japanimation II. 100 Units.
This course focuses on learning spoken Japanese that is aimed at native speakers. The goals are getting accustomed to that sort of authentic Japanese and being able to speak with a high degree of fluency. To keep a balance, writing and reading materials are provided. Watching videos and practicing speaking are the keys to success in this course.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 21200, or placement, or consent of instructor

JAPN 21300. Intermediate Modern Japanese through Japanimation II. 100 Units.
This course focuses on learning spoken Japanese that is aimed at native speakers. The goals are getting accustomed to that sort of authentic Japanese and being able to speak with a high degree of fluency. To keep a balance, writing and reading materials are provided. Watching videos and practicing speaking are the keys to success in this course.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): JAPN 21200, or placement, or consent of instructor
JAPN 24900. Pre-Modern Japanese: Kindai Bungo I. 100 Units.
This course focuses on the reading of scholarly Japanese materials with the goal of enabling students to do independent research in Japanese after the course's completion. Readings are from historical materials written in the eighteenth and nineteenth centuries.
Terms Offered: Autumn
Prerequisite(s): JAPN 20300 or equivalent, or consent of instructor.
Equivalent Course(s): JAPN 34900

KOREAN (KORE) COURSES

KORE 10100-10200-10300. Introduction to the Korean Language I-II-III.
This introductory sequence is designed to provide a basic foundation in modern Korean language and culture by focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Students in KORE 10100 begin by learning the complete Korean writing system (Hangul), which is followed by lessons focusing on basic conversational skills and grammatical structures. To provide sufficient opportunities to apply what has been learned in class, there are small group drill sessions, weekly Korean television drama screenings, and a number of other cultural activities (e.g., Korean New Year’s game competitions). The class meets for five fifty-minute sessions a week. All courses in this sequence must be taken for a quality grade.

KORE 10100. Introduction to the Korean Language I. 100 Units.
This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities. Must be taken for a letter grade.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): Placement, or consent of instructor

KORE 10200. Introduction to the Korean Language II. 100 Units.
Must be taken for a letter grade. This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): KORE 10100, or placement, or consent of instructor

KORE 10300. Introduction to the Korean Language III. 100 Units.
Must be taken for a letter grade. This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): KORE 10200, or placement, or consent of instructor

KORE 10100. Introduction to the Korean Language I. 100 Units.
This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities. Must be taken for a letter grade.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): Placement, or consent of instructor

KORE 10200. Introduction to the Korean Language II. 100 Units.
Must be taken for a letter grade. This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): KORE 10100, or placement, or consent of instructor

KORE 10300. Introduction to the Korean Language III. 100 Units.
Must be taken for a letter grade. This introductory course is designed to provide beginners with a solid foundation in modern Korean focusing on the balanced development of the four basic language skills of speaking, listening comprehension, reading, and writing. Along with basic conversational and grammatical patterns, the course introduces students to Korean culture through various channels such as Korean movies, music, and a number of other cultural activities.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): KORE 10200, or placement, or consent of instructor
KORE 20100-20200-20300. Intermediate Korean I-II-III.
As a continuation of KORE 10100-10200-10300, this sequence is intended to continue to build on students' language skills with an emphasis on enhancing the speaking ability, presentational skills, composition writing skills, and usage of more complex constructions. Approximately 150 Chinese characters are introduced for the achievement of basic literacy and vocabulary expansion. The curriculum also includes media, authentic reading materials, and weekly Korean language table meetings to maximize cultural exposure and opportunities to apply Korean language skills in real life situations. The class meets for five fifty-minute sessions a week. All courses in this sequence must be taken for a quality grade.

KORE 20100. Intermediate Korean I. 100 Units.
As a continuation of KORE 10100-10200-10300, this sequence is intended to continue to build on students' language skills with an emphasis on enhancing the speaking ability, presentational skills, composition writing skills, and usage of more complex constructions. Approximately 150 Chinese characters are introduced for the achievement of basic literacy and vocabulary expansion. The curriculum also includes media, authentic reading materials, and weekly Korean language table meetings to maximize cultural exposure and opportunities to apply Korean language skills in real life situations. The class meets for five fifty-minute sessions a week. All courses in this sequence must be taken for a quality grade.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): KORE 10300, or placement, or consent of instructor

KORE 20200. Intermediate Korean-2. 100 Units.
As a continuation of Beginning Korean, this course is to help students increase their communication skills (both oral and written) in the Korean language. Through an integrated framework of listening, speaking, reading, and writing, this course aims to increase fluency and accuracy in Korean. Videotapes and additional reading materials will be used in a supplementary fashion and approximately 100 Chinese characters will be introduced for the achievement of basic literacy. Classes are conducted mostly in Korean and meet for fifty-minute periods five times a week. Must be taken for a letter grade.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): KORE 20100, or placement, or consent of instructor

KORE 20300. Intermediate Korean III. 100 Units.
As a continuation of Beginning Korean, this course is to help students increase their communication skills (both oral and written) in the Korean language. Through an integrated framework of listening, speaking, reading, and writing, this course aims to increase fluency and accuracy in Korean. Videotapes and additional reading materials will be used in a supplementary fashion and approximately 100 Chinese characters will be introduced for the achievement of basic literacy. Classes are conducted mostly in Korean and meet for fifty-minute periods five times a week. Must be taken for a letter grade.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): KORE 20200, or placement, or consent of instructor

KORE 20401-20402-20403. Advanced Korean I-II-III.
This sequence introduces a wide selection of authentic reading materials from Korean newspaper articles, college-level textbooks, and literary prose as an entry point to discuss topics and issues in Korean society, culture, and history. The primary objective is further enhancement of advanced reading comprehension, composition writing, and presentational skills. In addition, Chinese character (Hanja) lessons are incorporated into each lesson with the purpose of expanding vocabulary to the advanced level. The class meets for two eighty-minute sessions a week. All courses in this sequence must be taken for a quality grade.
KORE 20401. Advanced Korean I. 100 Units.
This sequence introduces a wide selection of authentic reading materials from Korean newspaper articles, college-level textbooks, and literary prose as an entry point to discuss topics and issues in Korean society, culture, and history. The primary objective is further enhancement of advanced reading comprehension, composition, writing, and presentational skills. In addition, Chinese character (Hanja) lessons are incorporated into each lesson with the purpose of expanding vocabulary to the advanced level. The class meets for two eighty-minute sessions a week. All courses in this sequence must be taken for a quality grade.
Terms Offered: Autumn
Prerequisite(s): KORE 20300, or placement, or consent of instructor
Equivalent Course(s): KORE 30100

KORE 20402. Advanced Korean-2. 100 Units.
For graduates and advanced undergraduates. Must be taken for a letter grade. This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Winter
Prerequisite(s): KORE 20401, or KORE 30100, or placement, or consent of instructor
Equivalent Course(s): KORE 30200

KORE 20403. Advanced Korean-3. 100 Units.
This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Spring
Prerequisite(s): KORE 20402, or KORE 30400, or placement, or consent of instructor
Equivalent Course(s): KORE 30300

KORE 20402. Advanced Korean-2. 100 Units.
For graduates and advanced undergraduates. Must be taken for a letter grade. This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Winter
Prerequisite(s): KORE 20401, or KORE 30100, or placement, or consent of instructor
Equivalent Course(s): KORE 30200

KORE 20403. Advanced Korean-3. 100 Units.
This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Spring
Prerequisite(s): KORE 20402, or KORE 30400, or placement, or consent of instructor
Equivalent Course(s): KORE 30300

KORE 20402. Advanced Korean-2. 100 Units.
For graduates and advanced undergraduates. Must be taken for a letter grade. This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Winter
Prerequisite(s): KORE 20401, or KORE 30100, or placement, or consent of instructor
Equivalent Course(s): KORE 30200

KORE 20403. Advanced Korean-3. 100 Units.
This course introduces readings from a wide selection of written styles including journalistic pieces, college-level textbooks and literary prose. The class focuses on exercises in reading comprehension and discussions on various topics/issues related to contemporary Korea. Some audio and videotapes (e.g., televised news programs, movies, and dramas) will be used in order to improve the students' capacity in advanced Korean. Classes are conducted in Korean and meet for eighty-minute periods two times a week.
Terms Offered: Spring
Prerequisite(s): KORE 20402, or KORE 30400, or placement, or consent of instructor
Equivalent Course(s): KORE 30300

KORE 21100-21200-21300. Fourth-Year Modern Korean I-II-III.
Fourth-Year Modern Korean I-II-III
KORE 21100. Fourth Year Korean I. 100 Units.
The first in a series of three consecutive courses focuses on improving speaking, listening, reading, and writing skills to high-advanced level. Through intensive readings and discussions, students will build extensive vocabulary and complex grammatical structures as well as developing sophisticated speaking skills and academic writing skills. The materials introduced in this class include newspaper articles dealing with current social, cultural, or economic issues in Korea, literary works such as poems and novels, and authentic media such as TV documentaries or movies.
Equivalent Course(s): KORE 41100
KORE 21200. Fourth-Year Modern Korean II. 100 Units.
The second of three consecutive courses focuses on improving speaking, listening, reading, and writing skills to high-advanced level. Through intensive readings and discussions, students will build extensive vocabulary and complex grammatical structures as well as developing sophisticated speaking skills and academic writing skills. The materials introduced in this class include newspaper articles dealing with current social, cultural, or economic issues in Korea, literary works such as poems and novels, and authentic media such as TV documentaries or movies.
Equivalent Course(s): KORE 41200

KORE 21300. Fourth-Year Modern Korean III. 100 Units.
The third of three consecutive courses focuses on improving speaking, listening, reading, and writing skills to high-advanced level. Through intensive readings and discussions, students will build extensive vocabulary and complex grammatical structures as well as developing sophisticated speaking skills and academic writing skills. The materials introduced in this class include newspaper articles dealing with current social, cultural, or economic issues in Korea, literary works such as poems and novels, and authentic media such as TV documentaries or movies.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): KORE 41200 or consent
Note(s): Must be taken for a letter grade. No auditors.
ECONOMICS

Department Website: http://economics.uchicago.edu

PROGRAM OF STUDY

The program in economics is intended to equip students with the basic tools to understand the operation of a modern economy: the origin and role of prices and markets, the allocation of goods and services, and the factors that enter into the determination of income, employment, and the price level. The specialization in data science provides training in computation and data analysis beyond the basic methods discussed in the empirical methods sequence. The specialization in business economics is organized around the fundamental economic theory and empirical methods that students interested in pursuing careers in the private sector, the non-profit sector, and the public sector (among others) will find useful in carrying out their day-to-day tasks.

BA IN ECONOMICS, TRACKS A AND B

The program in economics can be divided into five component parts:

1. **Fundamentals**: provides students with the basic skills required to be successful in the major.
2. **Core curriculum**: consists of three courses designed to introduce students to the “economic approach.”
3. **Empirical Methods sequence**: provides students with the fundamental techniques of data analysis.
4. **Economic Policy course**: applies the tools developed in the core curriculum to issues of fiscal policy, monetary policy, and other policy discussions relevant to the current state of the economy.
5. **Electives**: allows students to tailor the economics major to their interests.

*Note: The requirements described below apply to students who matriculated at the University of Chicago in the 2016–17 academic year or later. Any possible exceptions will be noted.*

PROGRAM REQUIREMENTS, TRACKS A AND B

**Fundamentals**

Students must begin the economics major by demonstrating competence in basic calculus and principles of economics. The fundamentals sequence consists of the following courses. The first two are required; the second two are strongly recommended:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III</td>
<td>100</td>
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<tr>
<td>or MATH 15300</td>
<td>Calculus III</td>
<td></td>
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<tr>
<td>or MATH 16300</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 19520</td>
<td>Mathematical Methods for Social Sciences</td>
<td>100</td>
</tr>
<tr>
<td>or MATH 20400</td>
<td>Analysis in Rn II</td>
<td></td>
</tr>
<tr>
<td>or MATH 20800</td>
<td>Honors Analysis in Rn II</td>
<td></td>
</tr>
<tr>
<td>ECON 10000</td>
<td>Principles of Microeconomics</td>
<td>100</td>
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<tr>
<td>or ECON 19800</td>
<td>Introduction to Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 10200</td>
<td>Principles of Macroeconomics</td>
<td>100</td>
</tr>
<tr>
<td>or ECON 19900</td>
<td>Intro To Macroeconomics</td>
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</tbody>
</table>

Students who wish to complete the major with more rigorous mathematics may substitute MATH 20400 Analysis in Rn II for MATH 19520 Mathematical Methods for Social Sciences.

**Calculus**

Students who have an interest in the major should take calculus at the highest level for which they qualify. Students may complete MATH 19520 Mathematical Methods for Social Sciences prior to or concurrently with ECON 20000 The Elements of Economic Analysis I. Students must not postpone completion of MATH 19520 Mathematical Methods for Social Sciences beyond concurrent registration with ECON 20000 The Elements of Economic Analysis I.

1. **MATH 13000s**: Students must complete MATH 13300 Elementary Functions and Calculus III prior to enrolling in ECON 20000 The Elements of Economic Analysis I. Students may find it useful to complete MATH 19520 Mathematical Methods for Social Sciences prior to enrolling in the Elements of Economic Analysis sequence.

2. **MATH 15000s**: Students enrolling in the MATH 15000s sequence must complete MATH 15300 Calculus III before enrolling in ECON 20000 The Elements of Economic Analysis I.

3. **MATH 16000s and 16010s**: Students enrolling in the MATH 16000s sequences must complete MATH 16200 Honors Calculus II or MATH 16210 Honors Calculus II (IBL) before enrolling in ECON 20000 The Elements of Economic Analysis I. Enrollment in ECON 20000 The Elements of Economic Analysis I.
requires completion or concurrent enrollment in MATH 16300 Honors Calculus III/MATH 16310 Honors Calculus III (IBL) and demonstrated competency in Microeconomics (see Core Curriculum for details).

Students may satisfy the third quarter of calculus requirement by placement (based on the Higher-Level Math Test administered by the College prior to Orientation). In this case, students should continue their mathematics training with the highest mathematics level for which they qualify.

**Principles of Economics**

Students are expected to begin their study of economics with ECON 10000 Principles of Microeconomics (formerly ECON 19800 Introduction to Microeconomics) and ECON 10200 Principles of Macroeconomics (formerly ECON 19900 Intro To Macroeconomics). These courses provide a good overview of basic concepts. These two introductory courses are designed for students with limited or no prior course work in economics. While these two courses provide basic economics knowledge, they are not required in the major. Students who matriculated at the University of Chicago in 2016–17 or later may use ECON 19900 Intro To Macroeconomics to fulfill one of the economics elective requirements.

Students may not receive credit for both ECON 10000 Principles of Microeconomics and ECON 19800 Introduction to Microeconomics; and for both ECON 10200 Principles of Macroeconomics and ECON 19900 Intro To Macroeconomics.

Students are strongly encouraged to complete ECON 10200 Principles of Macroeconomics or ECON 19800 Introduction to Microeconomics prior to ECON 20000 The Elements of Economic Analysis I (or ECON 20100 The Elements of Economic Analysis I Honors) and ECON 10200 Principles of Macroeconomics or ECON 19900 Intro To Macroeconomics prior to ECON 20200 The Elements of Economic Analysis III (or ECON 20210 The Elements of Economic Analysis III Honors).

**Core Curriculum**

The core curriculum consists of three courses. Students may use the standard or honors sequence to satisfy this requirement. The honors sequence is designed for students interested in economics research and/or use of more sophisticated mathematical models.

<table>
<thead>
<tr>
<th>Standard Core Sequence</th>
<th>300</th>
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<tbody>
<tr>
<td>ECON 20000 The Elements of Economic Analysis I</td>
<td></td>
</tr>
<tr>
<td>ECON 20100 The Elements of Economic Analysis II</td>
<td></td>
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<tr>
<td>ECON 20200 The Elements of Economic Analysis III</td>
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<table>
<thead>
<tr>
<th>or Honors Core Sequence</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 20010 The Elements of Economic Analysis I Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 20110 The Elements of Economic Analysis II Honors</td>
<td></td>
</tr>
<tr>
<td>ECON 20210 The Elements of Economic Analysis III Honors</td>
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</tbody>
</table>

Most students begin the core curriculum in their second year. Those who wish to begin it during their first year must demonstrate competence with the fundamental skills needed in that sequence in the following ways:

- Students must either pass the economics placement test or complete ECON 10000 Principles of Microeconomics/ECON 19800 Introduction to Microeconomics prior to starting ECON 20000 The Elements of Economic Analysis I (or ECON 20100 The Elements of Economic Analysis I Honors) and ECON 10200 Principles of Macroeconomics or ECON 19900 Intro To Macroeconomics prior to ECON 20200 The Elements of Economic Analysis III (or ECON 20210 The Elements of Economic Analysis III Honors). No standardized external exams (IB, AP, nor A-Levels) will substitute, and they rarely serve as sufficient preparation for the economics placement test. Note that the placement test will only be offered Monday evening of the first week of Autumn Quarter.

- Students must satisfy the calculus requirement as discussed in Calculus.

**Empirical Methods**

In the modern economy, quantitative methods are highly valued skills. Students must satisfy the empirical methods component of the economics major in one of two ways, either as a three-quarter sequence or a two-quarter sequence. **Note:** The two-quarter sequence is only available to students who matriculated in 2016–17 or later. Those who matriculated in 2015–16 or earlier are required to take the standard three-quarter sequence.

**Option A** The three-quarter empirical methods sequence is comprised of a course in linear algebra, a course in statistics, and a course in econometrics, and is designed for students who complete the MATH 15000s sequence or higher. This three-quarter empirical methods sequence covers the broad ranges of scope that the disciplines provide, which will be useful for further quantitative training in the major.

**Option B** The two-quarter empirical sequence, comprised of an economics statistical methods course and a course in econometrics, is provided as an alternative for students who want to focus only on the relevant
materials in linear algebra and statistics that pertain to econometrics. ECON 21010 Statistical Methods in Economics teaches the fundamental methods and materials from linear algebra and statistics that are utilized in many economic applications.

Details about each sequence are below. We strongly encourage students to choose the highest mathematical tracks for which they are qualified. Students unsure of which sequence to choose should consult with the Undergraduate Office in the Department of Economics as well as the Department of Mathematics and Department of Statistics.

**Option A: Three-Quarter Empirical Methods Sequence**

In order to satisfy the empirical methods component of the economics major using a three-quarter sequence, students must complete the following courses. They must be taken in consecutive quarters, beginning with Linear Algebra and concluding with Econometrics:

<table>
<thead>
<tr>
<th>One of the following:</th>
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</thead>
<tbody>
<tr>
<td>MATH 19620 Linear Algebra</td>
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<tr>
<td>or STAT 24300 Numerical Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>or MATH 20250 Abstract Linear Algebra</td>
<td></td>
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<tr>
<td>or MATH 20700 Honors Analysis in Rn I</td>
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</table>

<table>
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<tr>
<th>One of the following:</th>
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<tbody>
<tr>
<td>STAT 23400 Statistical Models and Methods</td>
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<tr>
<td>or STAT 24400 Statistical Theory and Methods I</td>
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<tr>
<td>or STAT 24410 Statistical Theory and Methods Ia</td>
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<table>
<thead>
<tr>
<th>One of the following:</th>
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</thead>
<tbody>
<tr>
<td>ECON 21020 Econometrics</td>
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<tr>
<td>or ECON 21030 Econometrics - Honors</td>
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</tbody>
</table>

Total Units 300

Students may not use AP Statistics credit to satisfy the statistics requirement. Students with AP credit will need to expand on their training with STAT 23400 Statistical Models and Methods, STAT 24400 Statistical Theory and Methods I, or STAT 24410 Statistical Theory and Methods Ia. Students may not earn credit for both STAT 22000 Statistical Methods and Applications (via course enrollment or AP exam) and STAT 23400 Statistical Models and Methods.

Students who wish to pursue more advanced training in empirical methods may complete STAT 24300 Numerical Linear Algebra or MATH 20250 Abstract Linear Algebra or MATH 20700 Honors Analysis in Rn I; either STAT 24400 Statistical Theory and Methods I or STAT 24410 Statistical Theory and Methods Ia; and ECON 21030 Econometrics - Honors.

**Option B: Two-Quarter Empirical Methods Sequence**

Option B is available only to students who matriculated at the University of Chicago in 2016–17 and later. In order to satisfy the empirical methods component of the economics major using a two-quarter sequence, students must complete the following:

<table>
<thead>
<tr>
<th>ECON 21010 Statistical Methods in Economics</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 21020 Econometrics</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Units 200

Students should not begin the empirical methods sequence earlier than concurrently with ECON 20100 The Elements of Economic Analysis II and should take ECON 21010 Statistical Methods in Economics and ECON 21020 Econometrics in consecutive quarters. Students must complete the empirical methods sequence by the end of third year.

Students with credit for both MATH 19620 Linear Algebra and STAT 23400 Statistical Models and Methods (or more advanced equivalents) may not also earn credit for ECON 21010 Statistical Methods in Economics.

Students who complete the empirical methods component of the major with just two courses (ECON 21010 Statistical Methods in Economics and ECON 21020 Econometrics) must complete an additional economics elective, as discussed in Electives.

**Economic Policy**

The economic policy requirement provides students the opportunity to apply methods and tools taught in the economics core sequence to analyze current issues centered around monetary and fiscal policy. Most students will complete the economic policy requirement with ECON 23950 Economic Policy Analysis, but students
interested in learning more formal approaches may use one of the other macroeconomics courses listed below to satisfy the requirement.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 23950</td>
<td>Economic Policy Analysis</td>
</tr>
<tr>
<td>or ECON 23200</td>
<td>Topics in Macroeconomics</td>
</tr>
<tr>
<td>or ECON 23220</td>
<td>Introduction to Advanced Macroeconomic Analysis</td>
</tr>
<tr>
<td>or ECON 23330</td>
<td>Introduction to Dynamic Economic Modeling</td>
</tr>
</tbody>
</table>

Students who complete more than one of the above courses may apply the additional courses to satisfy the economics elective requirements. ECON 23950 Economic Policy Analysis may not count as an economics elective. Students may not earn credit for both ECON 23950 Economic Policy Analysis and ECON 20300 Elements of Economic Analysis IV.

Note: Students on track to complete ECON 20300 Elements of Economic Analysis IV after Autumn Quarter 2017 should take ECON 23950 Economic Policy Analysis in place of ECON 20300, regardless of matriculation date.

Electives

All students in the economics major must complete a minimum of four additional economics courses to broaden their exposure to areas of applied economics or economic theory. Students who complete the empirical methods component with the two-quarter sequence must complete five economics electives. These courses must have a higher course number than ECON 20200 The Elements of Economic Analysis III, with a couple of exceptions: Neither ECON 21010 Statistical Methods in Economics nor ECON 21300 Econometrics - Honors nor ECON 23950 Economic Policy Analysis can be used to satisfy the economics elective requirements; students who matriculated in 2016–17 or later may use ECON 10200 Principles of Macroeconomics OR ECON 19900 Intro To Macroeconomics to satisfy one of the economics elective requirements.

Students may use one course (pre-approved or approved by petition) outside of the University of Chicago Department of Economics to satisfy their elective requirements. Students may apply only one of the following two exceptions to this rule:

Exception (A): Students who participate in a College-sponsored Study Abroad program may petition to count an additional outside course completed at the host institution to satisfy elective requirements of the major.

Exception (B): Students may count an additional outside course to satisfy elective requirements of the major as long as it is drawn from the list of the pre-approved electives.

These rules imply that at most two courses completed outside the University of Chicago Department of Economics may be used to satisfy the elective requirements of the major. For example, if a student completes two courses as part of a College-sponsored Study Abroad program, then the student has fulfilled the outside electives two-course maximum and must complete the remaining elective requirements in the Department of Economics.

The following are pre-approved outside electives:

**Computer Science (only one may be used)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMSC 10600</td>
<td>Fundamentals Of Programming-2</td>
</tr>
<tr>
<td>or CMSC 12100</td>
<td>Computer Science with Applications I</td>
</tr>
<tr>
<td>or CMSC 15100</td>
<td>Intro To Computer Science-1</td>
</tr>
<tr>
<td>or CMSC 16100</td>
<td>Honors Introduction to Computer Science I</td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 24500</td>
<td>Statistical Theory and Methods II</td>
</tr>
<tr>
<td>STAT 25100</td>
<td>Introduction to Mathematical Probability</td>
</tr>
<tr>
<td>STAT 25300</td>
<td>Introduction to Probability Models</td>
</tr>
<tr>
<td>STAT 26100</td>
<td>Time Dependent Data</td>
</tr>
</tbody>
</table>

**Mathematics**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 20500</td>
<td>Analysis in Rn III</td>
</tr>
<tr>
<td>MATH 20900</td>
<td>Honors Analysis in Rn III</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
</tr>
</tbody>
</table>

**University of Chicago Booth School of Business**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BUSN 20410</td>
<td>Corporation Finance</td>
</tr>
<tr>
<td>BUSF 37105</td>
<td>Data Science for Marketing</td>
</tr>
<tr>
<td>BUSF 38120</td>
<td>Behavioral Economics</td>
</tr>
<tr>
<td>BUSF 41201</td>
<td>Big Data</td>
</tr>
<tr>
<td>BUSF 41203</td>
<td>Financial Econometrics</td>
</tr>
</tbody>
</table>
Economics

BUS 41204 Machine Learning
BUS 42001 Competitive Strategy

* BUSN 20000-level (undergraduate-only) versions of these courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth’s academic and administrative policies. Consult the Booth website (https://www.chicagobooth.edu/programs/taking-courses-at-booth) for details.

Courses in other degree programs may be considered for elective credit through petition. To be considered, these courses must require the equivalent prerequisite course work of ECON 20100 The Elements of Economic Analysis II. Graduate level economics courses will be counted for elective credit, but consultation with the Undergraduate Office in advance of course registration is required.

Summary of Requirements

For summaries of requirements for the BA in economics (Tracks A and B), see below.

SAMPLE PROGRAMS FOR TRACKS A AND B

The following is a recommended sample plan of study (excluding four elective courses) for those students entering with the MATH 13000s sequence:

First Year
Autumn Quarter
MATH 13100
Winter Quarter
MATH 13200
Spring Quarter
MATH 13300
ECON 10000

Second Year
Autumn Quarter
ECON 20000
Winter Quarter
ECON 20100
Spring Quarter
ECON 20200
ECON 10200
MATH 19520

Third Year
Autumn Quarter
ECON 23950
Winter Quarter
STAT 23400
Spring Quarter
ECON 21020
MATH 19620

The following is a recommended plan of study (excluding four economics elective courses) for those students entering with the MATH 15000s or MATH 16000s sequence:

First Year
Autumn Quarter
MATH 15100
Winter Quarter
MATH 15200
Spring Quarter
MATH 15300
ECON 10000

Second Year
Autumn Quarter
ECON 20000
Winter Quarter
ECON 20100
Spring Quarter
ECON 20200
MATH 19520
STAT 23400

Third Year
Autumn Quarter
ECON 23950
ECON 21020

The following is a recommended plan of study (excluding five elective courses) for those students completing the two-quarter empirical methods sequence. Note that this plan of study can be used in conjunction with any calculus sequence:

First Year
Autumn Quarter
MATH 13100
Winter Quarter
MATH 13200
Spring Quarter
MATH 13300
ECON 10000

Second Year
Autumn Quarter
ECON 20000
Winter Quarter
ECON 20100
Spring Quarter
ECON 20200
MATH 19520

Third Year
Autumn Quarter
ECON 23950
Winter Quarter
ECON 21020
ECON 21010
Students wanting to appropriately plan their economics major with the courses MATH 20400 Analysis in Rn II, STAT 24400 Statistical Theory and Methods I, or STAT 24410 Statistical Theory and Methods Ia should consult with the Undergraduate Program Office in the Department of Economics.

**BA in Economics with Specialization in Business Economics**

The specialization in business economics is organized around the fundamental economic theory and empirical methods that students interested in pursuing careers in the private sector, the non-profit sector, and the public sector (among others) will find useful in carrying out their day-to-day tasks. Students who begin by following the standard economics major path have several decision points at which they can choose to specialize in business economics. Students should consult early in the first year with the Department of Economics Undergraduate Program to design a curriculum that satisfies their professional goals.

Students pursuing the Economics major must complete a Calculus sequence. However, it is not required for the Specialization in Business Economics. Students are still strongly urged to take Calculus to ensure sufficient quantitative understanding and competence.

Note that BUSN 20000-level (undergraduate-only) versions of courses offered by the University of Chicago Booth School of Business (Chicago Booth) will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth’s academic and administrative policies. Consult the Chicago Booth website (https://www.chicagobooth.edu/programs/taking-courses-at-booth) for details.

Early final grades are not given for economics graduate courses. Economics graduate courses should not be taken in the student's graduating quarter unless the student will have completed all graduation requirements, irrespective of the economics graduate course.

As with the standard economics program, this specialization is divided into five component parts:

1. **Core**: The core component is designed to introduce students to the tools of basic economic analysis. These courses include fundamental course work in microeconomics, macroeconomics, and business education.

2. **Methods**: The methods component is designed to introduce students to the different toolkits on which economists rely to analyze problems in both microeconomics and macroeconomics.

3. **Empirical Analysis**: The empirical analysis component provides students with the fundamental techniques of data analysis. These courses emphasize the application of empirical methods to relevant examples and develop the essential computer skills students need to lead successful careers.

4. **Perspectives**: The perspectives requirement recognizes that successful careers require broad-based understanding of the markets and industries in which our potential majors are likely to participate. This requirement is intended to facilitate both the acquisition of sector-specific knowledge and/or job-specific skills that are likely to provide context for the student’s economics and business training.

5. **Electives**: Electives from the University of Chicago Booth School of Business and the Department of Economics allow students to tailor the program to their interests.

**Core**

The core component is designed to introduce students to the tools of basic economic analysis. These courses include fundamental course work in microeconomics and macroeconomics. They courses introduce theory but emphasize the application of these tools to standard problems that students are likely to encounter as they carry out their professional activities. The core component consists of three courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 10000</td>
<td>Principles of Microeconomics</td>
<td>100</td>
</tr>
<tr>
<td>ECON 20000</td>
<td>The Elements of Economic Analysis I</td>
<td></td>
</tr>
<tr>
<td>ECON 10200</td>
<td>Principles of Macroeconomics</td>
<td>100</td>
</tr>
<tr>
<td>ECON 20200</td>
<td>The Elements of Economic Analysis III</td>
<td></td>
</tr>
<tr>
<td>BUSN 20100</td>
<td>Financial Accounting</td>
<td></td>
</tr>
<tr>
<td>BUSN 20330</td>
<td>Building the New Venture</td>
<td></td>
</tr>
<tr>
<td>BUSN 20400</td>
<td>Investments</td>
<td></td>
</tr>
<tr>
<td>BUSN 20410</td>
<td>Corporation Finance</td>
<td></td>
</tr>
<tr>
<td>BUSF 38002</td>
<td>Managerial Decision Making</td>
<td></td>
</tr>
<tr>
<td>BUSF 37000</td>
<td>Marketing Strategy</td>
<td></td>
</tr>
<tr>
<td>BUSF 40000</td>
<td>Business Process Fundamentals</td>
<td></td>
</tr>
<tr>
<td>BUSF 41201</td>
<td>Big Data</td>
<td></td>
</tr>
<tr>
<td>BUSF 42001</td>
<td>Competitive Strategy</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 300
Economics

\^ Students who have previously completed ECON 19800 (but not ECON 20000) will have satisfied this requirement
\^ Students who have previously completed ECON 19900 (but not ECON 20200) will have satisfied this requirement
\* BUSN 20000-level (undergraduate-only) versions of these courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth's academic and administrative policies. Consult the Chicago Booth website for details.
\* BUSN 20000-level versions of these course numbers are forthcoming.

Methods
The methods component of the major is designed to expose students to the different toolkits on which economists rely to analyze problems. These methods courses include offerings in basic price theory, game theory, and experimental methods. This component also includes course work that will be useful in macroeconomic and financial analysis. Students must complete one microeconomic methods course and one macroeconomic methods course from the lists below:

One Microeconomic Methods course, chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 20100</td>
<td>The Elements of Economic Analysis II</td>
<td>100</td>
</tr>
<tr>
<td>ECON 20700</td>
<td>Game Theory and Economic Applications</td>
<td></td>
</tr>
<tr>
<td>ECON 21800</td>
<td>Experimental Economics</td>
<td></td>
</tr>
</tbody>
</table>

One Macroeconomic Methods course, chosen from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 13000</td>
<td>Introduction to Money and Banking</td>
<td>100</td>
</tr>
<tr>
<td>ECON 16020</td>
<td>Introduction to Public Sector Economics</td>
<td></td>
</tr>
<tr>
<td>ECON 17100</td>
<td>Introduction to International Trade</td>
<td></td>
</tr>
<tr>
<td>ECON 23950</td>
<td>Economic Policy Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 200

Empirical Analysis
The objective of the empirical analysis component is to ensure that students who complete the major are comfortable carrying out data analysis in various forms. This requires that students gain familiarity with basic statistics and basic econometric methods. These courses will emphasize the application of empirical methods to relevant examples and develop essential computer skills.

ECON 21010 or STAT 23400 or STAT 24400
- Statistical Methods in Economics
- Statistical Models and Methods
- Statistical Theory and Methods I

ECON 11020 or ECON 21020 or ECON 21030
- Introduction to Econometrics
- Econometrics
- Econometrics - Honors

Total Units 200

* For students matriculating in the 2017–18 academic year or earlier, STAT 22000 Statistical Methods and Applications may also be used as a substitute for ECON 21010 Statistical Methods in Economics.

Perspectives
The perspectives requirement consists of one course that can come from any division in the University. This requirement recognizes that successful careers require broad-based understanding of the markets and industries in which our potential majors are likely to participate. This requirement is intended to facilitate the acquisition of sector-specific knowledge and/or job-specific skills that are likely to provide context for the economics and business training to which students will receive exposure while completing the specialization business economics. It is expected that students use this perspectives component as a stepping-stone to design a meaningful set of courses that complement their training in business economics.

It is important to emphasize that there are many courses across the University that students can use to satisfy the perspectives requirement. A list of courses pre-approved for this requirement may be found on the departmental website (https://economics.uchicago.edu/content/specialization-business-economics), but students may petition the Department of Economics to use other suitable courses.

Electives
Students must take five electives to complete the specialization in business economics: three from the University of Chicago Booth School of Business, as defined below, and two from the University of Chicago Department of Economics. A student may, by petition, use a course from outside Chicago Booth and the Department of Economics as, at most, one business economics elective.
A note on professional school courses: The rules of the College allow students to use no more than four courses from professional schools to satisfy degree requirements. The specialization in business economics requires four courses taken at Chicago Booth. If a student successfully petitions to use a course from a professional school other than Chicago Booth (e.g., the Law School or the Harris School of Public Policy) in the major, then College rules require that the approved course substitute for a Chicago Booth elective. Be aware that undergraduates may enroll in a total of six professional school courses, but the last two courses would be ineligible to satisfy any undergraduate degree requirement.

Courses in the University of Chicago Booth School of Business

The courses at Chicago Booth that students can use to meet the electives requirements are categorized in eight different “bundles.” Courses in the table below with an asterisk (*) are also eligible for the Foundations of Business Education requirement; however, a course used to satisfy the core requirement in the major cannot be also counted as an elective. Students must complete four distinct Booth courses: one Foundations in Business Education and three electives. In order to expose students to different subfields in business education, the four Booth courses used to fulfill the core and elective requirements must be drawn from at least three of the thematic bundles listed below.

NOTE: Undergraduate (BUSN 20000-level) numbers forthcoming for all courses. BUSN 20000-level (undergraduate-only) versions of these courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth’s academic and administrative policies. Consult the Chicago Booth website for details.

CHICAGO BOOTH COURSES THAT MEET THE ELECTIVES REQUIREMENT

<table>
<thead>
<tr>
<th>Accounting</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>BUSN 20100 Financial Accounting</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 30001 Cost Analysis and Internal Controls</td>
<td></td>
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<tr>
<td>BUSN 20150 Financial Statement Analysis</td>
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</table>

<table>
<thead>
<tr>
<th>Entrepreneurship</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 20330 Building the New Venture</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 34104 College New Venture Challenge</td>
<td></td>
</tr>
<tr>
<td>BUSF 30121 Accounting for Entrepreneurship</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Finance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 20410 Corporation Finance</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 35000 Investments</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Management</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSF 38002 Managerial Decision Making</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 38120 Behavioral Economics</td>
<td></td>
</tr>
<tr>
<td>BUSF 38001 Managing in Organizations</td>
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<table>
<thead>
<tr>
<th>Marketing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSF 37000 Marketing Strategy</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 37202 Pricing Strategies</td>
<td></td>
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<tr>
<td>BUSF 37105 Data Science for Marketing</td>
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<table>
<thead>
<tr>
<th>Operations</th>
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</thead>
<tbody>
<tr>
<td>BUSF 40000 Business Process Fundamentals</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 36106 Managerial Decision Modeling</td>
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</table>

<table>
<thead>
<tr>
<th>Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSF 41201 Big Data</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 41204 Machine Learning</td>
<td></td>
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<tr>
<td>BUSF 41203 Financial Econometrics</td>
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</table>

<table>
<thead>
<tr>
<th>Strategy and the Business Environment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSF 42001 Competitive Strategy</td>
<td>*</td>
</tr>
<tr>
<td>BUSF 33502 International Financial Policy</td>
<td></td>
</tr>
</tbody>
</table>

* These courses are also eligible for the Foundations of Business Education requirement; however, a course used to satisfy the core requirement in the major cannot also be counted as an elective. Students must complete four distinct Chicago Booth courses: one Foundations of Business Education course and three electives. In order to expose students to different subfields in business education, the four Chicago Booth courses used to fulfill the core and elective requirements must be drawn from at least three of the thematic bundles listed here.
Students may further their business education by completing two additional Booth courses, potentially from Booth courses outside of the bundle list below (subject to the discretion of the instructor). However, per College rules, they will not count toward any degree requirements.

**Courses in the Department of Economics**

Students in the specialization in business economics must complete at least two electives in the Department of Economics. These may be ECON courses with numbers between 10200 and 19800, or numbers above 20200, assuming that the student has the appropriate prerequisites for the course. Note that ECON 21010, ECON 21020, ECON 21030, and ECON 23950 are exceptions to this and cannot be used to satisfy the elective requirement for the specialization in business economics.

**Summary of Requirements**

For a summary of requirements for the BA in Economics with Specialization in Business Economics, see below.

**BA IN ECONOMICS WITH SPECIALIZATION IN DATA SCIENCE**

The specialization in data science provides training in computation and data analysis beyond the basic methods discussed in the empirical methods sequence. The specialization in data science and the standard BA in economics share eight courses:

Two fundamentals courses: 200

- MATH 13300 Elementary Functions and Calculus III OR MATH 15300 Calculus III OR MATH 16300 Honors Calculus III
- MATH 19520 Mathematical Methods for Social Sciences OR MATH 20400 Analysis in Rn II OR MATH 20800 Honors Analysis in Rn II

One of the following: 300

- ECON 20000-20100-20200 The Elements of Economic Analysis I-II-III
- ECON 20010-20110-20210 The Elements of Economic Analysis: Honors I-II-III

One three-quarter empirical methods sequence: 300

- MATH 19620 Linear Algebra (OR STAT 24300 Numerical Linear Algebra OR MATH 20250 Abstract Linear Algebra OR MATH 20700 Honors Analysis in Rn I)
- STAT 23400 Statistical Models and Methods (OR STAT 24400 Statistical Theory and Methods I OR STAT 24410 Statistical Theory and Methods Ia)
- ECON 21020 Econometrics (OR ECON 21030 Econometrics - Honors)

Total Units 800

The specialization in data science is designed to begin after completion of the core sequence and the empirical methods sequence. Students pursuing the specialization in data science are not required to complete ECON 23950 Economic Policy Analysis. Instead, they must complete basic training in computer science and at least two data science courses in the Department of Economics:

One of the following: 100

- CMSC 12300 Computer Science with Applications III
- or CMSC 15200 Intro To Computer Science-2
- or CMSC 16200 Honors Introduction to Computer Science II

Two chosen from: 200

- ECON 21300 Data Construction and Interpretation in Economic Applications
- ECON 21310 Econometrics and Machine Learning
- ECON 21320 Applications of Econometrics and Data Science Methods

Total Units 300

Students pursuing the specialization in data science are encouraged to complete all three courses. These economics courses can also be used as electives by student pursuing the standard BA in economics. Descriptions for these courses are forthcoming.

Students pursuing the specialization in data science must also complete two electives drawn from the following sets of courses:

At most one of: 100

- ECON 21110 Applied Microeconometrics
- ECON 21130 Topics in Microeconometrics
ECON 21150  Topics in Applied Econometrics  
At most one of:  
ECON 21200  Time Series Econometrics  
STAT 26100  Time Dependent Data  
BUSF 41203  Financial Econometrics  
ECON 21410  Computational Methods in Economics  
ECON 23040  Cryptocurrencies  
STAT 27400  Nonparametric Inference  
STAT 27725  Machine Learning  

Descriptions of the data science courses are forthcoming.

**Students who have entered the specialization in data science but no longer wish to pursue it must** 
complete ECON 23950 Economic Policy Analysis and the necessary electives to satisfy the requirements of 
the standard BA in economics. All economics courses completed in the pursuit in the specialization in data science 
will count toward the degree requirements of the BA in economics. These students may also count course work 
in computer science as the outside elective as discussed in the Electives section.

Summary of Requirements

For a summary of requirements for the BA in economics with specialization in data science, see below.

**SUMMARIES OF REQUIREMENTS**

- BA in Economics, Track A: Three-Quarter Empirical Methods Sequence
- BA in Economics, Track B: Two-Quarter Empirical Methods Sequence
- BA in Economics with Specialization in Business Economics
- BA in Economics with Specialization in Data Science

**Summary of Requirements: BA in Economics, Track A: Three-Quarter Empirical Methods Sequence**

**GENERAL EDUCATION**

One of the following:  
- MATH 13100-13200  Elementary Functions and Calculus I-II  
- MATH 15100-15200  Calculus I-II  
- MATH 16100-16200  Honors Calculus I-II  
- MATH 16110 & MATH 16210  Honors Calculus I (IBL) and Honors Calculus II (IBL)

Total Units: 200

**MAJOR**

One of the following:  
- MATH 13300  Elementary Functions and Calculus III  
- MATH 15300  Calculus III  
- MATH 16300  Honors Calculus III  
- MATH 16310  Honors Calculus III (IBL)

One of the following:  
- ECON 20000-20100-20200  The Elements of Economic Analysis I-II-III  
- ECON 20010-20110-20210  The Elements of Economic Analysis: Honors I-II-III  
- MATH 19520  Mathematical Methods for Social Sciences **  
  or MATH 20400  Analysis in Rn II  
  or MATH 20800  Honors Analysis in Rn II  
- MATH 19620  Linear Algebra  
  or MATH 20250  Abstract Linear Algebra  
  or STAT 24300  Numerical Linear Algebra  
  or MATH 20700  Honors Analysis in Rn I  
- STAT 23400  Statistical Models and Methods  
  or STAT 24400  Statistical Theory and Methods I  
  or STAT 24410  Statistical Theory and Methods Ia  
- ECON 21020  Econometrics  

Total Units: 300
or ECON 21030 Econometrics - Honors
ECON 23950 Economic Policy Analysis 100
or ECON 23200 Topics in Macroeconomics
or ECON 23220 Introduction to Advanced Macroeconomic Analysis
or ECON 23330 Introduction to Dynamic Economic Modeling
Four electives * 400

Total Units 1300

* Credit may be granted by examination.
** Students are encouraged to take prior to or concurrently with ECON 20000 or ECON 20010.
+ These courses must include three economics courses numbered higher than ECON 20200 and must follow guidelines in the preceding Electives section. (Note: ECON 19900 may be used to fulfill one economics elective requirement for students who matriculated in 2016–17 or later.)

SUMMARY OF REQUIREMENTS: BA IN ECONOMICS, TRACK B: TWO-QUARTER EMPIRICAL METHODS SEQUENCE

GENERAL EDUCATION

One of the following: 200
MATH 13100-13200 Elementary Functions and Calculus I-II
MATH 15100-15200 Calculus I-II *
MATH 16100-16200 Honors Calculus I-II
MATH 16110 Honors Calculus I (IBL)
& MATH 16210 and Honors Calculus II (IBL)

Total Units 200

MAJOR

One of the following: 100
MATH 13300 Elementary Functions and Calculus III
MATH 15300 Calculus III *
MATH 16300 Honors Calculus III
MATH 16310 Honors Calculus III (IBL)

One of the following: 300
ECON 20000-20100-20200 The Elements of Economic Analysis I-II-III
ECON 20010-20110-20210 The Elements of Economic Analysis: Honors I-II-III
MATH 19520 Mathematical Methods for Social Sciences **
or MATH 20400 Analysis in Rn II
or MATH 20800 Honors Analysis in Rn II
ECON 21010 Statistical Methods in Economics 100
ECON 21020 Econometrics 100
ECON 23950 Economic Policy Analysis 100
or ECON 23200 Topics in Macroeconomics
or ECON 23220 Introduction to Advanced Macroeconomic Analysis
or ECON 23330 Introduction to Dynamic Economic Modeling

Five electives + 500

Total Units 1300

* Credit may be granted by examination.
** Students are encouraged to take prior to or concurrently with ECON 20000 or ECON 20010.
+ These courses must include four economics courses numbered higher than ECON 20200 and must follow guidelines in the preceding Electives section. (Note: ECON 19900 may be used to fulfill one economics elective requirement for students who matriculated in 2016–17 or later.)
or ECON 20000  The Elements of Economic Analysis I

ECON 10200  Principles of Macroeconomics  

or ECON 20200  The Elements of Economic Analysis III

One Foundations of Business Economics course, chosen from:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 20100</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUSN 20330</td>
<td>Building the New Venture</td>
</tr>
<tr>
<td>BUSN 20400</td>
<td>Investments</td>
</tr>
<tr>
<td>BUSN 20410</td>
<td>Corporation Finance</td>
</tr>
<tr>
<td>BUSF 38002</td>
<td>Managerial Decision Making</td>
</tr>
<tr>
<td>BUSF 37000</td>
<td>Marketing Strategy</td>
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<tr>
<td>BUSF 40000</td>
<td>Business Process Fundamentals</td>
</tr>
<tr>
<td>BUSF 41201</td>
<td>Big Data</td>
</tr>
<tr>
<td>BUSF 42001</td>
<td>Competitive Strategy</td>
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</table>

One Microeconomic Methods course, chosen from:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 20100</td>
<td>The Elements of Economic Analysis II</td>
</tr>
<tr>
<td>ECON 20700</td>
<td>Game Theory and Economic Applications</td>
</tr>
<tr>
<td>ECON 21800</td>
<td>Experimental Economics</td>
</tr>
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</table>

One Macroeconomics Methods course, chosen from:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECON 13000</td>
<td>Introduction to Money and Banking</td>
</tr>
<tr>
<td>ECON 16020</td>
<td>Introduction to Public Sector Economics</td>
</tr>
<tr>
<td>ECON 17100</td>
<td>Introduction to International Trade</td>
</tr>
<tr>
<td>ECON 23950</td>
<td>Economic Policy Analysis</td>
</tr>
<tr>
<td>ECON 21010</td>
<td>Statistical Methods in Economics *</td>
</tr>
<tr>
<td>or STAT 23400</td>
<td>Statistical Models and Methods</td>
</tr>
<tr>
<td>or STAT 24400</td>
<td>Statistical Theory and Methods I</td>
</tr>
</tbody>
</table>

ECON 11020  Introduction to Econometrics  

or ECON 21020  Econometrics  

or ECON 21030  - Econometrics - Honors

One Perspectives elective  

Three electives from the University of Chicago Booth School of Business §  

Two electives from the Department of Economics  

Total Units  

** Students who have previously completed ECON 19800 but not ECON 20000 will have satisfied this requirement

^ Students who have previously completed ECON 19900 but not ECON 20200 will have satisfied this requirement

* For students matriculating in the 2017–18 academic year or earlier, STAT 22000 Statistical Methods and Applications may also be used as a substitute for ECON 21010 Statistical Methods in Economics.

§ Students must take Chicago Booth courses in at least three thematic "bundles." See Electives section for details.

Note that BUSN 20000-level (undergraduate-only) versions of these courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth academic and administrative policies. Consult the Chicago Booth website for details.

Summary of Requirements: BA in Economics with Specialization in Data Science

GENERAL EDUCATION

One of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
<tr>
<td>MATH 16110 &amp; MATH 16210</td>
<td>Honors Calculus I (IBL) and Honors Calculus II (IBL)</td>
</tr>
</tbody>
</table>

Total Units  

Students who have previously completed ECON 19800 but not ECON 20000 will have satisfied this requirement

Students who have previously completed ECON 19900 but not ECON 20200 will have satisfied this requirement

For students matriculating in the 2017–18 academic year or earlier, STAT 22000 Statistical Methods and Applications may also be used as a substitute for ECON 21010 Statistical Methods in Economics.

Students must take Chicago Booth courses in at least three thematic "bundles." See Electives section for details.

Note that BUSN 20000-level (undergraduate-only) versions of these courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth academic and administrative policies. Consult the Chicago Booth website for details.
## MAJOR

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>Description</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH 13300 or MATH 15300 or MATH 16300</td>
<td>Elementary Functions and Calculus III or Calculus III or Honors Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 19520 or MATH 20400 or MATH 20800</td>
<td>Mathematical Methods for Social Sciences or Analysis in Rn II or Honors Analysis in Rn II</td>
<td>100</td>
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<tr>
<td>One of the following:</td>
<td>The Elements of Economic Analysis I-II-III</td>
<td>300</td>
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<tr>
<td>ECON 20000-20100-20200</td>
<td>or MATH 15300 or MATH 16300 or MATH 19520</td>
<td></td>
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<tr>
<td>ECON 20010-20110-20210</td>
<td>or MATH 20400 or MATH 20800 or MATH 19520</td>
<td></td>
</tr>
<tr>
<td>MATH 19620 or STAT 24300 or MATH 20250</td>
<td>Linear Algebra or Numerical Linear Algebra or Abstract Linear Algebra</td>
<td>100</td>
</tr>
<tr>
<td>or MATH 20700</td>
<td>or Honors Analysis in Rn I</td>
<td></td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
<td>100</td>
</tr>
<tr>
<td>or STAT 24400 or STAT 24410</td>
<td>or Statistical Theory and Methods I or Statistical Theory and Methods Ia</td>
<td></td>
</tr>
<tr>
<td>ECON 21020 or ECON 21030</td>
<td>Econometrics or Econometrics - Honors</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 12300 or CMSC 15200 or CMSC 16200</td>
<td>Computer Science with Applications III or Intro To Computer Science-2 or Honors Introduction to Computer Science II</td>
<td>100</td>
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<tr>
<td>Two Data Science courses chosen from:</td>
<td></td>
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<tr>
<td>ECON 21300 Data Construction and Interpretation in Economic Applications</td>
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<tr>
<td>ECON 21310 Econometrics and Machine Learning</td>
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<tr>
<td>ECON 21320 Applications of Econometrics and Data Science Methods</td>
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<tr>
<td>Two electives:</td>
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<td>200</td>
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<tr>
<td>At most one of: ECON 21110 Applied Microeconomics, ECON 21130 Topics in Microeconomics, ECON 21150 Topics in Applied Econometrics</td>
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<tr>
<td>At most one of: ECON 21200 Time Series Analysis, STAT 26100 Time Dependent Data, BUSF 41203 Financial Econometrics</td>
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<tr>
<td>ECON 21410</td>
<td>Computational Methods in Economics</td>
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<td>ECON 23040</td>
<td>Cryptocurrencies</td>
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<td>STAT 27400</td>
<td>Nonparametric Inference</td>
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<tr>
<td>STAT 27725</td>
<td>Machine Learning</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 1300

* Credit may be granted by examination.

## GRADING

Successful completion of the economics major requires both a major GPA of 2.0 or higher and a minimum grade of C– in all courses counted for the major program. In addition, students majoring in economics must receive quality grades in all courses required as part of the major. Non-majors may take economics courses on a P/F basis; only grades of C– or higher constitute passing work.

## HONORS

To be considered for honors, students must meet the following requirements: (1) a GPA of 3.5 or higher in the major and a GPA of 3.2 or higher overall, (2) participation in the honors workshop and sole authorship of an independent research paper on a topic in economics, and (3) a faculty sponsor’s letter evaluating this independent research paper. For award of honors, the project must receive a grade of A or A–. At the beginning of the student’s fourth year, the economics honors committee must have a letter from an economics faculty sponsor expressing willingness to oversee the student’s writing of an independent research paper and recommending the student be admitted into the honors workshop program. Honors papers should be outgrowths of economics electives or research assistant work for the faculty sponsor.
Participation in the ECON 29800 Undergraduate Honors Workshop is mandatory throughout the year. Upon completion of the paper in the Spring Quarter, the student will then be retroactively registered for the course in the fourth-year quarter of the student’s choosing. Plan for this retroactive registration with your College adviser.

The research paper, a transcript, and a recommendation letter from the faculty sponsor evaluating the independent research paper must be submitted to the undergraduate economics program office for consideration by the economics honors committee no later than the end of fourth week of the quarter in which the student plans to graduate. Students wishing to qualify for honors should (1) engage in preparatory course work in the area of interest no later than Spring Quarter of their third year and (2) consult with the program advisers no later than Winter Quarter of their third year.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the consent of the other program chair. Approval from both program chairs is required. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of third year, when neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

**Preparation for PhD Programs in Economics**

Students preparing to pursue a PhD program in economics should complete advanced course work in mathematics, statistics, and computer science. The real analysis sequence offered by the Mathematics Department, MATH 20300-20400-20500 Analysis in Rn I-II-III (or its honors variant MATH 20700-20800-20900 Honors Analysis in Rn I-II-III) contains material that is particularly important for economics graduate school.

Students who used MATH 13300 Elementary Functions and Calculus III or MATH 15300 Calculus III to fulfill the calculus requirement will need to take MATH 15910 Introduction to Proofs in Analysis to transition into the real analysis sequence. Completion of this course work allows students to participate in higher level electives that may also be helpful for their chosen path of study in graduate school.

Completion of either STAT 24400 Statistical Theory and Methods I or STAT 24410 Statistical Theory and Methods Ia and either MATH 20250 Abstract Linear Algebra or STAT 24300 Numerical Linear Algebra will allow students to continue their training in statistics and econometrics at an advanced level.

Increasingly, graduate programs expect students to have sophisticated programming skills. Completion of CMSC 15100-15200 Introduction to Computer Science I-II is strongly encouraged.

In addition, students who are interested in pursuing graduate study are encouraged to take appropriate courses from other departments in the social sciences to obtain a well-rounded perspective of their areas of interest.

Students are encouraged to seek research assistant jobs and may self-subscribe to the Research Assistant Jobs (https://lists.uchicago.edu/web/info/chicago_economics-researchasst) listhost to receive updates on job postings.

Provisional and early final grades are not given for economics graduate courses. Economics graduate courses should not be taken in the student’s graduating quarter unless the student will have completed 42 credits, not counting the economics graduate course, and all requirements for all majors."

It is important that such students consult early in the second year with one of the directors of the undergraduate program to design a plan of course work and research. Contact juliew@uchicago.edu for appointments.

**Economics Courses**

**ECON 10000. Principles of Microeconomics. 100 Units.**
By way of economic theory, applications, and contemporary issues, this course treats (1) the behavior and decision making on the part of individuals, business firms, and governments; and (2) the function of costs, prices, incentives, and markets in the American economy. We discuss contemporary topics (e.g., distribution of income, the environment, education, sports, health care). This course is formerly known as Econ 19800: Introduction to Microeconomics. Students may substitute "Econ 20000: The Elements of Economic Analysis I" for this course in the business economics track.

Instructor(s): A. Sanderson; M. Lee Terms Offered: Autumn Spring Winter

**ECON 10200. Principles of Macroeconomics. 100 Units.**
By way of theory and public policy applications, this course covers current major domestic and international macroeconomic issues in the U.S. economy, including the determination of income and output, inflation, unemployment, and economic growth; money, banking, and the Federal Reserve System; federal spending, taxation, and deficits; and international trade, exchange rates, and the balance of payments. This course is formerly known as Econ 19900: Introduction to Macroeconomics. Students may substitute "Econ 20200: The Elements of Economic Analysis III" for this course in the business economics track.

Instructor(s): A. Sanderson Terms Offered: Spring Winter
ECON 11020. Introduction to Econometrics. 100 Units.
This course introduces students to the practice of econometrics by focusing on the use of multivariate regression as a tool to establish causal relations. We emphasize practical aspects and processes of empirical research: data collection, analysis, and presentation (both written and oral). The goal is for students to critically read and evaluate existing research in the form of peer reviewed journal articles.
Instructor(s): Staff
Prerequisite(s): ECON 21010 or STAT 23400 or STAT 24400

ECON 12210. Economic History II: The Early Modern World, circa 1300-1800. 100 Units.
This course both describes preindustrial economic life and weighs the models used to explain fundamental changes to it. We will begin by describing some of the basic structures that determined patterns of production, exchange, and consumption in a period of low and easily reversible growth. These include agricultural productivity, demographic constraints, modes of transportation, and the social structures that governed the distribution of what little surplus premodern societies produced. Turning to the sources of economic dynamism that may have contributed to later industrialization, we will first examine the growth of long-distance trade networks starting in the late fourteenth century. How were traditional economies characterized by limited movement stimulated by the circulation of people, goods, and money from afar? We will then move to a discussion of the factors leading to (or frustrating) transformational patterns of economic growth: agricultural productivity, institutions, "proto-industrial" production in an era of limited urban growth, and changing norms of consumption. This course is part of the College Course Cluster program: Economic History, from Sumer to the Global World.
Instructor(s): P. Cheney & K. Pomeranz
Terms Offered: Winter
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): HIST 19402

ECON 12220. Economic History III: The Global Economy from Great Depression to Great Recession. 100 Units.
This is the third part in the economic history sequence. Topics include the second Industrial Revolution and the new imperialism, the Great Depression and World War II, the American postwar world economic order, communism, and third-world development; globalization, growth, inequality, and climate change; the great recession. This course is part of the College Course Cluster program: Economic History, from Sumer to the Global World.
Instructor(s): J. Levy
Terms Offered: Spring
Equivalent Course(s): HIST 29533, HIST 39533

ECON 14810. Evolution and Economics of Human Behavior. 100 Units.
This course explores how evolutionary biology and behavioral economics explain many different aspects of human behavior. Specific topics include evolutionary theory, natural and sexual selection, game theory, cost-benefit analyses of behavior from an evolutionary and a behavioral economics perspective, aggression, power and dominance, cooperation and competition, biological markets, parental investment, life history and risk-taking, love and mating, physical attractiveness and the market, emotion and motivation, sex and consumer behavior, cognitive biases in decision-making, and personality and psychopathology. Note(s): CHDV Distribution, A*; 1* Equivalent Course(s): CHDV 37950, PSYC 27950, PSYC 37950, BIOS 29265, ECON 14810
Instructor(s): D. Maestripieri
Terms Offered: Winter
Note(s): CHDV Distribution, A
Equivalent Course(s): PSYC 27950, CHDV 27950, PSYC 37950, CHDV 37950, BIOS 29265

ECON 19000. Economics for Everyone. 100 Units.
The field of economics has generated a powerful set of insights which have fundamentally shaped the modern world. Because modern economics puts such a heavy stress on mathematical rigor, the most interesting economic ideas often get pushed to the background. In this course, we will explore these big economic ideas, without the math. Our goal is to make the beauty and power of economic thinking available to everyone. We will discuss what it means to think like an economist, how you can use economic thinking to make the world a better place (or to take advantage of your friends and enemies, if you prefer), and also how sometimes thinking like an economist can get you into trouble.
Terms Offered: Winter

ECON 19100. Economics for Everyone: Macro. 100 Units.
This course explores the big ideas in macroeconomics in a way that is enjoyable and accessible, with minimal reliance on mathematics. The goal is to provide an introduction to macroeconomic issues for people who have never before studied macroeconomics (and who might never study it again), so that they can understand and contribute to ongoing discussions in the news and on social media. We will demystify some of the major macroeconomic questions of our times: Why is there unemployment? Why are some countries poor? What’s the big deal about government debt? How high should we set taxes? What gives money and stocks their value? What does the Fed do? And why did all those economists win Nobel Prizes? We will show the fun, interesting, and strange sides of macroeconomics.
Instructor(s): G. Kaplan
Terms Offered: Spring
ECON 19800. Introduction to Microeconomics. 100 Units.
By way of economic theory, applications, and contemporary issues, this course treats (1) the behavior and
decision making on the part of individuals, business firms, and governments; and (2) the function of costs, prices,
incentives, and markets in the American economy. We discuss contemporary topics (e.g., distribution of income,
the environment, education, sports, health care).
Instructor(s): A. Sanderson, J. List Terms Offered: Autumn, Spring

ECON 19900. Intro To Macroeconomics. 100 Units.
By way of theory and public policy applications, this course covers current major domestic and international
macroeconomic issues in the U.S. economy, including the determination of income and output, inflation,
unemployment, and economic growth; money, banking, and the Federal Reserve System; federal spending,
taxation, and deficits; and international trade, exchange rates, and the balance of payments.
Instructor(s): A. Sanderson Terms Offered: Autumn, Winter

ECON 20000-20100-20200-20300. The Elements of Economic Analysis I-II-III-IV.
ECON 20000. The Elements of Economic Analysis I. 100 Units.
This course develops the economic theory of consumer choice. This theory characterizes optimal choices
for consumers given their incomes and preferences, as well as the relative prices of different goods. This
course develops tools for analyzing how these optimal choices change when relative prices and consumer
incomes change. Finally, this course presents several measures of consumer welfare. Students learn how to
evaluate the impact of taxes and subsidies using these measures. Completion of ECON 19800 is strongly
recommended of students without a prior microeconomics course.
Terms Offered: Autumn Spring
Prerequisite(s): MATH 13300 (with prior completion of or at least concurrent with MATH 19520), MATH
15300, or 16300. First-year students must also pass the economics placement exam or complete ECON 19800.

ECON 20100. The Elements of Economic Analysis II. 100 Units.
This course is a continuation of ECON 20000. The first part of this course discusses markets with one or a
few suppliers. The second part focuses on demand and supply for factors of production and the distribution
of income in the economy. This course also includes some elementary general equilibrium theory and
welfare economics.
Instructor(s): Staff Terms Offered: Autumn, Winter
Prerequisite(s): ECON 20000 or 20010

ECON 20200. The Elements of Economic Analysis III. 100 Units.
As an introduction to macroeconomic theory and policy, this course covers the determination of aggregate
demand (i.e., consumption, investment, the demand for money); aggregate supply; and the interaction
between aggregate demand and supply. We also discuss economic growth, business cycle, inflation and
money. Completion of ECON 19900 is strongly recommended of students without a prior macroeconomics
course.
Instructor(s): Staff Terms Offered: Spring, Winter
Prerequisite(s): ECON 20100 or 20110

ECON 20300. Elements of Economic Analysis IV. 100 Units.
This is a course in money and banking, monetary theories, the determinants of the supply and demand for
money, the operation of the banking system, monetary policies, financial markets, and portfolio choice.
Instructor(s): Staff
Prerequisite(s): ECON 20200 or 20210

ECON 20010-20110-20210. The Elements of Economic Analysis: Honors I-II-III.
The Elements of Economic Analysis: Honors I-II-III
ECON 20010. The Elements of Economic Analysis I Honors. 100 Units.
The scope of the honors section is the same as the standard section, but it covers material at greater depth
and using more sophisticated mathematical methods. This course develops the economic theory of consumer
choice. This theory characterizes optimal choices for consumers given their incomes and preferences, as well
as the relative prices of different goods. This course develops tools for analyzing how these optimal choices
change when relative prices and consumer incomes change. Finally, this course presents several measures of
consumer welfare. Students learn how to evaluate the impact of taxes and subsidies using these measures.
Completion of ECON 19800 is strongly recommended of students without a prior microeconomics course.
Instructor(s): Staff Terms Offered: Autumn Spring
Prerequisite(s): MATH 13300 (with prior completion of or at least concurrent with MATH 19520), MATH
15300, or 16300. First-year students must also pass the economics placement exam or complete ECON 19800.
ECON 20110. The Elements of Economic Analysis II Honors. 100 Units.
The scope of the honors section is the same as the standard section, but it covers material at greater depth
and using more sophisticated mathematical methods. This course is a continuation of ECON 20000/20010. The
first part of this course discusses markets with one or a few suppliers. The second part focuses on demand and supply for factors of production and the distribution of income in the economy. This course also includes some elementary general equilibrium theory of welfare economics.
Instructor(s): Staff Terms Offered: Autumn Winter
Prerequisite(s): ECON 20000 or 20010

ECON 20210. The Elements of Economic Analysis III Honors. 100 Units.
The scope of the honors section is the same as the standard section, but it covers material at greater depth
and using more sophisticated mathematical methods. As an introduction to macroeconomic theory and policy, this course covers the determination of aggregate demand (i.e., consumption, investment, the demand for money); aggregate supply; and the interaction between aggregate demand and supply. We also discuss economic growth, business cycle, inflation and money. Completion of ECON 19900 is strongly recommended of students without a prior macroeconomics course.
Instructor(s): Staff Terms Offered: Spring Winter
Prerequisite(s): ECON 20110

ECON 20100. The Elements of Economic Analysis II. 100 Units.
This course is a continuation of ECON 20000. The first part of this course discusses markets with one or a few suppliers. The second part focuses on demand and supply for factors of production and the distribution of income in the economy. This course also includes some elementary general equilibrium theory and welfare economics.
Instructor(s): Staff Terms Offered: Autumn Winter
Prerequisite(s): ECON 20000 or 20010

ECON 20200. The Elements of Economic Analysis III. 100 Units.
As an introduction to macroeconomic theory and policy, this course covers the determination of aggregate demand (i.e., consumption, investment, the demand for money); aggregate supply; and the interaction between aggregate demand and supply. We also discuss economic growth, business cycle, inflation and money. Completion of ECON 19900 is strongly recommended of students without a prior macroeconomics course.
Instructor(s): Staff Terms Offered: Spring Winter
Prerequisite(s): ECON 20100 or 20110

ECON 20520. Formal Models of Political Economics. 100 Units.
This course introduces formal economic models adopted in the modern inquiry into the incentives of participants in political processes. The approach is largely game theoretical, while topics covered include electoral competition, checks and balances, delegation, legislative bargaining, political agency, special interest politics and campaign finance.
Instructor(s): R. Fang Terms Offered: Spring
Prerequisite(s): ECON 20100 (ECON 20700 strongly recommended)

ECON 20700. Game Theory and Economic Applications. 100 Units.
ECON 20700 or 20770 may be used as an economics elective, but only one may be used toward degree requirements. This course introduces the basic ideas and applications of game theory. Topics include models of games in extensive and strategic form, equilibria with randomization, signaling and beliefs, reputation in repeated games, bargaining games, investment hold-up problems, and mediation and incentive constraints.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Prerequisite(s): ECON 20100
ECON 20770. Decision and Strategy. 100 Units.
ECON 20700 or 20770 may be used as an economics elective, but only one may be used toward degree requirements. This course provides a formal introduction to game theory with applications in economics. We will study models of how individuals make decisions, and how those decisions are shaped by strategic concerns and uncertainty about the world. The topics will include the theory of individual choice, games of complete and incomplete information, and equilibrium concepts such as Nash equilibrium. The applications will include oligopoly, auctions, and bargaining. The course is appropriate for advanced undergraduates who are interested in a rigorous mathematical approach to understanding human behavior.
Instructor(s): E. Lipnowski Terms Offered: Winter
Prerequisite(s): ECON 20100 and MATH 20300, or consent of instructor

ECON 20780. Decision and Strategy II. 100 Units.
We continue the formal introduction to decision theory and game theory begun in ECON 20770, with a specific focus on models of incomplete information. Topics covered include subjective expected utility, Bayesian games, contract theory, and mechanism design. Among the applications we will consider are auctions, collusion, entry deterrence, and strategic communication. The course is appropriate for advanced undergraduates who are interested in a rigorous mathematical approach to decision making in strategic situations.
Instructor(s): B. Brooks Terms Offered: Spring
Prerequisite(s): ECON 20770 or consent of instructor

ECON 20780. Theory of Auctions. 100 Units.
In part, this course covers the analysis of the standard auction formats (i.e., Dutch, English, sealed-bid) and describes conditions under which they are revenue maximizing. We introduce both independent private-value models and interdependent-value models with affiliated signals. Multi-unit auctions are also analyzed with an emphasis on Vickrey's auction and its extension to the interdependent-value setting.
Instructor(s): P. Reny Terms Offered: Winter
Prerequisite(s): ECON 20100, MATH 20300, and STAT 24400

ECON 21010. Statistical Methods in Economics. 100 Units.
This course provides a solid foundation in probability and statistics for economists. We emphasize topics needed for further study of econometrics in ECON 21020. Topics include elements of probability theory, sampling theory, estimation, hypothesis testing, and an introduction to linear algebra.
Instructor(s): Staff Terms Offered: Autumn Spring
Prerequisite(s): At least concurrent registration with Econ 20100

ECON 21020. Econometrics. 100 Units.
Required of students who are majoring in economics; those students are encouraged to meet this requirement by the end of their third year. This course covers the single and multiple linear regression model, the associated distribution theory, and testing procedures; corrections for heteroskedasticity, autocorrelation, and simultaneous equations; and other extensions as time permits. Students also apply the techniques to a variety of data sets using PCs.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): ECON 20100, ECON 21010, or STAT 23400 and MATH 19620 (or MATH 20000 or STAT 24300 or MATH 20250)

ECON 21030. Econometrics - Honors. 100 Units.
The topics are essentially the same as those covered in ECON 21020, but this foundations course in econometrics gives a more systematic introduction to the application of statistical theory to economic applications. This course is intended for students who are planning to study economics at the graduate level.
Instructor(s): Staff Terms Offered: Spring, Winter
Prerequisite(s): ECON 20100, and STAT 24400, 24410 or 24500, and MATH 20250 or STAT 24300; or consent of instructor

ECON 21110. Applied Microeconometrics. 100 Units.
ECON 21100 or 21110 or 21130 or 21150 may be used as an economics elective, but only one may be used toward degree requirements. This course will cover a broad set of applications in labor economics, public economics, industrial organization, economics of education, environmental economics, and development economics. There will be a strong focus on how economic theory, institutional details, and experiments can be used to draw causal inferences on economic relationships. There will be emphasis on applying a number of commonly used microeconometric methods to economic data; including the linear regression model, fixed and random effects models, instrumental variables, and discrete choice models. When interpreting the empirical results, we will also discuss the importance of omitted variables bias and measurement error.
Instructor(s): J. Joensen
Prerequisite(s): ECON 21020 or ECON 21030
ECON 21130. Topics in Microeconometrics. 100 Units.
ECON 21100 or 21110 or 21130 or 21150 may be used as an economics elective, but only one may be used toward degree requirements. This course focuses on micro-econometric methods that have applications to a wide range of economic questions. We study identification, estimation, and inference in both parametric and non-parametric models and consider aspects such as consistency, bias and variance of estimators. We discuss how repeated measurements can help with problems related to unobserved heterogeneity and measurement error, and how they can be applied to panel and network data. Topics include duration models, regressions with a large number of covariates, non-parametric regressions, and dynamic discrete choice models. Applications include labor questions such as labor supply, wage inequality decompositions and matching between workers and firms. Students will be expected to solve programming assignment in R.
Prerequisite(s): ECON 21020 OR ECON 21030

ECON 21150. Topics in Applied Econometrics. 100 Units.
ECON 21100 or 21110 or 21130 or 21150 may be used as an economics elective, but only one may be used toward degree requirements. This course builds on the theoretical foundations set in Econ 21030 and explores more advanced topics pertinent to modern economic applications. While the course content may change from year to year according to student and instructor interests, some potential topics are panel data methods, treatment effects/causal inference, discrete choice/limited dependent variable models, demand estimation, and selected topics in economic applications of supervised and unsupervised learning algorithms. The course will involve analytically and computationally intensive assignments and a significant project component.
Instructor(s): A. Hortacsu Terms Offered: Winter
Prerequisite(s): ECON 21030

ECON 21320. Applications of Econometric and Data Science Methods. 100 Units.
This course builds on the theoretical foundations set in Econ 21030 and explores further topics pertinent to modern economic applications. While the course content may change from year to year according to student and instructor interests, some potential topics are panel data methods, treatment effects/causal inference, discrete choice/limited dependent variable models, demand estimation, and topics in economic applications of supervised and unsupervised learning algorithms. The course will involve analytically and computationally intensive assignments and a significant empirical project component.
Instructor(s): A. Hortacsu Terms Offered: Winter
Prerequisite(s): CMSC 12300/15200/16200 and Econ 21030 (Honors Econometrics preferred, but ECON 21020 allowed with consent of instructor.)

ECON 21330. Econometrics and Machine Learning. 100 Units.
This course reviews a number of modern methods from econometrics, statistics and machine learning, and presents applications to economic problems. Examples of methods covered are simulation-based techniques, regularization via coefficient and matrix penalization, and regression and classification methods such as trees, forests and neural networks. Applications include economic models of network formation, and dimension reduction for structural economic models. The course involves programming and work with data. Beyond econometric background such as Econ 21030, students should have a solid background in computation.
Instructor(s): S. Bonhomme Terms Offered: Winter
Prerequisite(s): CMSC 12300/15200/16200 and Econ 21030 (Honors Econometrics preferred, but ECON 21020 allowed with consent of instructor.)

ECON 21410. Computational Methods in Economics. 100 Units.
This course introduces the empirical and computational techniques necessary for numerical estimation and simulation in economics. Through examples in economics, the course covers topics such as optimization, function approximation, and monte carlo techniques. Emphasis will be placed on developing effective programming and research practices. The course is structured through a series of applications in such topics as segregation, occupational choice, and repeated games. The course will be taught in R and STATA. Though helpful, no previous experience with R or STATA is required.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): ECON 20100 and ECON 21020 or ECON 21030

ECON 21730. Applied Behavioral Economics. 100 Units.
This class covers recent work in behavioral economics. Topics include discrimination, social pressure, social norms, identity and gender. Applications will cover a wide range of fields, including labor economics, finance, and political economy.
Instructor(s): L. Bursztyn Terms Offered: Winter
Prerequisite(s): ECON 20100 and ECON 21020 (or ECON 21030).

ECON 21800. Experimental Economics. 100 Units.
This course provides the necessary tools to be an avid consumer of the experimental literature and instructs students on how to become a producer of that literature. Topics include a summary of recent experimental findings and details on how to gather and analyze data using experimental methods.
Instructor(s): L. Bursztyn Terms Offered: Winter
Prerequisite(s): ECON 20100 and ECON 21020 or ECON 21030
Equivalent Course(s): ECON 41100
ECON 21830. Social Neuroscience. 100 Units.
Social species, by definition, create emergent organizations beyond the individual - structures ranging from dyads and families to groups and cultures. Social neuroscience is the interdisciplinary field devoted to the study of neural, hormonal, cellular, and genetic mechanisms, and to the study of the associations and influences between social and biological levels of organization. The course provides a valuable interdisciplinary framework for students in psychology, neuroscience, behavioral economics, and comparative human development. Many aspects of social cognition will be examined, including but not limited to attachment, attraction, altruism, contagion, cooperation, competition, dominance, empathy, isolation, morality, and social decision-making. Instructor(s): J. Decety Terms Offered: Spring
Equivalent Course(s): NSCI 21000, PSYC 22350, CHDV 22350, BIOS 24137

ECON 22200. Topics in American Economic History. 100 Units.
Economic analysis is applied to important issues in American economic history. Specific topics vary, but may include the following: the economics of colonization, the transatlantic slave trade, the role of indentured servitude and slavery in the colonial labor market, the record and sources of 19th-century economic growth, economic causes and effects of 19th-century immigration, the expansion of education, the economics of westward migration, determinants of long-run trends in the distribution of income and wealth, the quantitative analysis of economic and social mobility, and the economics of racial discrimination in the twentieth-century South. Instructor(s): D. Galenson
Equivalent Course(s): ECON 32000

ECON 22410. UChicago Economics: The People and the Seminal Ideas. 100 Units.
Econ 24720 or Econ 22410 may be used as an economics elective, but only one of the two may be used toward economics major requirements. This course will trace in general the history and evolution of economic thought as an intellectual discipline, from the Middle Ages through Adam Smith and the Classical dominance in the 18th and 19th centuries, to the neoclassical period and alternative schools, and then the rise of Keynesian economics and the emergence of the Chicago School of economics in the 20th century. With this background and context, the focus will turn to the theoretical and empirical contributions of important historical UChicago figures such as Veblen, Knight, Hayek, Friedman, Stigler, Coase and Becker as well as the seminal ideas of contemporary scholars, including several Nobel laureates, in the Department, other academic units on campus, and economists elsewhere with deep Chicago roots. Instructor(s): A. Sanderson and Staff Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing

ECON 22600. Innovators. 100 Units.
Economists believe that innovation is a primary source of economic growth. Yet although most innovations are made by individuals or small groups, until recently economists have not studied how those exceptional people produce their discoveries. Recent research has shown that there are two very different types of innovators, who have different goals and follow different processes. This course surveys this research, examining the careers and innovations of important practitioners in a range of modern arts, including painters, novelists, sculptors, poets, movie directors, photographers, songwriters, and architects, as well as entrepreneurs and scientists. The material covered in this course adds a new dimension to our understanding of creativity and of how innovators in many different activities produce new forms of art and science. Instructor(s): D. Galenson
Prerequisite(s): ECON 20100
Equivalent Course(s): ECON 42900

ECON 22650. Creativity. 100 Units.
This seminar examines recent research on how creative people innovate in a wide range of intellectual activities. The main project for the course is a term paper that analyzes the creative life cycle of one or more innovators of the student’s choice, using both quantitative and qualitative evidence. Students present their research in progress for discussion. The seminar is designed to give students all the tools needed to do this research, including choosing a subject, finding and using an appropriate data set, and negotiating the relevant scholarship. Instructor(s): D. Galenson
Prerequisite(s): ECON 19800 or consent of instructor
Equivalent Course(s): ECON 42800

ECON 23000. Money and Banking. 100 Units.
This course covers economic theories and topical issues in money and banking. We discuss such “traditional” topics as the quantity theory, the Phillips curve, and the money creation process. We also investigate models of bank runs and financial crises, the tradeoff between rules and discretion, and the New Macroeconomic Synthesis of New Classical. Other topics include New Keynesian approaches to modeling money and monetary policy, practical and institutional issues in European and U.S. monetary policy, and the 2008 financial crisis. Instructor(s): H. Uhlig Terms Offered: Winter
Prerequisite(s): ECON 20200 (or ECON 20210) and ECON 21020 (or ECON 21030)
ECON 23040. Cryptocurrencies. 100 Units.
This course will cover both the computer science aspects and economic aspects of cryptocurrencies. Topics to be discussed will include network and system building blocks, consensus protocols, cryptographic algorithms, security and privacy issues, pricing of cryptocurrencies, bubbles, monetary policy issues and regulatory concerns.
Instructor(s): D. Cash, H. Uhlig, B. Zhao Terms Offered: Winter
Prerequisite(s): CMSC 10500, 12100, 15100, or 16100 and ECON 10000 (ECON 19800) or ECON 10200 (ECON 19900)
Equivalent Course(s): CMSC 23280

ECON 23200. Topics in Macroeconomics. 100 Units.
This course focuses on the use of dynamic general equilibrium models to study questions in macroeconomics. Topics include long-run growth and dynamic fiscal policy (Ricardian equivalence, tax smoothing, capital taxation), labor market search, industry investment, and asset pricing. On the technical side, we cover basic optimal control (Hamiltonians) and dynamic programming (Bellman equations).
Instructor(s): N. Stokey Terms Offered: TBD
Prerequisite(s): ECON 20200 (or ECON 20210) and MATH 20300

ECON 23330. Introduction to Dynamic Economic Modeling. 100 Units.
This course provides an introduction to dynamic economic models, with applications to macroeconomics, labor economics, financial economics, and other subfields of economics. The core methodology will be consistent over time, but the applications will vary from year to year. The course will analyze decentralized equilibrium and social planner’s problems in dynamic environments. It will focus on developing techniques for analyzing such models graphically, analytically, and computationally. Students should be familiar with constrained optimization (e.g. Lagrangians), linear algebra, and difference equations, as well as microeconomics, macroeconomics, and econometrics at an intermediate level.
Instructor(s): R. Shimer Terms Offered: Winter
Prerequisite(s): ECON 20200 (or ECON 20210) and ECON 21020 (or ECON 21030)

ECON 23410. Economic Growth. 100 Units.
The process of economic growth and the sources of differences in economic performance across nations are some of the most interesting, important and challenging areas in modern social science. You cannot travel or read the news without wondering why differences in standards of living among countries are so large. The primary purpose of this course is to introduce undergraduate students to these major issues and to the theoretical tools necessary for studying them. The course therefore strives to provide students with a solid background in dynamic economic analysis, as well as empirical examples and data analysis. We will cover models at an abstract and advanced level. You must have the degree of mathematical maturity associated with the concepts of functions, derivatives, integrals, Taylor series, optimization, ordinary differential equations. Some basic knowledge on regression analysis is also required.
Instructor(s): U. Akcigit Terms Offered: Winter
Prerequisite(s): ECON 20200 (or ECON 20210) and ECON 21020 (or ECON 21030)

ECON 23950. Economic Policy Analysis. 100 Units.
Building on the tools and methods that are developed in the core courses, this course analyzes fiscal and monetary policy and other topical issues. We use both theoretical and empirical approaches to understand the real-world problems.
Instructor(s): Staff Terms Offered: Autumn Spring
Prerequisite(s): ECON 20200; ECON 21020 or 21030 strongly recommended.

ECON 24000. Labor Economics. 100 Units.
Topics include the theory of time allocation, the payoffs to education as an investment, detecting wage discrimination, unions, and wage patterns. Most of the examples are taken from U.S. labor data, although we discuss immigration patterns and their effects on U.S. labor markets. Some attention is also given to the changing characteristics of the workplace.
Instructor(s): Staff Terms Offered: TBD
Prerequisite(s): ECON 20100 and ECON 21020 (or ECON 21030)

ECON 24450. Inequality and the Social Safety Net: Theory, Empirics, and Policies. 100 Units.
This course will introduce students to key economic and conceptual issues surrounding inequality and the social safety net. We will study the theoretical underpinnings and empirical analysis of the social safety net, focusing on the effects of social insurance and public assistance programs on individual and societal outcomes. After studying models of the insurance-incentive tradeoff, we will apply these models and econometric strategies to the empirical analysis of social safety net programs. We will study how social safety net programs interact with labor markets, specifically human capital investment and work decisions, and how they affect long-term outcomes such as income, health, well-being, and inequality. Students will learn how to analyze the tradeoffs involved in social safety net programs and will learn the current state of evidence on these programs.
Instructor(s): M. Deshpande Terms Offered: Spring
Prerequisite(s): ECON 20100 and ECON 21020 or ECON 21030
ECON 24720. Inequality: Origins, Dimensions, and Policy. 100 Units.
For the last four decades, incomes in the United States and across the globe have grown more unequal. That
fact has attracted worldwide attention from scholars, governments, religious figures, and public intellectuals. In
this interdisciplinary course, participating faculty members drawn from across the University and invited guest
speakers will trace and examine the sources and challenges of inequality and mobility in many of its dimensions,
from economic, political, legal, biological, philosophical, public policy, and other perspectives. This course is part
of the College Course Cluster program: Inequality.
Instructor(s): A. Sanderson and Staff Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing
Note(s): ECON 24720 or ECON 22410 may be used as an Economics elective, but only one of the two may be used
toward Economics major requirements.
Equivalent Course(s): BPRO 28900, PBPL 28920

ECON 25000. Introduction To Finance. 100 Units.
This course develops the tools to quantify the risk and return of financial instruments. These are applied to
standard financial problems faced by firms and investors. Topics include arbitrage pricing, the capital asset
pricing model, and the theory of efficient markets and option pricing. Prerequisite(s): ECON 20300, STAT 23400,
and ECON 21000
Instructor(s): Staff Terms Offered: Autumn,Spring,Winter
Prerequisite(s): ECON 23950 and ECON 21020 or ECON 21030

ECON 25100. Financial Economics; Speculative Markets. 100 Units.
This course focuses on the description, pricing, and hedging of basic derivative claims on financial assets.
We study the characteristics, uses, and payoffs of a variety of contracts where the underlying claims include
commodities, foreign currencies, bonds, stocks, or stock indices. We examine contracts such as options, swaps,
and futures contracts. We use a unified approach (the technique of portfolio replication) to study pricing of
these claims. Students also gain an understanding of strategies for hedging of the risks inherent in holding these
derivative claims.
Instructor(s): F. Alvarez Terms Offered: Spring
Prerequisite(s): ECON 20100 and STAT 23400 (or ECON 21010)

ECON 25130. Behavioral Finance. 100 Units.
This course is designed to give students an overview of psychological biases in financial decision-making
and examine the impacts of these biases in financial markets. It will also introduce students to behavioral and
experimental methodologies–both in the lab and in the field–used in finance. Topics include: non-expected
utility theories under risk and ambiguity, biases in probabilistic judgment, framing, loss aversion, self-control
and non-exponential discounting, mental accounting and herding.
Instructor(s): G. Ponti Terms Offered: Spring
Prerequisite(s): ECON 20100 and ECON 21020 (or ECON 21030)

ECON 25710. China’s Economic Development & Transition. 100 Units.
Equivalent Course(s): PBPL 27150

ECON 26010. Public Finance. 100 Units.
This course addresses the measurement, explanation, and consequences of government activity including tax
systems, expenditure programs, and regulatory arrangements. Topics include cross-country comparisons of
government behavior, market analyses of public policy, the incidence of government activity, and effects of
economic activity on politics and public policy.
Instructor(s): M. Golosov Terms Offered: Autumn
Prerequisite(s): ECON 23950 or consent of instructor
Note(s): ECON 26010 or 26020 may be used as an economics elective, but only one may be used toward degree
requirements.

ECON 26020. Public Sector Economics. 100 Units.
ECON 26010 or 26020 may be used as an economics elective, but only one may be used toward degree
requirements. This course addresses the measurement, explanation, and consequences of government activity
including tax systems, expenditure programs, and regulatory arrangements. Topics include cross-country
comparisons of government behavior, market analyses of public policy, the incidence of government activity, and
effects of economic activity on politics and public policy.
Instructor(s): C. Mulligan
Prerequisite(s): ECON 23950 AND ECON 21020 (or ECON 21030); or consent of instructor

ECON 26500. Environmental Economics. 100 Units.
This course applies theoretical and empirical economic tools to environmental issues. We discuss broad
concepts such as externalities, public goods, property rights, market failure, and social cost-benefit analysis.
These concepts are applied to areas that include nonrenewable resources, air and water pollution, solid waste
management, and hazardous substances. We emphasize analyzing the optimal role for public policy.
Instructor(s): S. Shaikh Terms Offered: Econ 26500 will not be offered in 2018-19.
Prerequisite(s): ECON 20100
Equivalent Course(s): ENST 26500, PBPL 32631
ECON 26530. Environment, Agriculture, and Food: Economic and Policy Analysis. 100 Units.
The connections between environment, agriculture, and food are inherent in our social, cultural, and economic networks. Land use, natural resource management, energy balances, and environmental impacts are all important components in the evolution of agricultural systems. Therefore it is important to develop ways in which to understand these connections in order to design effective agricultural programs and policies. This course is designed to provide students with guidance on the models and tools needed to conduct an economic research study on the intersecting topics of environment, agriculture, and food. Students learn how to develop original research ideas using a quantitative and applied economic policy analysis for professional and scholarly audiences. Students collect, synthesize, and analyze data using economic and statistical tools. Students provide outcomes and recommendations based on scholarly, objective, and policy relevant research rather than on advocacy or opinions, and produce a final professional-quality report for a workshop presentation and publication. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400 Equivalent Course(s): ENST 26530, PBPL 26530, PPHA 32510

ECON 26540. Environment, Agriculture, and Food: Advanced Economic and Policy Analysis. 100 Units.
This course is an extension of ENST 26530 but also stands alone as a complete course itself. Students don't need to take ENST 26530 to enroll in this course. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400 Equivalent Course(s): PPHA 32520, PBPL 26531, ENST 26531

ECON 26700. Economics of Education. 100 Units.
This course explores economic models of the demand for and supply of different forms of schooling. The course examines the markets for primary, secondary, and post-secondary schooling. The course examines numerous public policy questions, such as the role of government in funding or subsidizing education, the design of public accountability systems, the design of systems that deliver publicly funded (and possibly provided) education, and the relationship between education markets and housing markets.
Instructor(s): D. Neal Terms Offered: TBD
Equivalent Course(s): PBPL 26705

ECON 26800. Energy and Energy Policy. 100 Units.
This course shows how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, how we may address them through both policy and scientific study, and how the policy and scientific aspects can and should interact. We address specific technologies, both those now in use and those under development, and the policy questions associated with each, as well as with more overarching aspects of energy policy that may affect several, perhaps many, technologies.
Instructor(s): S. Berry, G. Tolley Terms Offered: TBD. May be offered 2018-2019
Prerequisite(s): PQ: Third- or fourth-year standing. For ECON majors who want ECON credit for this course (ECON 26800): PQ is ECON 20100.
Equivalent Course(s): PBPL 29000, CHSS 37502, PPHA 39201, ENST 29000, PSMS 39000, BPRO 29000

ECON 26920. Behavioral Economics and Policy. 100 Units.
The standard theory of rational choice exhibits explanatory power in a vast range of circumstances, including such disparate decision making environments as whether to commit a crime, have children, or seek to emigrate. Nonetheless, shortfalls from full rationality seem not to be uncommon, and are themselves, to some extent, systematic. Behavioral economics documents and tries to account for these departures from full rationality. This course looks at areas in which some modification of the traditional rational choice apparatus might most be warranted; these include decisions that unfold over time, involve low probability events, or implicate willpower. To what extent should public policy respond to shortfalls from rationality or concern itself with promoting happiness?
Instructor(s): J. Leitzel Terms Offered: Winter
Equivalent Course(s): PBPL 28805
ECON 27000. International Economics. 100 Units.
This course covers international economics with an emphasis on international trade. The basic theories of international trade are introduced and used to analyze welfare and distributional effects of international trade, government policies, and technology diffusion. In addition, this course also discusses the main empirical patterns of international trade and international investment.
Instructor(s): F. Tintelnot Terms Offered: Winter
Prerequisite(s): ECON 20100
Equivalent Course(s): PBPL 27000

ECON 27700. Health Economics and Public Policy. 100 Units.
This course analyzes the economics of health and medical care in the United States with particular attention to the role of government. The first part of the course examines the demand for health and medical and the structure and the consequences of public and private insurance. The second part of the course examines the supply of medical care, including professional training, specialization and compensation, hospital competition, and finance and the determinants and consequences of technological change in medicine. The course concludes with an examination of recent proposals and initiatives for health care reform.
Instructor(s): Meltzer, D Terms Offered: TBD
Prerequisite(s): PBPL 20000 or ECON 20000 and one undergraduate course in quantitative research methods (Statistics or Econometrics) or the equivalent or consent of the instructor
Equivalent Course(s): CCTS 38300, PBHS 38300, PBPL 28300, PPHA 38300

ECON 27720. Economics and Regulation of Health Care Markets: Theory and Empirics. 100 Units.
This course explores theoretical and empirical facets of the economics of health care and the industrial organization of the health care sector. The course primarily follows the approach of model-driven empirical work, combining economic modelling with experimental and observational data to test for and quantify theoretical predictions. Topics include asymmetric information, adverse selection, demand for medical care, health care externalities, regulation of health insurance markets, health care outside the US, and public and private incentives for medical research. A particular emphasis is on how government regulation and market incentives interact in generating socially relevant outcomes.
Instructor(s): P. Tebaldi Terms Offered: Spring
Prerequisite(s): ECON 20100 required, ECON 21020 strongly preferred

ECON 28060. The Economics of Organizations: An Experimental Perspective. 100 Units.
This course offers an introduction to the experimental methodology while at the same time providing the students with up-to-date insights and findings on how to run an organization and how to manage a workforce. Students will learn the basics of the experimental methodology, learn about the most ground-breaking findings in experimental economics related to the functioning of firms, and know the relevant papers and findings in organizational and personnel economics with a particular emphasis on the question of how to set incentives for workers.
Instructor(s): S. Neckermann Terms Offered: Winter
Prerequisite(s): ECON 20100 and STAT 23400; Econ 21000 strongly recommended.

ECON 28100. The Economics of Sports. 100 Units.
This is a course in microeconomics that applies traditional product and factor market theory and quantitative analysis to contemporary economic issues in professional and college athletics. Topics include the sports business; market structures and outcomes; the market for franchises; barriers to entry; rival leagues, and expansion; cooperative, competitive, and collusive behavior among participants; labor markets, productivity, and compensation of players; racial discrimination; public policies and antitrust legislation; and financing of stadiums.
Instructor(s): A. Sanderson Terms Offered: Spring
Prerequisite(s): ECON 20100; ECON 21020 or ECON 21030 strongly recommended

ECON 28600. Economic Analysis of Law. 100 Units.
This course involves the application of the choice theory of economics to the opportunities obtainable within different legal environments. The likelihood that a person will choose to return a lost wallet, keep a promise, drive more carefully, or heed the terms in a will is partly a function of the applicable laws and regulations. Alternative rules, under the standard Law and Economics approach, are compared in terms of the economic efficiency of their subsequent outcomes. This efficiency lens of Law and Economics is applied to rules concerning property, torts, contracts, and criminal behavior.
Instructor(s): J. Leitzel Terms Offered: Winter
Prerequisite(s): ECON 20100
Equivalent Course(s): PBFL 28605
ECON 28620. Crony Capitalism. 100 Units.
The economic system prevailing in most of the world today differs greatly from the idealist version of free markets generally taught in economic classes. This course analyzes the role played by corporate governance, wealth inequality, regulation, the media, and the political process in general in producing these deviations. It will explain why crony capitalism prevails in most of the world and why it is becoming more entrenched also in the United States of America. The course, which requires only basic knowledge of economics, welcomes undergraduates. Grades will be determined as follows: 40% by the sum of all the homework, 30% by class participation and 30% by the final. Registration for this class concludes at the end of week 1.

ECON 28700. The Economics of Crime. 100 Units.
This course uses theoretical and empirical economic tools to analyze a wide range of issues related to criminal behavior. Topics include the police, prisons, gang behavior, guns, drugs, capital punishment, labor markets and the macroeconomy, and income inequality. We emphasize the analysis of the optimal role for public policy. Instructor(s): S. Levitt Terms Offered: Winter
Prerequisite(s): ECON 20100 required; ECON 21020, STAT 23400 or ECON 21010 strongly recommended
Equivalent Course(s): PBPL 23200

ECON 29700. Undergrad Rdg/Rsch: Economics. 100 Units.
Students are required to submit the College Reading and Research Course Form. Prerequisite(s): Consent of directors of the undergraduate program
Instructor(s): J. Wong Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Consent of directors of the undergraduate program

ECON 29800. Undergraduate Honors Workshop. 100 Units.
For details, see the preceding Honors section.
Instructor(s): K. Yoshida, V. Lima Terms Offered: Autumn Spring Winter
Prerequisite(s): Faculty sponsorship and consent of honors workshop supervisors
ENGLISH LANGUAGE AND LITERATURE

Department Website: http://english.uchicago.edu

Program of Study

The undergraduate program in English Language and Literature provides students with the opportunity to intensively study works of literature originally written in English. Courses address fundamental questions about topics such as the status of literature within culture, the literary history of a period, the achievements of a major author, the defining characteristics of a genre, the politics of interpretation, the formal beauties of individual works, and the methods of literary scholarship and research.

The study of English may be pursued as preparation for graduate work in literature or other disciplines, or as a complement to general education. Students in the Department of English Language and Literature learn how to ask probing questions of a large body of material; how to formulate, analyze, and judge questions and their answers; and how to present both questions and answers in clear, cogent prose. To the end of cultivating and testing these skills, which are central to virtually any career, each course offered by the English Department stresses writing.

Although the main focus of the English Department is to develop reading, writing, and research skills, the value of bringing a range of disciplinary perspectives to bear on the works studied is also recognized. Besides offering a wide variety of courses in English, the English Department encourages students to integrate the intellectual concerns of other fields into their study of literature. This is done by permitting up to three courses outside the English Department to be counted as part of the major if a student can demonstrate the relevance of these courses to his or her program of study. Those interested in creative writing should see Creative Writing below.

PROGRAM REQUIREMENTS

The Department of English requires a total of 13 courses: 11 courses taken within the Department of English and two language courses beyond the College requirement or their equivalent, as well as a Cluster Statement to be submitted by the end of the third week of Spring Quarter of a student's third year. The program presupposes the completion of the general education requirement in the humanities (or its equivalent), in which basic training is provided in the methods, problems, and disciplines of humanistic study.

Language Requirement

Because literary study is enriched by some knowledge of other cultural expressions, the major in English requires students to extend their knowledge of a language beyond the level required of all College students. All students must complete two quarters of study at the second-year level in a language other than English (or the equivalent as determined by petition).

NOTE: If a student has placed into a language's 20200-level course, they should take the course they have tested into. Upon completion, they can go through the Language Center (https://college.uchicago.edu/sites/college.uchicago.edu/files/attachments/language_petition.pdf) petition process to receive back credit for the skipped intermediate-level course (20100). Students who place into a language course beyond 20200 (that is, the third course of the intermediate level, or above) and would like to discuss the possibility of petitioning for a substitute to the language requirement, should provide the Student Affairs Assistant with an official copy of their placement results and set up an appointment.

Alternatively, students may take two courses in an advanced computer language. As of Autumn 2013, the following course combinations may be taken to satisfy the language requirement:

CMSC 12100-12200 Computer Science with Applications I-II,
CMSC 15100-15200 Introduction to Computer Science I-II, or
CMSC 16100-16200 Honors Introduction to Computer Science I-II.

Course Distribution Requirements

The major in English requires at least 11 departmental courses. Students may substitute up to three courses from departments outside English with the permission of the Director of Undergraduate Studies. Departmental courses should be distributed among the following:

Gateway Requirement

Early on, students are required to take at least one of our three introductions to a genre (fiction, poetry, or drama), all of which introduce students to techniques for formal analysis and close reading. Alternatively, one course from the "Approaches to Theater" sequence (ENGL 10950 Approaches to Theater I: Ancient to Renaissance or ENGL 10951 Approaches to Theater II: Late 17th Century to the Present) may be taken to fulfill this requirement. NOTE: ENGL 10800 Introduction to Film Analysis does NOT satisfy the Gateway requirement and may only be used as an elective.
One English "Introduction to" a genre (poetry, fiction, drama) or "Approaches to Theater" course

Genre Requirement

Because an understanding of literature demands sensitivity to various conventions and genres, students are required to take at least one course in each of the genres of fiction, poetry, and drama (one of these courses may be the gateway course above).

One English course in fiction
One English course in poetry
One English course in drama

Period Requirement

Reading and understanding works written in different historical periods require skills and historical information that contemporary works do not require. Students are accordingly asked to study a variety of historical periods in order to develop their abilities as readers, to discover areas of literature that they might not otherwise explore, and to develop their knowledge of literary history. To meet the period requirement in English, students should take at least one course in each of the following:

One English course in literature written before 1650
One English course in literature written between 1650 and 1830
One English course in literature written between 1830 and 1940
One English course in literary or critical theory

NOTE: Many courses satisfy several requirements. For example, a gateway course could also satisfy a genre requirement, or a course on Chaucer could satisfy the genre requirement for poetry and the pre-1650 requirement. The description for each English course includes the distribution areas the course is eligible to satisfy. For details about the requirements met by specific courses, students should consult the Student Affairs Assistant.

Cluster Statement

The purpose of the Cluster Statement is to help students organize and give coherence to their individual program of study. Students will design a cluster of at least five courses that share a conceptual focus. By the end of the third week in Spring Quarter of their third year, students should submit a Cluster Worksheet and one-to-two-page statement to their departmental advisor and then the Student Affairs Assistant outlining their interests in the field and designating a "cluster" of at least five courses. Up to two of these courses may be from departments outside English. Students will design a personalized cluster that falls under one of the following four general rubrics: (1) literary and critical theory, (2) form/genre/medium, (3) literature in history, (4) literature and culture(s). Students may include Creative Writing courses within their clusters. See the English Department website (http://english.uchicago.edu/undergrad/undergrad-requirements/#Cluster) for more information.

Electives

Electives to make up a total of 11 courses. These may include:

Seminars in Research and Criticism

These courses, limited to 15 third- and fourth-year students who have already fulfilled the department's Gateway requirement and taken at least two further English courses, examine different topics and change from year to year. All seminars focus on the analytical, research, and bibliographic skills necessary for producing a substantial seminar paper (around 15–20 pages). They are particularly recommended for those wishing to pursue graduate studies in English, those who wish to write a strong critical BA paper, or those interested in research methods in English.

Makers Seminars

These courses culminate in a final project that can take a variety of forms beyond the research paper. These courses are limited to third- and fourth-year English majors, but non-majors may petition the instructor for admission.

For updated course information, visit english.uchicago.edu/courses. For required student forms, visit english.uchicago.edu/undergrad/resources.

BA Project

NOTE: English no longer offers a Creative BA option. Students interested in completing a creative BA project should instead elect the Creative Writing major.
The BA Project is an optional component of the English major, but students who wish to be considered for departmental honors must submit a Critical BA Project.

All BA writers must attend a mandatory research info session, which will be held towards the end of Spring Quarter. The session will prepare students for the preliminary work they will complete for their project during the summer before their fourth year. The student is required to work on an approved topic over the course of the fourth year of study and to submit a final version to the Director of Undergraduate Studies that has been critiqued by both a faculty advisor and a graduate student preceptor and has gone through revisions based on this feedback and guidance.

Students who wish to use the BA Project in English to meet the same requirement in another major should discuss their proposals with both Directors of Undergraduate Studies no later than the end of their third year. A consent form, to be signed by both departments, is available from the College advising office. It must be completed and returned to the student’s College adviser by the end of Autumn Quarter of the student’s year of graduation.

The BA Project may develop from a paper written in an earlier course or from independent research. Students who wish to complete a BA Project must submit a proposal (available on the English Department website [http://english.uchicago.edu/undergrad/resources](http://english.uchicago.edu/undergrad/resources)) by the end of Spring Quarter of their third year. On this form, they identify a faculty member who will serve as their project advisor.

Students work on their BA Project over three quarters. Prior to the Autumn Quarter of their fourth year, students will be assigned a graduate student preceptor who will help them develop pieces of their project and suggest revisions. Over Autumn Quarter, students will attend a series of mandatory colloquia led by the preceptors to prepare them for the upcoming quarter when the bulk of the writing occurs. In the Winter and Spring Quarters, students will continue to meet with their preceptors and will also consult with their individual faculty advisor.

In consultation with the faculty advisor and graduate preceptor, students submit a near-final draft of their paper by the end of week two of Spring Quarter. By the beginning of the fifth week, students submit the final version of their project to their preceptor, faculty advisor, and the Student Affairs Assistant.

Students may elect to register for the BA Project Preparation Course (ENGL 29900) for one quarter credit. Note that the grade for this course is on work toward the BA Project and is normally submitted in Spring Quarter even when the course has been taken in an earlier quarter. See Reading Courses for other information.

**Honors**

Completion of a BA Project does not guarantee a recommendation for departmental honors. For honors candidacy, a student must have at least a 3.25 grade point average overall and a 3.6 GPA in the major (grades received for transfer credit courses are not included into this calculation).

To be eligible for honors, a student’s BA Project must be judged to be of the highest quality by the graduate student preceptor, faculty advisor, and Director of Undergraduate Studies. Honors recommendations are made to the Master of the Humanities Collegiate Division by the department and it is the Master of the Humanities Collegiate Division who makes the final decision.

**SUMMARY OF REQUIREMENTS FOR THE MAJOR**

The Department of English requires a total of 13 courses: 11 courses taken within the Department of English and two language courses or their equivalent, as well as a Cluster Statement to be submitted by the end of the third week of Spring Quarter of a student's third year. By Winter Quarter of their third year, students must also meet with the Student Affairs Assistant to review their English Requirements Worksheet.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Two quarters of study at the second-year level in a language other than English or credit for the equivalent as determined by petition</td>
<td>200</td>
</tr>
<tr>
<td>or two quarters of a computer language</td>
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<tr>
<td>A total of 11 additional English courses is required to meet the distribution requirements of the major (one course may satisfy more than one requirement):</td>
<td>1100</td>
</tr>
<tr>
<td>One English introduction to a genre course or “Approaches to Theater” course</td>
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<tr>
<td>One English course in fiction</td>
<td></td>
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<tr>
<td>One English course in poetry</td>
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<tr>
<td>One English course in drama</td>
<td></td>
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<tr>
<td>One English course in literature written before 1650</td>
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<tr>
<td>One English course in literature written between 1650 and 1830</td>
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<tr>
<td>One English course in literature written between 1830 and 1940</td>
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<tr>
<td>One English course in literary or critical theory</td>
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<tr>
<td>One to seven English electives (may include ENGL 29900)</td>
<td></td>
</tr>
<tr>
<td>Cluster Statement with five courses</td>
<td></td>
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</tbody>
</table>
BA Project (optional) 000
Total Units 1300

* The Cluster Statement must be submitted by the end of the third week of Spring Quarter of a student's third year. This requirement is worth 000 units. See the section "Cluster Statement" above for details.

Courses Outside the Department Taken for Program Credit

A maximum of three courses outside the Department of English may count toward the total number of courses required by the major. Two of these may count toward the student's "cluster." The student, after discussion with the Student Affairs Assistant, may submit a petition for course approval to the Director of Undergraduate Studies before taking courses outside the English Department for credit toward the major. Such courses may be selected from related areas in the University (history, philosophy, religious studies, social sciences, etc.) or they may be taken from a study abroad program.

Four total Creative Writing (CRWR) courses may be counted toward the elective requirement without a petition.

Transfer credits for courses taken at another institution are subject to approval by the Director of Undergraduate Studies and are limited to a maximum of three courses. Transferred courses do not contribute to the student's University of Chicago grade point average for the purpose of computing an overall GPA, dean’s list, or honors. NOTE: The Office of the Dean of Students in the College must approve the transfer of all courses taken at other institutions, with the exception of courses taken as part of a University-sponsored study abroad program. For details, visit the Transfer Credit page.

creative writing

Undergraduate students may also declare a major in Creative Writing. Students who are not majoring in English Language and Literature or Creative Writing may declare the minor in English and Creative Writing. Students interested in pursuing these options should contact the Program Coordinator for Creative Writing for further information. Please note that there is no minor solely in English. The minor in English and Creative Writing for non–English majors is the only minor available through the Department of English Language and Literature.

double majors in English Language and literature and creative writing

When students choose a double major in Creative Writing and English Language and Literature, they may count up to four courses towards both majors. These four courses will typically include the three Literature Courses and the Literary Genre course, but in some cases one of these slots might be filled by a CRWR course (with Director of Undergraduate Studies approval). However, the two Research Background Electives required for the Creative Writing major should be taken outside of the Department of English Language and Literature.

This means that a maximum of four English Language and Literature courses, including the Literary Genre course, can count towards the Creative Writing major.

Students who are pursuing only the English Language and Literature major may count up to four CRWR courses towards the major in English as electives without a petition. However, when students are pursuing a double major in English Language and Literature and Creative Writing, they must observe the shared four-course maximum, so any eligible CRWR courses beyond this cap must be counted towards English only.

Minor in English and Creative Writing

Students who are not English Language and Literature or Creative Writing majors may complete a minor in English and Creative Writing. Such a minor requires six courses plus a portfolio of creative work. At least two of the required courses must be Creative Writing (CRWR) workshop courses, with at least one being an Advanced Workshop. Three of the remaining required courses may be taken in either the Department of English Language and Literature (ENGL) or the Program in Creative Writing (CRWR). This may include CRWR Technical Seminars or general education courses, as long as they are not already counted toward the general education requirement in the arts.

In addition, students must enroll in one of the following workshops offered during the Winter Quarter: CRWR 29200 (http://collegecatalog.uchicago.edu/search/?P=CRWR%2029200) Thesis/Major Projects: Fiction; CRWR 29300 (http://collegecatalog.uchicago.edu/search/?P=CRWR%2029300) Thesis/Major Projects: Poetry; CRWR 29400 (http://collegecatalog.uchicago.edu/search/?P=CRWR%2029400) Thesis/Major Projects: Creative Nonfiction. Finally, students must submit a portfolio of their work (e.g., a selection of poems, one or two short stories or chapters from a novel, two or three nonfiction pieces) to the Creative Writing program coordinator by the end of the fifth week in the quarter in which they plan to graduate. Students will work with a graduate student preceptor to compile and refine their final portfolios.

Students who elect the minor program in English and Creative Writing must meet with the program administrator for Creative Writing before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the administrator. The administrator's
approval for the minor program should be submitted to a student's College adviser by the deadline above on a form obtained from the adviser.

Students completing this minor will be given enrollment preference for CRWR Advanced Workshops and Thesis/Major Projects Workshops, and they must follow all relevant admission procedures described at the Creative Writing (https://creativewriting.uchicago.edu) website. For details, see Enrolling in Creative Writing Courses (http://collegecatalog.uchicago.edu/thecollege/creativewriting/#Enrolling%20in%20Creative%20Writing%20Courses).

Courses in the minor (1) may not be doubly counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades (not P/F), and at least half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor Program in English and Creative Writing

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<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Two CRWR workshop courses *</td>
</tr>
<tr>
<td>Three CRWR or ENGL electives</td>
</tr>
<tr>
<td>One Thesis/Major Projects Workshop +</td>
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<tr>
<td>A portfolio of the student's work</td>
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<tr>
<td>Total Units</td>
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</table>

* At least one must be an Advanced Workshop.

Minor to Major and Major to Minor

Student circumstances change, and thus a transfer between the major and minor programs may be desirable to students who begin a course of study in either program. Workshop courses (including Beginning Workshops) and one Technical Seminar may count towards the minor, but Fundamentals in Creative Writing will not. The Thesis/Major Projects Workshop will also function as a portfolio workshop for minors. Students should consult with their College adviser if considering such a change and must update their planned program of study with the Program Coordinator or Director of Undergraduate Studies in Creative Writing.

Sample Plan of Study for the Minor

CRWR 10200 Beginning Fiction Workshop 100
CRWR 22110 Advanced Fiction: Exploring Your Boundaries 100
ENGL 16500 Shakespeare I: Histories and Comedies 100
ENGL 10706 Introduction to Fiction 100
CRWR 29200 Thesis/Major Projects: Fiction 100
ENGL 10703 20th-Century American Short Fiction 100
A portfolio of the student's work (two short stories) 100

Total Units 600

READING COURSES

ENGL 29700 Reading Course 100
ENGL 29900 Independent BA Paper Preparation 100

Enrollment in ENGL 29700 Reading Course or ENGL 29900 Independent BA Paper Preparation requires approval from the Director of Undergraduate Studies. They may be eligible to fulfill requirements for the major if they are taken for a quality grade (not P/F) and include a final paper assignment. No student may use more than two readings courses in the major. Critical BA writers who wish to register for ENGL 29900 Independent BA Paper Preparation must arrange for appropriate faculty supervision and obtain the permission of the Director of Undergraduate Studies. ENGL 29900 Independent BA Paper Preparation counts as an English elective but not as one of the courses fulfilling distribution requirements for the major.

NOTE: Reading courses are special research opportunities that must be justified by the quality of the proposed plan of study; they also depend upon the availability of faculty supervision. No student can expect a reading course to be arranged automatically.

GRADING

Students majoring in English must receive quality grades (not P/F) in all 13 courses taken to meet the requirements of the program. Non-majors may take English courses for P/F grading with consent of instructor.
ADVISING

Students are encouraged to declare a major in English as early as possible, ideally before the end of their second year. Students who declare the major after their second year must notify the Student Affairs Assistant to ensure that departmental advising assignments are arranged. After declaring the major, students should arrange a meeting with the Student Affairs Assistant, who will help students fill out the English Requirements Worksheet. Students should also subscribe to the departmental email list for majors (ugrad-english@lists.uchicago.edu) to ensure that they do not miss important communications from the undergraduate office.

Third-year students will be assigned a departmental faculty advisor. Students should meet with their faculty advisor at least twice a year to discuss their academic interests, progress in the major, and long-term career goals. The Student Affairs Assistant and Director of Undergraduate Studies are also available to assist students. Students should meet with the Student Affairs Assistant early in their final quarter to be sure they have fulfilled all requirements.

THE LONDON PROGRAM

This program, offered in Autumn Quarter, provides students with an opportunity to study British literature and history in the cultural and political capital of England in the Autumn Quarter. In the ten-week program, students take four courses, three of which are each compressed into approximately three weeks and taught in succession by Chicago faculty. The fourth, project-oriented, course is conducted at a less intensive pace. The program includes a number of field trips (e.g., Cornwall, Bath, Canterbury, Cambridge). The London program is designed for third- and fourth-year students with a strong interest and some course work in British literature and history. Applications are available on the University of Chicago's Study Abroad home page (study-abroad.uchicago.edu) and typically are due in mid–Winter Quarter.

ENGLISH LANGUAGE AND LITERATURE COURSES

**ENGL 10400. Introduction to Poetry. 100 Units.**
This course involves intensive readings in both contemporary and traditional poetry. Early on, the course emphasizes various aspects of poetic craft and technique, setting, and terminology, as well as provides extensive experience in verbal analysis. Later, emphasis is on contextual issues: referentiality, philosophical and ideological assumptions, as well as historical considerations. (Gateway, Poetry)
Instructor(s): Lisa Ruddick Terms Offered: Spring

**ENGL 10600. Introduction to Drama. 100 Units.**
This course explores the unique challenges of experiencing performance through the page. Students will read plays and performances closely, taking into account not only form, character, plot, and genre, but also theatrical considerations like staging, acting, spectatorship, and historical conventions. We will also consider how various agents-playwrights, readers, directors, actors, and audiences-generate plays and give them meaning. While the course is not intended as a survey of dramatic literature or theater history, students will be introduced to a variety of essential plays from across the dramatic tradition. The course culminates in a scene project assignment that allows students put their skills of interpretation and adaptation into practice. No experience with theater is expected. (Gateway, Drama)
Instructor(s): John Muse Terms Offered: Autumn
Equivalent Course(s): TAPS 19300, CMLT 20601

**ENGL 10640. Introduction to Victorian Literature: Men and Women. 100 Units.**
This course will introduce the major genres of fiction and poetry produced in Victorian Britain. I have chosen texts that highlight the period’s central preoccupations: gender and sexuality. A time during which the so-called Woman Question vexed politicians, commentators and activists, when marriage and motherhood were under review, and styles of masculinity contested, literature of the period presented dynamic discussions about the roles of men and women, how they might interact, and what they can do. These texts are also some of the most formally innovative of the period. Texts are likely to include Robert Browning's Men and Women (which gives us our title), Elizabeth Barrett Browning, Aurora Leigh, M E Braddon, Lady Audley's Secret, Lewis Carroll, Alice in Wonderland, and short stories by the New Woman writer, George Egerton, and Oscar Wilde. (1830-1940)
Instructor(s): Josephine McDonagh Terms Offered: Winter

**ENGL 10703. 20th-Century American Short Fiction. 100 Units.**
This course presents America’s major writers of short fiction in the 20th century. We will begin with Willa Cather’s “Paul’s Case” in 1905 and proceed to the masters of High Modernism, Hemingway, Fitzgerald, Faulkner, Porter, Welty, Ellison, Nabokov; on through the next generation, O’Connor, Pynchon, Roth, Mukherjee, Coover, Carver; and end with more recent work by Dantical, Tan, and the microfictionists. Our initial effort with each text will be close reading, from which we will move out to consider questions of ethnicity, gender, and psychology.
Writing is also an important concern of the course. There will be two papers and an individual tutorial with each student. (1830-1940, Fiction)
Instructor(s): William Veeder Terms Offered: Autumn
Equivalent Course(s): AMER 10703
ENGL 10706. Introduction to Fiction. 100 Units.
This course explores the various strategies and techniques that authors have used to tell stories that claim in one way or another to be realistic. As we take up how storytellers "make it real" we will address key elements of narrative, including point of view, characterization, voice, tone, diction, syntax, setting, symbolism, pacing, modes of mediation, intertextuality, motifs, and figuration. We will focus primarily on novels and short stories, with a nod to the graphic novel at the conclusion of the course. (Gateway, Fiction)
Instructor(s): Ken Warren Terms Offered: Winter

ENGL 10800. Introduction to Film Analysis. 100 Units.
This course introduces basic concepts of film analysis, which are discussed through examples from different national cinemas, genres, and directorial oeuvres. Along with questions of film technique and style, we consider the notion of the cinema as an institution that comprises an industrial system of production, social and aesthetic norms and codes, and particular modes of reception. Films discussed include works by Hitchcock, Porter, Griffith, Eisenstein, Lang, Renoir, Sternberg, and Welles.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Note(s): Required of students taking a major or minor in Cinema and Media Studies.
Equivalent Course(s): ARTH 20000, ARTV 20300, CMST 10100

ENGL 10860. Introduction to Modernism. 100 Units.
This course focuses on the major figures of British and Anglo-American modernism, including T.S. Eliot, Ezra Pound, James Joyce, Gertrude Stein, Katherine Mansfield, Virginia Woolf, and Samuel Beckett. We will also be discussing modernist developments in music and the visual arts. A guided tour of the Art Institute will be included, along with screenings of some of Beckett's plays. Requirements: one paper of 3-4 pages, one paper of 5-6 pages, regular postings to online blog, and class presentations. (Fiction, Poetry, Drama)
Instructor(s): Maud Ellmann Terms Offered: Winter

ENGL 11004. History of the Novel. 100 Units.
We will read one or more novels and novellas from each of the last four centuries and also study movie adaptations of these works. Likely novelists to be studied include Miguel de Cervantes, Samuel Richardson, Henry Fielding, Choderlos de Laclos, Jane Austen, Gustave Flaubert, Charles Dickens, George Eliot, Henry James, Vladimir Nabokov, Franz Kafka, Tom McCarthy, and Samuel Beckett. Film screenings will be scheduled on alternate Friday afternoons and will also be available for watching in the library. (1650-1830, 1830-1940, Fiction)
Requirements: one paper of 5-6 pages, one paper of 7-8 pages, regular postings to the online discussion board, and in-class exercises.
Instructor(s): Maud Ellmann Terms Offered: Autumn

ENGL 12300. Poetry And Being. 100 Units.
This course involves close analysis of poems from a variety of periods, exposure to various critics' perspectives on literary form, and a series of theoretical readings on creativity, play, and emotion, which we will place in dialogue with our interpretations of individual poems. Theoretical areas to be explored include psychoanalysis and cognitive psychology. (Poetry, Theory)
Instructor(s): Lisa Ruddick Terms Offered: Winter
Prerequisite(s): PQ: Intro to Poetry (ENGL 10400) or an equiv course at another institution or consent of instructor.

ENGL 12320. Critical Videogame Studies. 100 Units.
Since the 1960s, games have arguably blossomed into the world’s most profitable and experimental medium. This course attends specifically to video games, including popular arcade and console games, experimental art games, and educational serious games. Students will analyze both the formal properties and sociopolitical dynamics of video games. Readings by theorists including Ian Bogost, Roger Caillois, Nick Dyer-Witheford, Mary Flanagan, Jane McGonigal, Lisa Nakamura, and Katie Salen will help us think about the growing field of video game studies. This is a 2018-19 Signature Course in the College. (Theory)
Instructor(s): Patrick Jagoda Terms Offered: Autumn
Equivalent Course(s): SIGN 26038, CMST 27916
ENGL 12520. Climate Change in Literature, Art, and Film. 100 Units.
If meteorological data and models show us that climate change is real, art and literature explore what it means for our collective human life. This is the premise of many recent films, novels, and artworks that ask how a changing climate will affect human society. In this course, we will examine the aesthetics of climate change across media, in order to understand how narrative, image, and even sound help us witness a planetary disaster that is often imperceptible. Our approach will be comparative: what kind of story about climate change can a science fiction novel about a dystopian future tell, and how is this story different than, say, that of an art installation made of melting blocks of Arctic ice? Do different media tend to emphasize different aspects of ecological crisis? Readings and discussions will introduce students to some of the ways that humanities scholarship is contributing to climate change research. The syllabus may include Jeff VanderMeer, Annihilation (2014); Margaret Atwood, Oryx and Crake (2003); John Luther Adams, Become Ocean (2014); George Miller, Mad Max: Fury Road (2015); and Amitav Ghosh, The Great Derangement (2016). (Fiction, Theory). This course is part of the College Cluster program: Climate Change, Culture and Society.
Instructor(s): L. McEnerney, K. Cochran, T. Weiner Terms Offered: Spring Winter
Equivalent Course(s): ENST 12520, SIGN 26014

ENGL 12720. Inventing Consciousness: Literature, Philosophy, Psychology. 100 Units.
Consciousness is an historical achievement. As a phenomenon, consciousness probably came into being somewhere deep in evolutionary time. Yet as a concept consciousness is relatively new: the European notion of consciousness emerges only in the late seventeenth century. This course draws on the resources of literature, history, philosophy, and psychology to examine how the concept of consciousness came to possess the explanatory dominance it currently holds. We will begin by acquiring a sense of what consciousness currently means in philosophy and psychology, paying particular attention to how the Western concept differs from similar ideas in such traditions as Buddhism. After examining the pre-history of consciousness by reading such authors as William Shakespeare, we will then turn to two historical moments that were central to the concept’s development. First, we will train our attention on the interplay between philosophy and literature in the late seventeenth century, reading texts by René Descartes, John Milton, Thomas Traherne, and John Locke. Second, we will focus on how, in the late nineteenth and early twentieth centuries, the psychology of William James contributed to the development of “stream of consciousness” techniques in the novels of Henry James and Virginia Woolf. In this course, we will stress the historical contingency of this concept-consciousness has a birthdate-in order to determine the nature of a consequence that follows from this fact: the extent to which current uses of this concept are still shaped and constrained by the historical circumstances that conditioned its appearance and development. (1650-1830, 1830-1940, Fiction, Poetry)
Instructor(s): W. J. T. Mitchell Terms Offered: Autumn
Equivalent Course(s): SIGN 26042

ENGL 12800. Theories of Media. 100 Units.
This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat in which images proliferate and take on a “life of their own.” The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato’s Allegory of the Cave and Cratylus, Aristotle’s Poetics, and modern texts such as Marshall McLuhan’s Understanding Media, Regis Debray’s Mediology, and Friedrich Kittler’s Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of concepts such as the “unmediated” or “immediate”? How do media become intelligible and concrete in the form of “metapictures” or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become “mixed” in hybrid, intermedial formations? We will also look at recent films such as The Matrix and Existenz that project fantasies of a world of total mediation and hyperreality.
Instructor(s): Timothy Harrison Terms Offered: Spring
Equivalent Course(s): SIGN 26014

ENGL 13000. Academic and Professional Writing (The Little Red Schoolhouse) 100 Units.
Academic and Professional Writing, a.k.a. “The Little Red Schoolhouse” or “LRS” (English 13000/33000) is an advanced writing course for third- and fourth-year undergraduates who are taking courses in their majors or concentrations, as well as graduate students in all of the divisions and university professional programs. LRS helps writers communicate complex and difficult material clearly to a wide variety of expert and non-expert readers. It is designed to prepare students for the demands of academic writing at various levels, from the B.A. thesis to the academic article or book—and for the tasks of writing in professional contexts.
Instructor(s): L. McEnerney, K. Cochran, T. Weiner Terms Offered: Spring Winter
Prerequisite(s): Third- or fourth-year standing
Note(s): This course does not count towards the ISHU program requirements. May be taken for P/F grading by students who are not majoring in English. Materials fee $20.
Equivalent Course(s): ENGL 33000
ENGL 13720. Thinking with Race in Medieval England. 100 Units.
The medieval period is often thought of as the era just before the idea of race emerged - before the Atlantic
slave trade, before European colonialism, before scientific racism. At the same time, the Middle Ages have been
crucial to modern phenomena of racialized nationalism and ideologies of whiteness. In recent years, medievalists
have studied and debated race’s significance. Acknowledging the complex and urgent status of medieval race
today, this course examines some of the stories, images, ideas, and institutions of medieval England. We will
test how race helps us think about the articulation and operationalization of human difference between the
twelfth and fourteenth centuries, especially with respect to Jews, Saracens (a term created by Christians to refer
to Arabs and Muslims of varying ethnicities), and the so called “monstrous races” who were thought to populate
the far reaches of the world. We’ll ask - How did geography, religion, and history come to be corporealized, or
understood as legible on the body? How did the essentialization of differences between groups act to satisfy
desires, or seemingly to solve intellectual and ideological difficulties? How does “thinking with race” in medieval
England throw new light on race and racism today? Readings will be both in Middle English and modern
English translation. No previous experience with medieval literature is expected. This is a 2018-19 College
Signature Course. (Pre-1650)
Instructor(s): Julie Orlemanski Terms Offered: Spring
Equivalent Course(s): SIGN 26041

ENGL 15107. Some Versions of Apocalypse. 100 Units.
The end of the world is one of the most durable of mankind’s obsessions, from prophetic texts of antiquity to
today’s fascination with zombie plagues, environmental disaster, and nuclear winter. In this course we will
explore what is both fearful and alluring about catastrophe on an unimaginable scale, as we read and view some
paradigmatic apocalyptic works across a wide historical range. The course will focus on close attention to the
aesthetics of individual works, locating those works in their historical contexts, and the conceptual analysis of the
texts’ motivating concerns. We will especially attend to the relationship between aesthetic form and the political,
economic, and subjective forms that mediate catastrophe—as well as the ways that the end of things asks us to
think beyond mediation. Texts include the biblical Book of Revelation, William Langland’s medieval allegory
Piers Plowman, Daniel Defoe’s early modern chronicle of the black death A Journal of the Plague Year, Cormac
McCarthy’s postapocalyptic novel The Road, and both the novel and film versions of World War Z. This is a
2018-19 Signature Course in the College. (Fiction)
Instructor(s): Mark Miller Terms Offered: Winter
Equivalent Course(s): SIGN 26040

ENGL 15500. Chaucer: The Canterbury Tales. 100 Units.
Close reading of Chaucer’s Canterbury Tales, with particular attention to the intersection of literary form with
problems in ethics, politics, and sexuality. (Pre-1650, Poetry)
Instructor(s): Mark Miller Terms Offered: Winter
Equivalent Course(s): FNDL 25700

ENGL 15806. Multilingual Literatures of Early Medieval Britain. 100 Units.
We will read (in modern English translation) works composed in the several languages of early medieval Britain.
Texts will include: from Old English, Beowulf and The Battle of Maldon; from Old Norse, Egil’s Saga and King
Harald’s Saga; from Anglo-Norman French, The Song of Roland; from Old Irish, selections from The Táin Bó
Cuailnge; from medieval Welsh, Y Gododdin, and “Culhwch and Olwen”; and from Latin, selections from
Geoffrey of Monmouth’s History of the Kings of Britain. (Pre-1650, Fiction)
Instructor(s): Christina von Nolcken Terms Offered: Autumn

ENGL 16600. Shakespeare II: Tragedies and Romances. 100 Units.
This course explores mainly major plays representing the genres of tragedy and romance; most (but not all) date
from the latter half of Shakespeare’s career. After having examined how Shakespeare develops and deepens
the conventions of tragedy in Titus Andronicus, Othello, Macbeth, King Lear, and Antony and Cleopatra, we
will turn our attention to how he complicates and even subverts these conventions in The Winter’s Tale and The
Tempest. Throughout, we will treat the plays as literary texts, performance prompts, and historical documents.
Section attendance is required. This course is part of the College Course Cluster, The Renaissance. (Pre-1650,
Drama)
Instructor(s): Ellen MacKay Terms Offered: Winter
Equivalent Course(s): FNDL 21404, TAPS 28406

ENGL 17501. Milton. 100 Units.
A study of Milton’s major writings in lyric, epic, tragedy, and political prose, with emphasis upon his evolving
sense of his poetic vocation and career in relation to his vision of literary, political, and cosmic history. Graduate
students will be expected to do additional secondary reading, (Pre-1650, 1650-1830, Poetry), (Med/Ren)
Instructor(s): Joshua Scodel Terms Offered: Spring
Equivalent Course(s): RLST 25405, ENGL 47501, FNDL 21201
ENGL 17950. The Declaration of Independence. 100 Units.
This course explores important intellectual, political, philosophical, legal, economic, social, and religious contexts for the Declaration of Independence. We begin with a consideration of the English Revolution, investigating the texts of the Declaration of Rights of 1689 and Locke's Second Treatise and their meanings to American revolutionaries. We then consider imperial debates over taxation in the 1760s and 1770s, returning Benjamin Franklin's Autobiography to its original context. Reading Paine's Common Sense and the letters of Abigail Adams and John Adams we look at the multiple meanings of independence. We study Jefferson's drafting process, read the Declaration over the shoulders of people on both sides of the Atlantic, and consider clues to contemporary meanings beyond the intentions of Congress. Finally, we briefly engage the post-revolutionary history of the place and meaning of the Declaration in American life. (1650-1830, 1830-1940) This is a 2018-19 College Signature Course.
Instructor(s): Eric Slauter Terms Offered: Winter
Equivalent Course(s): HMRT 17950, LLSO 27950, HIST 17604, FNDL 27950, SIGN 26039

ENGL 18500. American Horrors. 100 Units.
This course is a survey of horror in American literature and film, with a special focus on the genre's relation to racial and sexual violence. How does horror reflect, contribute to, or intervene into structures of racism, sexism, xenophobia, and queerphobia? How do fictional texts represent or transform non-fictional horrors, from lynching to rape to police brutality? And what is the status of horror as an emotion that structures relations of power and privilege in the United States? Together, we will gain a historical perspective on the genre, for instance tracking the figure of the zombie from its birth in Haitian folklore as a projection of the horrors of slavery, through 20th century works like George Romero's film Night of the Living Dead, and into present day works including Colson Whitehead's novel Zone One. We will pay special attention to the present moment, interrogating a renaissance of horror tropes in, for instance, feminist fiction (Karen Russell and Carmen Maria Machado), television (American Horror Story and Stranger Things), and cinema (It and Get Out).
Instructor(s): Michael Dango Terms Offered: Autumn
Equivalent Course(s): CRES 18500, GNSE 18500

ENGL 18700. Sexual Violence in America: Theory, Literature, and Activism. 100 Units.
This course will consider how a spectrum of sexual violence has been represented, politicized, and theorized in the United States from the 1970s to the present. To get a handle on this vast topic, our archive will be wide-ranging, including legal statutes and court opinions on sexual harassment and pornography; fiction, poetry, and graphic novels that explore the limits of representing sexual trauma; activist discourses in pamphlets and editorials from Take Back the Night to #MeToo; and groundbreaking essays by feminist and queer theorists, especially from critical women of color. How does the meaning of sex and of power shift with different kinds of representation, theory, and activism? How have people developed a language to share experiences of violation and disrupt existing power structures? And how do people begin to imagine and build a different world whether through fiction, law, or institutions? (Theory)
Instructor(s): Michael Dango Terms Offered: Winter

ENGL 19700. Image, Text, Archive. 100 Units.
This course examines hybrid image-texts of the last 150 years to investigate what happens to narrative and genre when visual images become integral parts of textual composition, and what kinds of claims such texts make about memory, veracity, or objectivity. We will examine the early history of photography and image reproduction, learn to formally read images, and interrogate the relationship of photography to documentary. Our readings will include Louis Aragon's Paris Peasant (1925), André Breton's Nadja (1928), James Agee and Walker Evans's Let Us Now Praise Famous Men (1941), Vladimir Nabokov's Speak, Memory (1966), Michael Ondaatje's The Collected Works of Billy the Kid (1970), W. G. Sebald's The Rings of Saturn (1995) and Austerlitz (2001), and Anne Carson's Nox (2009); critical readings will include texts by Roland Barthes, Margaret Iverson, Timothy Dow Adams, and Linda Hutcheon. (1830-1940, Theory)
Instructor(s): Rachel Kyne Terms Offered: Winter

ENGL 19800. The Unincorporated: Modernism, Geography, and Race. 100 Units.
This course investigates the centrality of notions of exclusion and exclusivity to the development of modernist literature on both sides of the Atlantic. The period of literary modernism stretching from the late-19th century to roughly the Second World War coincides with the high point of European imperial claims as well as the sedimentation of Jim Crow. We will trace the articulation of forms of belonging - and non-belonging - along the interrelated axes of space and race in modernist figures and writings ranging from Joseph Conrad, George Orwell, James Joyce, and Jean Rhys to Djuna Barnes, Aimé Césaire, Albert Camus, Gwendolyn Brooks, and Richard Wright. Our quarter will conclude with Kamal Daoud's The Meursault Investigation, a defiant recasting of Camus's 1942 The Stranger. (Fiction, 1830-1940, Theory)
Instructor(s): Rachel Kyne Terms Offered: Autumn
CMLT 20109. Comparative Methods in the Humanities. 100 Units.
This course introduces models of comparative analysis across national literatures, genres, and media by focusing on poetry in different languages and cultures and in relation to other discursive and artistic forms. We will examine a wide variety of poetic and critical texts in order to explore such topics as the specificity of poetry and of poetic kinds; orality and folk, art, and popular song; poetry’s relation to prose (from philosophy to autobiography to journalism); transnational imitation and translation; poetry and globalization; ekphrasis and poetry’s relations to visual arts; and poetry and film. Readings will likely include poems by Sappho, Horace, Dante, Li Bai, Du Fu, Ronsard, Shakespeare, Milton, Basho, Goethe, Wordsworth, Robert Browning, and Dylan; and critical writings by Longinus, Plutarch, Montaigne, Li Zhi, Wordsworth, Auerbach, Jakobson, Adorno, Pasolini, Zumthor, Culler, and Damrosch.
Instructor(s): Joshua Scodel
Terms Offered: Spring
Equivalent Course(s): ENGL 28918

ENGL 20148. London Program: English Renaissance Verse and the Poetics of Place. 100 Units.
This course will explore sixteenth- and seventeenth-century English poetry by focusing on the poetic treatments of diverse places, including commercial, legal, and theatrical London venues, courtly palaces, aristocratic country houses and rural estates, churches, prisons, and imaginary landscapes. Poets might include Wyatt, Spenser, Sidney, Shakespeare, Donne, Jonson, Herbert, Herrick, Lovelace, Milton, Marvell, Philips, and Cowley. Genres might include sonnet, epithalamion, satire, pastoral, georgic, epistle, epigram, country-house poem, and ode. Trips within and close to London might include the Tower of London, the Whitehall Banqueting House, the Globe Theater, Hampton Court, and Penshurst Place. (Pre-1650, Poetry)
Instructor(s): Joshua Scodel
Terms Offered: Autumn
Prerequisite(s): Admission to the London Program (study abroad) is required.

ENGL 20149. London Program: Literature and the Environment in Eighteenth-Century Britain. 100 Units.
This course will focus on eighteenth-century literature that engages us with the nonhuman environment— with the plants, animals, and elements, the landscapes and the climates that surround and shape human life. We will range widely in genres from nature poetry and travel writing to natural history and the novel, reflecting throughout on the ways in which nature may be cultivated, improved, or imported from elsewhere - not something opposed to human culture but wholly tied up with it. Together, we will ask: how do ideas of nature look different in the city, the country, or the colonies? And crucially, what might eighteenth century understandings of the relationship between human beings and the natural world have to tell us our own moment of ecological entanglement and crisis? The course will draw on the resources of London and its environs, likely to include Kew Gardens, the Natural History Museum, the Sloane House, and Tate Britain. (1650-1830)
Instructor(s): Heather Keenleyside
Terms Offered: Autumn
Prerequisite(s): Admission to the London Program (study abroad) is required.

ENGL 20150. London Program: Pagan London. 100 Units.
This course is a study of literary modernism by way of its debt to Scottish anthropologist J.G. Frazer’s The Golden Bough, a foundational work in the anthropology of magic, religion, purity, pollution, sacrifice, fertility, and the death and reincarnation of gods. Reading Frazer’s work alongside works by William Butler Yeats, T.S. Eliot, Ezra Pound, H.D., Virginia Woolf, James Joyce, Ludwig Wittgenstein, Robert Graves, Sigmund Freud, and Jane Harrison, we will examine the widespread impact of Frazer’s tome, its resonance in the tumultuous war years, and the ways in which it participated in the creation of pagan, heretical, outsider, country, rural, and ethnic values in modernist London. Inasmuch as Frazer’s work possessed a literary life, we will examine how its anthropology possessed by literature lives on in the works of such anthropologists as Mary Douglas and Michael Taussig. Course fieldtrips are likely to include the newly reconstructed London Mithraeum, Greenwich, and the Stonehenge monument. (1830-1940, Fiction, Poetry, Theory)
Instructor(s): Edgar Garcia
Terms Offered: Autumn
Prerequisite(s): Admission to the London Program (study abroad) is required.

ENGL 20151. London from the Outside-In. 100 Units.
In discussing Jane Austen’s Mansfield Park, Edward Said writes of the Bertram estate’s colonial holdings in Antigua, and the few references in the novel itself to these plantations, claiming that the novel demonstrates “the avowedly complete subordination of colony to metropolis.” In this course, we will explore and expand upon this idea, seeking to understand the ways in which London’s cosmopolitan and prominent history depend upon England’s imperial endeavors. This pursuit will also involve representations of the city “from the outside,” such as Samuel Selvon’s The Lonely Londoners and Tayeb Salih’s Season of Migration. Readings will be diverse in genre, style, and period, attempting to open as many related discourses as possible, as this course is aimed at developing an independent research project. Class time will be equally devoted to the readings, research techniques, and workshopping your ideas. (Theory)
Instructor(s): Tim DeMay
Terms Offered: Autumn
ENGL 20562. Freedom and Fate in the Renaissance. 100 Units.
In this course, we will study theories of will and of action that held sway in the Renaissance. Is human choice governed by reason, or are our wills overruled by our own passions or by divine grace? Can self-determination genuinely arise in political or physical systems determined by history? What does it mean to depicts free choice? Questions like these shaped crucial Renaissance debates in parliaments and churches, in laboratories and in the arts. We'll examine them through both literary and philosophical texts by writers including William Shakespeare, John Donne, Thomas Hobbes, John Milton, Margaret Cavendish, and Isaac Newton. (Poetry, Pre-1650, 1650-1830)
Instructor(s): Sarah Kunjummen Terms Offered: Winter

ENGL 22110. Excrement and Ecstasy: The Devotional Body in Early Modern Literature. 100 Units.
This class asks why writers in the seventeenth century turn to bodily metaphor and erotic language to describe their interactions with the divine. We will investigate the materiality of the body in early modern poetry—where it is frequently depicted as in organic frenzy, failing, and even producing excrement—and its involvement with religious devotional practice. Authors of focus will likely include William Shakespeare, John Donne, George Herbert, John Milton, and Margaret Cavendish. (Poetry, Pre-1650, 1650-1830)
Instructor(s): Beatrice Bradley Terms Offered: Autumn

ENGL 22130. Making Scents: A Literary History of Smell. 100 Units.
While the visual has long been the privileged sense in literary studies, recent work has begun to explore other senses. From massive medieval farts to modern perfumes, we will consider what a focus on scent can contribute to our understanding of literature. Drawing from fiction, poetry, objects, history, and science, this course integrates an interdisciplinary approach. Primary literary texts will likely include H.D., Huysmans, Baudelaire, Burney, Shakespeare, and Chaucer. We will probably also think with perfumes, Luca Turin's The Secret of Scent, Alexandra Horowitz's Being a Dog, and Tom Tykwer's 2006 film adaptation of Patrick Süskind's Perfume: The Story of a Murderer. (Fiction, Poetry, Theory)
Instructor(s): Jennifer Yida Pan Terms Offered: Winter

ENGL 22150. Luxury and Global Modernism. 100 Units.
The desire for and consumption of luxury is central to the world-building enterprise of capitalist modernity as we understand it, from the elaboration of colonial trade routes to the emergence of the era-defining aesthetic mode known as glamour. As both the object of the primitivizing imaginary of colonial social science and the motor of excitement for the new in the modern Western city, luxury infused some of the complexities of global interconnectedness into the imagination and the arts of the late 19th and early 20th centuries. With readings across the literary, but also the material-cultural and social-scientific archives of Western and non-Western modernisms, this course asks how luxury might open new avenues for the study of modernism's inherently global character. Course texts will include literary works by Henry James, Djuna Barnes, Mina Loy, and MP Shiel; social scientific works by Marcel Mauss and Georges Bataille; visual works by Raghubir Singh, Coco Chanel, and Josephine Baker; theoretical readings from the fields of postcolonial, queer, and fashion studies. (1830-1940, Fiction, Theory)
Instructor(s): Jacob Harris Terms Offered: Spring

ENGL 23170. The Beast Fable from Aesop to Zootopia. 100 Units.
In this course, we will read collections of medieval beast fables to theorize what Geoffrey Chaucer, John Lydgate, Robert Henryson, and others found compelling about animals in various states of personification. In addition, we will look to contemporary forms of the genre to consider how this mode of storytelling continues to provoke analysis and evade interpretation. Previous work in Middle English is not required. (Pre-1650)
Instructor(s): Jo Nixon Terms Offered: Autumn

ENGL 23190. Eco-consciousness: Climates and Ecologies of Eighteenth-Century Literature. 100 Units.
Given our present-day concerns about political climates and ecological consciousness, this course returns to the eighteenth century to analyze how writers interpreted climate and ecology back then. In the context of agricultural, industrial, and political revolutions, this class will explore how writers like Mary Wollstonecraft, Charlotte Smith, William Wordsworth, John Clare understood both political and ecological climates like colonialism, women's rights, class revolutions, and natural history. (Fiction, Poetry, 1650-1830, Theory)
Instructor(s): Caroline Heller Terms Offered: Spring

ENGL 23400. Virginia Woolf. 100 Units.
Along with a number of Woolf's major works, students read theoretical and critical texts that give a sense of the range of contemporary approaches to Woolf. (1830-1940, Fiction)
Instructor(s): Lisa Ruddick Terms Offered: Winter
Equivalent Course(s): GNSE 23400, FNDL 24011

ENGL 23808. Sonnets from Wyatt to Yeats and Beyond. 100 Units.
This course will trace the history and persistence of the sonnet in English poetry, but it will start with the founder of the tradition, the early Renaissance Italian poet, Francesco Petrarach, who made the form popular, and remained its model practitioner. Since the form flourished in the Renaissance (in England as in all over Europe) and was revived in the 19th century, the course will mainly be devoted to poets from those periods. Poets to be studied will include: Wyatt, Sidney, Shakespeare, Milton, Wordsworth, Keats, Hopkins, Elizabeth Barrett Browning, and D. G. Rossetti. There will be a midterm and a final paper. (Poetry)
Instructor(s): Richard Strier Terms Offered: Winter
ENGL 24102. The Idiot as Hero. 100 Units.
What strains are put on the apparatus of representation and storytelling when the protagonist is assumed to be cognitively challenged, foolish, stupid, or even idiotic? How do we make sense of idiocy? How do we interpret and evaluate what an idiot's idiocy means? What other codes — ethical, political, ideological, sexual, etc. — come into play when we respond aesthetically to a story about an idiot? How, and to what degree, is it possible for us to identify with the experience of being stupid? What means do writers and filmmakers do to exploit the aesthetic possibilities of idiocy (that is, the pleasures that can be derived by representing or evoking idiocy in particular ways)? Readings may include Sterne, Tristram Shandy; Wordsworth, "The Idiot Boy"; Flaubert, Madame Bovary. Films may include Forrest Gump; Born Yesterday; Nights of Cabiria. (Fiction)
Instructor(s): Lawrence Rothfield Terms Offered: Winter

ENGL 24150. Melodrama and Film. 100 Units.
This course examines the central role melodrama has played in understandings of film and vice versa. Working carefully through select films like Bigger than Life, Letter from an Unknown Woman, and Vertigo, we'll develop an account of key cinematic concepts like camera movement and mise-en-scène. We'll also interrogate various conceptualizations of melodrama (as mode, genre, style, affect, etc.) and consider melodrama's longstanding, global appeal. (Theory)
Instructor(s): Joseph Bitney Terms Offered: Autumn

ENGL 24170. The Arts of Civil War. 100 Units.
What aesthetic strategies do art and literature employ to represent civil war in the twentieth and twenty-first centuries? In order to propose some answers, this comparative course traverses a wide range of cultural and historical contexts, moving chronologically through civil wars and revolutions in the United States, Russia, Spain, Ireland, Vietnam, Lebanon, and Syria. In doing so, we will query current debates around the relation between aesthetics and politics in critical theory, as well as pressing questions of human rights, citizenship, exile, refugee crisis, national sovereignty, and international humanitarianism. In addition to encountering artists and writers who work in a variety of different media (poetry, novels, visual art, film, etc.), we will read recent work by political theorists, philosophers, art historians, and literary critics. We will examine artists and writers such as Walt Whitman, El Lissitzky, Pablo Picasso, Etel Adnan, Lan Cao, Colm Toibin, Claudia Rankine, Mounira Al Solh, and Ghayath Almadhoun, as well as the theoretical writings of Hannah Arendt, Michel Foucault, Susan Sontag, and Giorgio Agamben. Our primary task will be to investigate the dynamic ways in which art theorizes civil war. (Fiction, Poetry, Theory)
Instructor(s): Brandon Truett Terms Offered: Autumn
Equivalent Course(s): HMRT 22907

ENGL 24400. Brecht and Beyond. 100 Units.
Brecht is indisputably the most influential playwright in the 20th century, but his influence on film theory and practice and on cultural theory generally is also considerable. In this course we will explore the range and variety of Brecht's own theatre, from the anarchic plays of the 1920's to the agitprop Lehrstück and film esp Kühle Wampe) to the classical parable plays, as well as the work of his heirs in German theatre (Heiner Müller, Peter Weiss) and film (RW Fassbinder, Alexander Kluge), in French film (Jean-Luc Godard) and cultural theory (the Situationists and May 68), film and theatre in Britain (such as Caryl Churchill or Mike Leigh), theatre and film in Africa, from South Africa to Senegal, and if possible a film or play from the US that engages with Brechtian theory and/or practice. (Drama)
Instructor(s): Loren Kruger Terms Offered: Spring
Prerequisite(s): TAPS and/or Hum Core required; no first years.
Equivalent Course(s): CMST 26200, CMLT 20800, TAPS 28435

ENGL 25130. Ethnic Minority Poetry in the US. 100 Units.
This course is designed as a survey of the various minority traditions excluded from canonical understandings of the history of US poetry. Centered around the twentieth century yet bookended by earlier and later poetry, the course is divided into five sections: African American, Native American, Latinx, Asian American, and Jewish American. Among many others, we'll read poems by Myung Mi Kim, Amiri Baraka, Simon J. Ortiz, and Allen Ginsberg. (Poetry, Theory, 1830-1940)
Instructor(s): Geronimo Sarmiento Cruz Terms Offered: Autumn

ENGL 25150. Pop Psychology. 100 Units.
This course takes for its premise that our understanding of psychological study is as fundamentally shaped by popular culture as it is by science. Using a constellation of literary, filmic and televisual, and other popular texts, we will consider how modes of psychological study, manipulation, and repair figure in the American popular imagination. Our eclectic archive will include pamphlets on psychological warfare, psychological thrillers, sitcoms, reality tv, studies on personality tests, and self-help tracts. Students will be encouraged to bring in their own examples as well. We will ask: what conception of human motivation and susceptibility, unconscious phenomena, collective feeling, or the form of "the therapeutic" do these texts carry? What aesthetic, formal, medial conventions or innovations can we track across our transmedial archive? (Fiction, Theory)
Instructor(s): Shirl Yang Terms Offered: Spring

ENGL 25804. Signs of the Americas. 100 Units.
It is a common misconception that literature can happen only in the alphabet or that such non-alphabetical literatures have long ago ceased to be made. This course corrects such misconceptions by exploring modern and contemporary literatures that have been written with, or in response to, such sign-systems as pictographs, hieroglyphs, totem poles, wampum, and khipu. Focusing especially on the sign-systems of the native Americas, this class gives students a basic introduction to the mechanics of these signs, in order to discuss how these mechanics might be at play in the works of such poets, writers, and artists as Anni Albers, Simon Ortiz, Gerald Vizenor, Louise Erdrich, John Borrows, Charles Olson, Bill Reid, Robert Brighurst, Fred Wah, Clayton Eshleman, Cy Twombly, Joaquin Torres-Garcia, Cecilia Vicuña, and others. Key questions to be asked include: how are these signs an interface for contemporary histories of nation and capital? And: how do those material histories and their identifications in race, gender, kinship, and ecology change when cast in the mechanics, tropes, and figures of these signs? As a “Makers Seminar,” this course will include creative alternatives to the standard analytical college paper. (Fiction, Poetry, Theory)
Instructor(s): Edgar Garcia Terms Offered: Spring
Equivalent Course(s): SPAN 25818, LACS 25804

ENGL 25970. Alternate Reality Games: Theory and Production. 100 Units.
Games are one of the most prominent and influential media of our time. This experimental course explores the emerging genre of “alternate reality” or “transmedia” gaming. Throughout the quarter, we will approach new media theory through the history, aesthetics, and design of transmedia games. These games build on the narrative strategies of novels, the performative role-playing of theater, the branching techniques of electronic literature, the procedural qualities of video games, and the team dynamics of sports. Beyond the subject matter, students will design modules of an Alternate Reality Game in small groups. Students need not have a background in media or technology, but a wide-ranging imagination, interest in new media culture, or arts practice will make for a more exciting quarter.
Instructor(s): Patrick Jagoda, Heidi Coleman Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing. Instructor consent required. To apply, submit writing through online form at http://bigproblems.uchicago.edu; see course description. Once given consent, attendance on the first day is mandatory. Questions:mb31@uchicago.edu.
Note(s): Note(s): English majors: this course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): ARTV 20700, CMST 35954, MAAD 25954, CMST 25954, BPRO 28700, ENGL 32314, TAPS 28466, ARTV 30700

Examining the environmental and social forces in the period between 1780-1867, this course highlights the literary establishment’s complex and often troubled relationship with the Industrial Revolution and the rise of the working class from a matrix of underground networks. The course features a diverse cadre of writers and theorists such as Jane Austen, Karl Marx, and E.J. Blandford, and provides a nuanced understanding of laborers’ lived, material conditions through class visits to the Coal Mine at the Museum of Science and Industry, the Special Collections archive, and interactive discussions with the People’s History Museum and the Labor and Working-Class History Association. (1650-1830, 1830-1940, Fiction, Poetry, Theory)
Instructor(s): Carrie Taylor Terms Offered: Spring

ENGL 26300. The Literature of Disgust, Rabelais to Nausea. 100 Units.
This course will survey a range of literary works which take the disgusting as their principle aesthetic focus, while also providing students with an introduction to core issues and concepts in the history of aesthetic theory, such as the beautiful and the sublime, disinterested judgment and purposive purposelessness, taste and distaste. At the same time, our readings will allow us to explore the ways in which the disgusting has historically been utilized as a way of producing socially critical literature, by representing that which a culture categorically attempts to marginalize, exclude, and expel. Readings will engage with the variety of aesthetic functions that the disgusting has been afforded throughout modern literary history, including the carnivalesque and grotesque in Rabelais and the bawdy and satirical in Swift; revolted Victorian realism and gruesome Zolaesque naturalism; and Sartre’s existential nausea and Kafka’s anxious repulsion; as well as Thomas Bernhard’s experiments with contempt and William Burroughs’ hallucinogenic inversions of pleasure and disgust. Prerequisite: Strong stomach. (F, G, H)
Instructor(s): Zachary Samalin Terms Offered: Spring
Equivalent Course(s): CMLT 26301
ENGL 27003. Woman/Native. 100 Units.
This course reads works of postcolonial literature and theory in order to consider the entanglements of the figures of “women” and “natives” in colonial as well as postcolonial discourse. We will discuss topics such as the persistent feminization of the profane, degraded, and contagious bodies of colonized natives; representations of women as both the keepers and the victims of “authentic” native culture; the status (symbolic and otherwise) of women in anti-colonial resistance and insurgency; and the psychic pathologies (particularly nervous conditions of anxiety, hysteria, and madness) that appear repeatedly in these works as states to which women and/as natives are especially susceptible. Authors may include Ama Ata Aidoo, Helène Cixous J.M. Coetzee, Maryse Condé, Tsitsi Dangarembga, Mahasweta Devi, Assia Djebar, Frantz Fanon, Sigmund Freud, Silvia Federici, Nuruddin Farah, Bessie Head, V.S. Naipaul, Jean Rhys, Tayeb Salih, Ousmane Sembène, Gayatri Chakravorty Spivak.
(Fiction, Theory)
Instructor(s): Sonali Thakkar Terms Offered: Spring
Equivalent Course(s): GNSE 27013, CMLT 27003, CRES 27013

ENGL 27600. Cinema in Africa. 100 Units.
This course examines Africa in film as well as films produced in Africa. It places cinema in Sub Saharan Africa in its social, cultural, and aesthetic contexts ranging from neocolonial to postcolonial, Western to Southern Africa, documentary to fiction, art cinema to TV. We will begin with La Noire de... (1966), ground-breaking film by the "father" of African cinema, Ousmane Sembene, contrasted w/ a South African film, African Jim (1959) that more closely resembles African American musical film, and anti-colonial and anti apartheid films from Lionel Rogosin’s Come Back Africa (1959) to Sarah Maldoror’s Sambizanga, Ousmane Sembenes Camp de Thiaroye (1984), and Jean Marie Teno’ss Afrique, Je te Plumerai (1995). The rest of the course will examine cinematic representations of tensions between urban and rural, traditional and modern life, and the different implications of these tensions for men and women, Western and Southern Africa, in fiction, documentary and ethnographic film, including 21st century work where available.
Instructor(s): Loren Kruger
Prerequisite(s): Second-year standing or above in the College; recommended for advanced undergrads and grad students in CMST, CRES, African studies, English and/or Comparative Lit with interests in race and representation, Africa and the world
Equivalent Course(s): CMST 24201, CMLT 42900, CMST 34201, CRES 34201, CMLT 22900, CRES 24201, ENGL 48601

ENGL 28200. Narrating Migration. 100 Units.
Human migration is one of the most pressing global problems of our time, though it is not a new phenomenon. It has shaped societies throughout time, and the degree to which it is perceived as a "problem" or an "opportunity" changes radically according to circumstances and ideologies. In this course, we will analyze the different ways in which migration has been perceived, understood, and experienced. We will focus on two intense episodes in the global history of migration: migration from early nineteenth-century Britain; and migration to late 20th and 21st-century America. Our emphasis throughout will be on the ways in which migration is narrated: the stories that societies tell about the migration of themselves and others. We will cover a wide range of migration narratives, including those of creative writers and artists, and will consider them through the lenses of literary criticism, history, theory, and also artistic practice itself.
Instructor(s): J. Mcdonagh, V. Tran Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): BPRO 28200

ENGL 28404. Introduction to Old English. 100 Units.
Moððe word fræt.” These are the first words of a riddle that students will learn how to read in this course. As the first part of the Medieval Research Series, this course introduces students to the Old English language, the literary history of early medieval England, and current research tools and scholarship in the field of Old English. In studying the language, we will explore its diverse and exciting body of literature, including poems of heroic violence and lament, laws, medical recipes, and humorously obscene riddles. Successful completion of the course will give students a rich sense not only of the earliest period of English literary culture, but also of the structure of the English language as it is written and spoken today. (Pre-1650) This course is the first in a two quarter Medieval Research sequence. No prior experience with Old or Middle English is required. The second course in the Medieval Research sequence (Beowulf) will be offered in the Spring Quarter.
Instructor(s): Benjamin Saltzman Terms Offered: Winter
Equivalent Course(s): ENGL 38404

ENGL 28505. Beowulf. 100 Units.
In this course, we will read and translate Beowulf from Old English, attending closely to language, paleography, and textual cruxes. We also will examine the history of scholarship on the poem and a variety of approaches to its interpretation, guided by student interest. Over the course of the term, each student will produce a piece original scholarly research that engages with the poem and its critical tradition. (Pre-1650, Poetry) This course is the second in a two quarter Medieval Research sequence.
Instructor(s): Benjamin Saltzman Terms Offered: Spring
Prerequisite(s): Introduction to Old English (or the equivalent).
Equivalent Course(s): ENGL 38505
ENGL 28650. Outsider Writing. 100 Units.
A kinship between poetry and mental illness is a commonplace in myth, received opinion, and literary history, whether formulated as divine inspiration or bipolar disorder. Similarly the pejorative ascription of insanity to poets has been a commonplace of literary review and criticism. 'My vocabulary did this to me' are the reputed dying words of the poet Jack Spicer who claimed to respond to dictation as though himself a radio tuning to messages. Language’s dictation, however experienced, unites mental disorder and the literary arts - the pressure of language that might become unhinged. What of the reader? Aesthetic response also is both formally contained and threatens to become unhinged. This class will read 20th and 21st century works of Outsider poetry and fiction in English, and consider how best to respond. Outsider writing will be related to Outsider visual art, and to the emergent field of Outsider theory. (Theory)
Instructor(s): John Wilkinson Terms Offered: Autumn

ENGL 29505. Joan Didion: Reporter, Novelist, Essayist, Memoirist. 100 Units.
This seminar is a reading and writing-intensive course designed to provide advanced English majors with the tools and resources necessary to propose and conduct their own literary research projects. Reading for the course will include one of Didion’s novels as well as works of non-fiction in its various forms. Because the course requires historical research and considerable engagement with criticism as well as with the literature itself, it is ideally suited for students interested in developing the skills necessary to write a B.A. Honors paper or considering graduate work in English. The course will culminate in a substantial critical paper of your own design. This is Seminar in Research and Criticism intended for English majors.
Instructor(s): Deborah Nelson Terms Offered: Winter
Prerequisite(s): This course is limited to 15 third- and fourth-year students who have already fulfilled the Department’s Gateway requirement and taken at least two further English courses.

ENGL 29705. Incarcerated Life. 100 Units.
The United States today is in the midst of an incarceration crisis, one in which millions of Americans are currently warehoused within, or have passed through, carceral institutions. Many scholars locate the emergence of this punitive turn in the 1970s, and with good reason: the landscape of penality and confinement looks much different in earlier historical periods. Turning to the eighteenth and nineteenth centuries, this course will explore literary, philosophical, and pragmatic engagements with the prison across the British Empire and in the postcolonial United States. By tracing the particular fears and fantasies that grouped around institutions of confinement, we will explore the logic by which an institution once marginal to social life has become so central to society that incarceration is now a conventional form of life. This course will involve a robust research component, culminating in a final paper; while this course is rooted in the eighteenth and nineteenth centuries, students will be welcome to pursue research on contemporary regimes of incarceration. Our theoretical readings will include Michel Foucault, Angela Davis, and Ruth Wilson Gilmore. Our archive of literary, philosophical, and practical texts will include the Newgate Calendar, Cesare Beccaria, Oliver Goldsmith, John Gay, Jeremy Bentham, James Williams, Harriet Jacobs, and Austin Reed. (1830-1940) This is Seminar in Research and Criticism intended for English majors.
Instructor(s): Christopher Taylor Terms Offered: Spring
Prerequisite(s): This course is limited to 15 third- and fourth-year students who have already fulfilled the Department’s Gateway requirement and taken at least two further English courses.
ENVIRONMENTAL SCIENCE

Department Website: http://geosci.uchicago.edu

PROGRAM OF STUDY

The Department of the Geophysical Sciences offers a BS degree in Environmental Science. The program is intended for students whose interests fall at the intersection of biology, chemistry, and earth sciences, and is designed to prepare them to enter a variety of interdisciplinary fields in the environmental sciences, including the interface of environmental science and public policy. Students are given the opportunity to study such topics as the biogeochemical cycles, environmental chemistry, microbiology, ecology, the chemistry and dynamics of the ocean and atmosphere, climate change, and environmentally relevant aspects of economics and policy. Students are encouraged to participate in the Semester in Environmental Science at the Marine Biological Laboratory, and undergraduate research is also strongly encouraged.

PROGRAM REQUIREMENTS FOR THE BS IN ENVIRONMENTAL SCIENCE

The requirements for the BS degree in Environmental Science involve completion of:

- six required courses that fulfill general education requirements for the physical sciences, biological sciences, and mathematics
- seven required science or mathematics courses
- eleven elective courses pertinent to the major from the electives lists below, which must include
  - four courses designated ENSC or GEOS
  - one course in Statistics, and two more in any of Mathematics, Statistics, or Computing
  - one to three courses in Social Science/Public Policy

Candidates for the BS in Environmental Science complete a year of chemistry, a year of mathematics (including Calculus I-II), and a year of biology (ENSC 24400 Ecology and Conservation, GEOS 13900 Biological Evolution and BIOS 20198 Biodiversity), as well as PHYS 13100 Mechanics or the equivalent. (Note that some advanced chemistry courses require further physics as a prerequisite.)

Students are encouraged to begin discipline-specific courses as early as possible. Required disciplinary courses include ENSC 13300 The Atmosphere, ENSC 23800 Global Biogeochemical Cycles, and ENSC 23900 Environmental Chemistry. (Note that ENSC 23800 Global Biogeochemical Cycles is typically offered every other year.) Of ENSC/GEOS science electives, one can be a field course, and one may be ENSC 29700 Reading and Research in Environmental Science. Students participating in the Semester in Environmental Science receive credit for four courses in environmental science, two of which can be used to substitute for ENSC 24400 Ecology and Conservation and ENSC 23900 Environmental Chemistry.

The major is designed to be flexible enough to accommodate students whose primary interests cover various aspects of environmental science. Sample course schedules below give examples of course plans appropriate to students focusing on climatology, conservation, and biogeochemistry. Students with a focus on policy questions may take up to three courses in social science/public policy. These courses are available through undergraduate programs in Economics, Public Policy Studies, and Environmental and Urban Studies, or through the Harris School of Public Policy (http://harris.uchicago.edu).

Because analysis of data and mathematical modeling are fundamental to environmental science, the major requires six courses in quantitative methods: a year of mathematics, one course in statistics, and two additional courses in mathematics, statistics, or computing.

Note that while students taking calculus through the more introductory MATH 13000s sequence are encouraged to complete the third quarter of calculus, MATH 13300 Elementary Functions and Calculus III, in the higher tracks Calculus III (e.g., MATH 15300 Calculus III) is not specifically required or recommended, as the first two courses offer a sufficiently comprehensive calculus training for students to move on to other courses. Depending on the choice of electives, students may credit as many as nine Mathematics/Statistics/Computing courses toward the major.

Summary of Requirements for the BS in Environmental Science

GENERAL EDUCATION

One of the following sequences: 200

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
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<tbody>
<tr>
<td>CHEM 10100 &amp; CHEM 10200</td>
<td>Introductory General Chemistry I and Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11000-11200</td>
<td>Comprehensive General Chemistry I-II *</td>
</tr>
<tr>
<td>CHEM 12100 &amp; CHEM 12200</td>
<td>Honors General Chemistry I and Honors General Chemistry II</td>
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One of the following sequences: 200

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
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<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II *</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>-------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
<tr>
<td>BIOS 20198</td>
<td>Biodiversity</td>
</tr>
</tbody>
</table>

| Total Units | 600 |
| GEOS 13900  | Biological Evolution          | 100   |

** MAJOR **

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>ENSC 13300</td>
<td>The Atmosphere</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 23800</td>
<td>Global Biogeochemical Cycles</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 23900</td>
<td>Environmental Chemistry</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24400</td>
<td>Ecology and Conservation</td>
<td>100</td>
</tr>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (∗)</td>
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<tr>
<td>or CHEM 12300</td>
<td>Honors General Chemistry III</td>
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One of the following:

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<td>PHYS 12100</td>
<td>General Physics I (∗ ‡)</td>
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<tr>
<td>PHYS 13100</td>
<td>Mechanics</td>
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<tr>
<td>PHYS 14100</td>
<td>Honors Mechanics</td>
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One of the following:

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<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH 20000</td>
<td>Mathematical Methods for Physical Sciences I</td>
<td></td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
<td></td>
</tr>
<tr>
<td>BIOS 20152</td>
<td>Introduction to Quantitative Modeling in Biology (Advanced)</td>
<td></td>
</tr>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III (†)</td>
<td></td>
</tr>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td></td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
</tbody>
</table>

Eleven electives as follows:

| Total Units | 1100 |
| Four courses designated ENSC or GEOS from List E-1: Physical and Biological Sciences | |
| One course from List E-2: Social Sciences | |
| Three courses from List E-3: Computational Sciences, of which one must be under the heading of Statistics | |
| Three more courses from any of the elective lists, but only up to two of these may be from List E-2: Social Sciences | |

| Total Units | 1800 |

* Credit may be granted by examination.

** Only students majoring in Environmental Science or Geophysical Sciences may use this pairing toward the general education requirement in the Biological Sciences. Environmental Science and Geophysical Sciences majors can take these courses without the BIOS prerequisites (BIOS 20150-20151/20152) unless they pursue a double major in Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151/20152.

§ Biological Evolution has several cross-listings; Environmental Science majors must register for the course under the GEOS 27300 listing.

† PHYS 13100 or PHYS 14100 are the preferred courses. PHYS 12100 is allowable on a case-by-case basis but may not provide adequate preparation to allow for enrollment in higher level PHYS courses. Additionally, PHYS 12100 has a prerequisite of a year of Chemistry. Special petition to the department counselor is required for PHYS 12100 approval.

**Lists of Elective Courses**

**List E-1: Physical and Biological Sciences**

**Environmental Science**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENSC 21100</td>
<td>Energy: Science, Technology, and Human Usage</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 23805</td>
<td>Stable Isotope Biogeochemistry</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24000</td>
<td>Geobiology</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24500</td>
<td>Environmental Microbiology</td>
<td>100</td>
</tr>
</tbody>
</table>
The following courses are the College designations for the Semester in Environmental Science that is taught at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts. One quarter at MBL counts for four courses: ENSC 23820, ENSC 24100, ENSC 29800, and an elective of ENSC 24200, ENSC 24300, or ENSC 28100. Admission to the Semester in Environmental Science program is by application, which must be received by the MBL generally in March of the year preceding the start of the semester. Admissions decisions will generally be sent in April. Note that these courses start at the beginning of September, typically four weeks prior to the start of the College’s Autumn Quarter and are completed by the end of Autumn Quarter. More information on the course content and the application process, and deadlines can be found at college.uchicago.edu/academics/semester-environmental-science-ses.

Students participating in the Semester in Environmental Science receive credit for four courses in environmental science, two of which can be used to substitute for ENSC 24400 Ecology and Conservation and ENSC 23900 Environmental Chemistry.

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### Field Courses in Environmental Science

The department sponsors field trips that range in length from one day to several weeks. Shorter field trips typically form part of lecture-based courses and are offered each year. (The trips are open to all students and faculty if space permits.) Longer trips are designed as undergraduate field courses, and one such course may be used as an elective science course for the major. Destinations of field courses have recently included Baja California and the Bahamas.

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### Geophysical Sciences

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21400</td>
<td>Thermodynamics and Phase Change</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22060</td>
<td>What Makes a Planet Habitable?</td>
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</tr>
<tr>
<td>GEOS 22200</td>
<td>Geochronology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 23205</td>
<td>Introductory Glaciology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24220</td>
<td>Climate Foundations</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24230</td>
<td>Geophysical Fluid Dynamics: Foundations</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24240</td>
<td>Geophysical Fluid Dynamics: Rotation and Stratification</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24250</td>
<td>Geophysical Fluid Dynamics: Understanding the Motions of the Atmosphere and Oceans</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 26100</td>
<td>Phylogenetics and the Fossil Record</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 26300</td>
<td>Invertebrate Paleobiology and Evolution</td>
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### Chemistry

<table>
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<th>Course</th>
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<tr>
<td>CHEM 20100-20200</td>
<td>Inorganic Chemistry I-II</td>
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<tr>
<td>CHEM 22000-22100-22200</td>
<td>Organic Chemistry I-II-III</td>
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<tr>
<td>CHEM 23300</td>
<td>Intermediate Organic Chemistry</td>
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<tr>
<td>CHEM 26100-26200-26300</td>
<td>Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics**</td>
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### Biology and Ecology

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<tr>
<td>BIOS 20200</td>
<td>Introduction to Biochemistry</td>
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<tr>
<td>BIOS 23232</td>
<td>Ecology and Evolution in the Southwest</td>
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<tr>
<td>BIOS 23252</td>
<td>Field Ecology</td>
<td>100</td>
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<tr>
<td>BIOS 23254</td>
<td>Mammalian Ecology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23258</td>
<td>Molecular Evolution I: Fundamentals and Principles</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23266</td>
<td>Evolutionary Adaptation</td>
<td>100</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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<tr>
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<tr>
<td>BIOS 23289</td>
<td>Marine Ecology</td>
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<tr>
<td>BIOS 23404</td>
<td>Reconstructing the Tree of Life: An Introduction to Phylogenetics</td>
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<tr>
<td>BIOS 23406</td>
<td>Biogeography</td>
<td>100</td>
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<tr>
<td>BIOS 25206</td>
<td>Fundamentals of Bacterial Physiology</td>
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**Physics**

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<tr>
<td>PHYS 12200</td>
<td>General Physics II</td>
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<tr>
<td>PHYS 12200</td>
<td>General Physics III†</td>
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</tr>
<tr>
<td>PHYS 13200-13300</td>
<td>Electricity and Magnetism; Waves, Optics, and Heat</td>
<td>200</td>
</tr>
<tr>
<td>PHYS 14200-14300</td>
<td>Honors Electricity and Magnetism; Honors Waves, Optics, and Heat</td>
<td>200</td>
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<td>PHYS 18500</td>
<td>Intermediate Mechanics</td>
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<tr>
<td>PHYS 19700</td>
<td>Statistical and Thermal Physics</td>
<td>100</td>
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<tr>
<td>PHYS 22500</td>
<td>Intermediate Electricity and Magnetism I</td>
<td>100</td>
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<tr>
<td>PHYS 22600</td>
<td>Electronics</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 22700</td>
<td>Intermediate Electricity and Magnetism II</td>
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</table>

* Enrollment in CHEM 2300 requires a grade of C or higher in CHEM 22200 or 23200
** Prerequisites include MATH 20100 and PHYS 13300
*** ENSC majors can take these courses without the BIOS prerequisites (20150-20151) unless they pursue a double major in biology. Students are expected to show competency in the mathematical modeling of biological phenomena covered in BIOS 20151.
† PHYS 13200-13300 or PHYS 14200-14300 are the preferred sequences. PHYS 12200-12300 is allowable on a case-by-case basis but may not provide adequate preparation to allow for enrollment in higher level PHYS courses. Special petition to the department counselor is required for PHYS 12100-12200-12300 approval.

List E-2: Social Sciences

**Microeconomics Foundations**

Students may take one of the following:

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<thead>
<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>ECON 19800</td>
<td>Introduction to Microeconomics</td>
<td>100</td>
</tr>
<tr>
<td>ECON 20000</td>
<td>The Elements of Economic Analysis I*</td>
<td>100</td>
</tr>
<tr>
<td>ECON 20100</td>
<td>The Elements of Economic Analysis II*</td>
<td>100</td>
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<tr>
<td>PBPL 20000</td>
<td>Economics for Public Policy</td>
<td>100</td>
</tr>
<tr>
<td>PPHA 32300</td>
<td>Principles of Microeconomics and Public Policy I*</td>
<td>100</td>
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<tr>
<td>PPHA 32400</td>
<td>Principles of Microeconomics and Public Policy II</td>
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</table>

**Other Social Science Electives**

(Note that many courses below require microeconomics as a prerequisite)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 19900</td>
<td>Intro To Macroeconomics**</td>
<td>100</td>
</tr>
<tr>
<td>ECON 26500</td>
<td>Environmental Economics</td>
<td>100</td>
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<tr>
<td>ENST 23550</td>
<td>Urban Ecology and the Nature of Cities</td>
<td>100</td>
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<tr>
<td>ENST 24102</td>
<td>Environmental Politics</td>
<td>100</td>
</tr>
<tr>
<td>ENST 28220</td>
<td>Global Energy &amp; Climate Challenge: Economics, Science &amp; Policy</td>
<td>100</td>
</tr>
<tr>
<td>PBPL 21800</td>
<td>Economics and Environmental Policy</td>
<td>100</td>
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<td>PBPL 23100</td>
<td>Environmental Law</td>
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<td>PBPL 24701</td>
<td>U.S. Environmental Policy</td>
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<tr>
<td>PBPL 26530</td>
<td>Environment, Agriculture, and Food: Economic and Policy Analysis</td>
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<td>PBPL 26531</td>
<td>Environment, Agriculture, and Food: Advanced Economic and Policy Analysis</td>
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</tr>
<tr>
<td>PPHA 36930</td>
<td>Environmental Economics: Theory and Applications</td>
<td>100</td>
</tr>
<tr>
<td>PPHA 38900</td>
<td>Environmental Science/Policy</td>
<td>100</td>
</tr>
<tr>
<td>PPHA 39901</td>
<td>Policy Approaches to Mitigating Climate Change</td>
<td>100</td>
</tr>
</tbody>
</table>

* Must be taken in sequence
** Acceptable only if a microeconomics course is also taken
**List E-3: Computational Sciences**

### Mathematics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>or MATH 16300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 15910</td>
<td>Introduction to Proofs in Analysis</td>
<td>100</td>
</tr>
<tr>
<td>or STAT 24300</td>
<td>Numerical Linear Algebra</td>
<td></td>
</tr>
<tr>
<td>MATH 20000-20100</td>
<td>Mathematical Methods for Physical Sciences I-II</td>
<td>200</td>
</tr>
<tr>
<td>MATH 21100</td>
<td>Basic Numerical Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20152</td>
<td>Introduction to Quantitative Modeling in Biology (Advanced)</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 26210-26211</td>
<td>Mathematical Methods for Biological Sciences I-II</td>
<td>200</td>
</tr>
</tbody>
</table>

### Physics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics **</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics ***</td>
<td>100</td>
</tr>
</tbody>
</table>

### Statistics

Students may take any course in statistics at the 22000 level or higher, but recommended courses are shown below. Some courses require one of the first three as a prerequisite.

Students may take one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPHA 31200 &amp; PPHA 31300</td>
<td>Mathematical Statistics for Public Policy I and Mathematical Statistics for Public Policy II †</td>
<td></td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications §§</td>
<td></td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods ‡‡</td>
<td>100</td>
</tr>
<tr>
<td>STAT 24400-24500</td>
<td>Statistical Theory and Methods I-II §</td>
<td>200</td>
</tr>
<tr>
<td>STAT 22400</td>
<td>Applied Regression Analysis</td>
<td>100</td>
</tr>
<tr>
<td>STAT 22600</td>
<td>Analysis of Categorical Data</td>
<td>100</td>
</tr>
<tr>
<td>STAT 26100</td>
<td>Time Dependent Data</td>
<td>100</td>
</tr>
<tr>
<td>PPHA 34600</td>
<td>Program Evaluation</td>
<td>100</td>
</tr>
</tbody>
</table>

The 30000 (and above) level courses listed below are a joint offering of the Department of Statistics and the Department of Public Health Studies, and may be suitable for Environmental Science majors.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 31900</td>
<td>Introduction to Causal Inference</td>
<td>100</td>
</tr>
<tr>
<td>STAT 35800</td>
<td>Statistical Applications</td>
<td>100</td>
</tr>
<tr>
<td>STAT 36900</td>
<td>Applied Longitudinal Data Analysis</td>
<td>100</td>
</tr>
</tbody>
</table>

### Computing

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOS 25400</td>
<td>Intro to Numerical Techniques for Geophysical Sciences</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 12100-12200-12300</td>
<td>Computer Science with Applications I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>CMSC 23710</td>
<td>Scientific Visualization</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 28510</td>
<td>Introduction to Scientific Computing</td>
<td>100</td>
</tr>
</tbody>
</table>

* Recommended prerequisite is MATH 19620 or MATH 15300 or MATH 16300

** Would generally substitute for MATH 20000-20100

*** Recommended in addition to MATH 20000-20100 for advanced students—covers partial differential equations

† Must be taken as a sequence

‡‡ Higher programming component than STAT 22000

§ Recommended for advanced students. Must be taken as a sequence to be credited. STAT 24400-24500 have no prerequisite but it is possible to take both STAT 23400 and STAT 24400-24500.

§§ AP credit for STAT 22000 does not count toward the major requirements. Students with AP credit for STAT 22000 should plan to take at least three other courses from List E-3: Computational Sciences, one of which must be under the heading of Statistics.

**Grading**

Students majoring in Environmental Science must receive quality grades in all courses taken to meet requirements in the major.
HONORS

The BS degree with honors is awarded to students who meet the following requirements: (1) a GPA of 3.25 or higher in the major and of 3.0 or higher overall; (2) completion of a paper based on original research, supervised and approved by a faculty member in geophysical sciences; (3) an oral presentation of the thesis research. All theses will be examined by the supervisor and a second reader from the faculty. Manuscript drafts will generally be due in the sixth week of the quarter in which the student will graduate (fifth week in Summer Quarter), and final manuscripts and oral presentations in the eighth week (seventh week in Summer Quarter).

Students are strongly encouraged to reach out to potential faculty supervisors no later than their third year, since theses generally arise out of research projects already begun with faculty members. When a thesis topic is determined, students should notify the undergraduate adviser of their intent to complete a thesis and confirm their eligibility. ENSC 29700 Reading and Research in Environmental Science can be devoted to the preparation of the required paper; however, students using this course to meet a requirement in the major must take it for a quality grade.

Students who wish to submit a single paper to meet the honors requirement in Environmental Science and the BA paper requirement in another major should discuss their proposals with the undergraduate advisers from both programs no later than the end of third year. Certain requirements must be met. A consent form, to be signed by the undergraduate advisers, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

SAMPLE BS PROGRAMS

Each student will design an individual plan of course work, choosing from a wide range of selections that take advantage of rich offerings from a variety of subdisciplines. The sample programs that appear below are merely for the purpose of illustration; many other variations would be possible. NOTE: Courses that meet general education requirements and are required for the major are not listed.

Environmental Geochemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSC 23805</td>
<td>Stable Isotope Biogeochemistry</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 23820</td>
<td>Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 28100</td>
<td>Quantitative Environmental Analyses # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 29800</td>
<td>Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20200</td>
<td>Introduction to Biochemistry</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 26210-26211</td>
<td>Mathematical Methods for Biological Sciences I-II</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 22000 &amp; CHEM 22100</td>
<td>Organic Chemistry I and Organic Chemistry II</td>
<td>200</td>
</tr>
<tr>
<td>PBPL 20000</td>
<td>Economics for Public Policy</td>
<td>100</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications</td>
<td>100</td>
</tr>
</tbody>
</table>

Environmental Microbiology

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSC 23820</td>
<td>Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24000</td>
<td>Geobiology</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24100</td>
<td>Ecology - Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24200</td>
<td>Methods in Microbial Ecology - Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 24500</td>
<td>Environmental Microbiology</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 29800</td>
<td>Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23404</td>
<td>Reconstructing the Tree of Life: An Introduction to Phylogenetics</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 25206</td>
<td>Fundamentals of Bacterial Physiology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 26210-26211</td>
<td>Mathematical Methods for Biological Sciences I-II</td>
<td>200</td>
</tr>
<tr>
<td>PBPL 20000</td>
<td>Economics for Public Policy</td>
<td>100</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications</td>
<td>100</td>
</tr>
</tbody>
</table>

Environmental Science and Public Policy

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSC 21100</td>
<td>Energy: Science, Technology, and Human Usage</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 23805</td>
<td>Stable Isotope Biogeochemistry</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 25200</td>
<td>Global Warming: Understanding the Forecast</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 29002</td>
<td>Field Course in Modern and Ancient Environments</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23406</td>
<td>Biogeography</td>
<td>100</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PBPL 21800</td>
<td>Economics and Environmental Policy</td>
<td>100</td>
</tr>
<tr>
<td>PPHA 31201</td>
<td>Advanced Statistics for Data Analysis I</td>
<td>200</td>
</tr>
<tr>
<td>&amp; PPHA 31301</td>
<td>and Statistical Theory and Applications for Public Policy II</td>
<td></td>
</tr>
<tr>
<td>PPHA 32300</td>
<td>Principles of Microeconomics and Public Policy I</td>
<td>200</td>
</tr>
<tr>
<td>&amp; PPHA 32400</td>
<td>and Principles of Microeconomics and Public Policy II</td>
<td></td>
</tr>
<tr>
<td>STAT 22400</td>
<td>Applied Regression Analysis</td>
<td>100</td>
</tr>
</tbody>
</table>

**ENVIRONMENTAL SCIENCE COURSES**

**ENSC 13300. The Atmosphere. 100 Units.**
This course introduces the physics, chemistry, and phenomenology of the Earth’s atmosphere, with an emphasis on the fundamental science that underlies atmospheric behavior and climate. Topics include: (1) atmospheric composition, evolution, and structure; (2) solar and terrestrial radiation in the atmospheric energy balance; (3) the role of water in determining atmospheric structure; and (4) wind systems, including the global circulation, and weather systems.
Instructor(s): D. Abbot Terms Offered: Spring
Prerequisite(s): MATH 13100-MATH 13200
Equivalent Course(s): GEOS 13300, ENST 13300

**ENSC 13400. Global Warming: Understanding the Forecast. 100 Units.**
This course presents the science behind the forecast of global warming to enable the student to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, including comparisons with Venus and Mars; an overview of the carbon cycle in its role as a global thermostat; predictions and reliability of climate model forecasts of the greenhouse world. This course is part of the College Course Cluster program, Climate Change, Culture, and Society. (L)
Instructor(s): D. MacAyeal, D. Abbot Terms Offered: Autumn Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): PHSC 13400, GEOS 13400, ENST 12300

**ENSC 20209. An Environmental History of Africa, 1800-2016. 100 Units.**
For much of the twentieth century the African environment has been a story of decline and degradation—a narrative of how Africans have consistently destroyed their pristine environments. Images of soil erosion, desertification, deforestation, and famines have, in part, shaped Western perceptions of Africa. This course will consider an alternative perspective of Africa’s environment by focusing on the dynamic and complex processes of environmental change from the precolonial period to the present. We will draw on historical texts, novels, and films from multiple regions on the continent to explore how Africans understood, exploited, and managed their natural environments. By adopting an African “point of view,” this course will attempt to address some of the grave misconceptions that have led so many to believe that Africa was and continues to be a “Dark Continent.” Students will be encouraged to think critically about the meaning of “environmental crisis” and how that trope has served various political and cultural projects over time. But we will also seriously consider the ways in which human beings have taxed natural resources in ways that have produced profound short- and long-term consequences.
Equivalent Course(s): HIST 20209

**ENSC 21100. Energy: Science, Technology, and Human Usage. 100 Units.**
This course covers the technologies by which humans appropriate energy for industrial and societal use, from steam turbines to internal combustion engines to photovoltaics. We also discuss the physics and economics of the resulting human energy system: fuel sources and relationship to energy flows in the Earth system; and modeling and simulation of energy production and use. Our goal is to provide a technical foundation for students interested in careers in the energy industry or in energy policy. Field trips required to major energy converters (e.g., coal-fired and nuclear power plants, oil refinery, biogas digester) and users (e.g., steel, fertilizer production). This course is part of the College Course Cluster program: Climate Change, Culture and Society.
Instructor(s): E. Moyer Terms Offered: Spring
Prerequisite(s): Knowledge of physics or consent of instructor
Equivalent Course(s): GEOS 24705, ENST 24705, GEOS 34705

**ENSC 23800. Global Biogeochemical Cycles. 100 Units.**
This survey course covers the geochemistry of the surface of the Earth, focusing on biological and geological processes that shape the distributions of chemical species in the atmosphere, oceans, and terrestrial habitats. Budgets and cycles of carbon, nitrogen, oxygen, phosphorus, and sulfur are discussed, as well as chemical fundamentals of metabolism, weathering, acid-base and dissolution equilibria, and isotopic fractionation. The course examines the central role that life plays in maintaining the chemical disequilibria that characterize Earth’s surface environments. The course also explores biogeochemical cycles change (or resist change) over time, as well as the relationships between geochemistry, biological (including human) activity, and Earth’s climate.
Instructor(s): J. Waldbauer Terms Offered: Winter
Prerequisite(s): CHEM 1100-11200 or consent of instructor
Equivalent Course(s): GEOS 33800, GEOS 23800
ENSC 23820. Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory. 100 Units.
This course examines the interface of biological processes with chemical processes in ecological systems. Course content emphasizes aquatic chemistry and the role of microbes in the cycling of nitrogen, carbon, and other elements. Effects of global changes on chemical cycling are emphasized.
Instructor(s): Marine Biological Laboratory Staff. Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27712 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): BIOS 27711

ENSC 23900. Environmental Chemistry. 100 Units.
The focus of this course is the fundamental science underlying issues of local and regional scale pollution. In particular, the lifetimes of important pollutants in the air, water, and soils are examined by considering the roles played by photochemistry, surface chemistry, biological processes, and dispersal into the surrounding environment. Specific topics include urban air quality, water quality, long-lived organic toxins, heavy metals, and indoor air pollution. Control measures are also considered. This course is part of the College Course Cluster program: Climate Change, Culture, and Society.
Instructor(s): A. Colman, D. Archer Terms Offered: Autumn
Prerequisite(s): CHEM 11101-11201 or equivalent, and prior calculus course
Equivalent Course(s): GEOS 23900, ENST 23900, GEOS 33900

ENSC 24000. Geobiology. 100 Units.
Geobiology seeks to elucidate the interactions between life and its environments that have shaped the coevolution of the Earth and the biosphere. The course will explore the ways in which biological processes affect the environment and how the evolutionary trajectories of organisms have in turn been influenced by environmental change. In order to reconstruct the history of these processes, we will examine the imprints they leave on both the rock record and on the genomic makeup of living organisms. The metabolism and evolution of microorganisms, and the biogeochemistry they drive, will be a major emphasis.
Instructor(s): M. Coleman, J. Waldbauer
Prerequisite(s): GEOS 13100-13200-13300 or college-level cell & molecular biology
Equivalent Course(s): GEOS 36600, GEOS 26600

ENSC 24100. Ecology - Marine Biological Laboratory. 100 Units.
This course examines the structure and functioning of terrestrial and aquatic ecosystems including the application of basic principles of community and ecosystem ecology. The course also examines contemporary environmental problems such as the impacts of global and local environmental change on community composition and food webs within forest, grassland, marsh and nearshore coastal ecosystems on Cape Cod. This course examines the structure and functioning of terrestrial and aquatic ecosystems including the application of basic principles of community and ecosystem ecology. The course also examines contemporary environmental problems such as the impacts of global and local environmental change on community composition and food webs within forest, grassland, marsh and nearshore coastal ecosystems on Cape Cod.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): BIOS 27710

ENSC 24200. Methods in Microbial Ecology - Marine Biological Laboratory. 100 Units.
This course explores the biology of microbes found in the environment, including relationships with the physical, chemical, and biotic elements of their environment. Emphasis is placed on understanding the science underlying the various methodologies used in the study of these organisms and systems. In the laboratory, students will work with the latest techniques to measure microbial biomass, activity, extracellular enzymes, and biogeochemical processes. Students are also introduced to molecular methods for assessing microbial genomic diversity.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): BIOS 27714
ENSC 24300. Roles of Animals in Ecosystems # Marine Biological Laboratory. 100 Units.
This course addresses the question, How do animals, including man, affect the structure and function of ecosystems. The course takes an interdisciplinary approach focused on the interactions of animal diversity, migration patterns, population dynamics, and behavior with biogeochemical cycles, productivity, and transport of materials across ecosystems. This course is an elective option within the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711, and BIOS 27712.
Equivalent Course(s): BIOS 27715

ENSC 24400. Ecology and Conservation. 100 Units.
This course focuses on the contribution of ecological theory to the understanding of current issues in conservation biology. We emphasize quantitative methods and their use for applied problems in ecology (e.g., risk of extinction, impact of harvesting, role of species interaction, analysis of global change). Course material is drawn mostly from current primary literature; lab and field components complement concepts taught through lecture. Overnight field trip required. Prerequisite(s): BIOS 20150, BIOS 20151 or BIOS 20152 Note(s): BIOS 20196 is identical to the previously offered BIOS 23251. Students who have taken BIOS 23251 should not enroll in BIOS 20196. Equivalent Course(s): ENSC 24400
Instructor(s): C. Pfister, E. Larsen Terms Offered: Autumn, L.
Prerequisite(s): BIOS 20150, BIOS 20151 or BIOS 20152
Note(s): BIOS 20196 is identical to the previously offered BIOS 23251. Students who have taken BIOS 23251 should not enroll in BIOS 20196.
Equivalent Course(s): BIOS 20196

ENSC 24500. Environmental Microbiology. 100 Units.
The objective of this course is to understand how microorganisms alter the geochemistry of their environment. The course will cover fundamental principles of microbial growth, metabolism, genetics, diversity, and ecology, as well as methods used to study microbial communities and activities. It will emphasize microbial roles in elemental cycling, bioremediation, climate, and ecosystem health in a variety of environments including aquatic, soil, sediment, and engineered systems.
Instructor(s): M. Coleman Terms Offered: Autumn
Prerequisite(s): CHEM 11100-11200 and BIOS 20186 or BIOS 20197 or BIOS 20198
Equivalent Course(s): GEOS 36650, GEOS 26650

ENSC 28100. Quantitative Environmental Analyses # Marine Biological Laboratory. 100 Units.
This course emphasizes the application of quantitative methods to answering ecological questions. Students apply mathematical modeling approaches to simulating biological and chemical phenomena in terrestrial and marine ecosystems.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn, L.
Prerequisite(s): Consent Only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710, BIOS 27711 and BIOS 27712.
Equivalent Course(s): BIOS 27713

ENSC 29002. Field Course in Modern and Ancient Environments. 100 Units.
This course uses weekly seminars during Winter Quarter to prepare for a one-week field trip over spring break, where students acquire experience with sedimentary rocks and the modern processes responsible for them. Destinations vary; past trips have examined tropical carbonate systems of Jamaica and the Bahamas and subtropical coastal Gulf of California. We usually consider biological, as well as physical, processes of sediment production, dispersal, accumulation, and post-depositional modification.
Instructor(s): S. Kidwell, M. LaBarbera Terms Offered: Winter
Note(s): Organizational meeting and deposit usually required in Autumn Quarter; interested students should contact an instructor in advance.
Equivalent Course(s): GEOS 29002, GEOS 39002

ENSC 29700. Reading and Research in Environmental Science. 300.00 Units.
Independent study; regular meetings with Geophysical Sciences faculty member required. Register by section corresponding to faculty supervisor.
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): Consent of instructor and departmental counselor
Note(s): Students are required to submit the College Reading and Research Course Form. Available to nonmajors for P/F grading. Must be taken for a quality grade when used to meet a requirement in the major.
ENSC 29800. Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory. 100 Units.
This course is the culmination of the Semester in Environmental Science at the Marine Biological Laboratory. An independent research project, on a topic in aquatic or terrestrial ecosystem ecology, is required. Students will participate in a seminar for scientific communication as well as submit a final paper on their project.
Instructor(s): Marine Biological Laboratory Staff Terms Offered: Autumn. L.
Prerequisite(s): Consent only. Admission by application to the Semester in Environmental Science program at the Marine Biological Laboratory in Woods Hole, MA; concurrent registration in BIOS 27710 and BIOS 27711 along with one of BIOS 27713, BIOS 27714 or BIOS 27715.
Equivalent Course(s): BIOS 27712
ENVIRONMENTAL AND URBAN STUDIES

Department Website: http://environmentalstudies.uchicago.edu

As of academic year 2017–18 the Environmental Studies major has become the Environmental and Urban Studies major. This title reflects the addition of a third thematic track, focused on human interaction with place, space, and the built environment in urban regions.

PROGRAM OF STUDY

The program encourages interdisciplinary approaches to the complex entanglements and intersections of urbanism, environment, and humans by incorporating frameworks, theories, models and methods from the humanities and social and natural sciences. Students can choose to focus on one of following three tracks:

- **Environmental Economics and Policy Track**
- **Socio-natural Systems and Frameworks Track**
- **Urban Environment Track**

Students in other fields of study may also complete a minor in Environmental and Urban Studies with an emphasis on one of these tracks. Requirements for the minor follow the description of the major.

Note: The BS in Environmental Science that is offered by the Department of Geophysical Sciences may be more appropriate for students who intend to pursue postgraduate studies or professional careers in the natural sciences. Students who matriculated before July 2006 and have questions about Environmental Studies courses that they have already taken should contact the program director of Environmental and Urban Studies, Sabina Shaikh (773.834.4405, sabina@uchicago.edu), to devise their program of study.

PROGRAM REQUIREMENTS

Students in the Class of 2020 and beyond will follow new requirements for the Environmental and Urban Studies major, described below. Students in the Class of 2019 can continue under the earlier Environmental Studies requirements and receive the old major name on their transcript, but may opt into the Environmental and Urban Studies major by completing the updated requirements. These students may request to switch to the updated Environmental and Urban Studies major requirements, if they align with the student's interests and fit within the student's graduation plan.

Students in the major must complete thirteen courses:

Environmental and Urban Studies Core Sequence

Students are required to take the two-course core sequence in Environmental and Urban Studies (ENST 21201 Human Impact on the Environment-ENST 21301 Making the Natural World: Foundations of Human Ecology). These courses provide an overview of contemporary environmental issues and the theoretical and empirical approaches used to understand and address them.

Thematic Tracks in Environmental and Urban Studies

Students complete a total of six courses: four courses within the track they have selected as their area of emphasis and two complementary courses from one of the remaining tracks. Lists of approved courses can be found on the department’s website.

- **Environmental Economics and Policy Track:** This concentration emphasizes issues such as environmental law, development, globalization, and policy studies. This track has a more applied focus and is inclined more toward present-day issues and strategies in the context of politics, law, and economics.

- **Socio-natural Systems and Frameworks Track:** This concentration emphasizes environmental history; landscape studies; human ecology and demography; and environmental ethics, philosophy, and representation. Included in this track are courses on cultural and historical constructions of the natural and the human. This track emphasizes intellectual frameworks as well as the use of substantive information from the social sciences, sciences, and humanities.

- **Urban Environment Track:** This concentration emphasizes theoretical and practical perspectives on human interaction with the urban, physical environment. The track encourages a spatial and place-based urban perspective, meaning that built form and environmental context provide the conceptual core through which the social, economic, and political understanding of urbanism is pursued. The track approaches the nature and dynamics of cities by capitalizing on the growth of interest in urban planning, urban sustainability, and urban design.
Quantitative Analysis Requirement

One course must be taken to demonstrate competence in quantitative analysis. Students may choose to take either STAT 22000 or an equivalent.

Environmental Sciences and Geographical Studies Course Work

Students must take a total of three approved courses in environmental sciences and geographical studies, as broken down below. Lists of approved courses can be found on the department's website.

- Students in the **Environmental Economics and Policy Track** and the **Socio-natural Systems and Frameworks Track** must take two environmental sciences courses and one geographical studies course.
- Students in the **Urban Environment Track** must take two geographical studies courses and one environmental science course.

BA Thesis

Students are expected to develop significant independent research projects in close consultation with their preceptor and faculty adviser. In consultation with Environmental and Urban Studies preceptors, students prepare a topic page that is due eighth week of Spring Quarter in their third year. At this time, students are also required to secure a faculty adviser. The thesis adviser may be chosen from among the faculty teaching in Environmental and Urban Studies and related fields. The preceptor serves as a second reader on all theses. Where appropriate, outside scholars, scientists, or policy experts may be added as additional readers with the approval of the program director.

In Autumn Quarter of their fourth year, students register for ENST 29801 BA Colloquium I, which is designed to teach research skills and more generally to aid the research and writing process. The final version of the BA thesis is due by the second Friday of the quarter in which the student plans to graduate. Students wishing to build additional time for research or writing into their schedules may speak with their thesis adviser about potentially taking ENST 29900 B. A. Thesis (Reading and Research).

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the consent of the other program director. Approval from both program directors is required. Students should consult with the directors by the earliest BA proposal deadline (or by the end of their third year, when neither program publishes a deadline). A consent form, to be signed by the directors, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Internship or Field Studies Program

In addition to course work, students will be required to participate in an approved internship or field studies program with significant links to their program of study. Completion of the Chicago Studies Certificate Program will satisfy this requirement. See below for details.

**SUMMARY OF REQUIREMENTS FOR THE MAJOR**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 21201</td>
<td>Human Impact on the Environment</td>
<td>100</td>
</tr>
<tr>
<td>ENST 21301</td>
<td>Making the Natural World: Foundations of Human Ecology</td>
<td>100</td>
</tr>
<tr>
<td>Four courses in the thematic track of emphasis ‡</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>Two courses in the supporting thematic track</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications (or equivalent) *</td>
<td>100</td>
</tr>
<tr>
<td>Three courses in environmental sciences or geographical studies +</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>ENST 29801</td>
<td>BA Colloquium I</td>
<td>100</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>1300</td>
</tr>
</tbody>
</table>

‡ Students may use a maximum of 200 units of supervised individual reading and research credit (ENST 29700, 29701, 29702, or equivalent) toward their primary track requirements in the major.

* Credit may be granted via examination.

+ Must come from approved lists, found on the department’s website.

**ADVISING**

Application for admission to the Environmental and Urban Studies program should be made to the program preceptor, who explains requirements and arranges a preliminary program of study. Admission to the major or minor is complete when a program of study has been approved by the program director. This program of study, which the student formulates in consultation with both the program preceptor and the program director, should be in place by a student’s third year. The contact information for the current program preceptors is available on the program website at pge.uchicago.edu.
Environmental and Urban Studies majors and minors must submit the Intent to Graduate form no later than the second week of the quarter in which they intend to graduate. The form is available online and must be submitted electronically. See environmentalstudies.uchicago.edu/content/program-forms for more information.

Students will need to formalize their declaration of the major on my.uchicago.edu and provide regular documentation of any program approvals from the department to their College adviser for the requisite processing.

**GRADING**

Students who are majoring or minoring in Environmental and Urban Studies must receive quality grades in courses taken to meet the requirements of the program.

**HONORS**

Eligibility for honors requires an overall GPA of 3.0 or higher, a GPA of 3.5 or higher in the courses taken to meet the requirements of the program, and a BA thesis that is judged to be a high pass by the faculty and preceptor readers.

**MINOR PROGRAM IN ENVIRONMENTAL AND URBAN STUDIES**

Students who are not Environmental and Urban Studies majors may complete a minor in Environmental and Urban Studies. Such a minor requires that six courses be taken according to the following guidelines:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 21201</td>
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<td>100</td>
</tr>
<tr>
<td>ENST 21301</td>
<td>Making the Natural World: Foundations of Human Ecology</td>
<td>100</td>
</tr>
<tr>
<td>Four courses in one of the three thematic tracks</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

*Must be chosen in consultation with the program director.

Students who elect the minor program in Environmental and Urban Studies should meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the minor and select appropriate courses. The approval of the program director for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.

Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and at least half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

**EXPERIENTIAL LEARNING OPPORTUNITIES**

The Environmental and Urban Studies major offers experiential learning opportunities through practicum courses, the Chicago Studies Quarter and the Chicago Studies Certificate Program. Students in all tracks, and in particular the Urban Environment track, are encouraged to enroll in these programs, which offer immersion in the academic, experiential, interdisciplinary study of Chicago and its region. For more information about these programs, please see the listing in this catalog or visit chicagostudies.uchicago.edu.

**Chicago Studies Quarter**

Each spring, a small cohort of students studies the culture, politics, and history of the city through a curriculum of three interrelated courses with a common theme through the Chicago Studies Quarter. Admission to the program is competitive. Courses are taught by Chicago specialists from a variety of disciplines and join classroom instruction with weekly excursions and co-curricular activities.

All courses in the Chicago Studies Quarter will have an Environmental and Urban Studies course number. They are also listed in all three tracks of the major and can therefore be taken to satisfy requirements either within or outside the student’s primary track.

**Chicago Studies Quarter: Calumet**

Since 2012, the Calumet Quarter has offered a one-quarter, intensive, experience-based program focused on human land use in the Calumet Region just south and east of the city. As of 2017–18, it has merged with the Chicago Studies Quarter and is officially known as the Chicago Studies Quarter: Calumet. It features integrated courses, projects, field trips, guest lectures, and presentations, and integrates perspectives from the sciences, humanities, and social sciences in the study of local environments and communities.

Chicago Studies Quarter: Calumet is offered every other year. The next offering will be in Spring Quarter 2020. Courses taken as part of this program can be used to satisfy requirements in all three tracks of the major.

**Chicago Studies Certificate**

The Chicago Studies Certificate, launched in 2017–18, is designed for students who wish to integrate their academic inquiry with positive impact in Chicago through sustained community engagement, urban scholarship,
Environmental and Urban Studies

Completion of the Chicago Studies Certificate will satisfy the internship/field study requirement for the Environmental and Urban Studies major.

ENVIRONMENTAL STUDIES COURSES
ENST 10001. Getting to Green: The Business Case for Sustainability. 100 Units.
ENST 10010. Architecture and Urban Design Towards Sustainable Cities. 100 Units.
ENST 12100. Chemistry & The Atmosphere. 100 Units.
Not offered in 2018-19
Terms Offered: Not offered 2015-16
Equivalent Course(s): PHSC 13500
ENST 12300. Global Warming: Understanding the Forecast. 100 Units.
This course presents the science behind the forecast of global warming to enable the student to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, including comparisons with Venus and Mars; an overview of the carbon cycle in its role as a global thermostat; predictions and reliability of climate model forecasts of the greenhouse world. This course is part of the College Course Cluster program, Climate Change, Culture, and Society. (L)
Instructor(s): D. MacAyeal, D. Abbot Terms Offered: Autumn Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): PHSC 13400, GEOS 13400, ENSC 13400
ENST 12402. Life Through a Genomic Lens. 100 Units.
The implications of the double helical structure of DNA triggered a revolution in cell biology. More recently, the technology to sequence vast stretches of DNA has offered new vistas in fields ranging from human origins to the study of biodiversity. This course considers a set of these issues, including the impact of a DNA perspective on the legal system, on medicine, and on conservation biology.
Instructor(s): A. Turkewitz, M. Nobrega Terms Offered: Winter
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Equivalent Course(s): BIOS 11125
ENST 12520. Climate Change in Literature, Art, and Film. 100 Units.
If meteorological data and models show us that climate change is real, art and literature explore what it means for our collective human life. This is the premise of many recent films, novels, and artworks that ask how a changing climate will affect human society. In this course, we will examine the aesthetics of climate change across media, in order to understand how narrative, image, and even sound help us witness a planetary disaster that is often imperceptible. Our approach will be comparative: what kind of story about climate change can a science fiction novel about a dystopian future tell, and how is this story different than, say, that of an art installation made of melting blocks of Arctic ice? Do different media tend to emphasize different aspects of ecological crisis? Readings and discussions will introduce students to some of the ways that humanities scholarship is contributing to climate change research. The syllabus may include Jeff VanderMeer, Annihilation (2014); Margaret Atwood, Oryx and Crake (2003); Iain Banks, Use of Weapons (2012); George Miller, Mad Max: Fury Road (2015); and Amitav Ghosh, The Great Derangement (2016). (Fiction, Theory). This course is part of the College Cluster program: Climate Change, Culture and Society.
Instructor(s): Benjamin Morgan Terms Offered: Autumn
Equivalent Course(s): ENGL 12520, SIGN 26014
ENST 13113-29720. Prairie Ecosystems: Lessons of Sustainability in the Past, Present, and Future; Reading and Research: Calumet.
ENST 13113. Prairie Ecosystems: Lessons of Sustainability in the Past, Present, Future. 100 Units.
Warm coat and ability to walk five miles required. This course looks at the Midwest prairie as a model ecosystem. How and when did grasslands evolve? And where and when did they become established? How many species and biotrophic levels are interconnected in a regularly disturbed environment? Are there keystone species? What are the ecological forces that maintain, destroy, and restore balance? Glacial retreat, fire, deep-rooted perennial grasses, large herbivores, deforestation, industrial agriculture, and biofuels are covered. We then apply what we have learned from the grasslands to live sustainably.
Instructor(s): J. Borevitz Terms Offered: Spring
Prerequisite(s): BIOS 10130
Equivalent Course(s): BIOS 13113
ENST 13300. The Atmosphere. 100 Units.
This course introduces the physics, chemistry, and phenomenology of the Earth's atmosphere, with an emphasis on the fundamental science that underlies atmospheric behavior and climate. Topics include (1) atmospheric composition, evolution, and structure; (2) solar and terrestrial radiation in the atmospheric energy balance; (3) the role of water in determining atmospheric structure; and (4) wind systems, including the global circulation, and weather systems.
Instructor(s): D. Abbot Terms Offered: Spring
Prerequisite(s): MATH 13100-MATH 13200
Equivalent Course(s): ENSC 13300, GEOS 13300

ENST 20540. The Chicago Climate Change & Culture Institute-I. 100 Units.
Climate change is arguably the greatest environmental, political and cultural challenge of our times. We are already beginning to feel its impacts in changing weather patterns and rising temperatures. In the years to come, Earth scientists tell us that climate change will impact every human being on the planet. We need to become informed and engaged about what awaits us and what we can do to avoid worst-case scenarios. This 3-week intensive course of study focuses on three key questions: Why did climate change happen? How is it impacting different communities across the world? What can be done to prepare the world for a more environmentally secure future? The 4CI program features lectures by leading experts on climate change from the Social Sciences, Earth Sciences, Humanities, Art and Architecture. Seminar discussions and site visits to a variety of local initiatives working toward clean energy and sustainability goals round out the program. 4CI will give you the answers you want about climate change and the tools you need to start making a positive difference, whether that is on your campus, in your community or at your workplace. The program leverages the intellectual resources of one of the world's most prestigious research universities and will acquaint you with a city that proudly stands on the cutting edge of sustainable urbanism.
Terms Offered: Summer. Summer 2018
Equivalent Course(s): ANTH 30540, ANTH 20540

ENST 21201. Human Impact on the Environment. 100 Units.
Students will analyze the impact of the human enterprise on the world that sustains it. Topics include human population dynamics, historical trends in human well-being, our use of natural resources-especially in relation to the provision of energy, water, and food-and the impacts these activities have on the range of goods and services provided by geological/ecological systems. Students will read and discuss diverse sources and write short weekly papers.
Instructor(s): Alison Anastasio Terms Offered: Autumn
Note(s): ENST 21201 and 21301 are required of students who are majoring in Environmental Studies and may be taken in any order.
Equivalent Course(s): NCDV 21201

ENST 21301. Making the Natural World: Foundations of Human Ecology. 100 Units.
Humans have "made" the natural world both conceptually, through the creation of various ideas about nature, ecosystem, organism, and ecology, and materially, through millennia of direct action in and on the landscape. Students will consider the conceptual underpinnings of contemporary notions of ecology, environment, and balance through the examination of specific historical trajectories of anthropogenic landscape modification and human society.
Instructor(s): Alison Anastasio Terms Offered: Winter
Note(s): ENST 21201 and 21301 are required of students who are majoring in Environmental Studies and may be taken in any order.
Equivalent Course(s): ANTH 21303

ENST 21440. (Re)constructing Nature: Restoration Ecology in a Time of Climate Change. 100 Units.
Restoration ecologists, environmental professionals, and average citizens all participate in the process of habitat restoration. How does this interdisciplinary practice balance the priorities of ecosystem function and services, conservation of imperiled species and habitats, aesthetic appeal, and human use in a dynamic climate? In this course students will gain a broad overview of the field of restoration ecology and approach it from scientific, practical, and humanistic perspectives using scientific literature, case studies, and planning documents.
ENST 21500. Environmental Justice. 100 Units.
The effects of environmental pollution are not evenly distributed and are more likely to be experienced by low-income and minority communities. The location of toxic waste sites (both manufacturing plants and dump sites), the persistence of brownfields locations, and a lack of parks and open space are some of the conditions that have led to an ongoing effort to expand the focus of environmental advocacy to the pursuit of equitable and just outcomes in disadvantaged neighborhoods. This course will examine the history of the environmental justice, the efforts to pursue more equitable outcomes, and the prospect for such efforts in the face of global challenges such as climate change. The course will include class visits to sites in Chicago where environmental justice efforts are being undertaken as well as speakers from environmental justice organizations.
Instructor(s): Raymond Lodato
Equivalent Course(s): PBPL 21501

ENST 22209. Philosophies of Environmentalism and Sustainability. 100 Units.
Many of the toughest ethical and political challenges confronting the world today are related to environmental issues: for example, climate change, loss of biodiversity, the unsustainable use of natural resources, pollution, and other threats to the well-being of both present and future generations. Using both classic and contemporary works, this course will highlight some of the fundamental and unavoidable philosophical questions presented by such environmental issues. Can a plausible philosophical account of justice for future generations be developed? What counts as the ethical treatment of non-human animals? What do the terms “nature” and “wilderness” mean, and can natural environments as such have moral and/or legal standing? What fundamental ethical and political perspectives inform such positions as ecofeminism, the “Land Ethic,” political ecology, ecojustice, and deep ecology? And does the environmental crisis confronting the world today demand new forms of ethical and political philosophizing and practice? Are we in the Anthropocene? Is “adaptation” the best strategy at this historical juncture? Field trips, guest speakers, and special projects will help us philosophize about the fate of the earth by connecting the local and the global. (A)
Instructor(s): B. Schultz Terms Offered: Autumn
Equivalent Course(s): HMRT 22201, PLSC 22202, PHIL 22209, GNSE 22204

ENST 22300. South Side Ecologies. 100 Units.
In this project-based course, students will engage with local habitats and communities on the ground to explore the entanglements of humans and nature. Topics in human, social, natural, and political ecologies on the South Side of Chicago will be highlighted each year.
Instructor(s): Alison Anastasio Terms Offered: Spring

ENST 22506. The Natures of the Factory Farm. 100 Units.
This course looks at the culture, technology, politics, and ecology of industrial agriculture through the lens of the animal-based “factory” farm. Over the quarter we will trace key steps along the process of manufacturing industrialized animals from life to death in order to think about the factory farm’s logic, value, and consequences for rural environments (primarily) within the United States. By emphasizing the historical and cultural conditions of possibility that enable the modern-day factory farm, this course illustrates how mass-producing life forms is more than just a matter of technology, profit-making, or necessity. Instead, we will see how legal definitions of the “farm” versus the “factory,” ideological notions of animal (and human) “nature,” labor law, animal confinement, and the corporate ownership of genetic breeds contribute to its growing ascendancy as a global norm of animal production. But the factory farm has also led to new ideals for rural life that go far beyond classic forms of American agrarianism. As such, we will look to a series of case studies that take up the ecological politics of heritage-breed animals, raw milk production, and recent (Europe-based) projects that try to redeem certain elements of industrial agriculture. Along the way, students will receive an introduction to the analysis of food chains, applied ethology, animal studies, agrarian studies, and rural environmental politics.
Instructor(s): A. Blanchette Terms Offered: Not offered 2017–18

ENST 22708. Planetary Britain, 1600-1900. 100 Units.
What were the causes behind Britain’s Industrial Revolution? In the vast scholarship on this problem, one particularly heated debate has focused on the imperial origins of industrialization. How much did colonial resources and markets contribute to economic growth and technological innovation in the metropole? The second part of the course will consider the global effects of British industrialization. To what extent can we trace anthropogenic climate change and other planetary crises back to the environmental transformation wrought by the British Empire? Topics include ecological imperialism, metabolic rift, the sugar revolution, the slave trade, naval construction and forestry, the East India Company, free trade and agriculture, energy use and climate change.
Equivalent Course(s): KNOW 32808, HIPS 22708, HIST 22708, HIST 32708, KNOW 22708, CHSS 32708
ENST 23100. Environmental Law. 100 Units.
This lecture/discussion course examines the development of laws and legal institutions that address environmental problems and advance environmental policies. Topics include the common law background to traditional environmental regulation, the explosive growth and impact of federal environmental laws in the second half of the twentieth century, regulations and the urban environment, and the evolution of local and national legal structures in response to environmental challenges.
Instructor(s): R. Lodato Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): PBPL 23100, LLSO 23100

ENST 23289. Marine Ecology. 100 Units.
This course provides an introduction into the physical, chemical, and biological forces controlling the function of marine ecosystems and how marine communities are organized. The structures of various types of marine ecosystems are described and contrasted, and the lectures highlight aspects of marine ecology relevant to applied issues such as conservation and harvesting.
Instructor(s): T. Wootton Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and prior introductory course in ecology or consent of instructor.
Equivalent Course(s): BIOS 23289

ENST 23505. Environmental Ethics. 100 Units.
This course examines foundational issues of environmental ethics. What kind of values (economic, aesthetic, existence) are important? What kind of value do individual biota, humans, other species, ecosystems, humans, or inorganic entities have? What is the relationship of humans to the rest of the world? What should it be? Do religious and philosophical traditions contribute to or help address environmental degradation?
Instructor(s): S. Fredericks Terms Offered: Winter
Equivalent Course(s): RLST 23505

ENST 23550. Urban Ecology and the Nature of Cities. 100 Units.
Urban ecology is an interdisciplinary field derived from the academic discipline of ecology. How well does classical ecological theory, typically formed from reductionist views of nature without humans, describe and predict patterns in human-dominated landscapes? Students will learn fundamental concepts in ecological theory, examine how these concepts apply to urban systems, and explore the paradigms of ecology in, of, and for cities. Readings and discussions will focus on classical research papers from the ecological literature, history of modern ecology, and contemporary approaches to studying biotic systems in cities.
Instructor(s): Alison Anastasio Terms Offered: Winter
Equivalent Course(s): PBPL 23550

ENST 23610. Eating a Global Environment: Critical Perspectives of Agrofood Systems. 100 Units.
This topics course looks at questions about the human dimensions of the globalization and localization of food production. Drawing sociological theories of labor and consumption, class, and capitalism into popular notions of taste, nutrition, and the 'good farmer,' this course aims to answer questions of agrofood systems in a globalizing world. We will bring social scientific theory to bear on a series of case studies centering on the United States and its relationships with other places. Our driving questions and interdisciplinary readings will be animated by four themes: 1) ideological roots of food and farming, 2) causes and consequences of agricultural globalization, 3) challenges facing urban and rural food access, and 4) power dynamics of sustainable land use.
Equivalent Course(s): PBPL 23610

ENST 23640. Fruited Plains and Scarred Mountains: The Environmental History of Work in the United States. 100 Units.
Ask most people to name an ecosystem, and they'll probably talk about mountains, beaches, plains, or forests. But most of us spend nearly a third of our adult lives in another ecosystem we often don't think about: our workplace. In fact, one of the most common ways humans interact with the environment in our modern world is by working-from farming and mining to housekeeping and coding. This course will examine the environmental history of work in the United States from the colonial era to the present through lectures, discussion, and other forms of active learning. We will cover a range of topics including racialized and gendered labors, the work of empire, energy workplaces, industrialization, agriculture, the information revolution, and climate adaptation. By engaging this history, we will also consider broader interdisciplinary questions: how should environmental concerns shape labor policy and organizing? What workplace considerations must be incorporated into the development of climate adaptation strategies and just transition programs? Why do the stories that we tell ourselves about the meaning of work matter for climate justice? What is the future of work in a climate-changed world?
Instructor(s): Trish Kahle Terms Offered: Winter
ENST 23650. Revolutionizing Agriculture: Early Modern Technologies for the New Millennium. 100 Units.
Based on a wave of sustainable and organic farming technologies that have reinvented early modern growing practices, this course integrates USDA reports and modern field and lab studies into the historiography of The British Agricultural Revolution. Not all historical technologies were sustainable, and this course relies upon modern agronomy to evaluate the environmental costs and benefits of the farming improvements that defined the British Agricultural Revolution. We similarly explore primary historical sources and historiography to better understand the environmental limits of the technologies used by organic and sustainable farmers today. By bringing the science and history into discourse, we will take a critical look at the British Agricultural Revolution, which is thought to have facilitated the Industrial Revolution by accumulating capital for investment and by allowing England to feed a growing urban population and manufacturing sector without a significant increase in arable acres. We know that yields per acre per worker did increase, but this is the only aspect of the story that remains unquestioned. Some agricultural improvement technologies, like light plowing and enclosure, caused catastrophic environmental harms that ultimately lowered yields over time. Other technologies like The Norfolk Rotation may have had small and gradual impacts over time and cannot be easily correlated with increases in yields on a site-by-site basis in the historical literature or in modern field trials. Other early modern technologies have proven to be more beneficial than previously thought. How can a better understanding of this history inform farming practices today?
Equivalent Course(s): AMER 24190, ARTV 20210, ARTH 24190, GEOG 24190

ENST 23900. Environmental Chemistry. 100 Units.
The focus of this course is the fundamental science underlying issues of local and regional scale pollution. In particular, the lifetimes of important pollutants in the air, water, and soils are examined by considering the roles played by photochemistry, surface chemistry, biological processes, and dispersal into the surrounding environment. Specific topics include urban air quality, water quality, long-lived organic toxins, heavy metals, and indoor air pollution. Control measures are also considered. This course is part of the College Course Cluster program: Climate Change, Culture, and Society.
Instructor(s): A. Colman, D. Archer Terms Offered: Autumn
Prerequisite(s): CHEM 11101-11201 or equivalent, and prior calculus course
Equivalent Course(s): GEOS 23900, ENSC 23900, GEOS 33900

ENST 24102. Environmental Politics. 100 Units.
This course examines the different theoretical underpinnings of environmental activism and elucidates the manner in which they lead to different ends. We explore several contrasting views of environmentalism, including the land ethic, social ecology, and deep ecology. Discussions are based on questions posed about the readings and the implications they suggest. Class participation is required.
Instructor(s): R. Lodato Terms Offered: Spring
Equivalent Course(s): LLSO 24102, PBPL 24102

ENST 24190. Imagining Chicago’s Common Buildings. 100 Units.
This class is an architectural studio based in the common residential buildings of Chicago and the city’s built environment. While a design project and architectural skills will be the focus of the class, it will also incorporate readings, a small amount of writing, and some social and geographical history. We will: (1) give students interested in pursuing architecture or the study of cities experience with a studio class and some skills related to architectural thinking, (2) acquaint students intimately with Chicago’s common residential buildings and built fabric, and (3) situate all this within a context of social thought about residential architecture, common buildings, housing, and the city.
Instructor(s): L. Joyer Terms Offered: Autumn
Equivalent Course(s): AMER 24190, ARTV 20210, ARTH 24190, GEOG 24190

ENST 24201. China’s Eco-Environmental Challenges and Society’s Responses. 100 Units.
In nearly four decades of reform and opening policies, China’s economic achievements have come at a high cost for its ecological environment; air pollution, water pollution, and soil contamination, among other problems, are facts of life for most Chinese citizens. In addition, China is now the world’s biggest emitter of carbon dioxide and has recently acknowledged its contributions to global warming and the need for drastic mitigation of greenhouse gases. Facing these tremendous challenges, remarkable shifts in the way that Chinese society communicates and tackles these problems are occurring. This seminar will look, in particular, at relevant public debates, crucial policies, as well as popular initiatives and protest, to approach this wide topic. How is the relationship between humans/society and nature/environment conceptualized and communicated? Can we detect shifts from traditional to modern, even contemporary ‘Chinese approaches’? And to what extent and how do political authorities, media, the general population and scientists in China interact in the face of the acknowledged risks that environmental pollution poses to communities, to China’s (economic) development and, not least, to individual health and well-being. Basic knowledge about modern Chinese society and politics as well as Chinese reading skills are helpful, but not a strict requirement for participation in this course.
Instructor(s): A.L. Ahlers Terms Offered: Autumn
Equivalent Course(s): EALC 34201, EALC 24201
ENST 24600. Introduction to Urban Sciences. 100 Units.
This course is a grand tour of conceptual frameworks, general phenomena, emerging data and policy applications that define a growing scientific integrated understanding of cities and urbanization. It starts with a general outlook of current worldwide explosive urbanization and associated changes in social, economic and environmental indicators. It then introduces a number of historical models, from sociology, economics and geography that have been proposed to understand how cities operate. We will discuss how these and other facets of cities can be integrated as dynamical complex systems and derive their general characteristics as social networks embedded in structured physical spaces. Resulting general properties of cities will be illustrated in different geographic and historical contexts, including an understanding of urban resource flows, emergent institutions and the division of labor and knowledge as drivers of innovation and economic growth. The second part of the course will deal with issues of inequality, heterogeneity and (sustainable) growth in cities. We will explore how these features of cities present different realities and opportunities to different individuals and how these appear as spatially concentrated (dis)advantage that shape people’s life courses. We will show how issues of inequality also have consequences at more macroscopic levels and derive the general features of population and economic growth for systems of cities and nations.
Instructor(s): Luis Bettencourt Terms Offered: Autumn
Prerequisite(s): STAT 22000
Equivalent Course(s): GEOG 24600, PBPL 24605, SOCI 20285

ENST 24660. Urban Geography. 100 Units.
This course examines the spatial organization and current restructuring of modern cities in light of the economic, social, cultural, and political forces that shape them. It explores the systematic interactions between social process and physical system. We cover basic concepts of urbanism and urbanization, systems of cities urban growth, migration, centralization and decentralization, land-use dynamics, physical geography, urban morphology, and planning. Field trip in Chicago region required. This course is part of the College Course Cluster, Urban Design.
Instructor(s): M. Conzen Terms Offered: Winter
Note(s): This course offered in even years.
Equivalent Course(s): GEOG 33500, GEOG 23500

ENST 24680. Introduction to Urban Planning. 100 Units.
The academic study of urban planning encompasses a range of issues dealing with cities, from urban design to governance, economic development, local politics, and place. The goal of this course is to provide a broad overview of urban planning theory and history while at the same time introducing students to basic GIS applications for urban planners. This format provides students with a better contextual understanding of the wide range of issues currently facing 21st century cities, and at the same time serves as an introduction to the everyday practice of urban planning. The course includes readings from prominent urban theorists, a discussion of the historical development of the urban planning profession in the US, and GIS exercises that allow students to apply their theoretical urban knowledge to real-world planning problems.
Instructor(s): Kevin Credit Terms Offered: Autumn
Equivalent Course(s): GEOG 24700, GEOG 34700

ENST 24701. U.S. Environmental Policy. 100 Units.
Making environmental policy is a diverse and complex process. Environmental advocacy engages different governmental agencies, congressional committees, and courts, depending on the issue. This course examines how such differentiation has affected policy making over the last several decades.
Instructor(s): R. Lodato Terms Offered: Autumn
Equivalent Course(s): PBPL 24701, LLSo 24901

ENST 24705. Energy: Science, Technology, and Human Usage. 100 Units.
This course covers the technologies by which humans appropriate energy for industrial and societal use, from steam turbines to internal combustion engines to photovoltaics. We also discuss the physics and economics of the resulting human energy system: fuel sources and relationship to energy flows in the Earth system; and modeling and simulation of energy production and use. Our goal is to provide a technical foundation for students interested in careers in the energy industry or in energy policy: Field trips required to major energy converters (e.g., coal-fired and nuclear power plants, oil refinery, biogas digester) and users (e.g., steel, fertilizer production). This course is part of the College Course Cluster program: Climate Change, Culture and Society.
Instructor(s): E. Moyer Terms Offered: Spring
Prerequisite(s): Knowledge of physics or consent of instructor
Equivalent Course(s): GEOS 24705, GEOS 34705, ENSC 21100
ENST 24756. Exploring the Resilient City. 100 Units.
In recent years, sub-national units of government have enacted meaningful policy plans in the wake of the ongoing failure of the international community to address global climate change. Cities in particular have shaped their plans to address the now-inevitable effects of climate change by adopting policies that emphasize resilience and environmental protection, without sacrificing economic growth, and with attention to the ongoing challenges of poverty and inequality. This course will take a comparative look at the policies adopted by cities on an international basis, while defining what it means to be a resilient city and how much the built environment can be adjusted to limit the environmental impact of densely populated metropolises. It will also consider what impact citizen activism and input had upon the shape of each plan and the direction that its policies took. Students will also be asked to consider what might be missing from each plan and how each plan could be improved to foster greater resiliency.
Instructor(s): R. Lodato Terms Offered: Winter
Equivalent Course(s): PBPL 24756

ENST 24800. Complex Problem: World Hunger. 100 Units.
Few of our policymakers are experts in economics, agronomy, food science, and molecular biology, yet all of these disciplines are essential for developing strategies to end world hunger. Choosing one country as a test case, we look at the history, politics, governmental structure, population demographics, and agricultural challenges. We then study the theory of world markets, global trade, and microeconomics of developing nations, as well as the promise and limitation of traditional breeding and biotechnology.
Instructor(s): J. Malamy, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): SOSC 26900, BIOS 02810, BPRO 24800

ENST 25006. How Things Get Done in Cities and Why. 100 Units.
Innovation. Prosperity. Democracy. Diversity. Cities long have been lauded as unique incubators of these social features. In contrast to the national level, the smaller scale and dense diversity of cities is thought to encourage the development of civic solutions that work for the many. But cities are inhabited by distinct groups of people with divergent interests and varied beliefs about how to address countless urban issues, such as creating jobs, delivering education, ensuring safe neighborhoods, promoting environmental sustainability, and taking care of the vulnerable. Many groups and organizations have an interest in the outcomes of these processes. Some take action to try to shape them to their own advantage, while others have few chances to make themselves heard. This course examines dynamics of interest representation, decision-making, and inclusion/exclusion in the contemporary city, drawing insights from multiple disciplines and substantive domains.
Instructor(s): N. Marwell Terms Offered: Autumn
Equivalent Course(s): SOSC 25006

ENST 25014. Introduction to Environmental History. 100 Units.
How have humans interacted with the environment over time? This course introduces students to the methods and topics of environmental history by way of classic and recent works in the field: Crosby, Cronon, Worster, Russell, and McNeill et al. Major topics of investigation include preservationism, ecological imperialism, evolutionary history, forest conservation, organic and industrial agriculture, labor history, the commons and land reform, energy consumption, and climate change. Our scope covers the whole period from 1492 with case studies from European, American and British imperial history.
Equivalent Course(s): HIST 25014, HIST 35014, HIPS 25014, CHSS 35014

ENST 25114. Natural History and Empire, circa 1500-1800. 100 Units.
This course will examine natural history-broadly defined as a systematic, observational body of knowledge devoted to describing and understanding the physical world of plants, animals, natural environments, and (sometimes) people-in the context of European imperial expansion during the early modern era. Natural history was upended by the first European encounters with the New World. The encounter with these new lands exposed Europeans for the first time to unknown flora and fauna, which required acute empirical observation, collection, cataloguing, and circulation between periphery and metropole in order to understand their properties and determine their usefulness. As the Spanish, Portuguese, British, French, and Dutch competed with one another to establish overseas trade and military networks in the sixteenth, seventeenth, and eighteenth centuries, they also competed over and shared information on natural resources. The course will combine lecture and discussion and mix primary source readings on natural history in the early modern world with modern historical writings. Though the readings skew a bit toward Britain and the British Atlantic world, every effort has been made to include texts and topics from multiple European and colonial locales. Topics and themes will include early modern sources of natural history from antiquity and their (re)interpretation in imperial context; early modern collecting cultures and cabinets of curiosities; Linnaeus and the origins of
Equivalent Course(s): HIST 25114, HIPS 25114
ENST 25460. Environmental Effects on Human Health. 100 Units.
Given the increasing human population in urban areas, the effects of urbanization and the urban environment on human health can be particularly profound. In this course, students will be introduced to environmental health issues, research, policy and advocacy. An overview of fundamental concepts in environmental health will be paired with case studies based on current local issues and topical research. Guest-led lectures and discussions will connect biological, chemical, and physical exposures to their real effects on human communities.
Instructor(s): Alison Anastasio Terms Offered: Spring

ENST 25500. Biogeography. 100 Units.
This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).
Instructor(s): B. Patterson (odd years, lab). L., Heaney (even years, discussion) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and a course in either ecology, evolution, or earth history; or consent of instructor
Equivalent Course(s): GEOG 25500, BIOS 23406, GEOG 35500, EVOL 45500

ENST 25900. Cultural Geography. 100 Units.
This course examines the two main concerns of this field of geography: (1) the logic and pathology revealed in the record of the human use and misuse of the Earth, and (2) the discordant relationship of the world political map with more complicated patterns of linguistic and religious distribution.
Instructor(s): TBD Terms Offered: TBD
Equivalent Course(s): GEOG 20100, GEOG 30100

ENST 26100. Roots of the Modern American City. 100 Units.
This course traces the economic, social, and physical development of the city in North America from pre-European times to the mid-twentieth century. We emphasize evolving regional urban systems, the changing spatial organization of people and land use in urban areas, and the developing distinctiveness of American urban landscapes. All-day Illinois field trip required. This course is part of the College Course Cluster, Urban Design.
Instructor(s): M. Conzen Terms Offered: Autumn
Note(s): This course offered in odd years.
Equivalent Course(s): HIST 38900, HIST 28900, GEOG 36100, GEOG 26100

ENST 26420. Sustainable Food Enterprise Lab Practicum. 100 Units.
This practicum explores efforts to promote environmental and social sustainability in the food system through market initiatives. Student teams will work on consulting projects for Chicago based client organizations, focusing on the connection between business success and social/environmental impact. Students will address a problem or an innovation challenge for the client and develop actionable, research-based recommendations. Student teams will refine the problem, identify appropriate analytical tools to address it, design data collection methods, collect and analyze data, develop data-driven recommendations and present to the client's management. Students will be mentored in their work with clients in order to develop their personal and interpersonal skills for working on environmental and social change. Project-based experiential learning will be complemented by readings and discussions that will support the students' work and invite them to reflect deeply and critically on sustainable food enterprises.
Instructor(s): T. Yifat Terms Offered: Winter. Not offered 2017-18

ENST 26433. Practicum in Environmental Management. 100 Units.
Students in this course will explore and evaluate aspects of environmental sustainability on campus, through scholarly research, interviews, surveys and data collection and analysis. Students will apply concepts and tools from environmental studies, public policy and economics to evaluate and make recommendations for enhancing the environmental performance of campus athletics operations and events. The research will be conducted in collaboration with the Office of Sustainability and Department of Physical Education and Athletics. Prerequisite: PBPL 200 or ECON 198 or equivalent
Instructor(s): S. Sabina Terms Offered: Autumn
Prerequisite(s): Prerequisite: PBPL 200 or ECON 198 or equivalent
Equivalent Course(s): PBPL 26433

ENST 26444. Practicum in Campus Athletics and Environment. 100 Units.
The practicum course will engage students in economic and environmental research related to designing a system for waste diversion on campus. Students will develop hands-on experience by designing, implementing, measuring and reporting the impacts of a "zero-waste" campus athletics event. Students will explore different technologies and behavioral interventions for waste management, with a focus on reducing food waste at campus events. Students are expected to attend the zero-waste event on April 23-24th, 2017.
Equivalent Course(s): PBPL 26444
ENST 26500. Environmental Economics. 100 Units.
This course applies theoretical and empirical economic tools to environmental issues. We discuss broad concepts such as externalities, public goods, property rights, market failure, and social cost-benefit analysis. These concepts are applied to areas that include nonrenewable resources, air and water pollution, solid waste management, and hazardous substances. We emphasize analyzing the optimal role for public policy.
Instructor(s): S. Shaikh Terms Offered: Econ 26500 will not be offered in 2018-19.
Prerequisite(s): ECON 20100
Equivalent Course(s): ECON 26500, PBPL 32631

ENST 26530. Environment, Agriculture, and Food: Economic and Policy Analysis. 100 Units.
The connections between environment, agriculture, and food are inherent in our social, cultural, and economic networks. Land use, natural resource management, energy balances, and environmental impacts are all important components in the evolution of agricultural systems. Therefore it is important to develop ways in which to understand these connections in order to design effective agricultural programs and policies. This course is designed to provide students with guidance on the models and tools needed to conduct an economic research study on the intersecting topics of environment, agriculture, and food. Students learn how to develop original research ideas using a quantitative and applied economic policy analysis for professional and scholarly audiences. Students collect, synthesize, and analyze data using economic and statistical tools. Students provide outcomes and recommendations based on scholarly, objective, and policy relevant research rather than on advocacy or opinions, and produce a final professional-quality report for a workshop presentation and publication. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): ECON 26530, PBPL 26530, PPHA 32510

ENST 26531. Environment, Agriculture, and Food: Advanced Economic and Policy Analysis. 100 Units.
This course is an extension of ENST 26530 but also stands alone as a complete course itself. Students don’t need to take ENST 26530 to enroll in this course. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): PPHA 32520, PBPL 26531, ECON 26540

ENST 27100-27201-27301-27401. Integrative Research Seminar: Calumet; Food Security and Agriculture: Calumet; Environmental Management and Planning in the Calumet Region; Restoration Ecology; Topics in the Ecology of the Calumet Region.
This full-time, one-quarter sequence is intended to help students bridge theory and practice in environmental studies. The program features four integrated courses, projects, field trips, guest lectures, and presentations. Students will work in the classroom and field as they integrate perspectives from the sciences, humanities, and social sciences in the study of local environments and communities. Enrollment is based on acceptance into the Calumet Quarter Program. Visit pge.uchicago.edu/calumet for an application, which requires an unofficial transcript and letter of recommendation. Students must enroll in the three core Calumet Quarter courses ENST 27100-27201-27301 and may also enroll in the optional readings course ENST 29720. The Calumet Quarter will not be offered in Spring Quarter 2017. It will be offered next in Spring Quarter 2018.

ENST 27100. Integrative Research Seminar: Calumet. 100 Units.
This course examines the history of land use and social and environmental issues in the Calumet region. In addition to discussing the Calumet region broadly, students develop final projects grounded in research from all courses in the field studies program. Talks and discussions are led each week by guest lecturers who represent industry, nonprofit organizations, or Chicago government, or who are conducting research within the Calumet region.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.
ENST 27201. Food Security and Agriculture: Calumet. 100 Units.
Do you know where your next meal will come from? Many people around the world, and even close to home, do not. The Food and Agricultural Organization explains that food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security is thus a complex issue involving aspects of food production and distribution, poverty, buying power, and social networks, and cultural choice. In this course we use the Calumet region as a case study to examine some aspects of the food security debate, especially the basic conceptual divide between the framework of food security, as defined by international organizations above, and the more grass-roots notion of food sovereignty. Though we will aim for an overview of the issues, we focus this quarter more specifically on issues of agriculture and the food system, including urban agriculture, permaculture, and other challenges to the dominant industrial model. In a region with significant economic distress and area of “food desert,” the Calumet presents examples of both challenge and response to this critical topic.
Instructor(s): K. Morrison Terms Offered: Spring. Not offered 2017-18
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27220. Environmental Management and Planning in the Calumet Region. 100 Units.
This course focuses on the identification and measurement of environmental outcomes in the Calumet Region of Chicago. Topics include the quantification of air quality impacts from industrial pollution and the potential for green infrastructure development to manage stormwater in the region and beyond. The course will introduce students to the environmental concerns and opportunities in the area and develop the methods and tools for measurement, management and planning for improved outcomes for residents and businesses. The course will draw on economic concepts and tools through applications of environmental management and policy. Enrollment in this course requires participation in the Calumet Quarter.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27301. Restoration Ecology. 100 Units.
This course will give students a strong foundation in the discipline of restoration ecology, building up from basic ecological principles to concepts and theory applied to restoration of ecosystems. We will evaluate restoration projects based on a discussion of primary literature with a focus on ecosystems found in the Calumet region. The course will also have a strong field component, and students will work on restoration projects in the Calumet area. Wetland restoration will be a primary focus, and projects will include studies of plant and bird diversity as well as water quality evaluations. The fieldwork will form the basis of the students' own case studies in restoration ecology, and students will write reports on their field work, analyzing their own projects in the context of the larger body of wetland restoration literature.
Instructor(s): T. Massad Terms Offered: Spring. Not offered 2017-18
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27320. Topics in the Ecology of the Calumet Region. 100 Units.
We consider stewardship of land, habitats, natural areas, communities, and buildings in the Calumet Region of Chicago and Northwest Indiana. The goal of this course is to give students a basic understanding of select ecological principles and concepts, a demonstration of their application to local ecosystems, and the opportunity to collaborate with stewards in the Calumet.
Instructor(s): A. Anastasio Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27120. Historical Ecology of the Calumet Region. 100 Units.

ENST 27125. Voices of Alterity and Languages of Immigration. 100 Units.
TBA
Terms Offered: Spring. Enrollment is based on acceptance into the Chicago Studies Quarter Program.
Note(s): Enrollment is based on acceptance into the Chicago Studies Quarter Program.

ENST 27150. Urban Design with Nature. 100 Units.
This course will use the Calumet region as a laboratory for evaluating the social, environmental, and economic effects of alternative forms of human settlement. Students will be introduced to the basics of geographic information systems (GIS) and use GIS to map the Calumet region's "place types" - human habitats that vary along an urban-to-rural transect, as well as the ecosystem services provided by the types. They will then evaluate these place types using a range of social, economic and environmental criteria. In this way, students will evaluate the region's potential to simultaneously realize economic potential, protect environmental health, and provide social connectivity.
Terms Offered: Spring
ENST 27155. Urban Design with Nature. 100 Units.
This course will use the Chicago region as a laboratory for evaluating the social, environmental, and economic effects of alternative forms of human settlement. Students will be introduced to the basics of geographic information systems (GIS) and use GIS to map Chicago's "place types" - human habitats that vary along an urban-to-rural transect, as well as the ecosystem services provided by the types. They will then evaluate these place types using a range of social, economic and environmental criteria. In this way, students will evaluate the region's potential to simultaneously realize economic potential, protect environmental health, and provide social connectivity. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): Sabina Shaikh and Emily Talen Terms Offered: Autumn
Note(s): Students who have taken ENST 27150: Urban Design with Nature: Assessing Social and Natural Realms in the Calumet Region in the Spring of 2018 may not enroll in this course.
Equivalent Course(s): GEOG 27155, PBPL 27156

ENST 27200. The Calumet Experience. 100 Units.
This course is the field component of the Calumet Quarter. Throughout the quarter, students visit restoration sites, historical landmarks, industrial zones, and conservation zones throughout the Calumet region. In addition to day-long field trips, students are expected to attend weekly lunch sessions (lunch is provided) with professionals through the Calumet region and the Calumet Research Summit in April.
Instructor(s): R. Keller Terms Offered: Spring

ENST 27201. Food Security and Agriculture: Calumet. 100 Units.
Do you know where your next meal will come from? Many people around the world, and even close to home, do not. The Food and Agricultural Organization explains that food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security is thus a complex issue involving aspects of food production and distribution, poverty, buying power, and social networks, and cultural choice. In this course we use the Calumet region as a case study to examine some aspects of the food security debate, especially the basic conceptual divide between the framework of food security, as defined by international organizations above, and the more grass-roots notion of food sovereignty. Though we will aim for an overview of the issues, we focus this quarter more specifically on issues of agriculture and the food system, including urban agriculture, permaculture, and other challenges to the dominant industrial model. In a region with significant economic distress and area of "food desert," the Calumet presents examples of both challenge and response to this critical topic.
Instructor(s): K. Morrison Terms Offered: Spring. Not offered 2017-18
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27220. Environmental Management and Planning in the Calumet Region. 100 Units.
This course focuses on the identification and measurement of environmental outcomes in the Calumet Region of Chicago. Topics include the quantification of air quality impacts from industrial pollution and the potential for green infrastructure development to manage stormwater in the region and beyond. The course will introduce students to the environmental concerns and opportunities in the area and develop the methods and tools for measurement, management and planning for improved outcomes for residents and businesses. The course will draw on economic concepts and tools through applications of environmental management and policy. Enrollment in this course requires participation in the Calumet Quarter.
Instructor(s): S. Shaikh Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27221. Sustainable Urbanism. 100 Units.
This course explores cutting-edge solutions to today’s interrelated challenges of decarbonizing the economy, reversing the obesity epidemic, and replacing sprawl. In addition to learning about the current state of sustainable urban planning and design, students will apply to the Calumet region a collection of future-forward urban design strategies to build prosperous and sustainable urban communities that can thrive for years to come. Topics include community organizing; public health, safety, and welfare; governance; neighborhood planning and design; stormwater management; density, and net-zero-energy building design. While not a studio class, there will be opportunities to practice spatial design drawing, community engagement tactics, and sustainability metrics.
Terms Offered: TBD
ENST 27300. Freshwater Ecosystems of the Calumet Region. 100 Units.
The Calumet region contains a wide range of important freshwater ecosystems. The Great Lakes are possibly the world’s most valuable freshwater ecosystem, while the Kankakee marshes previously supported a massive diversity and abundance of waterfowl and other native species. Since European colonization most of the marshes of the Calumet region have been drained for agriculture, urbanization, or to create new land for industry. All remaining freshwater ecosystems in the Calumet region, including Lake Michigan, have been affected by invasive species, chemical pollution, overfishing, and numerous other factors. This course examines the history of impacts on the extent and functioning of freshwater ecosystems in the Calumet region. Particular attention is paid to the pre-European state of Calumet freshwaters, the impacts of land-use change and invasive species, and the prospects for restoration. The entire course is framed within the context of the economic conditions that allowed freshwater habitats in the Calumet region to be so strongly modified and how current economic conditions affect the likely future of these ecosystems.
Terms Offered: Spring

ENST 27301. Restoration Ecology. 100 Units.
This course will give students a strong foundation in the discipline of restoration ecology, building up from basic ecological principles to concepts and theory applied to restoration of ecosystems. We will evaluate restoration projects based on a discussion of primary literature with a focus on ecosystems found in the Calumet region. The course will also have a strong field component, and students will work on restoration projects in the Calumet area. Wetland restoration will be a primary focus, and projects will include studies of plant and bird diversity as well as water quality evaluations. The fieldwork will form the basis of the students’ own case studies in restoration ecology, and students will write reports on their field work, analyzing their own projects in the context of the larger body of wetland restoration literature.
Instructor(s): T. Massad Terms Offered: Spring. Not offered 2017-18
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27320. Topics in the Ecology of the Calumet Region. 100 Units.
We consider stewardship of land, habitats, natural areas, communities, and buildings in the Calumet Region of Chicago and Northwest Indiana. The goal of this course is to give students a basic understanding of select ecological principles and concepts, a demonstration of their application to local ecosystems, and the opportunity to collaborate with stewards in the Calumet.
Instructor(s): A. Anastasio Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 27325. Urban Ecology in the Calumet Region. 100 Units.
This course will give students a strong foundation in the local ecology of the Calumet. Students will use local research and habitats to understand fundamental concepts in ecology and the scientific method. Students will explore some of these habitats during field trips with scientists and practitioners. The course focus will be on urban ecology in the region, whether these fundamental ecological concepts are applicable, what other factors need to be considered in the urban ecosystem, and the role humans have in restoring natural and managing novel ecosystems, among other topics.
Terms Offered: TBD
Equivalent Course(s): PBPL 27325, GEOG 27325

ENST 27330. Practicum: Mapping Diaspora Experience. 100 Units.
TBA
Terms Offered: Spring. Enrollment is based on acceptance into the Chicago Studies Quarter Program.
Note(s): Enrollment is based on acceptance into the Chicago Studies Quarter Program.

ENST 27400. Epidemiology and Population Health. 100 Units.
This course does not meet requirements for the biological sciences major. Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis, and interpretation through lectures, assignments, and critical appraisal of both classic and contemporary research articles.
Instructor(s): B. Lahey Terms Offered: Autumn
Prerequisite(s): Introductory statistics recommended or Consent of Instructor
Equivalent Course(s): STAT 22810, PPHA 36410, PBHS 30910
ENST 27420. Urban Gardens: Therapeutic, Educational, and Community Building Practicum. 100 Units.
This teaching practicum will consider emerging research on urban gardens for individual, community, and environmental wellness, and will prepare students to design teachable lessons for school-based programs and community building. Course material is drawn from current literature, curricula, and case studies that demonstrate the impacts and methods of garden education, place-based development, and horticultural therapy. We will discuss the perceived individual, societal, and global problems that urban gardens are thought to address and the reported benefits they deliver. Students will evaluate the goals, organization, methodology, values-bias, and efficacy of existing curricula, and design a series of educational workshops that can be adapted to multiple age groups and learning environments. The course will include one or more field trips, and students will be required to volunteer/teach at an area school or community garden program.
Instructor(s): M. Mass Terms Offered: Not offered 2017-18
Note(s): This course will include off-site field trips and community service/teaching commitment.

ENST 28601. Ideas of Nature I. 100 Units.
Nature is, and has been, a fundamental category in human thought. Yet Arthur Lovejoy (1935) enumerated sixty-six senses in which the word had been used in European literature and philosophy. We examine the roles that the (nominally continuous) category of “nature” played in sources such as ancient religious texts, Greek and Roman philosophical writings, and medieval poetry and theology.
Instructor(s): A. Gugliotta Terms Offered: Spring
Prerequisite(s): ECON 20900, 21000, or 26500; or ENST 26500
Note(s): ENST 28601 and 28602 may be taken individually in any order. This course is offered in alternate years. Equivalent Course(s): HIPS 29001

ENST 28800. Readings in Spatial Analysis. 100 Units.
This independent reading option is an opportunity to explore special topics in the exploration, visualization and statistical modeling of geospatial data.
Instructor(s): L. Anselin Terms Offered: Autumn Spring Winter. Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading.
Note(s): By permission of instructor only.
Equivalent Course(s): GEOG 38700, GEOG 28700

ENST 28900. Environmental and Science Policy. 100 Units.
With a strong emphasis on the fundamental physics and chemistry of the environment, this course is aimed at students interested in assessing the scientific repercussions of various policies on the environment. The primary goal of the class is to assess how scientific information, the economics of scientific research, and the politics of science interact with and influence public policy development and implementation.
Equivalent Course(s): PBPL 28900

ENST 29525. The Global Life of Things. 100 Units.
What is a commodity? And can we read capitalism’s global history through the commodity form? This course will investigate how historians and anthropologists have studied commodities and commodification to account for the environmental, social, and cultural developments of capitalism over the last four centuries. We will begin by considering canonical theoretical approaches, including Marx, Polanyi, and Appadurai. Readings will then be based around case studies of, among other things, land, cotton, and slavery; sugar, guano, and mushrooms. Readings will span from the early modern Atlantic World through to the nineteenth-century Pacific, the twentieth-century Middle East, and the United States and Japan in the present day. The course should appeal to students pursuing studies of the early modern Atlantic world, economic history, or environmental history.
Equivalent Course(s): GLST 29525, HIST 29525
ENST 29700. Reading and Research. 100 Units.
This course is a reading and research course for independent study not related to BA research or BA paper preparation. Prerequisite(s): Consent of faculty supervisor and program director Note(s): Students are required to submit the College Reading and Research Course Form. This course may be counted as one of the electives required for the major.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of faculty supervisor and program director
Note(s): Students are required to submit the College Reading and Research Course Form. This course may be counted as one of the electives required for the major.

ENST 29701. Readings and Research: Working Group in Environment, Agriculture, and Food (EAF) 100 Units.
This course consists of participation in the Environment, Agriculture, and Food Group in a role assigned by the instructor.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): Registration by instructor consent only
Note(s): Please email Sabina Shaikh at sabina@uchicago.edu.
Equivalent Course(s): PBPL 29701

ENST 29720. Reading and Research: Calumet. 100 Units.
The Program on the Global Environment will be hosting many interesting guest speakers during the Calumet Quarter, and this readings course will be dedicated primarily to the discussion of relevant articles written by the speakers. This will acquaint students with literature on a variety of topics ranging from food security to wetlands ecology to conservation theory. Students will be expected to discuss the articles, drawing on knowledge gained in the three core Calumet courses. Students will also attend the guest presentations and write short responses to the lectures.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Enrollment is based on acceptance into Calumet Quarter Program.

ENST 29801. BA Colloquium I. 100 Units.
This colloquium is designed to aid students in their thesis research. Students are exposed to different conceptual frameworks and research strategies. The class meets weekly.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Students must have an approved topic proposal and a faculty reader
Note(s): Required of students with fourth-year standing who are majoring in Environmental Studies.

ENST 29802. BA Colloquium II. 100 Units.
This colloquium assists students in conceptualizing, researching, and writing their BA theses.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): Open only to students with fourth-year standing who are majoring in Environmental Studies

ENST 29900. B. A. Thesis (Reading and Research) 100 Units.
This is a reading and research course for independent study related to BA research and BA thesis preparation.
Instructor(s): Staff Terms Offered: Winter, Spring
Prerequisite(s): Consent of instructor and program director
Note(s): Students are required to submit the College Reading and Research Course Form.
FUNDAMENTALS: ISSUES AND TEXTS

Department Website: http://fundamentals.uchicago.edu

ABOUT FUNDAMENTALS

The Fundamentals program enables students to concentrate on fundamental questions by reading classic texts that articulate and speak to these questions. It seeks to foster precise and thoughtful pursuit of basic questions by means of (1) rigorous training in the interpretation of important texts, supported by (2) extensive training in at least one foreign language, and by (3) the acquisition of the knowledge, approaches, and skills of conventional disciplines: historical, religious, literary, scientific, political, and philosophical.

Rationale

A richly informed question or concern formulated by each student guides the reading of texts. Classic texts are also informed by such questions; for example, Socrates asks: What is virtue? What is the good? What is justice? Aristotle and Cicero explore the relation of civic friendship to society. Freud asks: What is happiness? Can humans be happy? Milton investigates how poetic vocation may be related to political responsibility. Students who are engaged by these questions and others like them, and who find them both basic and urgent, may wish to continue to explore them more thoroughly and deeply within the structure of the program which provides the wherewithal to address them on a high level.

That wherewithal is to be found in the fundamental or classic texts (historical, religious, literary, scientific, political, and philosophical) in which the great writers articulate and examine questions in different and competing ways. These books illuminate the persisting questions and speak to contemporary concerns because they are both the originators and exacting critics of our current opinions. These texts serve as colleagues who challenge us to think that something else might actually be the case than what we already think. The most important questions may, at bottom, be the most contested, and those most susceptible to, and most requiring, sustained, probing engagement.

This program emphasizes the firsthand experience and knowledge of major texts, read and reread and reread again. Because they are difficult and complex, only a small number of such works can be studied. Yet the program proposes that intensively studying a profound work and incorporating it into one’s thought and imagination prepares one for reading any important book or reflecting on any important issue. Read rapidly, such books are merely assimilated into preexisting experience and opinions; read intensively, they can transform and deepen experience and thought.

Studying fundamental texts is, by itself, not enough. Even to understand the texts themselves, supporting studies and training are necessary: a solid foundation in at least one foreign language and in disciplines and subject matters pertinent to the main questions of students are essential parts of the major. Students benefit from knowledge of the historical contexts out of which certain problems emerged or in which authors wrote; knowledge of specific subject matters and methods; knowledge of the language in which a text was originally written, as well as an understanding of the shape a given language imparts to a given author; fundamental skills of analysis, gathering evidence, reasoning, and criticism; different approaches and perspectives of conventional disciplines. All these are integral parts of the educational task.

Individual Program Design

Genuine questions cannot be assigned to a student; they must arise from within. For this reason, a set curriculum is not imposed upon students. Each student’s course of study must answer to his or her interests and concerns, and must begin from a distinctive concern. One student may be exercised about questions of science and religion; another about freedom and determinism; another about friendship and conversation; another by prudence, romance, and marriage; a fifth about distributive justice. Through close work with a suitably chosen faculty adviser, a student determines texts, text and author courses, and supporting courses as appropriate to address the student’s Fundamentals question. Beginning with a student’s questions and interests does not, however, imply an absence of standards or rigor; this program is most demanding.

Activities of Graduates

The Fundamentals program serves the purposes of liberal education, regarded as an end in itself, and offers no specific pre-professional training; yet Fundamentals graduates have successfully prepared for careers in the professions and in scholarship. Some are now pursuing work in law, medicine, journalism, ministry, government service, business, veterinary medicine, and secondary school teaching. Others have gone on to graduate schools in numerous fields, including classics, English, comparative literature, Slavic, history, philosophy, social thought, theology, religious studies, clinical psychology, political science, development economics, mathematics, film studies, and education.

Faculty

The faculty of the Fundamentals program comprises humanists and social scientists, representing interests and competencies in both the East and the West and scholarship in matters ancient and modern. This diversity and pluralism exists within a common agreement about the primacy of fundamental questions and the centrality of important books and reading them well. The intention is for the students to see and work with a variety of
scholars presenting their approaches to and understanding of books that they love, that they know well, and that
are central to their ongoing concerns.

Application to the Program

Students should apply in Spring Quarter of their first year to enter the program in their second year; the
goals and requirements of the program are best met if students spend three years in the major. Students are
interviewed and counseled in order to discover whether or not their interests and intellectual commitments
would be best served by this program. Admissions are decided on the basis of the application statement,
interviews, and previous academic performance.

PROGRAM REQUIREMENTS

The Fundamentals program comprises (a) 13 courses, (b) the Junior Paper, and (c) the Senior Exam, for a
total of 1500 units.

A. Course Work

1. Gateway Course (1 course) (Autumn Quarter or Winter Quarter): This course is specifically designed
for the incoming cohort of Fundamentals students and is a mandatory part of the program. It is devoted to
the close reading of one or two texts or the works of a single author, chosen because they raise challenging
questions and present important and competing answers. Through this course, students will study a variety
of ways in which a text can respond to their concerns and can compel consideration of its own questions.

2. Text/Author Courses (7 courses). The seven Text/Author courses are devoted to the study of one or
two particular texts or the work of a particular author. Text/Author courses are generally cross-listed as
FNDL courses in Class Search (http://registrar.uchicago.edu/classes); if a relevant course is not cross-listed,
the student should contact the coordinator to see if it can be counted toward the major. In years when the
Gateway Course is offered in Autumn Quarter, entering students are required to take at least one Text/
Author course in Winter Quarter; in years when the Gateway Course is offered in Winter Quarter, entering
students are expected to take at least one Text/Author course in Autumn Quarter.

   The Text/Author Courses and the Gateway Course—eight courses total—give each student the opportunity
to develop a list of six texts that will become the basis of his or her Senior Exam (see below). This list
should contain works in the area of the student’s primary interest that examine that interest from diverse
perspectives. One of the six must be studied in an original language other than English, the same language
in which the student establishes competency (any exceptions must be approved by the chair).

3. Supporting Courses (4 courses). These are courses that complement the student’s program, providing
historical context, theoretical and methodological training, or other complements. They do not have to be
listed as FNDL to satisfy this requirement, but they must be explicitly identified as supporting courses in
consultation with the student’s adviser.

4. Foreign Language (1 course). Students in the program are expected to achieve a level of proficiency in
a foreign language sufficient to enable them to study in the original language (other than English) one of
the texts on their examination list. Such training ordinarily requires two years of formal language instruction or
its equivalent. The third quarter of the second year of the language is counted toward the major. In addition,
students are required to take a course where they study a text in that language; the instructor of the course
may be asked to provide an evaluation of the student’s linguistic proficiency on the basis of this work.
Students and instructors should work closely together in determining how the student will demonstrate
competency in the language. As the achievement of proficiency may differ vis-à-vis length of study from
language to language, it may prove harder for students of some languages to read a text in its entirety even
after completing two years of instruction. Any students who believe that their language is so difficult that
doing so is unrealistic may petition to have the requirement met by reading a clearly marked-out portion of
the text—perhaps a chapter or two, or series of smaller sections. To be considered, the petition must set out a
clear plan and must be signed by the instructor of the text in question.

B. The Junior Paper

In the Winter or Spring Quarter of their junior year, students write an extended essay called the Junior Paper.
This project provides the opportunity for students to originate and formulate a serious inquiry into an important
issue arising out of their work and to pursue the inquiry extensively and in depth in a paper of about twenty to
twenty-five pages (roughly 8,000 to 10,000 words). At every stage in the preparation of the paper, students work
closely with their Fundamentals faculty adviser. Students register in the independent study course FNDL29901
in the quarter in which they write the paper; they are also expected to participate in the Junior Paper Colloquium
that takes place in the Winter Quarter. Acceptance of a successful Junior Paper is a prerequisite for admission to
the senior year of the program.

C. The Senior Exam

At the end of Week Six in the Spring Quarter of their senior year, students are examined on six texts they
have studied in the context of their Text/Author courses and approved independent study courses. Preparation
for this examination allows students to review and integrate their full course of study. During a three-day period,
students write two substantial essays on questions designed for them by the associated faculty. The examination
has a pedagogical intention, more than a qualifying one; its purpose is to allow students to demonstrate how they have related and integrated their questions, texts, and disciplinary studies. To take the exam, students register in FNDL 29902 in the Spring Quarter (or, with the consent of the chair, in the Autumn or Winter Quarters if there are scheduling issues).

Summary of Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
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<tr>
<td>The Gateway Course</td>
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<tr>
<td>Seven Text/Author Courses</td>
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<tr>
<td>Four Supporting Courses</td>
<td>400</td>
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<tr>
<td>Third quarter of second-year foreign language *</td>
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</tr>
<tr>
<td>FNDL 29901 Independent Study: Junior Paper</td>
<td>100</td>
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<tr>
<td>FNDL 29902 Independent Study: Senior Examination</td>
<td>100</td>
</tr>
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<td>Total Units</td>
<td>1500</td>
</tr>
</tbody>
</table>

* or credit for the equivalent, determined by petition

GRADING, ADVISING, AND HONORS

**Grading.** The Junior Paper and Senior Examination (FNDL 29901 and FNDL 29902) are graded Pass/Fail; all other courses within the major must be taken for quality grades. Independent study courses must include a term paper, and students should be prepared to request statements of reference or evaluation from faculty with whom they have worked in this capacity.

**Advising.** Each student has a faculty adviser who is assigned to the student on the basis of their mutual interests and areas of expertise. The adviser closely monitors the student’s choice of texts, courses, and language studies, allowing for the gradual development of a fitting and coherent program. The faculty adviser may also oversee the student’s Junior Paper and is responsible for approving the final list of texts for the Senior Exam. In addition, the program coordinator is available for advice and consultation on all aspects of the program.

**Honors.** Honors are awarded by the Fundamentals faculty to students who have performed with distinction in the program. An overall GPA of 3.5 is necessary to be considered for honors, and special attention is paid to both the Junior Paper and the Senior Exam.

ACADEMIC YEAR 2018–19 COURSES

**Gateway Course (required for all incoming Fundamentals majors)**

**FNDL 20200. Dostoevsky’s Brothers Karamazov. 100 Units.**

We will read and interpret The Brothers Karamazov by Dostoevsky. Among major themes are the relation to God and religion to the larger society and state; the problem of evil; and the nature of sin and how it enters into religious beliefs; human “freedom,” and what the word might have meant to Dostoevsky; and love. 

Instructor(s): S. Meredith Terms Offered: Autumn

Prerequisite(s): Required of new Fundamentals majors; open to others with consent of instructor.

Note(s): Fundamentals majors get first priority

Equivalent Course(s): RLST 28206

**Independent Study (for registering for the Junior Paper and Senior Examination)**

**FNDL 29901. Independent Study: Junior Paper. 100 Units.**

Students who are on campus will be required to attend a series of colloquium meetings in Winter Quarter, but should enroll in the quarter that they will write the Junior Paper. Students are required to submit the College Reading and Research Course Form. Must be taken for P/F grading.

Terms Offered: Autumn,Winter,Spring

Prerequisite(s): Open only to Fundamentals students with consent of faculty supervisor and program chair.

**FNDL 29902. Independent Study: Senior Examination. 100 Units.**

Students should expect to register for this independent study in the Spring of their final year, the quarter in which they will take their Senior Exam. Exceptions to this can only be made with the consent of the program chair. Students are required to submit the College Reading and Research Course Form. Must be taken for P/F grading.

Terms Offered: Spring

Prerequisite(s): Open only to Fundamentals students with consent of faculty supervisor and program chair.
AUTUMN QUARTER

FNDL 20200. Dostoevsky's Brothers Karamazov. 100 Units.
We will read and interpret The Brothers Karamazov by Dostoevsky. Among major themes are the relation to God and religion to the larger society and state; the problem of evil; and the nature of sin and how it enters into religious beliefs; human "freedom," and what the word might have meant to Dostoevsky; and love.
Instructor(s): S. Meredith Terms Offered: Autumn
Prerequisite(s): Required of new Fundamentals majors; open to others with consent of instructor.
Note(s): Fundamentals majors get first priority
Equivalent Course(s): RLST 28206

FNDL 21908. Aristotle's Nicomachean Ethics. 100 Units.
This course will offer a close reading of Aristotle's Nicomachean Ethics, one of the great works of ethics. Among the topics to be considered are: What is a good life? What is ethics? What is the relation between ethics and having a good life? What is it for reason to be practical? What is human excellence? What is the non-rational part of the human psyche like? How does it ever come to listen to reason? What is human happiness? What is the place of thought and of action in the happy life? (A)
Instructor(s): J. Lear; G. Richardson Lear Terms Offered: Autumn
Prerequisite(s): This course is intended for Philosophy majors and for Fundamentals majors. Otherwise please seek permission to enroll.
Equivalent Course(s): PHIL 21720

FNDL 22001. Foucault and The History of Sexuality. 100 Units.
This course centers on a close reading of the first volume of Michel Foucault's "The History of Sexuality", with some attention to his writings on the history of ancient conceptualizations of sex. How should a history of sexuality take into account scientific theories, social relations of power, and different experiences of the self? We discuss the contrasting descriptions and conceptions of sexual behavior before and after the emergence of a science of sexuality. Other writers influenced by and critical of Foucault are also discussed.
Instructor(s): A. Davidson Terms Offered: Autumn
Prerequisite(s): One prior philosophy course is strongly recommended.
Equivalent Course(s): HIPS 24300, KNOW 27002, CMLT 25001, PHIL 24800, GNSE 23100

FNDL 23008. Montesquieu's "The Spirit of the Laws" 100 Units.
From its publication in 1748, "The Spirit of the Laws" has been interpreted, among other things, as a foundational work of method in historical jurisprudence; a paean to the English constitution and an inspiration for that of the future United States; a precocious call for penal reform and the abolition of slavery; a monument to the Enlightenment's capacity for cultural relativism that laid the groundwork for the discipline of sociology; a historical treatise on the rise of globalized commerce and its political effects in Europe; and a manifesto for a reactionary feudal aristocracy. We will read "The Spirit of the Laws" with attention to these and other possible interpretations. This course is mainly an exercise in close reading, but we will also think about the contexts for the writing and reception of this landmark work of Enlightenment social and political thought.
Instructor(s): P. Cheney Terms Offered: Autumn
Prerequisite(s): Completion of one of these Core sequences: "Classics of Social and Political Thought," "Power, Identity, Resistance" or "Self, Culture, and Society."
Equivalent Course(s): LLSO 23008, HIST 23008

FNDL 24500. The Ethics of War: Reading Just and Unjust Wars: A Moral Argument with Historical Illustrations. 100 Units.
This course will involve a close reading of Michael Walzer's classic text on the ethics of war and his constructive account of the just-war tradition. Among the topics to be addressed are: moral relativism, human rights, and the ethics of various cases, e.g., terrorism, interventions, war crimes, blockades, assassinations, guerrilla warfare, reprisals, pre-emptive warfare, and nuclear deterrence. Relevant now no less than when it was first published in 1977, Walzer's work raises basic questions about the rights of nations and their moral obligations to their citizens and to others during times of war.
Instructor(s): Richard B. Miller Terms Offered: Autumn
Equivalent Course(s): RLST 24110

WINTER QUARTER

FNDL 21404. Shakespeare II: Tragedies and Romances. 100 Units.
This course explores mainly major plays representing the genres of tragedy and romance; most (but not all) date from the latter half of Shakespeare's career. After having examined how Shakespeare develops and deepens the conventions of tragedy in Titus Andronicus, Othello, Macbeth, King Lear, and Antony and Cleopatra, we will turn our attention to how he complicates and even subverts these conventions in The Winter's Tale and The Tempest. Throughout, we will treat the plays as literary texts, performance prompts, and historical documents. Section attendance is required. This course is part of the College Course Cluster, The Renaissance. (Pre-1650, Drama)
Instructor(s): Ellen MacKay Terms Offered: Winter
Equivalent Course(s): ENGL 16600, TAPS 28406
FNDL 21804. Dante's Divine Comedy-3: Paradiso. 100 Units.
An in-depth study of the third cantica of Dante's masterpiece, considered the most difficult but in many ways also the most innovative. Read alongside his scientific treatise the Convivio and his political manifesto the Monarchia.
Instructor(s): H. J. Steinberg Terms Offered: Winter
Prerequisite(s): Completion of the previous courses in the sequence not required, but students should familiarize themselves with the Inferno and the Purgatorio before the first day of class.
Note(s): Taught in English
Equivalent Course(s): ITAL 22101, REMS 32101, ITAL 32101

FNDL 24011. Virginia Woolf. 100 Units.
Along with a number of Woolf's major works, students read theoretical and critical texts that give a sense of the range of contemporary approaches to Woolf. (1830-1940, Fiction)
Instructor(s): Lisa Ruddick Terms Offered: Winter
Equivalent Course(s): GNSE 23400, ENGL 23400

FNDL 24718. Longinus' On the Sublime. 100 Units.
Composed around the first or second century C.E., Longinus' On the Sublime marks a new direction in ancient aesthetics and later had a profound influence on the aesthetics of the Romantic period and afterward. It was a watershed between viewing art as imitation and viewing it as self-expression. Great literature was now seen as producing ecstasy, not instruction; and the hearer was thought to share in the creativity of the author. We will read most of this text in Greek, with a view to understanding what is so innovative about it.
Terms Offered: Winter
Prerequisite(s): 2 years of Greek
Equivalent Course(s): GREK 34718, GREK 24718

FNDL 24918. Early Traveling Writing: Pausanias in Roman Greece. 100 Units.
Through a close reading of Pausanias, who wrote his Description of Greece during the Roman imperial period, this course explores ancient forms of travel writing and associated interests in the places, peoples, myths, ruins, and material objects of the Mediterranean world. Moving from the apparent ethnographic lens of earlier Greek literature to Roman imperialist expeditions, readings and discussions will examine the sociopolitical contexts out of which Pausanias emerged as a literary author, and his legacies in and relationship to the wide array of genres of modern travel writing, from Lewis and Clark to John Steinbeck. Key topics will include: movement through space, tourism, nature, landscape, town and country, sites and spectacles, myth, ritual, and acts of remembering and forgetting.
Instructor(s): C. Kearns Terms Offered: Spring
Equivalent Course(s): ANCM 34918, CLCV 24918, CLAS 34918

FNDL 25700. Chaucer: The Canterbury Tales. 100 Units.
Close reading of Chaucer's Canterbury Tales, with particular attention to the intersection of literary form with problems in ethics, politics, and sexuality. (Pre-1650, Poetry)
Instructor(s): Mark Miller Terms Offered: Winter
Equivalent Course(s): ENGL 15500

FNDL 27301. Weimar Political Theology: Schmitt and Strauss. 100 Units.
This course is devoted to the idea of "political theology" that developed during the interwar period in twentieth-century Central Europe, specifically Germany's Weimar Republic. The course's agenda is set by Carl Schmitt, who claimed that both serious intellectual endeavors and political authority require extra-rational and transcendent foundations. Along with Schmitt's works from the period, such as Political Theology and the Concept of the Political, we read and discuss the related writings of perhaps his greatest interlocutor, Leo Strauss.
Instructor(s): J. McCormick Terms Offered: Winter
Prerequisite(s): Consent of instructor.
Equivalent Course(s): PLSC 37301, PLSC 27301

FNDL 27950. The Declaration of Independence. 100 Units.
This course explores important intellectual, political, philosophical, legal, economic, social, and religious contexts for the Declaration of Independence. We begin with a consideration of the English Revolution, investigating the texts of the Declaration of Rights of 1689 and Locke's Second Treatise and their meanings to American revolutionaries. We then consider imperial debates over taxation in the 1760s and 1770s, returning Benjamin Franklin's Autobiography to its original context. Reading Paine's Common Sense and the letters of Abigail Adams and John Adams we look at the multiple meanings of independence. We study Jefferson's drafting process, read the Declaration over the shoulders of people on both sides of the Atlantic, and consider clues to contemporary meanings beyond the intentions of Congress. Finally, we briefly engage the post-revolutionary history of the place and meaning of the Declaration in American life. (1650-1830, 1830-1940) This is a 2018-19 College Signature Course.
Instructor(s): Eric Slauter Terms Offered: Winter
Equivalent Course(s): HMRT 17950, LLSO 27950, HIST 17604, ENGL 17950, SIGN 26039
FNDL 28401. Pasolini. 100 Units.
This course examines each aspect of Pasolini's artistic production according to the most recent literary and cultural theories, including Gender Studies. We shall analyze his poetry (in particular "Le Ceneri di Gramsci" and "Poesie informa di rosa"), some of his novels ("Ragazzi di vita," "Una vita violenta," "Teorema," "Petrolio"), and his numerous essays on the relationship between standard Italian and dialects, semiotics and cinema, and the role of intellectuals in contemporary Western culture. We shall also discuss the following films: "Accattone," "La ricotta," "Edipo Re," "Teorema," and "Salo".
Instructor(s): A. Maggi Terms Offered: Winter
Equivalent Course(s): ITAL 28400, ITAL 38400, CMST 23500, GNSE 28600, CMST 33500

SPRING QUARTER
FNDL 21300. James Joyce: Ulysses. 100 Units.
This course considers themes that include the problems of exile, homelessness, and nationality; the mysteries of paternity and maternity; the meaning of the Return; Joyce's epistemology and his use of dream, fantasy, and hallucinations; and Joyce's experimentation with and use of language.
Equivalent Course(s): ENGL 21301

FNDL 21403. Shakespeare I: Histories and Comedies. 100 Units.
This course will explore a selection of seven or eight plays representing Shakespeare's youthful genres of Comedy and History. We will consider how each play fits, or doesn't fit, within organizing dichotomies like playhouse versus print, popular versus elite, and early versus late. We will also consider how terms that structure our encounter with Shakespeare both form and deform his work, leaving us to ask, Can we do better? This course is part of the College Course Cluster, The Renaissance.
Instructor(s): David Simon Terms Offered: Spring
Equivalent Course(s): ENGL 16500, TAPS 28405

FNDL 23405. Boethius: Consolation of Philosophy. 100 Units.
The Consolation of Philosophy, which Boethius wrote in prison after a life of study and public service, offers a view on Roman politics and culture after Rome ceased to be an imperial capital. The Consolation is also a poignant testament from a man divided between Christianity and philosophy. About 70 pages of the text are read in Latin, and all of it in English. Secondary readings provide historical and religious context for the early sixth century AD.
Instructor(s): P. White Terms Offered: Spring
Prerequisite(s): Latin 20300 or equivalent
Equivalent Course(s): LATN 33400, LATN 23400

FNDL 25220. Pour une sociologie de Rabelais. 100 Units.
Nous aborderons l'œuvre de Rabelais à partir d'une lecture contextuelle de Gargantua et Pantagruel (les deux romans que nous lirons dans ce cours). Le but de ce cours est de présenter le contexte social, politique, économique et religieux de la première moitié du XVIe siècle en reliant les thèmes choisis (guerre, genre, utopie, éducation, amitié, économie, etc.), à des problèmes plus modernes. Car Rabelais nous permet aussi d'adresser les grands thèmes de la société française et occidentale contemporaine. Nous étudierons ainsi l'écriture du corps, l'organisation sociale de l'Ancien régime, les premières théories économiques, la découverte du Nouveau Monde et l'exploration de l'autorité. Nous lirons deux romans de Rabelais: Gargantua et Pantagruel.
Instructor(s): P. Desan Terms Offered: Spring
Prerequisite(s): FREN 20300
Note(s): Taught in French.
Equivalent Course(s): FREN 35220, FREN 25220

FNDL 25311. Pale Fire. 100 Units.
This course is an intensive reading of Pale Fire by Nabokov.
Equivalent Course(s): REES 20020, GNSE 29610, GNSE 39610, ENGL 22817, REES 30020

FNDL 25331. Beauvoir: The Second Sex. 100 Units.
In 1949, Simone de Beauvoir’s Le Deuxième Sexe took up the old question of sexual difference; it was never the same question again. Her attention to the situation and "situatedness" of women resulted in new ways of thinking about freedom, destiny, reciprocity, and subjectivity; it brought literature, autobiography, and cultural studies into philosophical reflection; and it contributed significantly to twentieth century transformations of women’s social, political, and cultural situations. We will engage a close reading of The Second Sex in English translation and with some reference to the original French.
Instructor(s): K. Culp Terms Offered: Spring
Equivalent Course(s): GNSE 25302
**FNDL 28102. Machiavelli’s Political Thought. 100 Units.**

This course is devoted to the political writings of Niccolò Machiavelli. Readings include *The Prince*, *Discourses on Livy’s History of Rome*, selections from the *Florentine Histories*, and Machiavelli’s proposal for reforming Florence’s republic, “Discourses on Florentine Affairs.” Topics include the relationship between the person and the polity; the compatibility of moral and political virtue; the utility of class conflict; the advantages of mixed institutions; the principles of self-government, deliberation, and participation; the meaning of liberty; and the question of military conquest.

**Instructor(s): J. McCormick**

**Terms Offered: Spring**

**Equivalent Course(s):** PLSC 52316, LLSO 28233, PLSC 27216

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**POSSIBLE SUPPORTING COURSES**

Supporting Courses are intended to provide further methodological training, historical context, and conceptual frameworks to enrich the student’s engagement with the texts, topics, and ideas relevant to his or her project; the selection of such courses will therefore vary considerably from person to person. The list below is a selection of what Fundamentals students might consider as their Supporting Courses, but it is by no means an exhaustive or prescriptive list. Students are encouraged to make a habit of reading the catalogs of other relevant departments and to comb through Class Search (https://coursesearch.uchicago.edu) to locate courses that speak to their interests. The program coordinator and the student’s advisers are also valuable resources to consult when planning out the academic year.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ANTH 20003</td>
<td>Discovering Anthropology: Reading Race</td>
<td>100</td>
</tr>
<tr>
<td>ANTH 20009</td>
<td>Embodiment: Governance, Resistance, Ethics</td>
<td>100</td>
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<td>ANTH 20701</td>
<td>Introduction to African Civilization I</td>
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<td>ANTH 21015</td>
<td>Media, Culture &amp; Society</td>
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<td>ANTH 21107</td>
<td>Anthropological Theory</td>
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<td>ANTH 21333</td>
<td>The Lived Body: Anthropology, Materiality, Meaningful Practice</td>
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<td>ANTH 22129</td>
<td>The Vocation of a Scientist</td>
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<td>Introduction to the Civilizations of South Asia I</td>
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<td>Rethinking the Middle East</td>
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<td>ANTH 24307</td>
<td>Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences</td>
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<td>ANTH 24312</td>
<td>Body &amp; Soul: The Anthropology of Religion, Health, &amp; Healing</td>
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<td>ANTH 24315</td>
<td>Culture, Mental Health, and Psychiatry</td>
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<td>Thinking Psychoanalytically: From the Sciences to the Arts</td>
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<td>ANTH 24345</td>
<td>Anthropology and ‘The Good Life’: Ethics, Morality, Well-Being</td>
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<td>CLCV 22117</td>
<td>Fate and Duty: European Tragedy from Aeschylus to Brecht</td>
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<td>CMST 14502</td>
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<td>CMST 24414</td>
<td>Soviet Science Fiction</td>
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<td>CMST 27205</td>
<td>Film Aesthetics</td>
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<td>EALC 10704</td>
<td>Topics in EALC: The Modern Short Story in East Asia</td>
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<td>Nature in Korean Literature and Visual Culture</td>
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<td>EALC 24626</td>
<td>Japanese Cultures of the Cold War: Literature, Film, Music</td>
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<td>Korean Literature, Foreign Criticism</td>
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<td>ENGL 10400</td>
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<td>ENGL 15107</td>
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<td>ENGL 23413</td>
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<td>ENGL 23808</td>
<td>Sonnets from Wyatt to Yeats and Beyond</td>
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<td>ENGL 26300</td>
<td>The Literature of Disgust, Rabelais to Nausea</td>
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<td>FREN 21719</td>
<td>Histoire, Superstitions et Croyances dans le roman francophone des XXe et XXIe siècles</td>
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<td>FREN 21903</td>
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<td>FREN 24301</td>
<td>Le Regne Des Passions Au XVII</td>
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<td>Paris Noir: African American Refuge in the City of Light</td>
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<td>HIST 27705</td>
<td>Introduction to Black Chicago, 1893 to 2010</td>
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<td>Poetic Postures of the Twentieth Century</td>
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<td>Babylon and the Origins of Knowledge</td>
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<td>Introduction to the Hebrew Bible</td>
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<td>NEHC 20630</td>
<td>Introduction to Islamic Philosophy</td>
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<td>NEHC 20745</td>
<td>A Social History of the Poet in the Arab and Islamic World</td>
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<td>Self-creation as a Literary and Philosophical Problem</td>
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<td>Philosophies of Environmentalism and Sustainability</td>
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<td>History of Philosophy II: Medieval and Early Modern Philosophy</td>
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<td>History of Philosophy III: Kant and the 19th Century</td>
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<td>Global Justice and the Politics of Empire</td>
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<td>Happiness</td>
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<td>PLSC 23313</td>
<td>Democracy and Equality</td>
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<td>PLSC 26152</td>
<td>A Right to Belong</td>
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<td>PLSC 26615</td>
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<td>Political Theory in Dark Times</td>
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<td>The Intelligible Self</td>
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<td>Russian Short Fiction: Experiments in Form</td>
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<td>REES 29018</td>
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<td>Religion, Ethics, War, and Resistance</td>
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<td>Indian Philosophy I: Origins and Orientations</td>
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<td>SOCI 20242</td>
<td>States, Markets, and Bodies</td>
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<td>Introducción a las literaturas hispánicas: textos españoles contemporáneos</td>
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<td>SPAN 22003</td>
<td>Introducción a las literaturas hispánicas: del Modernismo al presente</td>
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<td>De capa y espada: Martial Arts Culture in the Spanish Golden Age</td>
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<td>SPAN 26210</td>
<td>Witches, Sinners, and Saints</td>
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GENDER AND SEXUALITY STUDIES

Department Website: http://gendersexuality.uchicago.edu

PROGRAM OF STUDY

Gender and Sexuality Studies at the University of Chicago encompasses diverse disciplines, modes of inquiry, and objects of knowledge. Gender and Sexuality Studies allows undergraduates the opportunity to shape a disciplinary or interdisciplinary plan of study focused on gender and sexuality. The plan of study, designed with the assistance of the Director of Undergraduate Studies, can take the form of a gender or sexuality track in a traditional academic discipline, interdisciplinary work on a gender- and/or sexuality-related topic, or a combination thereof. Students can thus create a cluster of courses linked by their attention to gender or sexuality as an object of study or by their use of gender/sexuality categories to investigate topics in sexuality, social life, science, politics and culture, literature and the arts, or systems of thought.

Students in other fields of study may also complete a minor in Gender and Sexuality Studies. Information follows the description of the major.

PROGRAM REQUIREMENTS

All Gender and Sexuality Studies majors are advised, but not required, to take GNSE 15002-15003 Gender and Sexuality in World Civilizations I-II to fulfill their general education requirement in civilization studies. They may fulfill this general education requirement with another sequence and count GNSE 15002-15003 in the major. In some cases students can petition to waive this requirement.

The major requires eleven courses, a BA Essay Seminar, and a BA research project or essay that can count as a thirteenth course. The Center for Gender Studies recognizes two main paths by which students might develop an undergraduate concentration. Path A is for students whose central interest lies in the interdisciplinary study of gender and sexuality; it is designed to provide students with a range of conceptual and historical resources to pursue such study with creativity and rigor. Path B is for students whose interest in gender and sexuality is primarily organized around a specific other discipline or field such as History, English, or Political Science; it is designed to provide students with the conceptual and methodological resources to pursue Gender and Sexuality Studies within such a field. Within those goals, each path is meant to provide students with the opportunity to design a course of study tailored to their particular interests. Each path consists of one theory course, GNSE 10310 Theories of Gender and Sexuality or an approved substitute; a group of ten electives chosen in consultation with the Director of Undergraduate Studies and the Student Affairs Administrator; a BA Essay seminar for fourth-year students; and a BA paper written under the supervision of an appropriate faculty member.

Path A: The course GNSE 10310 Theories of Gender and Sexuality or an approved substitute and ten electives, which must meet the following chronological, geographical, and methodological distribution guidelines: at least one course with a main chronological focus that is pre-1900 and at least one course with a main chronological focus that is post-1900; at least one course with a main focus that is North America or Europe and at least one course with a main focus that is Latin America, Africa, or Asia; at least two courses in the Humanities and at least two courses in the Social Sciences. Any given course may fulfill more than one distribution requirement; for instance, a course on gender in Shakespeare would count as fulfilling one course requirement in pre-1900, Europe, and Humanities.

Path B: The course GNSE 10310 Theories of Gender and Sexuality or an approved substitute and ten elective courses, five or six of which should be primary courses and four or five of which should be supporting courses. Courses in the primary field focus on gender and/or sexuality in a single discipline or in closely related disciplines and develop a gender track within that discipline. Supporting field courses provide training in the methodological, technical, or scholarly skills needed to pursue research in the student’s primary field.

Research Project or Essay

A substantial essay or project is to be completed in the student’s fourth year under the supervision of a Gender Studies Adviser who is a member of the Gender and Sexuality Studies Affiliated Faculty in the student’s primary field of interest. Students must submit the essay by May 1 of their fourth year or by fifth week of their quarter of graduation.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the consent of the other program chair. Approval from both program chairs is required. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of their third year, when neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

SUMMARY OF REQUIREMENTS

MAJOR

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credits</th>
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<tr>
<td>GNSE 10310</td>
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<tr>
<td>Ten courses following the requirements of Path A OR Path B</td>
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</table>

Gender and Sexuality Studies

Path A (interdisciplinary): Courses distributed according to the chronological, geographical, and disciplinary categories of Path A, described above

Path B (disciplinary): Five or six courses in a primary field and four or five supporting courses

<table>
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<td>BA Essay</td>
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<td>Total Units</td>
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* Or an approved substitute

GRADING

Two of the supporting field courses may be taken for P/F grading. All other courses must be taken for a quality grade.

HONORS

Students with a 3.0 or higher overall GPA and a 3.5 or higher GPA in the major are eligible for honors. Students must also receive a grade of A on their BA project or essay with a recommendation for honors from their faculty adviser.

ADVISING

Each student chooses a faculty adviser for their BA project from among the Gender and Sexuality Studies Affiliated Faculty listed below. At the beginning of their third year, students are encouraged to design their program of study with the assistance of the Director of Undergraduate Studies.

MINOR PROGRAM IN GENDER AND SEXUALITY STUDIES

Gender and Sexuality Studies at the University of Chicago encompasses diverse disciplines, modes of inquiry, and objects of knowledge. A minor in Gender and Sexuality Studies allows students in other major fields to shape a disciplinary or interdisciplinary plan of study that will provide a competence in gender and sexuality studies. Such a minor requires a total of six courses:

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<tr>
<td>GNSE 10310</td>
<td>Theories of Gender and Sexuality *</td>
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<tr>
<td></td>
<td>Five additional courses in Gender and Sexuality Studies</td>
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<tr>
<td></td>
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</table>

* or an approved substitute

It is recommended, but not required, that students who minor in Gender and Sexuality Studies take GNSE 15002-15003 Gender and Sexuality in World Civilizations I-II to fulfill their general education requirement. Students who elect the minor program in Gender and Sexuality Studies must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the Director of Undergraduate Studies. The chair’s approval for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.

Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and at least four of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Nonmajors are encouraged to use the lists of faculty and course offerings as resources for the purpose of designing programs within disciplines, as an aid for the allocation of electives, or for the pursuit of a BA project. For further work in Gender and Sexuality Studies, students are encouraged to investigate other courses taught by resource faculty. For more information about Gender and Sexuality Studies, visit the Center for the Study of Gender and Sexuality website at gendersexuality.uchicago.edu or contact the student affairs administrator at 702.2365.

GENDER AND SEXUALITY STUDIES COURSES

**GNSE 10310. Theories of Gender and Sexuality. 100 Units.**

This is a one-quarter, seminar-style introductory course for undergraduates. Its aim is triple: to engage scenes and concepts central to the interdisciplinary study of gender and sexuality; to provide familiarity with key theoretical anchors for that study; and to provide skills for deriving the theoretical bases of any kind of method. Students will produce descriptive, argumentative, and experimental engagements with theory and its scenes as the quarter progresses. Prior course experience in gender/sexuality studies (by way of the general education civilization studies courses or other course work) is strongly advised.

Instructor(s): L. Berlant, K. Schilt

Terms Offered: Autumn

Equivalent Course(s): SOCI 20231, ENGL 10310
GNSE 11002. Medieval Masculinity. 100 Units.
This course will introduce students to concepts of masculinity in the Middle Ages, especially in the period between approximately 1000 and 1500 CE. Special attention will be paid to medieval notions of honor and to the roles that knighthood, chivalry, and monasticism played in promoting (often contradictory) masculine ideals. The course has two main goals. First, to assess and discuss recent scholarly debates and arguments about medieval masculinity. Second, to read closely a variety of medieval sources—including Arthurian literature, chronicles of the Crusades, biographical texts, and monastic histories—in order to develop new perspectives on masculinity during the Middle Ages.
Instructor(s): J. Lyon Terms Offered: TBD
Equivalent Course(s): HIST 33516, HIST 23516, GNSE 31002

GNSE 11009. Problems in the Study of Gender and Sexuality: The Big Issues. 100 Units.
This course will address contemporary major issues in feminist and queer theory.
Instructor(s): Linda Zerilli, Amanda Blair Terms Offered: Winter

GNSE 11010. Feminism: The Big Issues. 100 Units.
We will examine major recent issues in feminist thought.
Instructor(s): Linda Zerilli

GNSE 15002-15003. Gender and Sexuality in World Civilizations I-II.
This two-quarter sequence aims to expand students' exposure to an array of texts—theoretical, historical, religious, literary, visual—that address the fundamental place of gender and sexuality in the social, political, and cultural creations of different civilizations. This sequence meets the general education requirement in civilization studies.

GNSE 15002. Gender and Sexuality in World Civilizations I. 100 Units.
The first quarter offers a theoretical framing unit that introduces concepts in feminist, gender, and queer theory, as well as two thematic clusters, "Kinship" and "Creativity and Cultural Knowledge." The "Kinship" cluster includes readings on such topics as marriage, sex and anti-sex, love and anti-love, and reproduction. The "Creativity and Cultural Knowledge" cluster addresses the themes of authorship and authority, fighting and constructing the canon, and the debates over the influence of "difference" on cultural forms.
Instructor(s): Staff Terms Offered: Autumn
Note(s): This sequence meets the general education requirement in civilization studies.

GNSE 15003. Gender and Sexuality in World Civilizations II. 100 Units.
Three thematic clusters make up the second quarter. "Politics" focuses on texts related to activism/movement politics and women's rights as human rights and the question of universalism. "Religion" contextualizes gender and sexuality through examinations of a variety of religious laws and teachings, religious practices, and religious communities. "Economics" looks at slavery, domestic service, prostitution as labor, consumption, and the gendering of labor in contemporary capitalism.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): GNSE 15002
Note(s): This sequence meets the general education requirement in civilization studies.

GNSE 15003. Gender and Sexuality in World Civilizations II. 100 Units.
Three thematic clusters make up the second quarter. "Politics" focuses on texts related to activism/movement politics and women's rights as human rights and the question of universalism. "Religion" contextualizes gender and sexuality through examinations of a variety of religious laws and teachings, religious practices, and religious communities. "Economics" looks at slavery, domestic service, prostitution as labor, consumption, and the gendering of labor in contemporary capitalism.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): GNSE 15002
Note(s): This sequence meets the general education requirement in civilization studies.

GNSE 21001. Cultural Psychology. 100 Units.
There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning.
Instructor(s): R. Shweder Terms Offered: Autumn
Prerequisite(s): Undergraduates must be in third or fourth year.
Note(s): CHDV Distribution: B, C
Equivalent Course(s): AMER 33000, CHDV 31000, ANTH 35110, GNSE 31000, PSYC 23000, ANTH 24320, PSYC 33000, CHDV 21000
GNSE 21400. Advanced Theories of Gender and Sexuality. 100 Units.
Zerilli: This course examines contemporary theories of sexuality, culture, and society. We then situate these theories in global and historical perspectives. Topics and issues are explored through theoretical, ethnographic, and popular film and video texts. Simon: Our itinerary in this course will be interdisciplinary, ranging from political theory to science studies. Topics for discussion will likely include: the gendering of reason and passion in the history of philosophy; the power, persistence, and flexibility of norms; the relationship between eros and other forms of desire; the division of labor and other economic tributaries to gendered experience; openings for and challenges to the political aspirations of sexual (and other) minorities; and the pressures exerted by technology on erotic life. Students will engage key concepts in the field, and will be encouraged to experiment with new ones.
Instructor(s): L. Zerilli
Terms Offered: Autumn
Prerequisite(s): Completion of GNSE 10100-10200 and GNSE 28505 or 28605 or permission of instructor.
Equivalent Course(s): ENGL 30201, ENGL 21401, MAPH 36500, GNSE 31400, PLSC 31410, PLSC 21410

GNSE 21500. Darwinian Health. 100 Units.
This course will use an evolutionary, rather than clinical, approach to understanding why we get sick. In particular, we will consider how health issues such as menstruation, senescence, pregnancy sickness, menopause, and diseases can be considered adaptations rather than pathologies. We will also discuss how our rapidly changing environments can reduce the benefits of these adaptations.
Instructor(s): J. Mateo
Terms Offered: Winter
Prerequisite(s): Permission of instructor only.
Note(s): CHDV Distribution: A
Equivalent Course(s): CHDV 21500, HIPS 22401

GNSE 22904. Theories of Sexual Violence in American Culture. 100 Units.
Equivalent Course(s): ENGL 26910

GNSE 22905. Gendering Privacy. 100 Units.
Interest in privacy has surged in recent decades in light of the emergence of Big Data, the rise of increasingly sophisticated methods of surveillance, and the ubiquity of networked social media in everyday life. Yet privacy remains a notoriously slippery concept to pin down across disciplines, privacy has been conceptualized variously as a legal right, a psychological state of being, a set of preferences, and a boundary-making process. In this course, we take a sociological approach to privacy, starting with the notion that privacy is at once a decidedly “micro” individual phenomenon and at the same time a product of “macro” social-structural forces. Thus, while privacy preferences can vary from person to person, the capacity to achieve privacy is shaped by social position (e.g., race, class, gender, etc.). In this course, we focus specifically on how women and men experience possibilities for privacy and how these experiences are shaped by their racial and class location. We will draw on a range of theoretical perspectives, including feminist theory, critical legal theory, and critical race theory to examine privacy through the lens of social inequality. Empirically, we will investigate how the twin systems of welfare and criminal justice present challenges to privacy for men and women living in poverty. The main questions guiding our inquiry include: Who gets to have privacy (and who doesn’t), why, and at what costs?
Instructor(s): C. Hughes
Terms Offered: Winter

GNSE 23100. Foucault and The History of Sexuality. 100 Units.
This course centers on a close reading of the first volume of Michel Foucault’s "The History of Sexuality", with some attention to his writings on the history of ancient conceptualizations of sex. How should a history of sexuality take into account scientific theories, social relations of power, and different experiences of the self? We discuss the contrasting descriptions and conceptions of sexual behavior before and after the emergence of a science of sexuality. Other writers influenced by and critical of Foucault are also discussed.
Instructor(s): A. Davidson
Terms Offered: Autumn
Prerequisite(s): One prior philosophy course is strongly recommended.
Equivalent Course(s): HIPS 24300, KNOW 27002, CMLT 25001, PHIL 24800, FNDL 22001

GNSE 23103. Women Possessed: Religion, Gender, and Sexuality in Early America. 100 Units.
Equivalent Course(s): ENGL 21403, RLST 21312

GNSE 23104. Gender, Sexuality, and Islamic Traditions. 100 Units.
This course will explore the discourses surrounding gender and sexuality in the Islamic tradition, from the early Islamic period to the present day. The course will focus on two particular themes: (1) Islamic traditions of thought on issues of gender and sexuality, and (2) The transformations that have altered the space in which these discourses take place today in the Western academy. In each class, we will focus our readings and responses through discussion questions. In this interdisciplinary course, the instructors will compare and contrast their perspectives of classical Islamic studies, text criticism, and legal theory with feminist studies, postcolonial and critical theory, and the anthropology of religion.
Instructor(s): T. Gutmann, M. Sheibani
Terms Offered: Spring
Equivalent Course(s): NEHC 23104, RLST 28012
GNSE 23603. Grace, Love, and Pleasure. Painting in Eighteenth Century France. 100 Units.
The easing of political life and the relaxation of private morals which came to characterize the long reign of Louis XV (1715-1774) was mirrored by the development of a new conception of art, an art more intimate, decorative, generally amorous, and often erotic. It is these last two related dimensions which are the basis of a new visual aesthetic which constitutes the subject matter of this course. Through the exploration of contemporary novels and theater, as well as contemporary critical and philosophical writings, we will demonstrate how both the sensual and the erotic become essential components of the century’s cultural ethos. Artistic subjects, the mechanisms to represent them, their metaphorical stakes, and their phenomenological effects on the beholder will therefore be considered as the expression of a particular historical and ideological context. It is in this context that love became the symbol of a king who privileged peace against war, and where emotional pleasure triumphed over moralizing values and asserted itself as a new aesthetic category.
Instructor(s): S. Caviglia-Brunel Terms Offered: Winter
Note(s): Students who take this course for French credit must do the readings and assignments in French.
Equivalent Course(s): GNSE 33603, ARTH 23603, FREN 36303, TAPS 26303, FREN 26303, ARTH 33603

GNSE 28604. Law & Social Movements in Modern America. 100 Units.
This course traces and examines the relationship of law and social movements in the United States since 1865. We examine how lawyers and ordinary citizens have used the law to support the expansion of social, political, and economic rights in America. We also look at how the state and civic organizations have shaped and deployed law to criminalize the strategies of social reform movements and stifle dissent.
Instructor(s): J. Dailey Terms Offered: Autumn
Equivalent Course(s): HIST 28604, HMRT 28604, LLSS 28604

GNSE 29600. Feminist Philosophy. 100 Units.
The course is an introduction to the major varieties of philosophical feminism. After studying some key historical texts in the Western tradition (Wollstonecraft, Rousseau, J. S. Mill), we examine four types of contemporary philosophical feminism: Liberal Feminism (Susan Moller Okin, Martha Nussbaum), Radical Feminism (Catherine MacKinnon, Andrea Dworkin), Difference Feminism (Carol Gilligan, Annette Baier, Nel Noddings), and Postmodern “Queer” Gender Theory and trans feminism (Judith Butler, Michael Warner and others). After studying each of these approaches, we will focus on political and ethical problems of contemporary international feminism, asking how well each of the approaches addresses these problems. (A)
Instructor(s): M. Nussbaum Terms Offered: Spring
Prerequisite(s): Undergraduates may enroll only with the permission of the instructor.
Equivalent Course(s): PHIL 21901, PHIL 31900, PLSC 51900, HMRT 31900, RETH 41000

GNSE 29700. Readings in Gender Studies. 100 Units.
This is a general reading and research course for independent study not related to the BA thesis or BA research. Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Course Form. May be taken for P/F grading with consent of instructor. With prior approval, students who are majoring in Gender Studies may use this course to satisfy program requirements.

GNSE 29800-29900. BA Seminar; BA Essay.
GNSE 29800 and 29900 form a two-quarter sequence for seniors who are writing a BA essay.

GNSE 29800. B.A. Paper Seminar. 100 Units.
GNSE 29800 and 29900 form a two-quarter sequence for seniors who are writing a BA essay. This seminar provides students with the theoretical and methodological grounding in gender and sexuality studies needed to formulate a topic and conduct the independent research and writing of their BA essay. Prerequisite(s): Consent of instructor and program chairman Note(s): May be taken for P/F grading with consent of instructor.
Instructor(s): Jennifer Wild Terms Offered: Autumn
Prerequisite(s): Consent of instructor and program chairman
Note(s): May be taken for P/F grading with consent of instructor.

GNSE 29900. BA Essay. 100 Units.
The purpose of this course is to assist students in the preparation of drafts of their BA essay. An approved GNSE course may be substituted.
Terms Offered: Summer, Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and program chairman
Note(s): Students are required to submit the College Reading and Research Course Form signed by the faculty BA essay reader.
GNSE 29900. BA Essay. 100 Units.
The purpose of this course is to assist students in the preparation of drafts of their BA essay. An approved GNSE course may be substituted.
Terms Offered: Summer, Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and program chairman
Note(s): Students are required to submit the College Reading and Research Course Form signed by the faculty BA essay reader.
GEOPHICAL SCIENCES

Department Website: http://geography.uchicago.edu

PROGRAM OF STUDY

The discipline of geography contributes to an understanding of society by exploring the Earth's environment and its interactions with human life, by inquiring into cultures and societies from the perspective of area study, and by investigating problems of spatial organization. The BA program in geographical sciences offers a distinctive focus for general education and provides a background both for advanced specialization in the discipline and for study in other fields. Solid grounding in modern geography can lead to careers in government service, environmental consulting, marketing, publishing, planning, and teaching at all levels.

PROGRAM REQUIREMENTS

The BA degree in geographical sciences calls for the satisfactory completion of eleven courses, at least eight of which must be in geographical sciences. These include an introduction to Geographic Information Systems/GIS (GEOG 28201 Intro to Geographic Information Systems); the senior seminar (GEOG 29800 Senior Seminar); and at least nine additional geography courses, up to three of which may be in approved related fields. A BA thesis is prepared in connection with the senior seminar.

SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOG 28202</td>
<td>Geographic Information Science I</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Nine additional geographical sciences courses; up to three may be in approved related fields</td>
<td>900</td>
</tr>
<tr>
<td>GEOG 29800</td>
<td>Senior Seminar</td>
<td>100</td>
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<td></td>
<td>BA thesis</td>
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<td></td>
<td>Total Units</td>
<td>1100</td>
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GRADING

All courses counted toward the geographical sciences major must be taken for quality grades.

RESEARCH GRANTS

Geographical sciences students may apply for small grants from the Ada Espenshade Wrigley Fund in support of extraordinary expenses connected with research leading to their BA thesis.

HONORS

Honors are awarded to students with an overall GPA of 3.0 or higher who submit a BA thesis that is judged to be outstanding.

AWARDS

Each year the Committee on Geographical Sciences nominates fourth-year students for an Outstanding Senior in Geography Award from the Illinois Geographical Society and an Award for Excellence from the National Council for Geographic Education and the Association of American Geographers.

GEOPHICAL STUDIES COURSES

GEOG 20100. Cultural Geography. 100 Units.
This course examines the two main concerns of this field of geography: (1) the logic and pathology revealed in the record of the human use and misuse of the Earth, and (2) the discordant relationship of the world political map with more complicated patterns of linguistic and religious distribution.
Instructor(s): TBD Terms Offered: TBD
Equivalent Course(s): GEOG 30100, ENST 25900

GEOG 20273. Urban Spatial Archaeology I. 100 Units.
Space and time are fundamental concepts in urban spatial science. In this course, students will gain substantive and technical knowledge on how to analyze space and time through the tools of urban spatial archaeology. Specifically, this course will introduce students to various historical data sources on Chicago and New Orleans to digitize, then conduct a spatial historical analysis of any topic of their choice. By taking a historical approach to the study of time and space, students will walk away from the course with (1) ways to conceptualize time and space when studying urban issues, and (2) skills for designing a project to empirically demonstrate the workings of time and space in the real world. At the end of this course, students will be expected to have produced a historical dataset for a research paper that will be completed in the next course sequence.
Instructor(s): R. Vargas Terms Offered: Winter. Cancelled - Not offered in 2018/19
Prerequisite(s): GEOG 20500 and GEOG 28201
Equivalent Course(s): SOCI 20273, GEOG 30273, SOCI 30273
GEOG 20274. Urban Spatial Archaeology II. 100 Units.
This course builds off Urban Spatial Archaeology I, by focusing on more specific ways to apply the concepts of space and time to contemporary urban research issues. Students will also learn methods for analyzing the data they chose to digitize in the previous quarter, which will culminate in a research paper on a topic of their choosing. Students will walk away from this course with a deeper understanding of how researchers and policy makers think of space and time with respect to a particular urban issue. In addition, students will have produced a research paper and data visualization that would critique the ways researchers have traditionally conceptualized time and space.
Instructor(s): R. Vargas Terms Offered: Spring. Cancelled - Not Offered in 2018/2019
Prerequisite(s): SOCI 20273/30273 and GEOG 20273/30273
Equivalent Course(s): SOCI 20274, SOCI 30274, GEOG 30274

GEOG 20500. Introduction to Spatial Data Science. 100 Units.
Spatial data science consists of a collection of concepts and methods drawn from both statistics and computer science that deal with accessing, manipulating, visualizing, exploring and reasoning about geographical data. The course introduces the types of spatial data relevant in social science inquiry and reviews a range of methods to explore these data. Topics covered include formal spatial data structures, geovisualization and visual analytics, rate smoothing, spatial autocorrelation, cluster detection and spatial data mining. An important aspect of the course is to learn and apply open source software tools, including R and GeoDa.
Instructor(s): L. Anselin Terms Offered: Autumn
Prerequisite(s): STAT 22000 (or equivalent), familiarity with GIS is helpful, but not necessary
Equivalent Course(s): GEOG 30500, SOCI 20253, MACS 54000, SOCI 30253

GEOG 21900. Historical Geography of the United States. 100 Units.
This course examines the spatial dynamics of empire, the frontier, regional development, the social character of settlement patterns, and the evolution of the cultural landscapes of America from pre-European times to 1900.
Instructor(s): M. Conzen Terms Offered: Autumn
Note(s): This course offered in even years.
Equivalent Course(s): HIST 38800, GEOG 31900, HIST 28800

GEOG 22101. Changing America in the Last 100 Years. 100 Units.
This course explores the regional organization of U.S. society and its economy during the pivotal twentieth century, emphasizing the shifting dynamics that explain the spatial distribution of people, resources, economic activity, human settlement patterns, and mobility. We put special focus on the regional restructuring of industry and services, transportation, city growth, and cultural consumption. Two-day weekend field trip to the Mississippi River required.
Equivalent Course(s): HIST 27506, HIST 37506, GEOG 32101

GEOG 22700. Urban Structure and Process. 100 Units.
This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past American experience as a way of developing urban policy both in this country and elsewhere.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): SOSC 25100, SOCI 20104, CRES 20104, SOCI 30104, GEOG 32700

GEOG 23003. Urban Europe, 1600-present. 100 Units.
This course examines the growth, structure, and, on occasion, decline of European towns and cities from the seventeenth century to the present. The focus throughout is on questions directly related to the positioning, form, and function of urban communities and to the efforts of interest groups and policy makers to shape and promote the fortunes of these communities. The course is interdisciplinary in spirit and content, drawing on the contributions of historians, geographers, sociologists, economists, demographers, political scientists, urban planners, and others. There are no prerequisites; the readings and lectures cover whatever needs to be known about theories, methods, and the European context.
Instructor(s): J. Craig Terms Offered: Winter
Equivalent Course(s): HIST 23003, HIST 33003, GEOG 33003

GEOG 23500. Urban Geography. 100 Units.
This course examines the spatial organization and current restructuring of modern cities in light of the economic, social, cultural, and political forces that shape them. It explores the systematic interactions between social process and physical system. We cover basic concepts of urbanism and urbanization, systems of cities urban growth, migration, centralization and decentralization, land-use dynamics, physical geography, urban morphology, and planning. Field trip in Chicago region required. This course is part of the College Course Cluster, Urban Design.
Instructor(s): M. Conzen Terms Offered: Winter
Note(s): This course offered in even years.
Equivalent Course(s): ENST 24660, GEOG 33500
**GEOG 23700. Geographical Issues in Housing and Community Development. 100 Units.**
This course is part of the College Course Cluster, Urban Design.
Instructor(s): M. Conzen Terms Offered: Spring. This course offered in even years.
Prerequisite(s): Open to Chicago Studies Program students.
Equivalent Course(s): GEOG 33700, PBPL 23700

**GEOG 24100. Urban Design: The Chicago Experience. 100 Units.**
This course examines the theory and practice of urban design at the scale of block, street, and building—the pedestrian realm. Topics include walkability, the design of streets, architectural style and its effect on pedestrian experience, safety and security in relation to accessibility and social connection, concepts of urban fabric, repair and placemaking, the regulation of urban form, and the social implications of civic spaces. Students will analyze normative principles and the debates that surround them through readings and discussion, as well as firsthand interaction with the urbanism of Chicago.
Equivalent Course(s): PBPL 24105, GEOG 34100, SOSC 26001, SOSC 36001

**GEOG 24190. Imagining Chicago's Common Buildings. 100 Units.**
This class is an architectural studio based in the common residential buildings of Chicago and the city's built environment. While a design project and architectural skills will be the focus of the class, it will also incorporate readings, a small amount of writing, and some social and geographical history. We will: (1) give students interested in pursuing architecture or the study of cities experience with a studio class and some skills related to architectural thinking, (2) acquaint students intimately with Chicago's common residential buildings and built fabric, and (3) situate all this within a context of social thought about residential architecture, common buildings, housing, and the city.
Instructor(s): L. Joyner Terms Offered: Autumn
Equivalent Course(s): AMER 24190, ARTH 24190, ENST 24190

**GEOG 24600. Introduction to Urban Sciences. 100 Units.**
This course is a grand tour of conceptual frameworks, general phenomena, emerging data and policy applications that define a growing scientific integrated understanding of cities and urbanization. It starts with a general outlook of current worldwide explosive urbanization and associated changes in social, economic and environmental indicators. It then introduces a number of historical models, from sociology, economics and geography that have been proposed to understand how cities operate. We will discuss how these and other facets of cities can be integrated as dynamical complex systems and derive their general characteristics as social networks embedded in structured physical spaces. Resulting general properties of cities will be illustrated in different geographic and historical contexts, including an understanding of urban resource flows, emergent institutions and the division of labor and knowledge as drivers of innovation and economic growth. The second part of the course will deal with issues of inequality, heterogeneity and (sustainable) growth in cities. We will explore how these features of cities present different realities and opportunities to different individuals and how these appear as spatially concentrated (dis)advantage that shape people’s life courses. We will show how issues of inequality also have consequences at more macroscopic levels and derive the general features of population and economic growth for systems of cities and nations.
Instructor(s): Luis Bettencourt Terms Offered: Autumn
Prerequisite(s): STAT 22000
Equivalent Course(s): ENST 24680, GEOG 34700

**GEOG 24700. Introduction to Urban Planning. 100 Units.**
The academic study of urban planning encompasses a range of issues dealing with cities, from urban design to governance, economic development, local politics, and place. The goal of this course is to provide a broad overview of urban planning theory and history while at the same time introducing students to basic GIS applications for urban planners. This format provides students with a better contextual understanding of the wide range of issues currently facing 21st century cities, and at the same time serves as an introduction to the everyday practice of urban planning. The course includes readings from prominent urban theorists, a discussion of the historical development of the urban planning profession in the US, and GIS exercises that allow students to apply their theoretical urban knowledge to real-world planning problems.
Instructor(s): Kevin Credit Terms Offered: Autumn
Equivalent Course(s): ENST 24680, GEOG 34700

**GEOG 25400-25800. Ancient Landscapes I-II.**
The landscape of the Near East contains a detailed and subtle record of environmental, social, and economic processes that have obtained over thousands of years. Landscape analysis is therefore proving to be fundamental to an understanding of the processes that underpinned the development of ancient Near Eastern society. This sequence provides an overview of the ancient cultural landscapes of this heartland of early civilization from the early stages of complex societies in the fifth and sixth millennia B.C. to the close of the Early Islamic period around the tenth century A.D.
GEOG 25400. Ancient Landscapes I. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI's ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Autumn
Equivalent Course(s): ANTH 26710, NEAA 30061, NEAA 20061, ANTH 36710, GEOG 35400

GEOG 25800. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI's ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, ANTH 26711, NEAA 30062, NEAA 20062, GEOG 35800

GEOG 25500. Biogeography. 100 Units.
This course examines factors governing the distribution and abundance of animals and plants. Topics include patterns and processes in historical biogeography, island biogeography, geographical ecology, areography, and conservation biology (e.g., design and effectiveness of nature reserves).
Instructor(s): B. Patterson (odd years, lab). L., Heaney (even years, discussion) Terms Offered: Winter
Prerequisite(s): Three quarters of a Biological Sciences Fundamentals sequence and a course in either ecology, evolution, or earth history; or consent of instructor
Equivalent Course(s): ENST 25500, BIOS 23406, GEOG 35500, EVOL 45500

GEOG 25800. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI's ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, ANTH 26711, NEAA 30062, NEAA 20062, GEOG 35800

GEOG 25900. Introduction to Location Analysis. 100 Units.
Understanding the location of business activities - agricultural, industrial, retail, and knowledge-based - has long been a focus for economic geographers, regional scientists, and urban planners. This course traces the key theories and conceptual models that have been developed over time to explain why economic activities tend to locate where they do. To introduce and explain these theories, this course covers several foundational concepts in economic geography and urban planning, such as: bid-rent theory, locational triangulation, various models of urban structure and growth, urban market areas, transportation, economic restructuring, and the "back-to-the-city" movement. This course incorporates several GIS exercises to teach students the basic principles of location optimization and to help illuminate the foundational theoretical principles of economic geography.
Instructor(s): K. Credit Terms Offered: Spring
Equivalent Course(s): GEOG 35900
GEOG 26100. Roots of the Modern American City. 100 Units.
This course traces the economic, social, and physical development of the city in North America from pre-
European times to the mid-twentieth century. We emphasize evolving regional urban systems, the changing
spatial organization of people and land use in urban areas, and the developing distinctiveness of American urban
landscapes. All-day Illinois field trip required. This course is part of the College Course Cluster, Urban Design.
Instructor(s): M. Conzen Terms Offered: Autumn
Note(s): This course offered in odd years.
Equivalent Course(s): HIST 38900, ENST 26100, HIST 28900, GEOG 36100

GEOG 26400. Frontiers and Borders in South Asia. 100 Units.
Sometimes the frontline of empires and nation-states, sometimes neglected or inaccessible, peripheral spaces are
often of core concern to the central state. The aim of this upper-level undergraduate seminar is to examine the
history of borders, borderlands, and frontiers as political and social concepts and as produced spaces. We will
examine an array of case studies in addition to more theoretical scholarship that spans the disciplines of history,
environmental studies, political science, anthropology, and geography. While using South Asia (itself a rather
recently invented "area") as the primary geographic and historical focus this course will not be bound exclusively
to it. The first goal of the course is to explore the evolution of key concepts such as space, territory, frontier, and
borders/borderlands. The second goal is to develop methods for analyzing subjects that are simultaneously
physical spaces and political, social, and historical ideas. Finally, it seeks to introduce students to areas that often
fall beyond the penumbra of historical surveys centered on the nation-state. No prior knowledge of South Asian
history is assumed. Weekly readings will average 150 pages. Note: No prior knowledge of South Asian history is
assumed.
Equivalent Course(s): SALC 26804, HIST 26804, GLST 26804

GEOG 27155. Urban Design with Nature. 100 Units.
This course will use the Chicago region as a laboratory for evaluating the social, environmental, and economic
effects of alternative forms of human settlement. Students will be introduced to the basics of geographic
information systems (GIS) and use GIS to map Chicago’s "place types" - human habitats that vary along an
urban-to-rural transect, as well as the ecosystem services provided by the types. They will then evaluate these
place types using a range of social, economic and environmental criteria. In this way, students will evaluate the
region’s potential to simultaneously realize economic potential, protect environmental health, and provide social
connectivity. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): Sabina Shaikh and Emily Talen Terms Offered: Autumn
Note(s): Students who have taken ENST 27150: Urban Design with Nature: Assessing Social and Natural Realms
in the Calumet Region in the Spring of 2018 may not enroll in this course.
Equivalent Course(s): ENST 27155, PBPL 27156

GEOG 27325. Urban Ecology in the Calumet Region. 100 Units.
This course will give students a strong foundation in the local ecology of the Calumet. Students will use local
research and habitats to understand fundamental concepts in ecology and the scientific method. Students will
explore some of these habitats during field trips with scientists and practitioners. The course focus will be on
urban ecology in the region, whether these fundamental ecological concepts are applicable, what other factors
need to be considered in the urban ecosystem, and the role humans have in restoring natural and managing
novel ecosystems, among other topics.
Terms Offered: TBD
Equivalent Course(s): PBPL 27325, ENST 27325

GEOG 27600. Hist Coll: Chicago South Side. 100 Units.
No description available.
Instructor(s): K. Conzen Terms Offered: Autumn
Equivalent Course(s): HIST 29603

GEOG 27601. Colloquium: Hyde Park and Chicago’s South Side as Historic Laboratory. 100 Units.
This colloquium uses Hyde Park and Chicago’s South Side as a case study to introduce students to issues and
methodologies in the history and historical geography of American urban life during the past century and a half.
Discussions will focus on both primary and secondary source readings, and each participant will design and
carry out an original research project.
Instructor(s): K. Conzen Terms Offered: Autumn
Equivalent Course(s): HIST 29613

GEOG 28000. GIScience Practicum. 100 Units.
This applied course in geographic information science builds upon and refines knowledge and geocomputational
expertise gained in the GIScience sequence. Students will develop multifaceted GIS project incorporating
spatial thinking in design, infrastructure, and implementation. Projects could include the development of a web
application, dynamic dashboard, interactive storytelling map, infographic-driven policy brief, or research article
and are encouraged to link additional disciplines like health, sociology, economics, or political science.
Instructor(s): T. Schuble Terms Offered: Spring
Equivalent Course(s): GEOG 38000
GEOG 28202. Geographic Information Science I. 100 Units.
This course introduces students to a wide range of geospatial technologies and techniques in order to explain the basic theory and application of geographic information systems (GIS). To do this, students will use open source or free software such as QGIS and Google Earth Pro to complete GIS lab exercises that cover a range of topics, including an introduction to different types of geospatial data, geographic measurement, GIS, principles of cartography, remote sensing, basic GIS mapping and spatial analysis techniques, remote sensing, and specific geospatial applications such as 3D modeling and geodesign. By providing a general overview of geospatial technologies, this course provides students with a broad foundational knowledge of the field of GIScience that prepares them for more specialized concepts and applications covered in future GIS courses.
Instructor(s): Kevin Credit Terms Offered: Autumn Equivalent Course(s): GEOG 38202

GEOG 28402. Geographic Information Science II. 100 Units.
This course investigates the theory and practice of infrastructure and computational approaches in spatial analysis and GIScience. Geocomputation is introduced as a multidisciplinary systems paradigm necessary for solving complex spatial problems and facilitating new understandings. Students will learn about the elements of spatial algorithms and data structures, geospatial topologies, spatial data queries, and the basics of geodatabase architecture and design.
Instructor(s): M. Kodak Terms Offered: Winter Prerequisite(s): GIS I Equivalent Course(s): GEOG 38402

GEOG 28602. Geographic Information Science III. 100 Units.
This advanced course extends and connects both foundational and functional GIScience concepts. Students will be introduced to advanced programming and scripting languages necessary for spatial analysis and GIScience applications. Additional topics include customization, enterprise GIS, web GIS, and advanced visualization and analytic techniques.
Instructor(s): M. Kolak Terms Offered: Spring, GIS I and GIS II Equivalent Course(s): GEOG 38602

GEOG 28700. Readings in Spatial Analysis. 100 Units.
This independent reading option is an opportunity to explore special topics in the exploration, visualization and statistical modeling of geospatial data.
Instructor(s): L. Anselin Terms Offered: Autumn Spring Winter. Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading.
Note(s): By permission of instructor only. Equivalent Course(s): ENST 28800, GEOG 38700

GEOG 28702. Introduction to GIS and Spatial Analysis for Social Scientists. 100 Units.
This course provides an introduction and overview of how spatial thinking is translated into specific methods to handle geographic information and the statistical analysis of such information. This is not a course to learn a specific GIS software program, but the goal is to learn how to think about spatial aspects of research questions, as they pertain to how the data are collected, organized and transformed, and how these spatial aspects affect statistical methods. The focus is on research questions relevant in the social sciences, which inspires the selection of the particular methods that are covered. Examples include spatial data integration (spatial join), transformations between different spatial scales (overlay), the computation of “spatial” variables (distance, buffer, shortest path), geovisualization, visual analytics, and the assessment of spatial autocorrelation (the lack of independence among spatial variables). The methods will be illustrated by means of open source software such as QGIS and R.
Instructor(s): M. Kolak Terms Offered: Spring Equivalent Course(s): GEOG 38702

GEOG 28800. History of Cartography. 100 Units.
This course offers a grand overview of the key developments in mapmaking throughout history worldwide, from pre-literate cartography to the modern interactive digital environment. It looks at the producers, their audience, the technologies and artistic systems used, and the human and global contexts in which they developed. The course also draws on the extensive map collections of Regenstein Library.
Instructor(s): G. Danzer Terms Offered: Spring Equivalent Course(s): GEOG 38800

GEOG 28900. Readings in Urban Planning and Design. 100 Units.
This independent reading option is an opportunity to explore contemporary debates and theoretical arguments involved in the planning and design of cities.
Instructor(s): E. Talen Terms Offered: Autumn Spring Winter. Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading.
Note(s): By permission of instructor only. Equivalent Course(s): GEOG 38900, ENST 28980
GEOG 29100. Undergraduate Tutorial. 100 Units.
This course is intended for individual study of selected geographical problems.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor.
Note(s): Available for either quality grades or for P/F grading.

GEOG 29700. Readings in Special Topics in Geography. 100 Units.
A program of supervised reading of a special topic in geography. Students will meet periodically with the
instructor to discuss the readings, and submit a final paper critically reviewing the conceptual orientation and
substantive content of the readings.
Instructor(s): M. Conzen, L. Anselin, E. Talen. Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of instructor.
Note(s): Consent of instructor. Students are required to submit the College Reading and Research Course Form.
available for either quality grades or for P/F grading.

GEOG 29800. Senior Seminar. 100 Units.
This course is designed for development of the BA thesis.
Instructor(s): M. Conzen Terms Offered: Winter
Prerequisite(s): Open to students with fourth-year standing who are majoring in geographical studies.
Note(s): Must be taken for a quality grade.
GEOPHYSICAL SCIENCES

Department Website: http://geosci.uchicago.edu

PROGRAM OF STUDY

The Department of the Geophysical Sciences (GEOS) offers unique programs of study in the earth, atmospheric, and planetary sciences. Topics include the physics, chemistry, and dynamics of the atmosphere, oceans, and ice sheets; past and present climate change; the origin and history of the Earth, moon, and meteorites; properties of the deep interior of the Earth and the dynamics of crustal movements; and the evolution and geography of life and the Earth’s surface environments through geologic time. These multidisciplinary topics require an integrated approach founded on mathematics, physics, chemistry, and biology.

Both the BA and BS programs prepare students for careers that draw upon the earth, atmospheric, and planetary sciences. However, the BS degree provides a more focused and intensive program of study for students who intend to pursue graduate work in these disciplines. The BA degree also offers thorough study in the geophysical sciences, but it provides a wide opportunity for elective freedom to pursue interdisciplinary interests, such as environmental policy, law, medicine, business, and precollege education.

PROGRAM REQUIREMENTS FOR THE BA IN GEOPHYSICAL SCIENCES

The requirements for the BA degree in Geophysical Sciences involve completion of:

- six required courses that fulfill general education requirements for the physical sciences, biological sciences, and mathematics
- eight required science or mathematics courses
- seven elective courses pertinent to the major from the electives lists below, which must include:
  - one course in Computational Sciences (List 2)
  - four 20000-level courses designated GEOS in List 1
  - two more 20000-level science courses from any of Lists 1–2

Candidates for the BA in Geophysical Sciences complete a year of chemistry, a year of physics, a year of mathematics (including Calculus I-II), and a year of biology (GEOS 13900 Biological Evolution and BIOS 20198 Biodiversity).

The requirement for the third quarter of mathematics may be satisfied by either completing the calculus sequence (recommended for students taking the more introductory MATH 13000s sequence but not specifically required or recommended for the higher tracks such as MATH 15000s, as the first two quarters offer a sufficiently comprehensive calculus training for students to move on to other courses) or taking one of the designated mathematical methods courses instead. In addition, students must complete one elective course from Computational Sciences (List 2).

Students are encouraged to begin discipline-specific courses as early as possible. Required disciplinary courses include GEOS 13100 Physical Geology, GEOS 13200 Earth History, and GEOS 13300 The Atmosphere. With prior consent of the departmental counselor, students with the appropriate background may substitute a 20000-level course, which may be taken during or after the third year.

A minimum of six additional 20000-level science courses are required. At least four must be GEOS courses from List 1. Up to two may be chosen from other science courses in List 1. Up to two may be chosen from Computational Sciences (List 2). One may be a field course.

Summary of Requirements for the BA in Geophysical Sciences

GENERAL EDUCATION

One of the following sequences:

200

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100 &amp; CHEM 10200</td>
<td>Introductory General Chemistry I and Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II</td>
</tr>
<tr>
<td>CHEM 12100 &amp; CHEM 12200</td>
<td>Honors General Chemistry I and Honors General Chemistry II</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
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Both of the following:

200

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
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<tbody>
<tr>
<td>BIOS 20198</td>
<td>Biodiversity</td>
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</table>
GEOS 13900 Biological Evolution 100
Total Units 700

MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>GEOS 13100</td>
<td>Physical Geology</td>
<td>300</td>
</tr>
<tr>
<td>&amp; GEOS 13200</td>
<td>and Earth History</td>
<td></td>
</tr>
<tr>
<td>&amp; GEOS 13300</td>
<td>and The Atmosphere</td>
<td></td>
</tr>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III</td>
<td>100</td>
</tr>
<tr>
<td>or CHEM 12300</td>
<td>Honors General Chemistry III</td>
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One of the following sequences: 300

<table>
<thead>
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<th>Course Code</th>
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<tbody>
<tr>
<td>PHYS 12100-12200-12300</td>
<td>General Physics I-II-III §</td>
</tr>
<tr>
<td>PHYS 13100-13200-13300</td>
<td>Mechanics; Electricity and Magnetism; Waves, Optics, and Heat</td>
</tr>
<tr>
<td>PHYS 14100-14200-14300</td>
<td>Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat</td>
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</table>

One of the following: 100

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MATH 20000</td>
<td>Mathematical Methods for Physical Sciences I</td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
</tr>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III *</td>
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<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
</tbody>
</table>

One Computational Sciences course (List 2) 100

Six electives as follows: † 600

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Four courses designated GEOS from List 1: Physical and Biological Sciences</td>
<td></td>
</tr>
<tr>
<td>Two additional courses from List 1: Physical and Biological Sciences and/or from List 2: Computational Sciences</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 1500

* Credit may be granted by examination.

** Only Environmental Science and Geophysical Sciences majors may use this pairing to satisfy the general education requirement in the biological sciences. Geophysical Sciences majors can take these courses without the Biological Sciences prerequisites (BIOS 20150-20151) unless they pursue a double major in Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151.

† Only one of these electives may be a field course (GEOS 29001, GEOS 29002, GEOS 29005) and only one of these electives may be GEOS 29700 Reading and Research in the Geophysical Sciences.

§ PHYS 13100-13200-13300 or PHYS 14100-14200-14300 are the preferred courses. PHYS 12100-12200-12300 is allowable on a case-by-case basis but may not provide adequate preparation to allow for enrollment in higher level PHYS courses. Additionally, PHYS 12100 has a prerequisite of a year of chemistry. Special petition to the department counselor is required for PHYS 12100-12200-12300 approval.

% Biological Evolution has several cross-listings. Geophysical Sciences majors must register for it under the GEOS 27300 listing.

PROGRAM REQUIREMENTS FOR THE BS IN GEOPHYSICAL SCIENCES

The requirements for the BS degree in Geophysical Sciences involve completion of:

- six required courses that fulfill general education requirements for the physical sciences, biological sciences, and mathematics
- eight required science or mathematics courses
- ten elective courses pertinent to the major from the electives lists below, which must include:
  - two courses in Computational Sciences (List 2)
  - four 20000-level courses designated GEOS in List 1
  - four more 20000-level science courses from any of Lists 1–2: up to three non-GEOS courses from List 1, up to two from List 2

Candidates for the BS in Geophysical Sciences complete a year of chemistry, a year of physics, a year of mathematics (including Calculus I-II), and a year of biology and BIOS 20198 Biodiversity).
The requirement for the third quarter of mathematics may be satisfied by either completing the calculus sequence (recommended for students taking the more introductory MATH 13000s sequence but not specifically required or recommended for the higher tracks such as MATH 15000s, as the first two quarters offer a sufficiently comprehensive calculus training for students to move on to other courses) or taking one of the designated mathematical methods courses instead. In addition, students must complete two elective courses from Computational Sciences (List 2). The requirements are structured to allow and encourage students to complete sequences that extend through the study of differential equations.

Students are encouraged to begin discipline-specific courses as early as possible. Required disciplinary courses include GEOS 13100 Physical Geology, GEOS 13200 Earth History, and GEOS 13300 The Atmosphere, which is the introductory sequence. With prior consent of the departmental counselor, students with the appropriate background may substitute a 20000-level course, which may be taken during or after the third year.

A minimum of eight additional 20000-level science courses are required. At least four must be GEOS courses from List 1. Up to three may be chosen from other science courses in List 1. Up to two may be chosen from Computational Sciences (List 2). One may be a field course. One may be GEOS 29700 Reading and Research in the Geophysical Sciences.

Summary of Requirements for the BS in Geophysical Sciences

GENERAL EDUCATION

One of the following sequences: 200

- CHEM 10100 Introductory General Chemistry I
- & CHEM 10200 and Introductory General Chemistry II
- CHEM 11100-11200 Comprehensive General Chemistry I-II *
- CHEM 12100 Honors General Chemistry I
- & CHEM 12200 and Honors General Chemistry II

One of the following sequences: 200

- MATH 13100-13200 Elementary Functions and Calculus I-II *
- MATH 15100-15200 Calculus I-II
- MATH 16100-16200 Honors Calculus I-II

Both of the following: 200

- BIOS 20198 Biodiversity
- GEOS 13900 Biological Evolution

Total Units 700

MAJOR

GEOS 13100 & GEOS 13200 Physical Geology
& GEOS 13300 and Earth History

CHEM 11300 or CHEM 12300 Comprehensive General Chemistry III *
Honors General Chemistry III

One of the following sequences: 300

- PHYS 12100-12200-12300 General Physics I-II-III §
- PHYS 13100-13200-13300 Mechanics; Electricity and Magnetism; Waves, Optics, and Heat
- PHYS 14100-14200-14300 Honors Mechanics; Honors Electricity and Magnetism; Honors Waves, Optics, and Heat

One of the following: 100

- MATH 20000 Mathematical Methods for Physical Sciences I
- MATH 20250 Abstract Linear Algebra
- PHYS 22000 Introduction to Mathematical Methods in Physics
- BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced)
- MATH 13300 Elementary Functions and Calculus III *
- MATH 15300 Calculus III
- MATH 16300 Honors Calculus III

Two Computational Sciences courses from List 2 200

Eight electives as follows: 800

Four courses designated GEOS from List 1: Physical and Biological Sciences
Four additional courses from List 1: Physical and Biological Sciences and/or List 2: Computational Sciences, but only up to three courses may be non-GEOS courses from List 1 and only up to two courses may be from List 2.

Total Units 1800

* Credit may be granted by examination.

** Only Environmental Science and Geophysical Sciences majors may use this pairing to satisfy the general education requirement in the biological sciences. Geophysical Sciences majors can take these courses without the Biological Sciences prerequisites (BIOS 20150-20151) unless they pursue a double major in Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151.

† Only one of these electives may be a field course (GEOS 29001, GEOS 29002, GEOS 29005) and only one of these electives may be GEOS 29700 Reading and Research in the Geophysical Sciences.

§ PHYS 13100-13200-13300 or PHYS 14100-14200-14300 are the preferred courses. PHYS 12100-12200-12300 is allowable on a case-by-case basis but may not provide adequate preparation to allow for enrollment in higher level PHYS courses. Additionally, PHYS 12100 has a prerequisite of a year of chemistry. Special petition to the department counselor is required for PHYS 12100-12200-12300 approval.

% Biological Evolution has several cross-listings. Geophysical Science majors must register for it under the GEOS 27300 listing.

**LISTS OF ELECTIVE COURSES 1–2**

**LIST 1: PHYSICAL AND BIOLOGICAL SCIENCES**

**Geophysical Sciences**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21005</td>
<td>Mineral Science</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21100</td>
<td>Introduction to Petrology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21205</td>
<td>Introduction to Seismology, Earthquakes, and Near-Surface Earth Seismicity</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21400</td>
<td>Thermodynamics and Phase Change</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22000</td>
<td>Origin and Evolution of the Solar System</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22040</td>
<td>Formation of Planetary Syst. in our Galaxy: From Dust to Planetesimals</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22050</td>
<td>Formation of Planetary Systems in our Galaxy: From Planetesimals to Planets</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22060</td>
<td>What Makes a Planet Habitable?</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22200</td>
<td>Geochronology</td>
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<tr>
<td>GEOS 22600</td>
<td>Topics in Earth Science: The Accretion of Extraterrestrial Matter Throughout Earth’s History</td>
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<tr>
<td>GEOS 23205</td>
<td>Introductory Glaciology</td>
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<tr>
<td>GEOS 23400</td>
<td>Global Warming: Understanding the Forecast</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 23800</td>
<td>Global Biogeochemical Cycles</td>
<td>100</td>
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<tr>
<td>GEOS 23805</td>
<td>Stable Isotope Biogeochemistry</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 23900</td>
<td>Environmental Chemistry</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24220</td>
<td>Climate Foundations</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24230</td>
<td>Geophysical Fluid Dynamics: Foundations</td>
<td>100</td>
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<tr>
<td>GEOS 24240</td>
<td>Geophysical Fluid Dynamics: Rotation and Stratification</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24250</td>
<td>Geophysical Fluid Dynamics: Understanding the Motions of the Atmosphere and Oceans</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24705</td>
<td>Energy: Science, Technology, and Human Usage</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 25400</td>
<td>Intro to Numerical Techniques for Geophysical Sciences</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 26100</td>
<td>Phylogenetics and the Fossil Record</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 26300</td>
<td>Invertebrate Paleobiology and Evolution</td>
<td>100</td>
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<tr>
<td>GEOS 26600</td>
<td>Geobiology</td>
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<tr>
<td>GEOS 26650</td>
<td>Environmental Microbiology</td>
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<tr>
<td>GEOS 26905</td>
<td>Topics in Conservation Paleobiology</td>
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<tr>
<td>GEOS 28000</td>
<td>Intro To Structural Geology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 28100</td>
<td>Global Tectonics</td>
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</tr>
<tr>
<td>GEOS 28300</td>
<td>Principles of Stratigraphy</td>
<td>100</td>
</tr>
</tbody>
</table>
### Field Courses in Geophysical Sciences

The department sponsors field trips that range in length from one day to several weeks. Shorter field trips typically form part of lecture-based courses and are offered each year. (The trips are open to all students and faculty if space permits.) Longer trips are designed as undergraduate field courses, and one such course may be used as an elective science course for the major. Destinations of field courses have recently included Baja California, Death Valley, Nevada, Salton Trough, Newfoundland, and the Bahamas.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOS 29001</td>
<td>Field Course in Geology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 29002</td>
<td>Field Course in Modern and Ancient Environments</td>
<td>100</td>
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### Astronomy and Astrophysics

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<tr>
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<tbody>
<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars</td>
<td>100</td>
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### Biological Sciences*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOS 20188</td>
<td>Fundamentals of Physiology</td>
<td>100</td>
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<tr>
<td>BIOS 20189</td>
<td>Fundamentals of Developmental Biology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20196</td>
<td>Ecology and Conservation</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20200</td>
<td>Introduction to Biochemistry</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 21208</td>
<td>Fundamentals of Molecular Biology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 22250</td>
<td>Chordates: Evolution and Comparative Anatomy</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23262</td>
<td>Mammalian Evolutionary Biology</td>
<td>100</td>
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<tr>
<td>BIOS 23266</td>
<td>Evolutionary Adaptation</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23289</td>
<td>Marine Ecology</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 23404</td>
<td>Reconstructing the Tree of Life: An Introduction to Phylogenetics</td>
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<tr>
<td>BIOS 23406</td>
<td>Biogeography</td>
<td>100</td>
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<tr>
<td>BIOS 25206</td>
<td>Fundamentals of Bacterial Physiology</td>
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### Semester in Environmental Science/MBL

The following courses are the College designations for the Semester in Environmental Science that is taught at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts. Registration in ENSC 23820 Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory, ENSC 24100 Ecology - Marine Biological Laboratory, and ENSC 29800 Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory, plus one of ENSC 24200 Methods in Microbial Ecology - Marine Biological Laboratory, ENSC 24300 Roles of Animals in Ecosystems # Marine Biological Laboratory, or ENSC 28100 Quantitative Environmental Analyses # Marine Biological Laboratory is required. Admission to the Semester in Environmental Science program is by application, which must be received by the MBL generally in March of the year preceding the start of the semester. Admissions decisions will generally be sent in April. Note that these courses start at the beginning of September, typically four weeks prior to the start of the College’s Autumn Quarter, and are completed by the end of Autumn Quarter. More information on the course content, the application process, and deadlines can be found at college.uchicago.edu/academics/semester-environmental-science-ses. Students participating in the Semester in Environmental Science receive credit for four courses in environmental science.

<table>
<thead>
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<th>Credits</th>
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<tr>
<td>ENSC 23820</td>
<td>Biogeochemical Analysis in Terrestrial and Aquatic Ecosystems # Marine Biological Laboratory</td>
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<tr>
<td>ENSC 24100</td>
<td>Ecology - Marine Biological Laboratory</td>
<td>100</td>
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<tr>
<td>ENSC 24200</td>
<td>Methods in Microbial Ecology - Marine Biological Laboratory</td>
<td>100</td>
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<tr>
<td>ENSC 24300</td>
<td>Roles of Animals in Ecosystems # Marine Biological Laboratory</td>
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<tr>
<td>ENSC 28100</td>
<td>Quantitative Environmental Analyses # Marine Biological Laboratory</td>
<td>100</td>
</tr>
<tr>
<td>ENSC 29800</td>
<td>Independent Undergraduate Research in Environmental Sciences # Marine Biological Laboratory</td>
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</table>

* Excluding courses used to meet the general education requirement for the biological sciences

### Chemistry

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CHEM 20100-20200</td>
<td>Inorganic Chemistry I-II</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 22000-22100-22200</td>
<td>Organic Chemistry I-II-III</td>
<td>300</td>
</tr>
</tbody>
</table>
CHEM 26100-26200-26300  Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics  300
CHEM 26700  Experimental Physical Chemistry †  100

†  requires CHEM 26100

Physics
PHYS 18500  Intermediate Mechanics  100
PHYS 19700  Statistical and Thermal Physics  100
PHYS 22500  Intermediate Electricity and Magnetism I  100
PHYS 22700  Intermediate Electricity and Magnetism II  100
PHYS 22600  Electronics  100

List 2: Computational Sciences

Mathematics
MATH 20000-20100  Mathematical Methods for Physical Sciences I-II §  200
or STAT 24300  Numerical Linear Algebra  100
MATH 15910  Introduction to Proofs in Analysis  100
MATH 20250  Abstract Linear Algebra  100
MATH 20300  Analysis in Rn I  100
MATH 20400  Analysis in Rn II  100
MATH 20500  Analysis in Rn III  100
MATH 21100  Basic Numerical Analysis  100
MATH 27000  Basic Complex Variables  100
MATH 27300  Basic Theory of Ordinary Differential Equations  100
MATH 27500  Basic Theory of Partial Differential Equations  100
MATH 38300  Numerical Solutions to Partial Differential Equations  100

Biological Sciences
BIOS 20152  Introduction to Quantitative Modeling in Biology (Advanced)  100

Physiology
PHYS 22000  Introduction to Mathematical Methods in Physics §§  100
PHYS 22100  Mathematical Methods in Physics §§§  100

Statistics
Any course in statistics at the 22000 level or higher. Some recommendations follow:
STAT 22000  Statistical Methods and Applications * ‡‡  100
or STAT 23400  Statistical Models and Methods  100
STAT 22400  Applied Regression Analysis  100
STAT 22600  Analysis of Categorical Data  100
STAT 24400-24500  Statistical Theory and Methods I-II ‡‡  200
STAT 26100  Time Dependent Data  100

Computing
GEOS 25400  Intro to Numerical Techniques for Geophysical Sciences  100
CMSC 12100-12200-12300  Computer Science with Applications I-II-III  300
CMSC 23710  Scientific Visualization  100
CMSC 28510  Introduction to Scientific Computing  100
CMSC 34200  Numerical Hydrodynamics  100

*  AP credit for STAT 22000 does not count toward the major requirements. Students with AP credit for STAT 22000 should plan to take at least one other course from List 2 (BA program) or two other courses from List 2 (BS program).
§  Recommended prerequisite is MATH 19620 or MATH 15300 or MATH 16300
§§  Would generally substitute for MATH 20000-20100
§§§  Recommended in addition to MATH 20000-20100 for advanced students—covers partial differential equations
‡‡  STAT 23400 has a higher programming component than STAT 22000
Recommended for advanced students. Must be taken as a sequence to be credited. STAT 24400-24500 have no prerequisite but it is possible to take both STAT 23400 and STAT 24400-24500.

Grading

Students majoring in geophysical sciences must receive quality grades in all courses taken to meet requirements in the major.

Honors

The BA or BS degree with honors is awarded to students who meet the following requirements: (1) a GPA of 3.25 or higher in the major and of 3.0 or higher overall; (2) completion of a paper based on original research, supervised and approved by a faculty member in geophysical sciences; (3) an oral presentation of the thesis research. All theses will generally be due in the sixth week of the quarter in which the student will graduate (fifth week in Summer Quarter), and final manuscripts and oral presentations in the eighth week (seventh week in Summer Quarter).

Students are strongly encouraged to reach out to potential faculty supervisors no later than their third year, since theses generally arise out of research projects already begun with faculty members. When a thesis topic is determined, students should notify the undergraduate adviser of their intent to complete a thesis and confirm their eligibility. GEOS 29700 Reading and Research in the Geophysical Sciences can be devoted to the preparation of the required paper; however, students using this course to meet a requirement in the major must take it for a quality grade.

Students who wish to submit a single paper to meet the honors requirement in geophysical sciences and the BA paper requirement in another major should discuss their proposals with the undergraduate advisers from both programs no later than the end of third year. Certain requirements must be met. A consent form, to be signed by the undergraduate advisers, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Sample BS Programs

Each student will design an individual plan of course work, choosing from a wide range of selections that take advantage of rich offerings from a variety of subdisciplines. The sample programs that appear below are merely for the purpose of illustration; many other variations would be possible. NOTE: Courses that meet general education requirements and are required for the major are not listed.

Environmental Geochemistry

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHEM 26200-26300</td>
<td>Thermodynamics; Chemical Kinetics and Dynamics</td>
<td>200</td>
</tr>
<tr>
<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 23800</td>
<td>Global Biogeochemical Cycles</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 23805</td>
<td>Stable Isotope Biogeochemistry</td>
<td>100</td>
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<tr>
<td>GEOS 23900</td>
<td>Environmental Chemistry</td>
<td>100</td>
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<tr>
<td>GEOS 26650</td>
<td>Environmental Microbiology</td>
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<tr>
<td>GEOS 28300</td>
<td>Principles of Stratigraphy</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 25400</td>
<td>Intro to Numerical Techniques for Geophysical Sciences</td>
<td>100</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
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Geochemistry

<table>
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<tr>
<td>CHEM 26100-26200-26300</td>
<td>Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics</td>
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<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
<td>100</td>
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<tr>
<td>GEOS 21100</td>
<td>Introduction to Petrology</td>
<td>100</td>
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<tr>
<td>GEOS 22200</td>
<td>Geochronology</td>
<td>100</td>
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<td>GEOS 23800</td>
<td>Global Biogeochemical Cycles</td>
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<td>Environmental Chemistry</td>
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<tr>
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<td>Mathematical Methods for Physical Sciences I-II</td>
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Geophysics

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<tr>
<td>CMSC 12100-12200-12300</td>
<td>Computer Science with Applications I-II-III</td>
<td>300</td>
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<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21100</td>
<td>Introduction to Petrology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21205</td>
<td>Introduction to Seismology, Earthquakes, and Near-Surface Earth Seismicity</td>
<td>100</td>
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<tr>
<td>GEOS 28100</td>
<td>Global Tectonics</td>
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<td>Course Code</td>
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<td>Credits</td>
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<tr>
<td>PHYS 18500</td>
<td>Intermediate Mechanics</td>
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<td>Mathematical Methods in Physics</td>
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**Paleontology**

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<tr>
<td>BIOS 23289</td>
<td>Marine Ecology</td>
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<tr>
<td>BIOS 23404</td>
<td>Reconstructing the Tree of Life: An Introduction to Phylogenetics</td>
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<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
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<tr>
<td>GEOS 26300</td>
<td>Invertebrate Paleobiology and Evolution</td>
<td>100</td>
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<tr>
<td>GEOS 26600</td>
<td>Geobiology</td>
<td>100</td>
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<tr>
<td>GEOS 28000</td>
<td>Intro To Structural Geology</td>
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<td>GEOS 28300</td>
<td>Principles of Stratigraphy</td>
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<tr>
<td>STAT 22400</td>
<td>Applied Regression Analysis</td>
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<td>STAT 23400</td>
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**Physics of Climate**

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<tr>
<td>GEOS 22060</td>
<td>What Makes a Planet Habitable?</td>
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<tr>
<td>GEOS 23800</td>
<td>Global Biogeochemical Cycles</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24220</td>
<td>Climate Foundations</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 24230</td>
<td>Geophysical Fluid Dynamics: Foundations</td>
<td>100</td>
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<tr>
<td>GEOS 24240</td>
<td>Geophysical Fluid Dynamics: Rotation and Stratification</td>
<td>100</td>
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<tr>
<td>GEOS 24250</td>
<td>Geophysical Fluid Dynamics: Understanding the Motions of the Atmosphere and Oceans</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20000-20100</td>
<td>Mathematical Methods for Physical Sciences I-II</td>
<td>200</td>
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<tr>
<td>GEOS 25400</td>
<td>Intro to Numerical Techniques for Geophysical Sciences</td>
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<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
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**Planetary Science**

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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
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</tr>
<tr>
<td>GEOS 22000</td>
<td>Origin and Evolution of the Solar System</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 22060</td>
<td>What Makes a Planet Habitable?</td>
<td>100</td>
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<tr>
<td>GEOS 22200</td>
<td>Geochronology</td>
<td>100</td>
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<tr>
<td>GEOS 24220</td>
<td>Climate Foundations</td>
<td>100</td>
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<tr>
<td>GEOS 25400</td>
<td>Intro to Numerical Techniques for Geophysical Sciences</td>
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<tr>
<td>GEOS 28600</td>
<td>Earth and Planetary Surface Processes</td>
<td>100</td>
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<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars</td>
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<tr>
<td>PHYS 18500</td>
<td>Intermediate Mechanics</td>
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<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
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**Structure/Tectonics**

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<th>Course Title</th>
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<tr>
<td>GEOS 21000</td>
<td>Introduction to Mineralogy</td>
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</tr>
<tr>
<td>GEOS 21100</td>
<td>Introduction to Petrology</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 21205</td>
<td>Introduction to Seismology, Earthquakes, and Near-Surface Earth Seismicity</td>
<td>100</td>
</tr>
<tr>
<td>GEOS 28000</td>
<td>Intro To Structural Geology</td>
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<td>GEOS 28100</td>
<td>Global Tectonics</td>
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<tr>
<td>MATH 20000</td>
<td>Mathematical Methods for Physical Sciences I</td>
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<tr>
<td>PHYS 18500</td>
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<tr>
<td>PHYS 22500</td>
<td>Intermediate Electricity and Magnetism I</td>
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</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
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</tr>
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</table>
GEOPHYSICAL SCIENCES COURSES

GEOS 13100. Physical Geology. 100 Units.
This course introduces plate tectonics; the geologic cycle; and the internal and surface processes that make minerals and rocks, as well as that shape the scenery. Topics include: planetary geophysics; evidence leading to the theory of plate tectonics; natural hazards including earthquakes and volcanoes; economic geology including energy resources, ores, and mineral resources; crustal deformation and mountain building; and surface processes (erosion, groundwater). Laboratory exercises introduce identifying features of rocks and minerals, and interpreting geological maps. Biweekly writing assignments explore topics in geology that are supplemental to the lecture material. (L)
Instructor(s): D. Rowley Terms Offered: Autumn

GEOS 13200. Earth History. 100 Units.
This course covers principles of historical inference in Earth science; the physical, chemical, and biological data that are used to reconstruct Earth history; and the geographic, biotic, and environmental development of Earth. Weekly labs focus on observation and interpretation of sedimentary rocks and fossil assemblages in hand samples. A required one-day field trip introduces students to observation and interpretation of sedimentary rocks at the outcrop scale. (L)
Instructor(s): M. Foote Terms Offered: Winter
Prerequisite(s): GEOS 13100

GEOS 13300. The Atmosphere. 100 Units.
This course introduces the physics, chemistry, and phenomenology of the Earth's atmosphere, with an emphasis on the fundamental science that underlies atmospheric behavior and climate. Topics include (1) atmospheric composition, evolution, and structure; (2) solar and terrestrial radiation in the atmospheric energy balance; (3) the role of water in determining atmospheric structure; and (4) wind systems, including the global circulation, and weather systems.
Instructor(s): D. Abbot Terms Offered: Spring
Prerequisite(s): MATH 13100-MATH 13200
Equivalent Course(s): ENSC 13300, ENST 13300

GEOS 13400. Global Warming: Understanding the Forecast. 100 Units.
This course presents the science behind the forecast of global warming to enable the student to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, including comparisons with Venus and Mars; an overview of the carbon cycle in its role as a global thermostat; predictions and reliability of climate model forecasts of the greenhouse world. This course is part of the College Course Cluster program, Climate Change, Culture, and Society. (L)
Instructor(s): D. MacAyeal, D. Abbot Terms Offered: Autumn Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): PHSC 13400, ENSC 13400, ENST 13200

GEOS 13500. Natural Disasters: Science, Statistics, and Minimizing Risk. 100 Units.
This course investigates the mechanisms behind hurricanes, floods, earthquakes, and other natural hazards, and how to minimize the risks they can pose. First, we will apply the fundamental principles of physics, chemistry, and biology to understand the earth's climate, geology, and oceans, and how their conditions can become hazardous. Then we will apply this knowledge through physical experiments in the lab, 2D and 3D plots of data fields, and computer-assisted mathematical analysis. We will also explore how to use statistics to assess risk when we analyze data collected about hazards. By the end of the course, students will understand the nature of natural hazards as well as basic strategies for tackling complex scientific problems. Taught by two leading professors in the field, this will be an ideal course for students considering a STEM career, especially those wanting to apply hard science to real-world problems.

GEOS 13900. Biological Evolution. 100 Units.
This course is an introduction to evolutionary processes and patterns in present-day organisms and in the fossil record and how they are shaped by biological and physical forces. Topics emphasize evolutionary principles. They include DNA and the genetic code, the genetics of populations, the origins of species, and evolution above the species level. We also discuss major events in the history of life, such as the origin of complex cells, invasion of land, and mass extinction. This course is part of the College Course Cluster program: Climate Change, Culture and Society. (L)
Instructor(s): D. Jablonski Terms Offered: Winter
Prerequisite(s): BIOS 10130; No Biological Sciences majors except by petition to the BSCD Senior Advisers.
Equivalent Course(s): BIOS 13123

GEOS 21000. Introduction to Mineralogy. 100 Units.
This course covers structure, chemical composition, stability, and occurrence of major rock-forming minerals. Labs concentrate on mineral identification with the optical microscope. (L)
Instructor(s): A. Campbell Terms Offered: Winter
Prerequisite(s): CHEM 11100-11200-11300 or equivalent
Equivalent Course(s): GEOS 31000
GEOS 21005. Mineral Science. 100 Units.
This course examines the relationship between the structure of minerals, their chemistry, and their physical properties. Topics include crystallography, defect properties, phase transitions, and analytical tools, followed by detailed study of specific mineral groups.
Instructor(s): A. Campbell Terms Offered: Winter. not offered 2017-2018
Prerequisite(s): GEOS 21000 or consent of instructor.
Equivalent Course(s): GEOS 31005

GEOS 21100. Introduction to Petrology. 100 Units.
Students in this course learn how to interpret observable geological associations, structures, textures, and mineralogical and chemical compositions of rocks so as to develop concepts of how they form and evolve. Our theme is the origin of granitic continental crust on the only planet known to have oceans and life. Igneous, sedimentary, and metamorphic rocks; ores; and waste disposal sites are reviewed. (L)
Instructor(s): N. Dauphas Terms Offered: Spring
Prerequisite(s): GEOS 21000

GEOS 21200. Physics of the Earth. 100 Units.
This course considers geophysical evidence bearing on the internal makeup and dynamical behavior of the Earth, including seismology (i.e., properties of elastic waves and their interpretation, and internal structure of the Earth); mechanics of rock deformation (i.e., elastic properties, creep and flow of rocks, faulting, earthquakes); gravity (i.e., geoid, isostasy); geomagnetism (i.e., magnetic properties of rocks and history, origin of the magnetic field); heat flow (i.e., temperature within the Earth, sources of heat, thermal history of the Earth); and plate tectonics and the maintenance of plate motions. (L)
Instructor(s): D. Heinz Terms Offered: Spring
Prerequisite(s): Prior calculus and college-level physics courses, or consent of instructor.
Equivalent Course(s): GEOS 31200

GEOS 21205. Introduction to Seismology, Earthquakes, and Near-Surface Earth Seismicity. 100 Units.
This course introduces the mechanics and phenomenology of elastic waves in the Earth and in the fluids near the Earth's surface (e.g., S and P waves in the solid earth, acoustic waves in the ocean and atmosphere). Topics include stress and strain, constitutive equations, elasticity, seismic waves, acoustic waves, theory of refraction/ reflection, surface waves, dispersion, and normal modes of the Earth. Phenomenology addressed includes exploration geophysics (refraction/reflection seismology), earthquakes and earthquake source characterization, seismograms as signals, seismometers and seismological networks, and digital seismogram analysis.
Instructor(s): D. Heinz Terms Offered: Winter
Prerequisite(s): MATH 20000-20100-20200 and college-level chemistry and calculus, or consent of instructor.
Equivalent Course(s): GEOS 31205

GEOS 21400. Thermodynamics and Phase Change. 100 Units.
This course develops the mathematical structure of thermodynamics with emphasis on relations between thermodynamic variables and equations of state. These concepts are then applied to homogeneous and heterogeneous phase equilibrium, culminating in the construction of representative binary and ternary phase diagrams of petrological significance.
Instructor(s): A. Campbell Terms Offered: Spring
Prerequisite(s): MATH 20000-20100-20200 and college-level chemistry and calculus, or consent of instructor.
Equivalent Course(s): GEOS 31400

GEOS 22040. Formation of Planetary Syst. in our Galaxy: From Dust to Planetesimals. 100 Units.
This course examines the physical and chemical processes that operate during the earliest stages of planet formation when dust in a protoplanetary disk aggregates into bodies 1 to 10 km in size. Topics include the physical and chemical evolution of protoplanetary disks, radial transport of dust particles, transient heating events, and the formation of planetesimals. We discuss the evidence of these processes found in meteorites and observed in disks around young stars. Chemical and physical models of dust evolution are introduced, including an overview of basic numerical modeling techniques.
Instructor(s): F. Ciesla Terms Offered: Not offered 2017-2018
Prerequisite(s): One year of college-level calculus and physics or chemistry, or consent of instructor.
Note(s): This course is offered in alternate years.
Equivalent Course(s): GEOS 32040

GEOS 22050. Formation of Planetary Systems in our Galaxy: From Planetesimals to Planets. 100 Units.
This course explores the stage of planet formation during which 1 to 10 km planetesimals accrete to form planets. Topics include heating of planetesimals, models of giant planet formation, the delivery of water to terrestrial planets, and the impact that stellar mass and external environment have on planet formation. We also discuss what processes determine the properties (mass, composition, and orbital parameters) of a planet and its potential for habitability. Basic modeling techniques and current research papers in peer-reviewed journals are also discussed.
Instructor(s): F. Ciesla Terms Offered: Not offered 2017-2018
Prerequisite(s): Consent of instructor
Equivalent Course(s): GEOS 32050
GEOS 22060. What Makes a Planet Habitable? 100 Units.  
This course explores the factors that determine how habitable planets form and evolve. We will discuss a range of topics, from the accretion and loss of atmospheres and oceans, to the long-term carbon cycle, climate dynamics, and the conditions that sustain liquid water on a planet's surface over timescales relevant to the origin and evolution of life. Students will be responsible for reading and discussing papers in peer-reviewed journals each meeting and for periodically preparing presentations and leading the discussion. This course is part of the College Course Cluster program: Climate Change, Culture and Society. 
Instructor(s): Edwin Kite Terms Offered: Winter 
Equivalent Course(s): GEOS 32060, ASTR 49900

GEOS 22200. Geochronology. 100 Units.  
This course covers the duration of planetary differentiation and the age of the Earth (i.e., extinct and extant chronometers); timescales for building a habitable planet (i.e., the late heavy bombardment, the origin of the atmosphere, the emergence of life, and continent extraction); dating mountains (i.e., absolute ages, exposure ages, and thermochronology); the climate record (i.e., dating layers in sediments and ice cores); and dating recent artifacts (e.g., the Shroud of Turin). Prerequisite(s): Background in college-level geology, physics, and mathematics. Equivalent Course(s): GEOS 32200 
Instructor(s): N. Dauphas Terms Offered: Autumn 
Prerequisite(s): Background in college-level geology, physics, and mathematics. 
Equivalent Course(s): GEOS 32200

GEOS 22600. Topics in Earth Science: The Accretion of Extraterrestrial Matter Throughout Earth’s History. 100 Units.  
This course will provide a discussion of the nature and variability of extraterrestrial (ET) matter accreted throughout Earth’s history that is preserved in the geological record. This record is a rich archive of ET matter whose study not only provides unique insight into the origin and evolution of different Solar System objects but also enables a better understanding of delivery mechanisms. The course will highlight periods of dramatically increased accretion rates and important impact events. This includes events such as the recent Chelyabinsk and Tunguska air blasts, the “global killer” Chicxulub impact 66 Ma ago, the Ordovician meteorite showers, all the way to cataclysmic events that occurred on early Earth. The course will also provide an introduction to related key techniques such as classification with material from the meteorite collection, the identification of impact craters, and the use of tracers of ET material in the geological record. 
Instructor(s): P. Heck Terms Offered: Autumn 
Prerequisite(s): Background in college-level geology and mineralogy or consent of instructor 
Equivalent Course(s): GEOS 32600

GEOS 23205. Introductory Glaciology. 100 Units.  
The fundamentals of glacier and ice-sheet dynamics and phenomenology will be covered in this introductory course (snow and sea ice will be excluded from this course, however may be taken up in the future). Emphasis will be placed on developing the foundation of continuum mechanics and viscous fluid flow as a means of developing the basic equations of glacier deformation, ice-sheet and -shelf flow, basal processes, glacier hydrology, and unstable modes of flow. This course is intended for advanced undergraduate students in physics, math, geophysical sciences, and related fields as well as graduate students considering research in glaciology and climate dynamics. This course is part of the College Course Cluster program: Climate Change, Culture, and Society. 
Instructor(s): D. MacAyeal Terms Offered: Winter 
Prerequisite(s): Knowledge of vector calculus, linear algebra, and computer programming. 
Equivalent Course(s): GEOS 33205

GEOS 23800. Global Biogeochemical Cycles. 100 Units.  
This course covers the geochemistry of the surface of the Earth, focusing on biological and geological processes that shape the distributions of chemical species in the atmosphere, oceans, and terrestrial habitats. Budgets and cycles of carbon, nitrogen, oxygen, phosphorous, and sulfur are discussed, as well as chemical fundamentals of metabolism, weathering, acid-base and dissolution equilibria, and isotopic fractionation. The course examines the central role that life plays in maintaining the chemical disequilibria that characterize Earth’s surface environments. The course also explores biogeochemical cycles change (or resist change) over time, as well as the relationships between geochemistry, biological (including human) activity, and Earth’s climate. 
Instructor(s): J. Waldbauer Terms Offered: Winter 
Prerequisite(s): CHEM 11100-11200 or consent of instructor 
Equivalent Course(s): GEOS 33800, ENSC 23800
GEOS 23900. Environmental Chemistry. 100 Units.
The focus of this course is the fundamental science underlying issues of local and regional scale pollution. In particular, the lifetimes of important pollutants in the air, water, and soils are examined by considering the roles played by photochemistry, surface chemistry, biological processes, and dispersal into the surrounding environment. Specific topics include urban air quality, water quality, long-lived organic toxins, heavy metals, and indoor air pollution. Control measures are also considered. This course is part of the College Course Cluster program: Climate Change, Culture, and Society.
Instructor(s): A. Colman, D. Archer Terms Offered: Autumn
Prerequisite(s): CHEM 11101-11201 or equivalent, and prior calculus course
Equivalent Course(s): ENST 23900, ENSC 23900, GEOS 33900

GEOS 24200. Fundamentals of Geophysical Fluid Dynamics. 100 Units.
This course is an introduction to geophysical fluid dynamics for upper-level undergraduates and starting graduate students. The topics covered will be the equations of motion, the effects of rotation and stratification, shallow water systems and isentropic coordinates, vorticity and potential vorticity, and simplified equations for the ocean and atmosphere.
Instructor(s): D. Abbot Terms Offered: Winter
Prerequisite(s): Knowledge of vector calculus, linear algebra, or consent of instructor
Equivalent Course(s): GEOS 34200

GEOS 24220. Climate Foundations. 100 Units.
This course introduces the basic physics governing the climate of planets, the Earth in particular but with some consideration of other planets. Topics include atmospheric thermodynamics of wet and dry atmospheres, the hydrological cycle, blackbody radiation, molecular absorption in the atmosphere, the basic principles of radiation balance, and diurnal and seasonal cycles. Students solve problems of increasing complexity, moving from pencil-and-paper problems to programming exercises, to determine surface and atmospheric temperatures and how they evolve. An introduction to scientific programming is provided, but the fluid dynamics of planetary flows is not covered. This course is part of the College Course Cluster program: Climate Change, Culture and Society. (L)
Instructor(s): E. Moyer Terms Offered: Autumn
Prerequisite(s): Prior physics course (preferably PHYS 13300 and 14300) and knowledge of calculus required; prior geophysical sciences course not required.
Note(s): Prior programming experience helpful but not required.
Equivalent Course(s): GEOS 34220

GEOS 24230. Geophysical Fluid Dynamics: Foundations. 100 Units.
This course is for incoming graduate students in physical sciences intending to take further courses in geophysical fluid dynamics, fluid dynamics, condensed matter physics, and other areas requiring this fundamental skill set. It sets the stage for follow-on courses that present the detail of the behavior of fluids and continuums in geophysical, physical, chemical, and other settings. The material may be a student's first contact with continuum mechanics or a remedial or review for students who have previously taken similar courses. Topics include description of material properties in a continuum, including displacement, velocity, and strain rate; scalar, vector, and tensor properties of continuums, strain, strain rate, and stress; derivations and understanding of mass, momentum, and energy conservation principles in a continuum; applications of conservation principles to simple rheological idealizations, including ideal fluids and potential flow, viscous fluids and Navier-Stokes flow, elasticity and deformation; introductory asymptotic analysis, Reynolds number; heat transfer by conduction and convection, convective instability, Rayleigh number; fluids in gravitational fields, stratification, buoyancy; elliptic, parabolic, and hyperbolic partial differential equations, typical properties of each. Prerequisite(s): Vector calculus, linear algebra, advanced classical mechanics, basic knowledge of computing. Undergrads who take this course should intend to complete a second fluid-dynamics course in Geophysical Sciences.
Instructor(s): D. MacAyeal Terms Offered: Autumn
Prerequisite(s): Vector calculus, linear algebra, advanced classical mechanics, basic knowledge of computing.
Undergrads who take this course should intend to complete a second fluid-dynamics course in Geophysical Sciences.
Equivalent Course(s): GEOS 34230

GEOS 24240. Geophysical Fluid Dynamics: Rotation and Stratification. 100 Units.
This course is an introduction to geophysical fluid dynamics for upper-level undergraduates and starting graduate students. The topics covered will be the equations of motion, the effects of rotation and stratification, shallow water systems and isentropic coordinates, vorticity and potential vorticity, and simplified equations for the ocean and atmosphere.
Instructor(s): T. Shaw Terms Offered: Winter
Prerequisite(s): PQ: GEOS 24230 or equivalent; Knowledge of mechanics (PHYS 13100 or equivalent), thermodynamics (PHYS 19700 or equivalent), vector calculus and linear algebra (MATH 20000-20100-20200 or equivalent)
Equivalent Course(s): GEOS 34240
GEOS 24250. Geophysical Fluid Dynamics: Understanding the Motions of the Atmosphere and Oceans. 100 Units.
This course is part of the atmospheres and oceans sequence (GEOS 24220, 24230, 24240, 24250) and is expected to follow Geophysical Fluid Dynamics: Rotation and Stratification (GEOS 24240). The course demonstrates how the fundamental principles of geophysical fluid dynamics are manifested in the large-scale circulation of the atmosphere and oceans and their laboratory analogs. Topics include: balance of forces and the observed structure of the atmospheric and oceanic circulations, statistical description of the spatially and temporally varying circulation, theory of Hadley circulation, waves in the atmosphere and oceans, baroclinic instability, wind-driven ocean circulation.
Instructor(s): N. Nakamura Terms Offered: Spring
Prerequisite(s): GEOS 24230 and 24240, or consent of the instructor. Knowledge of vector calculus, linear algebra, and ordinary differential equations is assumed.
Equivalent Course(s): GEOS 34250

GEOS 24260. Radiation. 100 Units.
Equivalent Course(s): GEOS 34260

GEOS 24600. Laboratory Course on Weather and Climate. 100 Units.
Working in groups, students gain hands-on experience in designing, implementing, and analyzing experiments concerning the principles of rotating fluids that underlie weather and climate.
Instructor(s): N. Nakamura Terms Offered: Spring
Equivalent Course(s): GEOS 34600

GEOS 24705. Energy: Science, Technology, and Human Usage. 100 Units.
This course covers the technologies by which humans appropriate energy for industrial and societal use, from steam turbines to internal combustion engines to photovoltaics. We also discuss the physics and economics of the resulting human energy system: fuel sources and relationship to energy flows in the Earth system; and modeling and simulation of energy production and use. Our goal is to provide a technical foundation for students interested in careers in the energy industry or in energy policy. Field trips required to major energy converters (e.g., coal-fired and nuclear power plants, oil refinery, biogas digester) and users (e.g., steel, fertilizer production). This course is part of the College Course Cluster program: Climate Change, Culture and Society.
Instructor(s): E. Moyer Terms Offered: Spring
Prerequisite(s): Knowledge of physics or consent of instructor
Equivalent Course(s): ENST 24705, GEOS 34705, ENSC 21100

GEOS 24750. Earth and Human System Science: Food, Energy, and Water Cycles. 100 Units.
Earth system science should now explicitly include human activities, since humans both affect many major biogeochemical cycles on Earth, and human societies are dependent on those cycles. One third of the Earth’s surface is now used for production of food for humans, and waste product of human energy use affects the Earth’s radiative balance. This course provides a framework for understanding humanity as a component of Earth system science. The course covers the Earth’s energy flows and water and carbon cycles, their interactions, and the role that humans play in modifying them. Both agriculture and energy technologies can be seen as appropriation of natural energy flows, and we cover the history over which humans have become a global force. The course merges geophysical and biological sciences and engineering, and includes lab sessions and field trips to agriculture, water management, and energy facilities to promote intuition. One year of university-level science is recommended.
Instructor(s): E. Moyer Terms Offered: Autumn
Prerequisite(s): Familiarity with physics and biology at least at high school level

GEOS 25400. Intro to Numerical Techniques for Geophysical Sciences. 100 Units.
This class provides an introduction to different types of numerical techniques used in developing models used in geophysical science research. Topics will include how to interpolate and extrapolate functions, develop functional fits to data, integrate a function, or solve partial differential equations. Students are expected to have some familiarity with computers and programming-programming methods will not be discussed in detail. While techniques will be the focus of the class, we will also discuss the planning needed in developing a model as well as the limitations inherent in such models.
Equivalent Course(s): GEOS 35400
GEOS 26100. Phylogenetics and the Fossil Record. 100 Units.
Phylogenies are branching diagrams that reflect evolutionary relationships. In addition to providing information on the history of life, phylogenies are fundamental to modern methods for studying macroevolutionary and macroecological pattern and process. In the biological sciences, phylogenies are most often inferred from genetic data. In paleobiology, phylogenies can only be inferred from the fossilized remains of morphological structures, and collecting and analyzing morphological data present a different set of challenges. In this course, students will study both traditional and state-of-the-art approaches to inferring phylogenies in the fossil record, from data collection to interpretation. Lectures will explore the statistical underpinnings of phylogenetic methods, as well as their practical implementation in commonly used software. Topics will include: identifying and coding morphological characters, models of morphological evolution, parsimony, maximum likelihood, and bayesian methods, supertree approaches, and integrating time into phylogenetic inference. Fifty percent of the final assessment will come from a research paper due at the end of the quarter.
Instructor(s): G. Slater Terms Offered: Autumn
Prerequisite(s): BIOS 20197 or equivalent.
Equivalent Course(s): GEOS 36100

GEOS 26300. Invertebrate Paleobiology and Evolution. 100 Units.
This course provides a detailed overview of the morphology, paleobiology, evolutionary history, and practical uses of the invertebrate and microfossil groups commonly found in the fossil record. Emphasis is placed on understanding key anatomical and ecological innovations within each group and interactions among groups responsible for producing the observed changes in diversity, dominance, and ecological community structure through evolutionary time. Labs supplement lecture material with specimen-based and practical application sections. An optional field trip offers experience in the collection of specimens and raw paleontological data. Several "Hot Topics" lectures introduce important, exciting, and often controversial aspects of current paleontological research linked to particular invertebrate groups. (L)
Instructor(s): M. Webster Terms Offered: Autumn
Prerequisite(s): GEOS 13100 and 13200, or equivalent. Students majoring in Biological Sciences only; Completion of the general education requirement in the Biological Sciences, or consent of instructor.
Equivalent Course(s): GEOS 36300, BIOS 23261, EVOL 32400

GEOS 26600. Geobiology. 100 Units.
Geobiology seeks to elucidate the interactions between life and its environments that have shaped the coevolution of the Earth and the biosphere. The course will explore the ways in which biological processes affect the environment and how the evolutionary trajectories of organisms have in turn been influenced by environmental change. In order to reconstruct the history of these processes, we will examine the imprints they leave on both the rock record and on the genomic makeup of living organisms. The metabolism and evolution of microorganisms, and the biogeochemistry they drive, will be a major emphasis.
Instructor(s): M. Coleman, J. Waldbauer
Prerequisite(s): GEOS 13100-13200-13300 or college-level cell & molecular biology
Equivalent Course(s): ENSC 24000, GEOS 36600

GEOS 26650. Environmental Microbiology. 100 Units.
The objective of this course is to understand how microorganisms alter the geochemistry of their environment. The course will cover fundamental principles of microbial growth, metabolism, genetics, diversity, and ecology, as well as methods used to study microbial communities and activities. It will emphasize microbial roles in elemental cycling, bioremediation, climate, and ecosystem health in a variety of environments including aquatic, soil, sediment, and engineered systems.
Instructor(s): M. Coleman Terms Offered: Autumn
Prerequisite(s): CHEM 11100-11200 and BIOS 20186 or BIOS 20197 or BIOS 20198
Equivalent Course(s): GEOS 36650, ENSC 24500

GEOS 26905. Topics in Conservation Paleobiology. 100 Units.
Paleontological data from very young sedimentary records, including skeletal 'death assemblages' actively accumulating on modern land surfaces and seaboards, provide unique information on the status of present-day populations, communities, and biomes and their responses to natural and anthropogenic stress over the last few decades to millennia. This course on the emerging discipline of 'conservation paleobiology' uses weekly seminars and individual research projects to introduce how paleontologic methods, applied to modern samples, can address critical issues in the conservation and restoration of biodiversity and natural environments, including such basic questions as 'has a system changed, and if so how and when relative to suspected stressors?'. The course will include hands-on experience, either in the field or with already-collected marine benthic samples, to assess societally relevant ecological change in modern systems over time-frames beyond the reach of direct observation. Enrollment limited.
Instructor(s): S. Kidwell
Equivalent Course(s): EVOL 36905, GEOS 36905
GEOS 27100. Biological Evolution and the History of Life. 100 Units.
This course is an overview of evolutionary processes and patterns in present-day organisms and in the fossil record and how they are shaped by biological and physical forces. Topics emphasize evolutionary principles. They include DNA and the genetic code, the genetics of populations, the origins of species, and evolution above the species level. We also discuss major events in the history of life, such as the origin of complex cells, invasion of land, and mass extinctions. Aimed at GEOS and ENSC majors, this course differs from GEOS 13900 in requiring a term paper, topic chosen from a list provided by the instructor (L).
Instructor(s): D. Jablonski Terms Offered: Winter
Prerequisite(s): BIOS 10130; No Biological Sciences majors except by petition to the BSCD Senior Advisers.

GEOS 28000. Intro To Structural Geology. 100 Units.
This course explores the deformation of the Earth materials primarily as observed in the crust. We emphasize stress and strain and their relationship to incremental and finite deformation in crustal rocks, as well as techniques for inferring paleostress and strain in deformed crustal rocks. We also look at mesoscale to macroscale structures and basic techniques of field geology in deformed regions.
Instructor(s): D. Rowley Terms Offered: Winter
Prerequisite(s): GEOS 13100
Note(s): This course is offered in alternate years.
Equivalent Course(s): GEOS 38000

GEOS 28100. Global Tectonics. 100 Units.
This course reviews the spatial and temporal development of tectonic and plate tectonic activity of the globe. We focus on the style of activity at compressive, extensional, and shear margins, as well as on the types of basin evolution associated with each. (L)
Instructor(s): D. Rowley Terms Offered: Autumn
Prerequisite(s): GEOS 13100 or consent of instructor
Note(s): This course is offered in alternate years.
Equivalent Course(s): GEOS 38100

GEOS 28300. Principles of Stratigraphy. 100 Units.
This course introduces principles and methods of stratigraphy. Topics include facies analysis, physical and biostratigraphic correlation, and development and calibration of the geologic time scale. We also discuss controversies concerning the completeness of the stratigraphic record; origin of sedimentary cycles; and interactions between global sea level, tectonics, and sediment supply. (L)
Instructor(s): S. Kidwell Terms Offered: Autumn
Prerequisite(s): GEOS 13100-13200 or equivalent required; GEOS 23500 and/or 28200 recommended
Note(s): This course is offered in alternate years.
Equivalent Course(s): GEOS 38300

GEOS 28600. Earth and Planetary Surface Processes. 100 Units.
The focus of this course is to examine surface and lithospheric processes on planets and dwarf planets. Emphasis is placed on constraints that can be obtained from reconnaissance spacecraft (orbiter or flyby). The course will cover impact cratering, strength of the lithosphere, volcanism, fluvial and aeolian sediment transport, and landscape evolution.
Instructor(s): E. Kite Terms Offered: Autumn

GEOS 29001. Field Course in Geology. 100 Units.
Students in this course visit classic locations to examine a wide variety of geological environments and processes, including active tectonics, ancient and modern sedimentary environments, and geomorphology.
Prerequisite(s): GEOS 13100-13200 and consent of instructor
Note(s): Interested students should contact the departmental counselor.
Equivalent Course(s): GEOS 39001

GEOS 29002. Field Course in Modern and Ancient Environments. 100 Units.
This course uses weekly seminars during Winter Quarter to prepare for a one-week field trip over spring break, where students acquire experience with sedimentary rocks and the modern processes responsible for them. Destinations vary; past trips have examined tropical carbonate systems of Jamaica and the Bahamas and subtropical coastal Gulf of California. We usually consider biological, as well as physical, processes of sediment production, dispersal, accumulation, and post-depositional modification.
Instructor(s): S. Kidwell, M. LaBarbera Terms Offered: Winter
Note(s): Organizational meeting and deposit usually required in Autumn Quarter; interested students should contact an instructor in advance.
Equivalent Course(s): ENSC 29002, GEOS 39002

GEOS 29003. Field Course in Oceanography. 100 Units.
Students in this course spend roughly a week sailing a tall ship from the SEA education program, learning oceanographic sampling techniques and data interpretation as well as principles of navigation and seamanship.
Terms Offered: not offered 2015-2016
Prerequisite(s): Consent of instructor
Note(s): Interested students should contact the departmental counselor.
GEOS 29700. Reading and Research in the Geophysical Sciences. 100 Units.
Independent study; regular meetings with Geophysical Sciences faculty member required. Topics available include, but are not limited to: Mineralogy, Petrology, Geophysics, High Pressure Geophysics, Geodynamics, Volcanology, Cosmochemistry, Geochemistry, Atmospheric Dynamics, Paleoeclimatology, Physical Oceanography, Chemical Oceanography, Paleooceanography, Atmospheric Chemistry, Fluid Dynamics, Glaciology, Climatology, Radiative Transfer, Cloud Physics, Morphometrics, Phylogeny, Analytical Paleontology, Evolution, Taphonomy, Macroevolution, Paleobiology, Paleobotany, Biomechanics, Paleoecology, Tectonics, Stratigraphy.
Instructor(s): Staff Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of instructor and departmental counselor
Note(s): Students are required to submit the College Reading and Research Course Form. Available to nonmajors for P/F grading. Must be taken for a quality grade when used to meet a requirement in the major.
**Germanic Studies**

Department Website: http://german.uchicago.edu

**PROGRAM OF STUDY**

The program for the BA degree in Germanic Studies is intended to provide students with a wide ranging and highly personalized introduction to the language, literature, and culture of German-speaking countries and to various methods of approaching and examining these areas. It is designed to be complemented by other areas of study (e.g., anthropology, art history, comparative literature, economics, film studies, history, philosophy, political science, sociology).

Students in other fields of study may also complete a minor in Germanic Studies. Information follows the description of the major.

**PROGRAM REQUIREMENTS**

Students majoring in Germanic Studies typically register for six German language courses at the second-year level and above, plus six courses in German literature and culture, including three literature or culture courses taken in German, and GRMN 29900 BA Paper. With prior approval of the Director of Undergraduate Studies (DUS), students may count up to three relevant German-oriented courses from other departments in the humanities or social sciences toward the requirements of the major in Germanic Studies. Students must meet with the Director of Undergraduate Studies to discuss a plan of study as soon as they declare their major and no later than the end of Spring Quarter of their third year. Students must have their programs approved by the DUS before the end of their third year.

**BA Paper**

The BA paper typically is a research paper of a minimum of twenty-five pages. While the paper may be written in either English or German, it must include a bibliography that makes ample use of German-language sources. Students must submit a proposal for their BA paper to their faculty adviser by the beginning of the eighth week of Autumn Quarter in their senior year. A first draft of the paper is due on the first day of Spring Quarter, and the completed paper must be submitted by the beginning of the sixth week of Spring Quarter.

Germanic Studies will accept a paper or project used to meet the BA requirement in another major, under the condition that original German sources are used. Students should consult with both chairs by the earliest BA proposal deadline (or by the end of their third year, when neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

**SUMMARY OF REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Second-Year German: One of the following three-course sequences:</td>
<td>300</td>
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<tr>
<td>GRMN 20100-20200-20300</td>
<td></td>
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<tr>
<td>Deutsche Märchen; Deutsch-Amerikanische Themen; Kurzprosa aus dem 20. Jahrhundert*</td>
<td></td>
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<tr>
<td>GRMN 12001-12002-12003</td>
<td></td>
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<tr>
<td>Intensive German I-II-III</td>
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<tr>
<td>Third-Year German: Any three of the following courses:</td>
<td>300</td>
</tr>
<tr>
<td>GRMN 21103</td>
<td></td>
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<tr>
<td>Erzählten</td>
<td></td>
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<tr>
<td>GRMN 21303</td>
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<tr>
<td>Gedichte</td>
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<tr>
<td>GRMN 21403</td>
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<tr>
<td>Philosophie</td>
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<td>GRMN 21503</td>
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<td>Film</td>
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<td>GRMN 21603</td>
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<tr>
<td>Drama</td>
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<tr>
<td>GRMN 21703</td>
<td></td>
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<tr>
<td>Medien und Gesellschaft</td>
<td></td>
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<tr>
<td>Three courses in literature or culture taken in German ‡</td>
<td>300</td>
</tr>
<tr>
<td>Three courses in German literature and culture §</td>
<td>300</td>
</tr>
<tr>
<td>GRMN 29900</td>
<td>100</td>
</tr>
<tr>
<td>BA Paper</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>1300</td>
</tr>
</tbody>
</table>

* Or credit for the equivalent as determined by petition.
‡ One may be a course with a Languages Across Chicago (LxC) session; one may be an additional third-year course.
§ Two may be courses in other departments.
GRADING

Students who are majoring in Germanic Studies must receive a quality grade in all courses taken to meet requirements in the major. Non-majors have the option of taking courses for P/F grading (except for language courses, which must be taken for quality grades).

HONORS

Honors are reserved for students who achieve overall excellence in grades for courses in the College and within the major, as well as complete a BA paper that shows proof of original research or criticism. Students with an overall GPA of at least 3.0 for College work and a GPA of at least 3.5 in classes within the major, and whose GRMN 29900 BA Paper is judged superior by two readers, will be recommended to the Master of the Humanities Collegiate Division for honors.

STUDY ABROAD

As early in their course of study as possible, interested students are encouraged to take advantage of one of the study abroad options that are available in the College. The five options are:

1. A program in Vienna, which is offered each Autumn Quarter, includes three courses of European Civilization, as well as German language instruction on several levels.

2. The College also co-sponsors, with the Berlin Consortium for German Studies, a yearlong program at the Freie Universität Berlin. Students register for regular classes at the Freie Universität or at other Berlin universities. To be eligible, students must have completed the second year of German language courses or an equivalent, and should have completed all general education requirements.

3. Third-year majors can apply for a Romberg Summer Research Grant to do preparatory work for the BA paper.

4. Students who wish to do a summer study abroad program can apply for a Foreign Language Acquisition Grant (FLAG) that is administered by the College and provides support for a minimum of eight weeks of study at a recognized summer program abroad. Students must have completed GRMN 10300 Elementary German For Beginners-3 or its equivalent to be eligible for FLAG support for the study of German. For more information, visit study-abroad.uchicago.edu/sitg.

More than half of the requirements for the major must be met by registering for courses bearing University of Chicago course numbers.

PROFICIENCY CERTIFICATE

It is recommended that all students majoring in Germanic Studies complete the College’s Advanced Language Proficiency Certificate in German as documentation of advanced functional ability in reading, writing, listening to, and speaking German. Students are eligible to take the examinations that result in the awarding of this certificate after they have completed courses beyond the second year of language study and subsequently have spent a minimum of one quarter abroad in an approved program; FLAG students are also eligible. For more information, visit college.uchicago.edu/academics/advanced-language-proficiency.

MINOR PROGRAM IN GERMANIC STUDIES

Students in other fields of study may complete a minor in Germanic Studies. The minor in Germanic Studies requires a total of six courses in addition to the second-year language sequence (GRMN 20100 Deutsche Märchen/GRMN 20200 Deutsch-Amerikanische Themen/ GRMN 20300 Kurzprosa aus dem 20. Jahrhundert) (or credit for the equivalent as determined by petition). These six courses usually include the third-year sequence and three literature/culture courses. Two of the literature/culture courses must be taken in German. Note that credit toward the minor for courses taken abroad must be determined in consultation with the director of undergraduate studies.

Students who elect the minor program in Germanic Studies must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor and must submit a form obtained from their College adviser. Students choose courses in consultation with the director of undergraduate studies. The director’s approval for the minor program should be submitted to the student’s College adviser by the deadline above on the form.

Courses in the minor may not be double counted with the student’s major(s) or with other minors and may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

The following group of courses would comprise a minor in Germanic Studies. Other programs may be designed in consultation with the director of undergraduate studies. Minor program requirements are subject to revision.

Germanic Studies Sample Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRMN 21103</td>
<td>Erzaehlen</td>
<td>100</td>
</tr>
<tr>
<td>GRMN 21503</td>
<td>Film</td>
<td>100</td>
</tr>
</tbody>
</table>
Three courses in German literature and culture

GRMN 21303 Gedichte 100

Total Units 600

* At least two must be taken in German. Of these, one may be a course with a Languages Across Chicago (LxCC) session, and one may be an additional third-year course.

MINOR PROGRAM IN NORWEGIAN STUDIES

Students in any field may complete a minor in Norwegian Studies. A Norwegian Studies minor will consist of the beginning language cycle (NORW 10100-10200-10300 First-Year Norwegian I-II-III) as the language component of the minor. Three additional courses are required to complete the minor. Students choose these courses in consultation with the director of undergraduate studies. These courses may include:

20000-level Norwegian language courses and/or literature courses

NORW 10400 Intermediate Norwegian I: Introduction to Literature 100
NORW 10500 Intermediate Norwegian II 100

Students who elect the minor program in Norwegian Studies must meet with the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the minor and must submit a form obtained from their College adviser. Students choose courses in consultation with the director of undergraduate studies. The director’s approval for the minor program should be submitted to the student’s College adviser by the deadline above on the form.

Courses in the minor may not be double counted with the student’s major(s) or with other minors and may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Minor program requirements are subject to revision.

GERMAN COURSES

Language

FIRST-YEAR SEQUENCE

GRMN 10100-10200-10300. Elementary German for Beginners I-II-III.
This sequence develops proficiency in reading, writing, listening, and speaking for use in everyday communication. Knowledge and awareness of the different cultures of the German speaking countries is also a goal.

GRMN 10100. Elementary German For Beginners-1. 100 Units.
This sequence develops proficiency in reading, writing, listening, and speaking for use in everyday communication. Knowledge and awareness of the different cultures of the German speaking countries is also a goal. No auditors permitted. Must be taken for quality grade.
Terms Offered: Autumn
Note(s): No auditors permitted. Must be taken for quality grade.

GRMN 10200. Elementary German For Beginners-2. 100 Units.
Terms Offered: Winter
Prerequisite(s): GRMN 10100 or placement
Note(s): No auditors permitted. Must be taken for quality grade.

GRMN 10300. Elementary German For Beginners-3. 100 Units.
This sequence develops proficiency in reading, writing, listening, and speaking for use in everyday communication. Knowledge and awareness of the different cultures of the German speaking countries is also a goal. Prerequisite(s): GRMN 10200 or 10201, or placement. No auditors permitted. Must be taken for quality grade.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): GRMN 10200 or 10201, or placement
Note(s): No auditors permitted. Must be taken for quality grade.

GRMN 10200. Elementary German For Beginners-2. 100 Units.
Terms Offered: Winter
Prerequisite(s): GRMN 10100 or placement
Note(s): No auditors permitted. Must be taken for quality grade.
GRMN 10300. Elementary German For Beginners. 3. 100 Units.
This sequence develops proficiency in reading, writing, listening, and speaking for use in everyday communication. Knowledge and awareness of the different cultures of the German speaking countries is also a goal. Prerequisite(s): GRMN 10200 or 10201, or placement. No auditors permitted. Must be taken for quality grade.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): GRMN 10200 or 10201, or placement
Note(s): No auditors permitted. Must be taken for quality grade.

GRMN 10201. Elementary German 2. 100 Units.
This is an accelerated version of the GRMN 10100-10200 sequence intended for students with previous knowledge of the language. Prerequisite(s): Placement or consent of language coordinator. No auditors permitted. Must be taken for a quality grade.
Terms Offered: Autumn, Winter
Prerequisite(s): Placement or consent of language coordinator
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 12001-12002-12003. Intensive German I-II-III.
This intensive, three-quarter sequence brings students to high-intermediate levels in all four skills: reading, writing, speaking, and listening so that students can enter third-year level courses in German. Learners who are starting German late in their College careers or who wish to move forward swiftly will gain skills corresponding to two full years of study. NOTE: Each course is 200 units and corresponds in workload to taking two courses.

GRMN 12001. Intensive German I. 200 Units.
This intensive, three-quarter sequence brings students to high-intermediate levels in all four skills: reading, writing, speaking, and listening so that students can enter third-year level courses in German. Learners who are starting German late in their College careers or who wish to move forward swiftly will gain skills corresponding to two full years of study. NOTE: Each course is 200 units and corresponds in workload to taking two courses.
Instructor(s): Staff  Terms Offered: TBD

GRMN 12002. Intensive German II. 200 Units.
This intensive, three-quarter sequence brings students to high-intermediate levels in all four skills: reading, writing, speaking, and listening so that students can enter third-year level courses in German. Learners who are starting German late in their College careers or who wish to move forward swiftly will gain skills corresponding to two full years of study. NOTE: Each course is 200 units and corresponds in workload to taking two courses.
Instructor(s): Staff  Terms Offered: TBD

GRMN 12003. Intensive German III. 200 Units.
This intensive, three-quarter sequence brings students to high-intermediate levels in all four skills: reading, writing, speaking, and listening so that students can enter third-year level courses in German. Learners who are starting German late in their College careers or who wish to move forward swiftly will gain skills corresponding to two full years of study. NOTE: Each course is 200 units and corresponds in workload to taking two courses.
Instructor(s): Staff  Terms Offered: TBD

GRMN 13100. Reading German. 100 Units.
This course prepares students to read a variety of German texts. By the end of the quarter, students should have a fundamental knowledge of German grammar and a basic vocabulary. While the course does not teach conversational German, the basic elements of pronunciation are introduced.
Terms Offered: Spring
Note(s): Prior knowledge of German not required. No auditors permitted. This course does not prepare students for the competency exam. Must be taken for a quality grade.

SECOND-YEAR SEQUENCE
GRMN 20100. Deutsche Märchen. 100 Units.
This course is a comprehensive look at German fairy tales, including structure and role in German
tenineteenth-century literature, adaptation as children’s books in German and English, and film
interpretations. This course also includes a review and expansion of German grammar.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): GRMN 10300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 20200. Deutsch-Amerikanische Themen. 100 Units.
Issues may range from social topics such as family roles or social class, to literary genres such as exile or
immigrant literature. Review and expansion of German grammar continues. Prerequisite(s): GRMN 20100 or
placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 20300. Kurzprosa aus dem 20. Jahrhundert. 100 Units.
This course is a study of descriptive and narrative prose through short fiction and other texts, as well as
media from the twentieth century, with a focus on grammatical issues that are designed to push toward
more cohesive and idiomatic use of language.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): GRMN 20200 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

THIRD-YEAR SEQUENCE

GRMN 21103-21303-21403-21503-21603-21703. Drama; Erzählen; Film; Gedichte; Medien und Gesellschaft;
Philosophie.
It is not necessary to take these courses in sequence. These courses serve as preparation for seminar-style
classes. Students work with a variety of texts and learn to present and participate in instructor- and student-led
discussions of relevant issues and topics. Student also write short essays and longer research papers. Work in
grammar, structure, and vocabulary moves students toward more idiomatic use of German.

GRMN 21103. Erzählen. 100 Units.
It is not necessary to take these courses in sequence, but three of the four courses are required for the major.
These courses serve as preparation for seminar-style classes. Students work with a variety of texts and learn
to present and participate in instructor- and student-led discussions of relevant issues and topics. Student
also write short essays and longer research papers. Work in grammar, structure, and vocabulary moves
students toward more idiomatic use of German. This course develops advanced German skills through the
study of narratives of various authors from different periods. Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.
Terms Offered: Autumn
Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 21303. Gedichte. 100 Units.
This course develops advanced German skills through the study of poetry of various authors from different
periods.
Terms Offered: Spring
Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.
GRMN 21403. Philosophie. 100 Units.
This course develops advanced German skills through the study of philosophical texts of various authors from different periods.
Terms Offered: Spring. Offered in even-numbered years.
Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 21503. Film. 100 Units.
Instructor(s): Staff Terms Offered: TBD

GRMN 21603. Drama. 100 Units.
This course develops advanced German skill through the study of dramas and/or films of various authors/directors from different eras.
Instructor(s): Staff Terms Offered: TBD

GRMN 21703. Medien und Gesellschaft. 100 Units.
Instructor(s): Staff Terms Offered: TBD

GRMN 21903. Gedichte. 100 Units.
This course develops advanced German skills through the study of poetry of various authors from different periods.
Terms Offered: Spring
Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 21403. Philosophie. 100 Units.
This course develops advanced German skills through the study of philosophical texts of various authors from different periods.
Terms Offered: Spring. Offered in even-numbered years.
Prerequisite(s): GRMN 20300 or placement
Note(s): No auditors permitted. Must be taken for a quality grade.

GRMN 21503. Film. 100 Units.
Instructor(s): Staff Terms Offered: TBD

GRMN 21603. Drama. 100 Units.
This course develops advanced German skill through the study of dramas and/or films of various authors/directors from different eras.
Instructor(s): Staff Terms Offered: TBD

GRMN 21703. Medien und Gesellschaft. 100 Units.
Instructor(s): Staff Terms Offered: TBD

Literature and Culture
All literature and culture courses are conducted in German unless otherwise indicated. Students who are majoring or minoring in German and take courses taught in English are expected to do the majority of their course work in German.

GRMN 22312. Reforming Religious Media: Martin Luther and the Protestant Reformation. 100 Units.
The Protestant Reformation began with a carefully orchestrated media event, when Martin Luther posted his 95 theses on the door of a church in Wittenberg. Concurrently, he resorted to the still new medium of print to disseminate more widely his scathing critique of the Catholic Church’s use of indulgences to communicate God’s grace. This was only the beginning of Luther’s sweeping attack on the Church’s role as the sole mediator of salvation. No religious medium or communicational practice remained unquestioned, resulting in their comprehensive reform. Soon other reformers joined in, pushing the critique even further by questioning the need and validity of all religious mediation. Approaching the Protestant Reformation as a reform of religious media, this lecture course will give particular attention to the congenial alliance between Martin Luther’s religious message and the emerging technology of the printing press, the role of Scripture in legitimating Protestant theologies of communication, controversies around particular religious media like images or the eucharist, and the role of direct inspiration in radical reformers. This course will be taught in lecture format.
Instructor(s): Christopher Wild Terms Offered: Spring
GRMN 25005. The Pleasure of Literature: The Novella. 100 Units.
According to Ian McEwan, the novella is "the perfect form of prose fiction. It is the beautiful daughter of a rambling, bloated, ill-shaven giant" (i.e., the novel.) This course introduces students to the short prose form of the German novella from Romanticism to the present. We will use the genre of the novella to explore the many pleasures of reading literature, among which storytelling features prominently. What kind of storytelling happens in a novella? Where does the pleasure of reading stem from? How can we think the relationship between pleasure and literature? How do developments in new media and new modes of reading affect our pleasure? How can we compare our literary gratification to other types of readerly gratification such as those coming from news articles, blog entries, and other short forms (aphorisms, magazine articles) - or, for that matter, the "reading" of images? Might the pleasure of literature also point to its utility? Readings include: Boccaccio, Goethe, Hoffmann, Kleist, Keller, Büchner, Schnitzler, M. Walser, and others, alongside some scientific articles (e.g., cognitive neuroscience) and theoretical texts.
Instructor(s): Margareta Ingrid Christian Terms Offered: Spring
Note(s): This course will be taught in German.
Equivalent Course(s): GRMN 35005

GRMN 28150. Pragmatist Aesthetics. 100 Units.
An inquiry into pragmatism's relationship with philosophical aesthetics. The emphasis is on aesthetic action, making of the self and of the human form. Authors include Emerson, Nietzsche, Dewey, Heidegger, Rorty.
Instructor(s): Florian Klinger Terms Offered: Autumn
Prerequisite(s): For undergraduates, consent of instructor required.
Equivalent Course(s): GRMN 38150

GRMN 28500. Comparative Fairy Tales. 100 Units.
How do we account for the allure of fairy tales? For some, fairy tales count as sacred tales meant to enchant rather than edify. For others, they are cautionary tales, replete with obvious moral lessons. For the purposes of the course, we will assume that these critics are correct in their contention that fairy tales contain essential underlying meanings. We will conduct our own readings of fairy tales from the German Brothers Grimm, the Norwegians, Asbjørnsen and Moe and the Dane, Hans Christian Andersen, relying on our own critical skills as well as selected secondary readings.
Instructor(s): Kim Kenny Terms Offered: Spring
Equivalent Course(s): HUMA 28400, CMLT 21600, NORW 28500

GRMN 29700. Reading and Research Course in German. 100 Units.
No description available. Prerequisite(s): Consent of instructor and director of undergraduate studies Note(s): Students must consult with the instructor by the eighth week of the preceding quarter to determine the subject of the course and the work to be done. Students are required to submit the College Reading and Research Course Form.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and director of undergraduate studies
Note(s): Students must consult with the instructor by the eighth week of the preceding quarter to determine the subject of the course and the work to be done. Students are required to submit the College Reading and Research Course Form.

GRMN 29900. BA Paper. 100 Units.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Fourth-year standing. Consent of instructor and director of undergraduate studies.
Note(s): Students are required to submit the College Reading and Research Course Form.

Languages Across Chicago (LxC)

LxC courses have two possible formats: (1) an additional course meeting during which students read and discuss authentic source material and primary texts in German; or (2) a course in another discipline (such as history) that is taught entirely in German. Prerequisite German language skills depend on the course format and content. LxC courses maintain or improve students' German language skills while giving them a unique and broadened perspective into the regular course content.
GERMAN COURSES
Literature and Culture
GRMN 25005. The Pleasure of Literature: The Novella. 100 Units.
According to Ian McEwan, the novella is "the perfect form of prose fiction. It is the beautiful daughter of a rambling, bloated, ill-shaven giant" (i.e., the novel.) This course introduces students to the short prose form of the German novella from Romanticism to the present. We will use the genre of the novella to explore the many pleasures of reading literature, among which storytelling features prominently. What kind of storytelling happens in a novella? Where does the pleasure of reading stem from? How can we think the relationship between pleasure and literature? How do developments in new media and new modes of reading affect our pleasure? How can we compare our literary gratification to other types of readerly gratification such as those coming from news articles, blog entries, and other short forms (aphorisms, magazine articles) - or, for that matter, the "reading" of images? Might the pleasure of literature also point to its utility? Readings include: Boccaccio, Goethe, Hoffmann, Kleist, Keller, Büchner, Schnitzler, M. Walser, and others, alongside some scientific articles (e.g., cognitive neuroscience) and theoretical texts.
Instructor(s): Margareta Ingrid Christian Terms Offered: Spring
Note(s): This course will be taught in German.
Equivalent Course(s): GRMN 35005

NORWEGIAN COURSES
Language
NORW 10100-10200-10300. First-Year Norwegian I-II-III.
The aim of this sequence is to provide students with minimal proficiency in the four language skills of speaking, reading, writing and listening—with a special emphasis on speaking. To achieve these goals, we undertake an overview of all major grammar topics and work to acquire a substantial vocabulary.

NORW 10100. First Year Norwegian - I. 100 Units.
The aim of this sequence is to provide students with minimal proficiency in the four language skills of speaking, reading, writing and listening-with a special emphasis on speaking. To achieve these goals, we undertake an overview of all major grammar topics and work to acquire a substantial vocabulary.
Instructor(s): Kimberly Kenny Terms Offered: Autumn

NORW 10200. Elementary Norwegian-2. 100 Units.
Part two of the three-quarter beginning sequence, NORW10100, NORW10200 and NORW10300, continues the process of providing students with minimal proficiency in the four language skills of speaking, reading, writing, and listening - with a special emphasis on speaking. To achieve these goals, we undertake an overview of all major grammar topics and work to acquire a substantial vocabulary over the three-quarter sequence.
Instructor(s): Kimberly Kenny Terms Offered: Winter

NORW 10300. First-Year Norwegian III. 100 Units.
Part three of the three-quarter beginning sequence, NORW 10100, NORW 10200 and NORW 10300, concludes the process of providing students with minimal proficiency in the four language skills of speaking, reading, writing, and listening-with a special emphasis on speaking. To achieve these goals, we undertake an overview of all major grammar topics and work to acquire a substantial vocabulary over the three-quarter sequence.
Instructor(s): Kimberly Kenny Terms Offered: Spring

NORW 10400. Intermediate Norwegian I: Introduction to Literature. 100 Units.
This course combines intensive review of all basic grammar with the acquisition of more advanced grammar concepts. While our main priority remains oral proficiency, we work to develop our reading and writing skills. We challenge our reading ability with more sophisticated examples of Norwegian prose and strengthen our writing through essay writing. The centerpiece of the course is the contemporary Norwegian novel Naiv. Super.
Instructor(s): Kimberly Kenny Terms Offered: Spring
Prerequisite(s): NORW 10300 or consent of instructor
NORW 10500. Intermediate Norwegian II. 100 Units.
This course combines intensive review of all basic grammar with the acquisition of more advanced grammar concepts. Students undertake readings pertaining to culture and contemporary Norwegian life, including the contemporary novel, L, by Erlend Loe and excerpts from Thor Heyerdahl’s Kon Tiki. Classes conducted in Norwegian.

Literature and Culture

NORW 29700. Reading and Research Course in Norwegian. 100 Units.
Students must consult with the instructor by the eighth week of the preceding quarter to determine the subject of the course and the work to be done. Students are required to submit the College Reading and Research Course Form.
Instructor(s): Kimberly Kenny
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and director of undergraduate studies.
Note(s): Students must consult with the instructor by the eighth week of the preceding quarter to determine the subject of the course and the work to be done. Students are required to submit the College Reading and Research Course Form.
Global Studies

Department Website: http://globalstudies.uchicago.edu

Program of Study

The Global Studies major is an interdisciplinary major concerned with the interconnected and interdependent nature of the contemporary world. Its main task is to understand how sites, objects, and concepts contribute to worldwide connections, from ecological concerns to human rights campaigns. Students majoring in Global Studies will take courses throughout the College, often with particular interests in Anthropology, Environmental Studies, History, or a specific regional study.

Instead of beginning with “global” and “local,” the typical categories of globalization studies, the Global Studies program contends that the distinctions between sites and trends, between objects far and near, and between the cosmopolitan and the vernacular emerge from empirical studies. Students are encouraged to exercise close attention to mundane practices, everyday materialities, and lived experiences. With a good grounding in case studies, students in the program are expected to reflect upon the implications of their research interests, both inside and outside the classroom. Students carry these interests on to a variety of careers and professional opportunities following graduation.

Program Requirements

Students must complete a total of 13 courses (including one approved elective and two BA seminars), a research activity, and a language requirement, broken down in the following manner:

Introductory Courses (2 courses)
All students are required to take the two-quarter introductory sequence to the major, GLST 23101-23102 Global Studies I-II. These courses are offered annually and in sequence in the Autumn and Winter Quarters. Students are expected to complete the sequence in their second year, if possible, especially if they plan to study abroad during their third year.

Thematic Tracks (8 courses)
The body of the major (eight courses in all) is comprised of courses selected from four overlapping thematic tracks of study. Students will select two tracks, a primary and a secondary one, and complete five courses in the former and three in the latter. The selection of the primary and secondary tracks should be linked to the student’s BA research interests. The tracks are outlined below with sample classes that might fall within each category, but more detailed information about these tracks may be found on the Global Studies website (http://globalstudies.uchicago.edu).

Bodies and Nature
This track focuses on bodily nature (broadly construed) and ecological relationships. Particular attention is paid to environmental and health-related topics, and not always with a focus on human beings. Themes could range from sustainability, ecotourism, and pandemics to modern beauty practices, health movements, and animal studies.

BIOS 13140 The Public and Private Lives of Insects
GRMN 24416 Biocentrism: The Concept of Life in German Literature and Art
ANTH 28210 Colonial Ecologies

Knowledge and Practice
This track focuses on the production and circulation of knowledge, with an eye towards how that process is situated. Often there will be a science and technology component, but other times habitual/instinctual know-how will be highlighted. Themes could range from regulatory standards, countercultural movements, and cultural artifacts to consumer politics and media studies.

HIST 24206 Medicine and Culture in Modern East Asia
ENGL 29202 Objects, Things, and Other Things
SOCI 20208 Internet and Society

Cultures at Work
This track focuses on the entanglements of culture, economics, and politics. It focuses on cultural production, often of a physical nature, as well as cultural modes of reception. Themes could range from global brands, sweatshops, and rituals of food production/consumption to gaming and consumer politics. Much of “everyday life” would also apply.

ANTH 21725 Mass Mediated Society and Japan
GLST 24101 Paperwork
ECON 22650 Creativity

Governance and Affiliations
This track focuses on politics and claims to authority within power relations. It tries to stand a middle ground between extremes of privileging nation-states and solely valuing micro-sites of governance.
Themes could range from UN agencies to online protests, humanitarian intervention to surveillance and corporate governance.

CRES 22150 Contemporary African American Politics
PLSC 27016 Popular Culture, Art, and Autocracy
PLSC 29500 Drugs, Guns, and Money: The Politics of Criminal Conflict

**Elective (1 course)**

Students will select one elective course to further their BA research, often late in their third or early in their fourth year. This course should be chosen after discussion with the program administrator, and can include:

- A regional studies course that furthers the student's cultural and historical knowledge in their BA research topic
- A research methodology course (e.g., ANTH 21420 Ethnographic Methods) that will equip the student for better collection of primary source materials
- An introductory course in another major that has a direct connection to the BA research topic
- A language course that will help the student read texts or interact with persons pertaining to their BA research topic

These options are not exhaustive and should only be used as guiding ideas for the elective requirement. Students should seek program approval for their choice of elective course before registering, and the elective should be completed before the Winter Quarter of the student's fourth year.

**Research Activity Requirement**

Students will be expected to complete a structured activity or program exploring global issues related to their intended BA project, often in an international setting.

This major activity might be:

- An internship (academic year or summer)
- Select study abroad programs, often through the Study Abroad office
- A volunteer opportunity
- A well-defined field research project

Students should work with the program administrator to identify appropriate opportunities and should have their activity approved ahead of the experience itself. Most activities should last no less than six weeks, though intensive programs with shorter durations may be considered.

The research activity should be linked to the student's BA thesis and serve as an introduction to that topic. International experiences are encouraged for the completion of this requirement, but the requirement may be met with domestic projects dealing with global issues (for example, an internship with a domestic NGO).

**BA Seminars and Thesis (2 courses)**

Students are required to take the two-quarter BA seminar (GLST 29800 BA Thesis Seminar I and GLST 29801 BA Thesis Seminar II) in Autumn and Winter Quarters of their fourth year. The first BA deadline occurs during the Spring Quarter of a student's third year. At that time, students must have submitted a topic proposal, secured a faculty reader, and completed a faculty reader form. The final version of the BA thesis is due by the second Friday of the quarter in which the student plans to graduate. Successful completion of the thesis requires a passing grade from the faculty reader.

The Global Studies major thesis must be clearly organized around a contemporary global issue. Students may double-major, but double-majoring with another program that also requires a BA thesis would entail (a) the second major’s program accepting the Global Studies thesis as fulfilling that program’s BA requirements or (b) the student completing an additional BA thesis for the second major.

Regardless of the requirements of the second major, Global Studies majors are required to complete both quarters of the fourth-year BA seminar. Thesis seminars from other major programs will not count toward the Global Studies BA Thesis Seminar requirement.

**Foreign Language Requirement**

The Global Studies language requirement can be completed in two ways:

1. Students may complete the equivalent of a seventh quarter of language study in a single language. Credit for the seventh and final quarter of the language must be earned by University of Chicago course registration. If the final term of study in a foreign language focuses on cultural studies, it may be used in an appropriate primary or secondary thematic track, as outlined above.

2. Students may obtain an Advanced Language Proficiency Certificate, which is documentation of advanced functional ability in reading, writing, listening, and speaking. For details, visit the College’s Advanced Language Proficiency (http://college.uchicago.edu/academics-advising/academic-opportunities/advanced-language-proficiency) page.
SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLST 23101-23102</td>
<td>200</td>
</tr>
<tr>
<td>Five courses in a primary thematic track</td>
<td>500</td>
</tr>
<tr>
<td>Three courses in a secondary thematic track</td>
<td>300</td>
</tr>
<tr>
<td>GLST 29800</td>
<td>100</td>
</tr>
<tr>
<td>GLST 29801</td>
<td>100</td>
</tr>
<tr>
<td>One program elective</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>1300</strong></td>
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</tbody>
</table>

HONORS

Students with an overall GPA of 3.2 or higher and an in-major GPA of 3.5 or higher will be eligible for honors. For the awarding of honors, the BA thesis must also be judged "high pass" by the faculty reader.

ADVISING

Students should select their courses for the Global Studies major in close consultation with the program administrator. The Global Studies program publishes a list of courses approved for the major each quarter, both online and outside the Global Studies program office, Gates-Blake 119.

Students should meet with the program administrator early in their final year to be sure they have fulfilled all requirements.

GRADING

Students who are majoring in Global Studies must receive quality grades in all courses meeting the requirements of the degree program (i.e., they cannot use Pass/Fail or audited courses for major requirements).

GLOBAL STUDIES COURSES

GLST 23101-23102. Global Studies I-II.

This is the Global Studies program's core sequence, typically taken during a student's second year. Global Studies I is an orientation course for students interested in majoring in Global Studies, while Global Studies II seeks to impart important theories and research practices through intensive, critical readings.

GLST 23101. Global Studies I. 100 Units.

The first course in the two-quarter Global Studies core sequence.

Instructor(s): Larisa Jasarevic
Terms Offered: Autumn

GLST 23102. Global Studies II. 100 Units.

The second course in the two-quarter Global Studies core sequence.

Terms Offered: Winter
Prerequisite(s): GLST 23101

GLST 23102. Global Studies II. 100 Units.

The second course in the two-quarter Global Studies core sequence.

Terms Offered: Winter
Prerequisite(s): GLST 23101

GLST 23403. Borders, (Im)mobilities and Human Rights. 100 Units.

What is the human cost of border control? To what extent do individuals possess the right to move to other states? How do different states with large populations of refugees and asylum seekers develop and enforce migration policies, and what do the differences in these policies reveal about the social histories and futures of these states? To address these questions, we will consider how borders, institutions, and categories of migrant groups mutually shape one another. We will explore the interrelationships between categories of migration-forced, economic, regular, and irregular-in order to understand the multiple and unequal forms of mobility experienced by those who inhabit these categories. By utilizing a framework of human rights, this course will investigate how contemporary issues in migration-such as border management, illicit movement, and the fuzzy distinction between forced and economic migration-raise and reopen debates concerning the management of difference. We will draw on the work of anthropologists, sociologists, and geographers, as well as journalists, legal, and medical professionals. Our readings each week will include a mix of conceptual, ethnographic, long-form journalism, and policy texts. When possible, we will also invite representatives from different Chicago-based organizations that promote and protect the rights of people in various situations of migration to come to our class to discuss their work.

Equivalent Course(s): CHDV 23403, ANTH 25255, HMRT 23403
GLST 24110. In the Beginning*: Origin Stories in Science and Religion. 100 Units.
What is the origin of the universe? What is the origin of humanity? These questions have generated a plethora of answers, many of which fall within domains of what we now consider to be science and religion. However, as we will see throughout our readings, these two categories are hard to define; classifications often overlap, and science and religion intertwine throughout history and until today. What do we call “myth,” and what do we term “theory”? In this class, we will focus on not only the cultural embeddedness of religious and scientific narratives, but also the cultural implications of these texts. The course begins with origin stories and asks students to consider their power in shaping our world and perspectives, focusing on the ethical dimensions and implications of these narratives. What kind of relationships do we imagine among human beings, and between human and nonhuman beings in this world, given particular origin stories as our starting point? Finally, in relation to this goal of interrogating the ethical import of origin narratives, this course will close by asking whether we can imagine other kinds of origin stories (such as in the genre of science fiction), and what implications these imaginal narratives hold.
Instructor(s): Sartell, Elizabeth Terms Offered: Winter
Equivalent Course(s): RLST 28110

GLST 24111. Medical Knowledge in the Islamicate World. 100 Units.
Drawing on Marshall Hodgson’s term ‘Islamicate’ this course follows medical knowledge as a cultural and political object as it travels through various iterations across and between dynastic and modern colonial imperial formations. For students of Islamic studies, the course suggests how medical knowledge can be a point of departure for illuminating intellectual, social and political history. For students of globalization, it situates that phenomenon’s association with the space-time compressions of capitalism within a longer genealogy of migrations and knowledge exchanges. The course asks students to engage with several fundamental questions: Why was the medical knowledge produced in Greek antiquity absorbed and transformed by the Islamicate world? How did this medical knowledge change in translation between languages and across regionally specific cultural assemblages? How might close attention to the historically situated practices of medical knowledge production disrupt an essentialist understanding of ‘Islamic culture’? Ultimately, the central aim of this course is to urge students to think more deeply about the methods and sources for understanding the entangled histories of the Islamicate world.
Instructor(s): Datoo, Sabrina Terms Offered: Spring

GLST 24112. Global Food. 100 Units.
Do you know where the food you had for breakfast this morning came from? Who produced it? Where it was made? How far it travelled to make its way to your table? This class begins from the observation that the everyday act of eating is often a global practice in contemporary societies. From the international circulation of mega-brands like Coca-Cola, to the migrant labor that harvests much of America’s fresh produce, food provides a vantage-point for examining global connections. These connections are often produced through food: such as eating foreign cuisines, or receiving the international distribution of humanitarian food aid. Taking food as its central object, this class examines issues of the ‘global’ related to labor, political economy, biotechnology, humanitarian aid, nutrition science, brands and marketing, as well as everyday consumption and meaning-making. We will ask questions about the global politics of food, such as: How are global conditions of food production structured and organized? How do people make sense of global commodities within their own social worlds, and how do they use them to imagine connections with distant others? How are scientific concepts of nutrition and obesity made to circulate globally, and what impact do these ideas have in the places where they are exported? How do people imagine culture in relation to food, and what meanings is food given in contexts of cosmopolitanism and diaspora?
Instructor(s): Butler, Ella Terms Offered: Spring

GLST 25310. Extinction, Disaster, Dystopia: Environment and Ecology in the Indian Subcontinent. 100 Units.
This course aims to provide students an overview of key environmental and ecological issues in the Indian subcontinent. How have the unique precolonial, colonial, regional and national histories of this region shaped the peculiar nature of environmental issues? We will consider three major concepts—“extinction”, “disaster” and “dystopia” to see how they can be used to frame issues of environmental and ecological concern. Each concept will act as a framing device for issues such as conservation and preservation of wildlife, erasure of adavisi (first dwellers) ways of life, environmental justice, water scarcity and climate change. The course will aim to develop students’ ability to assess the specificity of these concepts in different disciplines. For example: What methods and sources will an environmental historian use to write about wildlife? How does this differ from the approach an ecologist or literary writer might take? Students will analyze various media: both literary and visual, such as autobiographies of shikaris (hunters), graphic novels, photographs, documentary films, ethnographic accounts and environmental history.
Equivalent Course(s): HIST 26806, SALC 25310, ENGL 22434, CRES 25310
GLST 26804. Frontiers and Borders in South Asia. 100 Units.
Sometimes the frontline of empires and nation-states, sometimes neglected or inaccessible, peripheral spaces are often of core concern to the central state. The aim of this upper-level undergraduate seminar is to examine the history of borders, borderlands, and frontiers as political and social concepts and as produced spaces. We will examine an array of case studies in addition to more theoretical scholarship that spans the disciplines of history, environmental studies, political science, anthropology, and geography. While using South Asia (itself a rather recently invented “area”) as the primary geographic and historical focus this course will not be bound exclusively to it. The first goal of the course is to explore the evolution of key concepts such as space, territory, frontier, and borders/borderlands. The second goal is to develop methods for analyzing subjects that are simultaneously physical spaces and political, social, and historical ideas. Finally, it seeks to introduce students to areas that often fall beyond the penumbra of historical surveys centered on the nation-state. No prior knowledge of South Asian history is assumed. Weekly readings will average 150 pages. Note: No prior knowledge of South Asian history is assumed.
Equivalent Course(s): GEOG 26400, SALC 26804, HIST 26804

GLST 27702. About Nature: From Science to Sense. 100 Units.
Consider mushrooms,” Anna Tsing (2012) suggests to those who are curious about human nature and she points to the relational and biological diversity found at the unruly edges of the global empire-the governmentalized, politicized, commoditized culture nature of capitalism. This class follows the suit, tracking the scent of what evidently remains, thrives, withdraws, overwhelms, and inspires wonder in the guises of the natural, wild, organic, or awesome.
Instructor(s): L. Jasarevic Terms Offered: Winter
Equivalent Course(s): INST 27702, ANTH 25117

GLST 27703. Earthbound Metaphysics: Speculations on Earths and Heavens. 100 Units.
Social thought has recently reopened the subject matter of the “world”: what is it made of, how does it hold together, who and what inhabits it? Proposals and inquiries generated in response are as imaginative as they are self-consciously urgent: written on the crest of the global ecological disaster, from within the zones of disturbance or the sites of extreme intervention into the living matter and forms of life, contemplating the end of the world and possibilities of extinction, redemption, cohabitation, or “collateral survival” (Tsing 2015). All are variously political. Foregrounding the plurality of the material worlds and lived worldviews on the one hand, and of the shared historical predicament on the other, social thinkers question universal values and conceivable relations, and search for alternate forms of grasping, engaging, and representing the pluriverse. This course goes along with such interests in the “worlds” and collects a number of compelling, contemporary texts that are variously oriented towards cosmopolitics, “minimalist metaphysics,” “new materialisms,” speculative realisms, eco-theology, and multispecies coexistence. Readings will stretch out to examine some classic ethnographic texts and past theoretical excursions into the perennial problem of how to know and tell the unfamiliar, native, worlds, which are swept by, mingling with, or standing out in the more globalizing trends of capitalist, scientific, and secular materialism.
Equivalent Course(s): ANTH 25118

GLST 29524. Approaches to World History. 100 Units.
What is world history? This seemingly simple question is a source of great debate, such as the heated responses to the College Board’s recent decision to cut material prior to 1450 from AP World History. How we answer it says a great deal about how we view the world and history generally. This course introduces answers to this question by previous scholars and challenges students to assess how these answers relate to their own education and intellectual interests at the University of Chicago. We will touch on major approaches and trends in the growing field of world history, including civilizational studies, the “great divergence” or “rise of the West,” world-systems theory, environmental history, “big history,” and the study of specific people, places, and objects in the context of world history. Students will leave with a solid grounding in one of the most vibrant and contentious fields of history today and a better understanding of the diversity of ways to situate historical narratives and current events into a global perspective.
Instructor(s): D. Knorr Terms Offered: Spring
Equivalent Course(s): HIST 29524

GLST 29525. The Global Life of Things. 100 Units.
What is a commodity? And can we read capitalism’s global history through the commodity form? This course will investigate how historians and anthropologists have studied commodities and commodification to account for the environmental, social, and cultural developments of capitalism over the last four centuries. We will begin by considering canonical theoretical approaches, including Marx, Polanyi, and Appadurai. Readings will then be based around case studies of, among other things, land, cotton, and slavery; sugar, guano, and mushrooms. Readings will span from the early modern Atlantic World through to the nineteenth-century Pacific, the twentieth-century Middle East, and the United States and Japan in the present day. The course should appeal to students pursuing studies of the early modern Atlantic world, economic history, or environmental history.
Instructor(s): O. Cussen Terms Offered: Spring
Equivalent Course(s): ENST 29525, HIST 29525
GLST 29610. Cultures and Politics of Water. 100 Units.
This course investigates the relationship between water, culture, and society in the global past. Instead of studying water from the natural science perspective, it places the cultural and political aspects of water at the center of the analysis, and posits the need for a long-term understanding of our contemporary water problems in a global context. The seminar draws on much empirical literature on the cultural and political dimensions of water in local contexts, and aims to relate them through the concept of globalization.
Instructor(s): James Hevia Terms Offered: Spring

GLST 29700. Reading/Research: Global Studies. 100 Units.
This is a reading and research course for independent study not related to BA research or BA paper preparation. Note/Prerequisite: College Reading and Research Course form required, along with consent of instructor and program director.
Terms Offered: Autumn Spring Winter
Prerequisite(s): GLST 23101, GLST 23102; consent of instructor and program director
Note(s): Students are required to submit the College Reading and Research Course Form.

GLST 29800. BA Thesis Seminar I. 100 Units.
This weekly seminar, taught by graduate student preceptors in consultation with faculty readers, is designed to aid students in their thesis research. Students are exposed to different conceptual frameworks and research strategies. Students must have approved topic proposals and faculty readers to participate in the seminar.
Terms Offered: Autumn
Prerequisite(s): GLST 23101 and GLST 23102
Note(s): Required of students with fourth-year standing who are majoring in Global Studies, but enrollment not permitted in quarter of graduation.

GLST 29801. BA Thesis Seminar II. 100 Units.
This weekly seminar, taught by graduate student preceptors in consultation with faculty readers, offers students continued BA research and writing support. Students present drafts of their work and critique the work of their peers.
Terms Offered: Winter
Prerequisite(s): GLST 29800
Note(s): Required of students with fourth-year standing who are majoring in Global Studies, but enrollment not permitted in quarter of graduation.

GLST 29900. BA Thesis: Global Studies. 100 Units.
This is a reading and research course for independent study related to BA research and BA thesis preparation. Note/Prerequisite: College Reading and Research Course form required, along with consent of instructor and program director.
Prerequisite(s): Consent of instructor and program director
Note(s): Students are required to submit the College Reading and Research Course Form.
History

Department Website: https://history.uchicago.edu/content/undergraduate-programs

Program of Study

For decades the University of Chicago has been a leader in the study of history, through its pioneering civilization studies programs, its intensive research-based undergraduate curriculum, and its training of academic historians as both researchers and teachers. Majoring in history not only enables you to become a consumer of academic knowledge, it also prepares you to become a producer of knowledge. Undergraduate history courses first train you to explore large-scale social, cultural, and political processes by defining concrete, researchable questions. Subsequently, as a history major, you are taught how to locate the primary and secondary sources necessary to develop answers to these questions. Finally, faculty assist you in transforming your research into historical arguments that shed light on the multiple ways in which our world, our very reality, has transformed over time. History is excellent preparation for a wide field of endeavors—from law, government, and public policy to the arts and business.

Students interested in a history major should consult the associate director before the end of their second year; it is, however, possible to join the major as a third-year student.

Program Requirements

In addition to the civilization sequences, students can choose from more than eighty history courses that are offered each year to undergraduates. Some of these are introductory lectures ("Gateway courses"), others are small seminars devoted to the intense study of a particular historical moment, theme, or event. Students must take twelve courses for the history major, one of which must be a history colloquium (HIST 29600s).

History majors have the option of pursuing one of two tracks: the Regular Track or the Research Track. Students in the Research Track complete a BA thesis during two BA seminars HIST 29801-29802 BA Thesis Seminar I-II. Students in the Regular Track take two elective courses in lieu of the BA seminars. Students wishing to pursue the Research Track must officially declare their intention to do so with the associate director by sixth week of Winter Quarter during their third year. Only students in the Research Track are eligible for honors.

Courses without a "HIST" number may be used only with departmental permission; students should submit a petition to the associate director to have them considered (see Petitioning for Outside Credit below). Students may use one civilization sequence (up to three courses in the same sequence) to count toward history major requirements, but only if these courses are not also being used to count toward general education requirements.

Major Field

Students in both the Research Track and the Regular Track are required to take six courses in, or directly related to, their chosen main field. Students construct the main field and choose their other courses in close consultation with the associate director, subject to final approval by the faculty chair of the Undergraduate Studies Committee.

The major field is usually defined by time and space. Examples are nineteenth- or twentieth-century US history, colonial Africa, the Atlantic world in the early modern or modern period, ancient Greece, or medieval Europe. Thematic major fields are also possible; for example, African American, Jewish, or gender history. Major fields may also be methodologically defined: for example, intellectual, economic, gender, political, or urban history. Students pursuing a major field in urban history, for example, might take courses ranging from "Jewish Spaces and Places: Imagined and Real" to "Cities from Scratch: The History of Urban Latin America"; a focus on economic history might include "Economic Change in China" and "The History of US Capitalism." The case of thematically or methodologically defined major fields, it is particularly important to consult closely with the associate director to ensure coherence.

Electives

In addition to the six courses in the main field, students must also take a number of elective courses. Students pursuing the Research Track take six electives, while students pursuing the Research Track take four electives and complete the major with two seminars for the BA thesis (See Research Track below). Electives should complement the main field, extend the range of your historical awareness, and explore varying approaches to historical analysis and interpretation. You are encouraged to take courses that introduce significant civilizational or chronological breadth into your studies, or a different methodology or theme than you are studying in your major field.

Research Colloquium (HIST 29600s)

Students who are majoring in history must take at least one history colloquium (HIST 29600s), though they are welcome to take more than one. Depending on the topic, the colloquium may count as one of the six courses comprising the student's major field or as one of the history electives, depending on the relevance of the colloquium to the student's major field. Students interested in pursuing the Research Track should take a colloquium prior to Spring Quarter of their third year, while those pursuing the Regular Track can take a
colloquium at any point prior to graduation. The colloquia are offered on a variety of topics each year and enable advanced College students to pursue research projects.

These courses expose students to the methods and practice of historical research and writing. Students are required to compose an original research paper that is at least fifteen pages in length. For students who are planning to begin graduate study the year following graduation, the colloquium provides them with the opportunity to produce a writing sample based on primary sources that they can use for their applications.

**RESEARCH TRACK**

Students admitted to the Research Track are required to complete twelve courses for the major: six in a major field, four electives, and two BA seminars. The research colloquium may count toward either the major field or the elective field requirement. Students planning to pursue graduate study in history or those wishing to go into a research-intensive career, such as journalism, law, or policy analysis, are encouraged to pursue the Research Track.

**Application to Research Track**

Students wishing to pursue the Research Track must submit a major form indicating their plans as well as a short description of their proposed BA thesis topic to the associate director by sixth week of Winter Quarter during their third year. With the approval of the faculty chair of the Undergraduate Studies Committee, the committee places students into a Spring Quarter BA thesis seminar before the end of Winter Quarter. In the seminar students develop a research proposal, which they submit at the end of Spring Quarter. The committee also assigns each student a BA thesis advisor from among the Department of History’s faculty.

**BA Thesis Seminars (HIST 29801 and 29802)**

Students pursuing the Research Track are required to complete a BA thesis and the two BA thesis seminars. The BA thesis is a three-quarter-long research project in which students develop a significant and original interpretation of a historical issue of their choosing. Theses are the culmination of the history program and range from forty to sixty pages in length. The BA thesis seminars assist students in formulating approaches and developing their research and writing skills, while providing a forum for group discussion and critiques.

Students formally register for two quarters, during the Spring Quarter of their third year (HIST 29801 BA Thesis Seminar I) and Winter Quarter of their fourth year (HIST 29802 BA Thesis Seminar II), though they are also expected to be actively engaged during the intervening Autumn Quarter. Students who are out of residence in Spring Quarter of their third year, take BA Seminar I in Autumn Quarter of their fourth year (see Study Abroad below). BA Thesis Seminar I meets weekly in the Spring Quarter of the third year, but only every other week during the autumn and winter terms of the fourth year. Throughout the period of researching and writing the thesis, students benefit from the company of their peers and the guidance of their preceptor, who is an advanced history graduate student, serves as the seminar instructor, and is the second reader of the thesis. You must receive a B grade in BA Seminar I to continue in the research track and enroll in BA Seminar II.

**BA Thesis**

The deadline for submission of the BA thesis is the second Friday of Spring Quarter. Students who wish to complete their papers in a quarter other than Spring Quarter must petition the department through the associate director. Students graduating in a quarter other than Spring Quarter must turn in their theses by Friday of seventh week of their final quarter. When circumstances justify it, the department establishes individual deadlines and procedures.

With approval from the undergraduate faculty chairs in two departments, history students may be able to write a BA thesis that meets requirements for a dual major. Students must consult with both chairs before the end of Spring Quarter of their third year. A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Students are eligible to apply for research funding for summer research from the Department of History and the PRISM (Planning Resources and Involvement for Students in the Majors) program. Students are also encouraged to take advantage of funding that is available for language study abroad through the Foreign Language Acquisition Grant (FLAG) program. For details on available funding, students should consult the associate director.

**HONORS**

Students pursuing the Research Track who have done exceptionally well in their course work and have written an outstanding BA thesis are recommended for honors. Candidates must have an overall GPA of 3.0 or higher and a GPA of 3.7 or higher in the twelve courses counting towards the major. Readers submit BA theses for departmental honors that they judge to be of particular distinction. If the department concurs, the student is awarded honors. Students who fail to meet the deadline for submission of the BA thesis are not eligible for honors consideration.
## SUMMARY OF REQUIREMENTS FOR THE MAJOR

### Regular Track

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six courses in a major field</td>
<td>600</td>
</tr>
<tr>
<td>Six electives</td>
<td>600</td>
</tr>
<tr>
<td>One of the 12 courses above must be a Research Colloquium (HIST 29600s)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1200</td>
</tr>
</tbody>
</table>

### Research Track

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six courses in a major field</td>
<td>600</td>
</tr>
<tr>
<td>Four electives</td>
<td>400</td>
</tr>
<tr>
<td>One of the 10 courses above must be a Research Colloquium (HIST 29600s)</td>
<td></td>
</tr>
<tr>
<td><strong>HIST 29801 BA Thesis Seminar I</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>HIST 29802 BA Thesis Seminar II</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1200</td>
</tr>
</tbody>
</table>

§ Students on the Research Track should complete their Research Colloquium before Spring Quarter of their third year.

### Reading and Research Courses

Students interested in pursuing a program of study that cannot be met by means of regular courses have the option of devising a reading and research course (HIST 29700 Readings in History) that is taken individually and supervised by a member of the Department of History faculty. Such a course requires the approval of the associate director and the prior consent of the instructor with whom the student would like to study. Note: Enrollment in HIST 29700 is open only to students who are doing independent study that is not related to the research or writing of the BA thesis. As a general rule, only one reading and research course can be counted towards the history major.

### Petitioning for Outside Credit

The Department of History offers a wide variety of courses each quarter, and majors are strongly encouraged to take history courses to fulfill the requirements of the major. In some instances, courses that originate outside the department can be used to fulfill the course requirements of the major. To receive history credit for nondepartmental courses, you must petition the Undergraduate Studies Committee for approval. A few things to keep in mind:

- Petitions must include a course description, a syllabus, and a statement of purpose that addresses the value of the course for your proposed course of study.
- Allow sufficient time for committee review and to enable you to take one or more additional history course(s) should your petition be denied.
- You should give your petition to the associate director, who shares it with the chair of the Undergraduate Studies Committee.
- Courses taken abroad may also be used towards the major, pending approval of the petition, however more than half of the requirements for the major must be met by registering for courses bearing University of Chicago course numbers.
- Petitions for courses abroad must include course syllabi, descriptions, and course work.
- Generally, no more than two petitions per student will be approved.
- Documentation of approved petitions must be provided to the College adviser in a timely fashion for processing.

### Grading

Courses counting towards the history major are normally taken for quality grades. The History Research Colloquium (HIST 29600s), HIST 29801 BA Thesis Seminar I, and HIST 29802 BA Thesis Seminar II must be taken for quality grades. In exceptional circumstances, students who are majoring in history may petition to allow a course taken for a pass/fail grade to count towards the requirements of the major. Students wishing to do so should consult with the associate director. A pass grade is to be given only for work of C– quality or higher. Students should also consult with their College adviser about the appropriateness of pass/fail grading options in their larger program of study.

### Minor in History

Students specializing in all disciplines are welcome to minor in history. Majors in such fields as international studies, political science, public policy, economics, and philosophy find that a history minor complements their major by providing a historical understanding of social, cultural, political, and economic issues, while those majoring in such disciplines as mathematics and the sciences use the minor to explore a different area of interest and to develop their humanistic understanding of the world. Students may choose to take courses in a variety of
fields, time periods, and thematic topics, with the aim of developing a broad understanding of historical change across time and space, or they may choose to focus specifically on a more narrowly defined field of interest.

Students wishing to pursue the minor should contact the associate director and complete the minor declaration form no later than the end of the third year. The associate director’s approval for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the adviser.

Requirements

The history minor requires a total of six courses chosen in consultation with the associate director. Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors; (2) may not be counted toward general education requirements; (3) may not be petitioned in from other departments; (4) must be taken for quality grades; and (5) must consist of more than half of the courses bearing University of Chicago course numbers.

Course Numbering

History courses numbered 10000 to 29999 are intended primarily for College students; 10000-level courses are introductory. Some 20000-level courses have 30000-level equivalents when they are open to graduate students. To register for 20000/30000 cross-listed courses, undergraduates must use the undergraduate number (20000). History courses numbered 40000 to 49999 are intended primarily for graduate students, but are open to advanced College students with the consent of the instructor. Undergraduates registered for 40000-level courses are held to the graduate-level requirements.

Double Major

Students planning to double major in history and another discipline are encouraged to do so, with the following stipulations:

• Double counting: Courses that are cross-listed with another department may be used for both majors.
• BA thesis and seminar: Double majors pursuing the Research Track must fulfill the requirements pertaining to the BA thesis, including taking part in the BA seminar.

Study Abroad

The Department of History strongly supports study abroad. We have arranged the course work requirement to make that possible, but a little prior planning is required, especially for those pursuing the Research Track. If at all possible, it is best to study abroad during Autumn and/or Winter Quarters of the third year. However, if a full-year study abroad experience is desired, that is still compatible with the Research Track history major. One section of the BA seminar (combining requirements of BA Seminar I and II in an accelerated manner) meets in Autumn Quarter to accommodate fourth-year students who have been abroad third year; these students register for BA Seminar II with the rest of their third-year cohort. All Research Track history majors are required to be on campus for Autumn and Winter Quarters of their fourth year in order to complete the BA thesis.

History Courses

HIST 10101-10102-10103. Introduction to African Civilization I-II-III.

Introduction to African Civilization introduces students to African history in a three-quarter sequence. Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.

HIST 10101. Introduction to African Civilization I. 100 Units.

Part one of the sequence takes a historical approach. We consider how different types of historical evidence—documentary, oral, and material—can be used to investigate processes of change and transformation in Africa from the early Iron Age through the emergence of the Atlantic world in the fifteenth century. We will investigate state formation in comparative perspective and examine case studies from the Swahili coast, the empires of Ghana and Mali, and Great Zimbabwe. The course also examines the diffusion of Islam, European contact, and the trans-Atlantic slave trade.

Instructor(s): E. Osborn Terms Offered: Autumn
Equivalent Course(s): CRES 20701, ANTH 20701
HIST 10102. Introduction to African Civilization II. 100 Units.
The second segment of the African Civilizations sequence uses anthropological perspectives to investigate colonial and postcolonial encounters in West and East Africa. The course objective is to show that while colonialism was brutal and oppressive, it was by no means a unidirectional process of domination in which Europeans plundered the African continent and enforced a wholesale adoption of European culture. Rather, scholars today recognize that colonial encounters were complex culture, political, and economic fields of interaction. Africans actively adopted, reworked, and contested colonizers’ policies and projects, and Europeans drew heavily from these encounters to form liberal conceptions of self, nation, and society. Over the course of the quarter, students will learn about forms of personhood, political economy, and everyday life in the twentieth century. Course themes will include social reproduction, kinship practices, medicine, domesticity, and development. Note(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies. CHDV Distribution C*.
Equivalent Course(s): ANTH 20702, CRES 20802, HIST 10102
Instructor(s): J. Cole Terms Offered: Winter
Prerequisite(s): Taking these courses in sequence is recommended but not required; this sequence meets the general education requirement in civilization studies.
Note(s): CHDV Distribution, C
Equivalent Course(s): CRES 20802, ANTH 20702, CHDV 21401

HIST 10103. Introduction to African Civilization III. 100 Units.
Part Three investigates the long nineteenth century. It considers the Egyptian conquest of Sudan, Omani colonialism on the Swahili coast, and Islamic reform movements across the Sahara. It will also explore connections between the end of the transatlantic slave trade and the formal colonization of the African continent.
Instructor(s): K. Hickerson Terms Offered: Spring
Equivalent Course(s): ANTH 20703, CRES 20703
HIST 10900. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SALC 20200, SOSC 23100, ANTH 24102

HIST 12001. Medieval History: Theories & Methods. 100 Units.
This course will introduce students to research methods and historical theories that are central to the field of medieval European history (500-1500 AD). The first section of the course is designed to give students a grounding in some of the most important historical narratives (political, social, economic, religious, intellectual, cultural) about the medieval period. Students will then spend the middle weeks of the quarter exploring the different types of original sources (written and non-written) that historians use to conduct research on the Middle Ages. This section of the course will include class time at the Regenstein Library’s Special Collections Research Center. In the final weeks, we will concentrate on some of the scholarly debates that have shaped the modern field of medieval history. Grades will be determined on the basis of a midterm exam, a final exam, two short papers, and classroom discussion.
Instructor(s): J. Lyon Terms Offered: Winter
Note(s): No prior knowledge of medieval European history is required; the course is open to all undergraduates.

HIST 12203. Italian Renaissance: Dante, Machiavelli, and the Wars of Popes and Kings. 100 Units.
This course will consider Florence, Rome, and the Italian city-states in the age of plagues and cathedrals, Dante and Machiavelli, Medici and Borgia (1250-1600), with a focus on literature, philosophy, primary sources, the revival of antiquity, and the papacy’s entanglement with pan-European politics. We will examine humanism, patronage, politics, corruption, assassination, feuds, arts, music, magic, censorship, education, science, heresy, and the roots of the Reformation. Writing assignments focus on higher-level writing skills, with a creative writing component linked to our in-class live-action-role-played (LARP) reenactment of a Renaissance papal election. This is a Department of History Gateway course.
Instructor(s): A. Palmer Terms Offered: Spring
Prerequisite(s): Graduate students by consent only; register for the course as HIST 90000 (sect 53) Reading and Research: History.
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): CLCV 22216, KNOW 12203, RLST 22203, SIGN 26034, ITAL 16000

HIST 12700-12800. Music in Western Civilization I-II.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.

HIST 12700. Music In Western Civilization I: To 1750. 100 Units.
Instructor(s): A. Robertson Terms Offered: Winter
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21100, MUSI 12100
HIST 12800. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): MUSI 12200, SOSC 21200

HIST 12800. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): MUSI 12200, SOSC 21200

HIST 13001-13002-13003. History of European Civilization I-II-III.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by “Europe” and “civilization.” Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.

HIST 13001. History of European Civilization I. 100 Units.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by “Europe” and “civilization.” Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
Instructor(s): J. Niermeier-Dohoney, A. Palmer, Staff Terms Offered: Autumn Winter
Prerequisite(s): Students must take a minimum of two quarters of Civ. to fulfill general education requirement; register for same section each quarter.
HIST 13002. History of European Civilization II. 100 Units.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by "Europe" and "civilization." Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
Instructor(s): J. Goldstein, A. Goff, S. Pincus, Staff
Terms Offered: Spring Winter
Prerequisite(s): Students must take a minimum of two quarters of Civ. to fulfill general education requirement; register for same section each quarter.

HIST 13003. History of European Civilization III. 100 Units.
The two-quarter History of European Civilization sequence may be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. Topics in this third quarter of the sequence may include women in European history, religion and society, Church and State, the Enlightenment, the transformation of the Roman World, or other focused topics on cultural, economic, social, political, or religious aspects of European history. The spring 2019 topics will be "The Crusades: History and Imagination" (section 2) and "Crossing the Channel: England and France" (section 4). Refer to https://history.uchicago.edu/content/spring-2019-college-courses for course descriptions.
Instructor(s): A. Locking
Terms Offered: Spring
Prerequisite(s): HIST 13001 and HIST 13002
Note(s): Students who plan to complete a three-quarter sequence register for HIST 13003 in Spring Quarter after completing HIST 13001-13002. Students may not combine HIST 13003 with one other quarter of European Civilization to construct a two-quarter sequence.

HIST 13002. History of European Civilization II. 100 Units.
History of European Civilization is a two-quarter sequence designed to use close readings of primary sources to enrich our understanding of Europeans of the past. As we examine the variety of their experiences, we will often call into question what we mean in the first place by "Europe" and "civilization." Rather than providing a narrative of high politics, the sequence will emphasize the contested geographic, religious, social, and racial boundaries that have defined and redefined Europe and its people over the centuries. We will read and discuss sources covering the period from the early Middle Ages to the present, from a variety of genres: saga, biography, personal letters, property records, political treatises, memoirs, and government documents, to name only a few. Individual instructors may choose different sources and highlight different aspects of European civilization, but some of the most important readings will be the same in all sections. The two-quarter sequence may also be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. This sequence meets the general education requirement in civilization studies.
Instructor(s): J. Goldstein, A. Goff, S. Pincus, Staff
Terms Offered: Spring Winter
Prerequisite(s): Students must take a minimum of two quarters of Civ. to fulfill general education requirement; register for same section each quarter.

HIST 13003. History of European Civilization III. 100 Units.
The two-quarter History of European Civilization sequence may be supplemented by a third quarter, in which students will have the opportunity to explore in greater depth a particular topic in the history of European civilization. Topics in this third quarter of the sequence may include women in European history, religion and society, Church and State, the Enlightenment, the transformation of the Roman World, or other focused topics on cultural, economic, social, political, or religious aspects of European history. The spring 2019 topics will be "The Crusades: History and Imagination" (section 2) and "Crossing the Channel: England and France" (section 4). Refer to https://history.uchicago.edu/content/spring-2019-college-courses for course descriptions.
Instructor(s): A. Locking
Terms Offered: Spring
Prerequisite(s): HIST 13001 and HIST 13002
Note(s): Students who plan to complete a three-quarter sequence register for HIST 13003 in Spring Quarter after completing HIST 13001-13002. Students may not combine HIST 13003 with one other quarter of European Civilization to construct a two-quarter sequence.
HIST 13100-13200-13300. History of Western Civilization I-II-III.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.

HIST 13100. Western Civilization-1. 100 Units.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.

Instructor(s): K. Weintraub, Autumn; J. Boyer, Summer Terms Offered: Autumn, Summer Prerequisite(s): These courses must be taken in sequence.

HIST 13200. Western Civilization-2. 100 Units.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.

Instructor(s): K. Weintraub, Winter, Summer Terms Offered: Summer, Winter Prerequisite(s): These courses must be taken in sequence.

HIST 13300. History of Western Civilization III. 100 Units.
This third course of the History of Western Civilization undertakes a detailed study of the French Revolution and charts the rise of liberal, anti-liberal, and post-liberal states and societies in nineteenth- and twentieth-century European history. The sequence closes with an appraisal of the condition of European politics, culture, and society at the end of the twentieth century

Instructor(s): K. Weintraub, Spring; D. Koehler, Summer Terms Offered: Spring Summer Prerequisite(s): These courses must be taken in sequence.

HIST 13200. Western Civilization-2. 100 Units.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. The purpose of this sequence is threefold: (1) to introduce students to the principles of historical thought, (2) to acquaint them with some of the more important epochs in the development of Western civilization since the sixth century BC, and (3) to assist them in discovering connections between the various epochs. The purpose of the course is not to present a general survey of Western history. Instruction consists of intensive investigation of a selection of original documents bearing on a number of separate topics, usually two or three a quarter, occasionally supplemented by the work of a modern historian. The treatment of the selected topics varies from section to section. This sequence is currently offered twice a year. The amount of material covered is the same whether the student enrolls in the Autumn-Winter-Spring sequence or the Summer sequence. This sequence meets the general education requirement in civilization studies.

Instructor(s): K. Weintraub, Winter, Summer Terms Offered: Summer, Winter Prerequisite(s): These courses must be taken in sequence.
HIST 13300. History of Western Civilization III. 100 Units.
This third course of the History of Western Civilization undertakes a detailed study of the French Revolution and charts the rise of liberal, anti-liberal, and post-liberal states and societies in nineteenth- and twentieth-century European history. The sequence closes with an appraisal of the condition of European politics, culture, and society at the end of the twentieth century
Instructor(s): K. Weintraub, Spring; D. Koehler, Summer Terms Offered: Spring Summer
Prerequisite(s): These courses must be taken in sequence.

HIST 13500-13600-13700. America in World Civilization I-II-III.
The America in World Civilization sequence is nothing like your high school history class, for here we examine America as a contested idea and a contested place by reading and writing about a wide array of primary sources. In the process, students gain a new sense of historical awareness and of the making of America. The course is designed both for history majors and non-majors who want to deepen their understanding of the nation’s history, encounter some enlightening and provocative voices from the past, and develop the qualitative methodology of historical thinking. It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III). This sequence meets the general education requirement in civilization studies.

HIST 13500. America In World Civilization I. 100 Units.
America in World Civilization I examines foundational texts and moments in American culture, society, and politics, from early European incursions into the New World through the early republic of the United States, roughly 1500-1800. We will examine encounters between Native Americans and representatives of imperial powers (Spain, France, and England) as well as the rise of African slavery in North America before 1700. We will consider the development of Anglo-American society and government in the eighteenth century, focusing especially on the causes and consequences of the American Revolution.
Instructor(s): E. Cook, M. Krueer, A. Lippert, A. Rowe, E. Slauter Terms Offered: Autumn
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13600. America in World Civilization II. 100 Units.
The nineteenth-century segment of America in World Civilizations asks: What happens when democracy confronts inequality? We focus on themes that include indigenous-US relations; religious revivalism and reform; slavery, the Civil War, and emancipation; the intersection between women’s rights and antislavery; the development of industrial capitalism; urbanism and social inequality.
Instructor(s): J. Dailey, J. Levy, A. Lippert, R. Rubin Terms Offered: Winter
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13700. America in World Civilization-III. 100 Units.
What conditions have shaped inclusion and exclusion from the category “American” in the twentieth century? Who has claimed rights, citizenship, and protection, and under what conditions? The third quarter of America in World Civilization focuses on multiple definitions of Americanism in a period characterized by empire, transnational formations, and America’s role in the world. We explore the construction of social order in a multicultural society; culture in the shadow of war; the politics of race, ethnicity, and gender; the rise and fall of new social movements on the left and the right; the emergence of the carceral state and militarization of civil space; and the role of climate change and the apocalyptic in shaping imagined futures.
Instructor(s): K. Belew & J. Dailey Terms Offered: Spring
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13600. America in World Civilization II. 100 Units.
The nineteenth-century segment of America in World Civilizations asks: What happens when democracy confronts inequality? We focus on themes that include indigenous-US relations; religious revivalism and reform; slavery, the Civil War, and emancipation; the intersection between women’s rights and antislavery; the development of industrial capitalism; urbanism and social inequality.
Instructor(s): J. Dailey, J. Levy, A. Lippert, R. Rubin Terms Offered: Winter
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).
HIST 13700. America in World Civilization-III. 100 Units.
What conditions have shaped inclusion and exclusion from the category "American" in the twentieth century? Who has claimed rights, citizenship, and protection, and under what conditions? The third quarter of America in World Civilization focuses on multiple definitions of Americanism in a period characterized by empire, transnational formations, and America's role in the world. We explore the construction of social order in a multicultural society; culture in the shadow of war; the politics of race, ethnicity, and gender; the rise and fall of new social movements on the left and the right; the emergence of the carceral state and militarization of civil space; and the role of climate change and the apocalyptic in shaping imagined futures.
Instructor(s): K. Belew & J. Dailey Terms Offered: Spring
Prerequisite(s): It is recommended that students take this course in chronological sequence: HIST 13500–13600 (I and II) or HIST 13600–13700 (II and III).

HIST 13803. The Soviet Union. 100 Units.
This lecture course surveys the making and unmaking of the Soviet Union as a society, culture, economy, superpower, and empire from 1917 to 1991. The Soviet Union began as an unprecedented radical experiment in remaking society and economy, ethnic and gender relations, personal identities, even human nature. In the course of its history, it came to resemble other (capitalist) societies, sharing, in turn, their violence, welfare provisions, and consumerism. The story of this transformation—from being unique and exhilarating to being much like everyone else, only poorer and more drab—will be at the center of our exploration. The main themes of the course include social and cultural revolutions; ideology and the role of Marxism; political violence from the birth of the socialist state to the end of the Stalin terror; Stalinism, its origins, practices, aesthetics, legacies, and critiques; law, dissent, and human rights; nationality policies and the role of ethnic minorities; the economy of shortages and the material culture it created; institutions of daily life (communal apartments, courtyards, peasant markets, dachas, and boiler rooms); socialist realism and the Soviet dreamworld.
Instructor(s): E. Gilburd Terms Offered: Spring
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): REES 13803

HIST 13900-14000. Introduction to Russian Civilization I-II.
This two-quarter sequence, which meets the general education requirement in civilization studies, provides an interdisciplinary introduction to Russian civilization. The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): E. Gilburd, W. Nickell Terms Offered: Autumn
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24000, REES 26011

HIST 13900. Intro to Russian Civilization-1. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): E. Gilburd, W. Nickell Terms Offered: Autumn
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24000, REES 26011

HIST 14000. Intro Russian Civilization-2. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): R. Bird, E. Gilburd Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24100, REES 26012
HIST 14000. Intro Russian Civilization-2. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual, and cultural life; the relationship between center and periphery; systems of social and political legitimization; and symbols and practices of collective identity.
Instructor(s): R. Bird, E. Gilburd Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. Equivalent Course(s): SOSC 24100, REES 26012

HIST 14204. History of the Present. 100 Units.
This Gateway course takes a reverse approach to the study of history, defining issues relevant to the current moment—some determined by the students—and exploring the long stories required to understand the present. We might examine the election of 2016, social movements, climate change, debt, gun ownership, statelessness, and other issues. Each topic will occupy one week of the course. Students will learn historical thinking skills, critical reading, and argumentation, and will complete a final assignment geared towards providing historical context for an ongoing debate in the public sphere. This lecture course is an elective open to non-majors and to first- and second-year students, although upper-year students and History majors and minors are welcome. No previous history course work is required.
Instructor(s): K. Belew Terms Offered: Spring
Prerequisite(s): To ensure registration after pre-registration, consider picking a W or F disc section other than sect 1 or 2. Or, after registration is complete, add the course and pick an open discussion section.
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages. Equivalent Course(s): SIGN 26019

HIST 14701. Human Rights in Chinese History. 100 Units.
This Gateway course will introduce students to China’s contentious rights environment and both domestic and international ideas of human rights. The course will consider social movements, dissent, the role of the press, environmentalism, and debates over “Asian values.” While the course surveys the modern period we will also discuss legacies of China’s philosophical traditions.
Instructor(s): J. Ransmeier Terms Offered: Winter
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages. Equivalent Course(s): EALC 14701, HMRT 14701

HIST 15100-15200-15300. Introduction to the Civilizations of East Asia I-II-III.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.

HIST 15100. Intro To East Asian Civilization I. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): G. Alitto Terms Offered: Autumn Summer
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required. Equivalent Course(s): CRES 10800, EALC 10800, SOSC 23500

HIST 15200. Intro To East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required. Equivalent Course(s): CRES 10900, SOSC 23600, EALC 10900
HIST 15300. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): CRES 11000, EALC 11000, SOSC 23700

HIST 15200. Intro to East Asian Civilization II. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a three-quarter sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present
Instructor(s): J. Ketelaar Terms Offered: Summer Winter
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): CRES 10900, SOSC 23600, EALC 10900

HIST 15300. Intro to East Asian Civilization III. 100 Units.
This sequence meets the general education requirement in civilization studies. This is a sequence on the civilizations of China, Japan, and Korea, with emphasis on major transformation in these cultures and societies from the Middle Ages to the present.
Instructor(s): K. H. Choi Terms Offered: Spring
Prerequisite(s): Open to undergraduates only; all students attend the MW lecture and register for one F discussion section.
Note(s): Taking these courses in sequence is not required.
Equivalent Course(s): CRES 11000, EALC 11000, SOSC 23700

HIST 15602-15603-15604. Ancient Empires I-II-III.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered. Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.

HIST 15602. Ancient Empires I. 100 Units.
The first course of this three-course sequence focuses on the Hittite Empire.
Instructor(s): H. Haroutunian Terms Offered: Autumn
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): CLCV 25700, NEHC 20011

HIST 15603. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, NEHC 20012

HIST 15604. Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550-1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): CLCV 25900, NEHC 20013
HIST 15603. Ancient Empires-II. 100 Units.
This course introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, NEHC 20012

HIST 15604. Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550-1069 BC), the ancient Egyptians were able to establish a vast empire and become one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): CLCV 25900, NEHC 20013

HIST 16101-16102-16103. Introduction to Latin American Civilization I-II-III.
Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

HIST 16101. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America. 
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): CRES 16101, LACS 16100, SOSC 26100, LACS 34600, ANTH 23101, HIST 36101

HIST 16102. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, LACS 34700, ANTH 23102, LACS 16200, HIST 36102, CRES 16102

HIST 16103. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, ANTH 23103, SOSC 26300, CRES 16103

HIST 16102. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, LACS 34700, ANTH 23102, LACS 16200, HIST 36102, CRES 16102

HIST 16103. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, LACS 16300, ANTH 23103, SOSC 26300, CRES 16103

HIST 16700-16800-16900. Ancient Mediterranean World I-II-III.
Available as a three-quarter sequence (Autumn-Winter-Spring) or as a two-quarter sequence (Autumn-Winter or Winter-Spring). This sequence meets the general education requirement in civilization studies. This sequence surveys the social, economic, and political history of Greece to the death of Alexander the Great (323 BC), the Roman Republic (509 to 27 BC), and late antiquity (27 BC to the fifth century AD).

HIST 16700. Anc Mediterr World-I: Greece. 100 Units.
This course surveys the social, economic, and political history of Greece from prehistory to the Hellenistic period. The main topics considered include the development of the institutions of the Greek city-state, the Persian Wars and the rivalry of Athens and Sparta, the social and economic consequences of the Peloponnesian War, and the eclipse and defeat of the city-states by the Macedonians.
Instructor(s): J. Hall, Staff Terms Offered: Autumn
Equivalent Course(s): CLCV 20700
HIST 16800. Anc Mediterr World-2: Rome. 100 Units.
This quarter surveys the social, economic, and political history of Rome, from its prehistoric beginnings in the twelfth century BCE to the end of the Severan dynasty in 235 CE. Throughout, the focus is upon the dynamism and adaptability of Roman society, as it moved from a monarchy to a republic to an empire, and the implications of these political changes for structures of competition and cooperation within the community. Instructor(s): C. Ando, Staff Terms Offered: Winter Note(s): This sequence meets the general education requirement in civilization studies.
Instructor(s): C. Ando, M. Andrews, Staff Terms Offered: Winter Equivalent Course(s): CLCV 20800

HIST 16900. Ancient Mediterranean World III. 100 Units.
This course will survey the social, political, and cultural history of the late antique Mediterranean from Constantine I to Charlemagne. Through close reading and discussion of primary sources, we will examine (among other topics) the rise and spread of Christianity and Islam, changing conceptions of Roman identity, and the inheritance of the classical world, as well as some implications of these topics for subsequent European history.
Instructor(s): R. Payne, staff Terms Offered: Spring Equivalent Course(s): CLCV 20900

HIST 16800. Anc Mediterr World-2: Rome. 100 Units.
This quarter surveys the social, economic, and political history of Rome, from its prehistoric beginnings in the twelfth century BCE to the end of the Severan dynasty in 235 CE. Throughout, the focus is upon the dynamism and adaptability of Roman society, as it moved from a monarchy to a republic to an empire, and the implications of these political changes for structures of competition and cooperation within the community. Instructor(s): C. Ando, Staff Terms Offered: Winter Note(s): This sequence meets the general education requirement in civilization studies.
Instructor(s): C. Ando, M. Andrews, Staff Terms Offered: Winter Equivalent Course(s): CLCV 20800

HIST 16900. Ancient Mediterranean World III. 100 Units.
This course will survey the social, political, and cultural history of the late antique Mediterranean from Constantine I to Charlemagne. Through close reading and discussion of primary sources, we will examine (among other topics) the rise and spread of Christianity and Islam, changing conceptions of Roman identity, and the inheritance of the classical world, as well as some implications of these topics for subsequent European history.
Instructor(s): R. Payne, staff Terms Offered: Spring Equivalent Course(s): CLCV 20900

HIST 17300-17310, HIST 17400-17410, HIST 17500-17510 Science, Culture, and Society in Western Civilization
These courses focus on the origins and development of science in the West. They aim to trace the evolution of the biological, psychological, natural, and mathematical sciences as they emerge from the culture and social matrix of their periods and, in turn, affect culture and social. In order to satisfy the general education requirement in civilization studies, students must take a course in two or three of the following chronological periods: ancient (numbered HIPS 17300-17310), early modern (HIPS 17400-17410), and modern (HIPS 17500-17510). Taking these courses in sequence is recommended but not required. Only one course per category may count toward the requirement unless special approval is granted.

HIST 17300. Science, Culture, and Society in Western Civilization I. 100 Units.
This undergraduate core course represents the first quarter of the Science, Culture, and Society in Western Civilization sequence. Taking these courses in sequence is recommended but not required. This quarter will focus on aspects of ancient Greek and Roman intellectual history, their perceived continuities or discontinuities with modern definitions and practices of science, and how they were shaped by the cultures, politics, and aesthetics of their day. Topics surveyed include history-writing and ancient science, the cosmos, medicine and biology, meteorology, ethnography and physiognomics, arithmetic and geometry, mechanics, taxonomy, optics, astronomy, and mechanical computing.
Instructor(s): J. Wee Terms Offered: Winter Equivalent Course(s): HIPS 17300

HIST 17400. Science, Culture, and Society in Western Civilization II. 100 Units.
This course addresses one of the great transformations in Western history. During the period from the early sixteenth century to the late seventeenth, European understandings of the natural world - and ways of achieving such understandings - underwent a series of radical and far-reaching transformations. The process affected every aspect of life as it was then lived, and as it has been lived since. It is often called the Scientific Revolution. Many people think that it was the central process in the development of modern culture itself.
Instructor(s): A. Johns Terms Offered: TBD Note(s): Not Offered in 2018-2019 academic year.
Equivalent Course(s): HIPS 17400
HIST 17402. Science, Culture, and Society in Western Civilization II: History of Medicine I. 100 Units.
This course examines the theory and practice of medicine between 1500 and 1900. Topics include traditional early modern medicine; novel understandings of anatomy, physiology, and disease from the Renaissance on; and new forms of medical practice, training, and knowledge-making that developed in the eighteenth and nineteenth centuries.
Instructor(s): M. Rossi Terms Offered: TBD. Not offered in 2018-2019
Equivalent Course(s): HIPS 17402

HIST 17403. Science, Culture, and Society in Western Civilization II: Early Modern Period. 100 Units.
Section 1, offered by Robert J. Richards - “Renaissance & Enlightenment.” This lecture-discussion course examines the development science and scientific philosophy from the mid-fifteenth to the mid-nineteenth centuries. The considerations begin with the recovery of an ancient knowledge in the works of Leonardo, Vesalius, Harvey, and Copernicus. Thereafter the course will focus on Enlightenment science, as represented by Galileo, Descartes, Newton, and Hume. The course will culminate with the work of Darwin, who utilized traditional concepts to inaugurate modern science. For each class, the instructor will provide a short introductory lecture on the texts, and then open discussion to pursue with students the unexpected accomplishments of the authors under scrutiny. Section 2, offered by Margaret Carlyle - “Revolutions in Astronomy & Anatomy.” This course explores scientific developments in Western Europe from the sixteenth-century Scientific Revolution to the eighteenth-century Enlightenment. During this period, European understandings of the natural world-and ways of achieving such understandings-underwent a series of radical and far-reaching transformations that are often called the Scientific Revolution.
Instructor(s): Robert J. Richards, Margaret Carlyle Terms Offered: Autumn Winter
Note(s): Offered by Robert J. Richards in Fall 2018, and by Margaret Carlyle in Winter 2019. Equivalent Course(s): HIPS 17403, KNOW 17403

HIST 17500. Sci/Culture/Society In W Civ-3. 100 Units.
No description available
Equivalent Course(s): HIPS 17500

HIST 17501. Science, Culture, and Society in Western Civilization III. 100 Units.
Full course title: Science, Culture, and Society in Western Civilization III: Medicine since the Renaissance. This course is an examination of various themes in the history of medicine in Western Europe and America since the Renaissance. Topics include key developments of medical theory (e.g., the circulation of the blood and germ theory), relations between doctors and patients, rivalries between different kinds of healers and therapists, and the development of the hospital and laboratory medicine.
Instructor(s): M. Rossi Terms Offered: Spring
Equivalent Course(s): HIPS 17501

HIST 17502. Science, Culture, and Society in Western Civilization III. 100 Units.
The course is organized around a series of broad questions about science. These questions are addressed by means of examples drawn from both the past and the present. The historical cases arise in chronological order, ranging from the development of experimental methods in the late seventeenth century to the advent of biotechnology in the modern era. They furnish a selective set of materials for a history of scientific practice. Their other purpose here, however, is to highlight the depth and importance of many problems still confronting the world of science today - problems that are cultural as well as scientific, and that demand of us an understanding of what science is and how it works.
Instructor(s): A. Johns Terms Offered: Spring
Equivalent Course(s): HIPS 17502

HIST 17503. Sci/Cult/Soc in Western Civilization III - The History of Medicine Part II: 1900 -Present. 100 Units.
Full course title: Science, Culture, and Society in Western Civilization III: History of Medicine 2. This three-quarter sequence focuses on the origins and development of science in the West. The twentieth century is sometimes called the "golden age" of medicine: a period in which medicine broke free of tradition and combined with science to provide powerful new ways of understanding disease, and spectacular new technologies for fighting sickness. Along with amelioration of suffering, however, came new diseases, new medical systems, and new ways of thinking about the relationship between medical bodies, political bodies, and the nature and scope of human misery. This course examines some of the many transformations of (predominantly Euro-American) medicine in the twentieth century, looking not only at advances in medical knowledge and technologies, but also at the social, political, moral and affective ramifications of new ways of thinking about the promise - and perils - of (bio)medical practice.
Instructor(s): Michael Paul Rossi Terms Offered: Spring
Equivalent Course(s): HIPS 17503
HIST 17504. Science, Culture, and Society in Western Civilization III: The Environment. 100 Units.
This course charts the development of modern science and technology with special reference to the environment. Major themes include natural history and empire, political economy in the Enlightenment, the discovery of deep time and evolutionary theory, the dawn of the fossil fuel economy, Malthusian anxieties about overpopulation, the birth of ecology, the Cold War development of climate science, the postwar debates about the limits to growth, and the emergence of modern environmentalism. We will end with the new science of the Anthropocene.
Instructor(s): Fredrik Albritton Jonsson Terms Offered: TBD. Not offered in 2018-2019 Academic Year
Equivalent Course(s): HIPS 17504

HIST 17704. The Old History of Capitalism. 100 Units.
What is the relationship between race and capitalism? This course introduces students to the concept of "racial capitalism," which rejects treatments of race as external to a purely economic project and counters the idea that racism is an externality, acultural overflow, or an aberration from the so-called real workings of capitalism. Spanning the colonization of North America to the era of mass incarceration, topics include the slave trade, indigenous dispossession, antebellum slavery, the Mexican-American War, "new imperialism," the welfare state, and civil rights. This course neither presumes a background in economics nor previous coursework in history.
Instructor(s): D. Jenkins Terms Offered: Winter
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): CRES 17704

HIST 17805. America in the Twentieth Century. 100 Units.
This is a thematic lecture course on the past 115 years of US history. The main focus of the lectures will be politics, broadly defined. The readings consist of novels and nonfiction writing, with a scattering of primary sources.
Instructor(s): J. Dailey Terms Offered: Autumn
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): LLSO 25904, AMER 17805

HIST 18101. Democracy in America? 100 Units.
This course will explore the unlikely career of democracy in US history. Throughout its past, the United States has been defined by endless and unpredictable struggles to establish and extend self-government of one kind or another—even as those struggles have encountered great resistance and relied on the exclusion or subordination of some portion of society to underwrite expanding freedom and equality for those enjoying the fullest benefits of citizenship. American democracy has also relied on a conceptual separation between state and society that has necessarily broken down in practice, as political institutions produced and sustained economic forms like slavery or the corporation, social arrangements like the family, and cultural values such as freedom—even as private interests worked their reciprocal influence over public institutions. Over the course of the quarter we will explore this contested history of democracy in America through a close reading of classic texts (including Tocqueville's famous study), contextualized by the most current historical scholarship. Small, incremental writing assignments and individual presentations will culminate in a final essay that can emphasize philosophical/theoretical or historical/empirical questions according to students' interests. Students will also have the option of conducting their own original research to satisfy some portion of the course work, which may lead to subsequent internship opportunities with relevant faculty.
Instructor(s): J. Sparrow Terms Offered: Spring
Prerequisite(s): History in the World courses use history as a valuable tool to help students critically examine our society, culture, and politics. Preference given to 1st- and 2nd-yr students.

HIST 18301-18302-18303. Colonizations I-II-III.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world.

HIST 18301. Colonizations I. 100 Units.
This sequence meets the general education requirement in civilization studies. This three-quarter sequence approaches the concept of civilization from an emphasis on cross-cultural/societal connection and exchange. We explore the dynamics of conquest, slavery, colonialism, and their reciprocal relationships with concepts such as resistance, freedom, and independence, with an eye toward understanding their interlocking role in the making of the modern world. Themes of slavery, colonization, and the making of the Atlantic world are covered in the first quarter.
Note(s): This sequence meets the general education requirement in civilization studies. This course is offered every year. These courses can be taken in any sequence.
Terms Offered: Autumn
Equivalent Course(s): ANTH 24001, SOSC 24001, CRES 24001
HIST 18302. Colonizations II. 100 Units.
Modern European and Japanese colonialism in Asia and the Pacific is the theme of the second quarter.
Terms Offered: Winter
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): ANTH 24002, SOSC 24002, CRES 24002

HIST 18303. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Terms Offered: Spring
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): CRES 24003, SOSC 24003, ANTH 24003, SALC 20702

HIST 18702. Race, Politics, and Sports in the United States. 100 Units.
Kneeling or standing for the national anthem? Breaking the glass ceiling, coming out of the closet, or crossing the color line in sports? This course will take up the question of why sports are so central to American identity and what historic role sports and athletes have played in American political life. Muhammad Ali, Billie Jean King, Jackie Robinson, and Bill Russell are only a few of the athletes who fought for freedom, inclusion, and equality in sports and American life. Through close critical readings of popular and scholarly writing, memoirs, and visual culture (film and television), we will examine the seminal overlapping events in sports history and American history to understand the collision and convergence of our politics and sports culture.
Instructor(s): M. Briones Terms Offered: Spring
Note(s): History in the World courses use history as a valuable tool to help students critically exam our society, culture, and politics. Preference given to 1st- and 2nd-yr students.
Equivalent Course(s): CRES 18702

HIST 19402. Economic History II: The Early Modern World, circa 1300-1800. 100 Units.
This course both describes preindustrial economic life and weighs the models used to explain fundamental changes to it. We will begin by describing some of the basic structures that determined patterns of production, exchange, and consumption in a period of low and easily reversible growth. These include agricultural productivity, demographic constraints, modes of transportation, and the social structures that governed the distribution of what little surplus premodern societies produced. Turning to the sources of economic dynamism that may have contributed to later industrialization, we will first examine the growth of long-distance trade networks starting in the late fourteenth century. How were traditional economies characterized by limited movement stimulated by the circulation of people, goods, and money from afar? We will then move to a discussion of the factors leading to (or frustrating) transformational patterns of economic growth: agricultural productivity, institutions, "proto-industrial" production in an era of limited urban growth, and changing norms of consumption. This course is part of the College Course Cluster program: Economic History, from Sumer to the Global World.
Instructor(s): P. Cheney & K. Pomeranz Terms Offered: Winter
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): ECON 12210

HIST 20110. Trans-Saharan Africa. 100 Units.
This course will deal with various developments (trade, politics, religion, slavery, voluntary migration) linking the Maghrib/North Africa with the great African desert and the "Sudanic" lands to its south. Along with lectures and discussions of readings we will visit an exhibit, Caravans of Gold, Fragments in Time: Art, Culture, and Medieval Trans-Saharan Exchange, at the Block Museum of Art in Evanston.
Instructor(s): R. Austen Terms Offered: Winter
Equivalent Course(s): CRES 30110, CRES 20110, HIST 30110
HIST 20111. History of Death. 100 Units.
From the treatment of mortal remains to the built environment of cemeteries, tombs, and memorials, the dead have always played a role in the lives of the living. This course examines how beliefs and practices surrounding death have been a source of meaning making for individuals, institutions, religious communities, and modern nations. It will ask students to consider how examining death makes it possible to better understand the values and concerns of societies across time and space. This course will consider case studies from Africa, the Middle East, the Caribbean, North America, Europe, and Asia, from the Middle Ages to the Vietnam War. It introduces students to the methods and debates that animate the historical study of death—coming from histories of the body, social history, and the study of slavery—and ends by asking the question: "Is it possible to have a global history of death?"
Instructor(s): K. Hickerson Terms Offered: Spring
Equivalent Course(s): CRES 20111, RLST 20111, GNSE 20111

HIST 20210. History Lab: Migration and Mobility in Human History. 100 Units.
This Making History course will explore different episodes of human mobility. We will study forced and voluntary migrations by considering the earliest movements of people out of Africa, the transatlantic slave trade, the displacements in Europe produced by World War II, and the current flows of people from Africa and the Middle East across the Mediterranean. These wide-ranging topics necessarily demand that students use a variety of primary sources and methodologies; assigned readings will thus be supplemented by documentaries, audio recordings, artistic renditions, and material culture. For their final project students will be required to work individually or in teams to investigate an example of human migration. Student may present the results of this research as a formal academic essay, may create a website or video, or use some other medium.
Instructor(s): E. Osborn Terms Offered: Winter
Note(s): Making History courses forgo traditional paper assignments for innovative projects that develop new skills with professional applications in the working world. Open to students at all levels, but especially recommended for 3rd- and 4th-yr students.

HIST 21006. The Present Past in Greece Since 1769. 100 Units.
This discussion-based course will explore how conceptions of the ancient past have been mobilized and imagined in the political, social, and cultural discourses of modern Greece from the lead up to the War of Independence through to the present day. Among the themes that will be addressed are ethnicity and nationalism, theories of history, the production of archaeological knowledge, and the politics of display.
Instructor(s): J. Hall Terms Offered: Winter
Equivalent Course(s): ANCM 31915, CLCV 21915, CLAS 31915, HIST 31006

HIST 21903. Medieval Christian Mythology. 100 Units.
Heaven and hell, angels and demons, the Virgin Mary and the devil battling over the state of human souls, the world on the edge of apocalypse awaiting the coming of the Judge and the resurrection of the dead, the transubstantiation of bread and wine into body and blood, the great adventures of the saints. As Rudolf Bultmann put it in his summary of the “world picture” of the New Testament, “all of this is mythological talk,” arguably unnecessary for Christian theology. And yet, without its mythology, much of Christianity becomes incomprehensible as a religious or symbolic system. This course is intended as an introduction to the stories that medieval Christians told about God, his Mother, the angels, and the saints, along with the place of the sacraments and miracles in the world picture of the medieval church. Sources will range from Hugh of St. Victor’s summum on the sacraments to Hildegard of Bingen’s visionary “Scivias,” the Pseudo-Bonaventuran “Meditations on the Life of Christ,” and Jacobus de Voragine’s “Golden Legend,” along with handbooks on summoning angels and cycles of mystery plays.
Instructor(s): R. Fulton Brown Terms Offered: Winter
Equivalent Course(s): RLST 21903, HIST 31903, HCHR 31903

HIST 22102. Medieval Travelers. 100 Units.
Why did Europeans respond as they did to the opportunities opened to them with Columbus’s discovery of a “new world” in the late fifteenth century? What precedents and preconceptions did they have for their encounter with this “new world”? This course seeks to answer these questions by looking to the accounts of those who traveled both within and beyond Europe, in fact and in imagination, during the centuries preceding Columbus’s voyage. Its argument will be that to understand what Columbus and his contemporaries found when they arrived in the “new world,” we must first understand what they thought they were looking for—and that what they were looking for is not necessarily what we might expect. The course gives students the opportunity to write a significant research paper, written in the character of a medieval traveler, whether a merchant, pilgrim, crusader, missionary, geographer, or conquistador.
Instructor(s): R. Fulton Brown Terms Offered: Spring
Equivalent Course(s): HIST 32102
HIST 2203. The Holy Roman Empire, 800–1500. 100 Units.
During the first seven centuries of its existence the Holy Roman Empire emerged as one of the most politically and culturally heterogeneous states in all of Europe. A vast expanse of central Europe that is today divided among more than a dozen nations was ruled, at least in theory, by the emperors during the central and late Middle Ages. The purpose of this course is to trace some of the major developments in imperial history between 800 (Charlemagne's coronation as emperor) and the early sixteenth century. Topics will include the changing nature of imperial authority from the Carolingians to the Habsburgs, the Church's and the nobility's establishment of quasi-independent lordships inside imperial territory, papal-imperial relations, and the eastward expansion of the empire.
Instructor(s): J. Lyon
Terms Offered: Winter
Equivalent Course(s): HIST 32203

HIST 22610. Paris and the French Revolution. 100 Units.
The French Revolution is one of the defining moments of modern world history. This course will explore the mix of social, political, and cultural factors which caused its outbreak in 1789 and go on to consider the overthrow of the Bourbon monarchy in 1792, the drift towards state-driven Terror in 1793-94, and the ensuing failure to achieve political stability down to the advent of Napoleon Bonaparte in 1799. We will view these epochal changes through the prism of France's capital city. Paris shaped the revolution in many ways, but the revolution also reshaped Paris. The urbane city of European enlightenment acquired new identities as democratic hub from 1789 and as site of popular democracy after 1793-94. In addition, the revolution generated new ways of thinking about urban living and remodelling the city for the modern age. A wide range of primary sources will be used, including visual sources (notably paintings, political cartoons and caricatures, and maps).
Instructor(s): C. Jones
Terms Offered: Spring
Prerequisite(s): Students taking FREN 22619/32619 must read French texts in French.
Equivalent Course(s): HIST 32610, FREN 22619, FREN 32619

HIST 23008. Montesquieu's "The Spirit of the Laws" 100 Units.
From its publication in 1748, "The Spirit of the Laws" has been interpreted, among other things, as a foundational work of method in historical jurisprudence; a paean to the English constitution and an inspiration for that of the future United States; a precocious call for penal reform and the abolition of slavery; a monument to the Enlightenment's capacity for cultural relativism that laid the groundwork for the discipline of sociology; a historical treatise on the rise of globalized commerce and its political effects in Europe; and a manifesto for a reactionary feudal aristocracy. We will read "The Spirit of the Laws" with attention to these and other possible interpretations. This course is mainly an exercise in close reading, but we will also think about the contexts for the writing and reception of this landmark work of Enlightenment social and political thought.
Instructor(s): P. Cheney
Terms Offered: Autumn
Prerequisite(s): Completion of one of these Core sequences: "Classics of Social and Political Thought," "Power, Identity, Resistance" or "Self, Culture, and Society."
Equivalent Course(s): LLSO 23008, FNDL 23008

HIST 23306. Europe, 1914 to Present. 100 Units.
This lecture course will provide an introductory survey to European history in the twentieth century. It aims to provide a critical overview of political, economic, social, and cultural developments. Topics covered will include the rise of mass politics and the conflict between Bolshevism and fascism; the causes, experiences, and effects of the First and Second World Wars in Western and Eastern Europe; the transformation of Eastern Europe's multinational empires into nationalizing states; interwar democratization and economic crisis; ethnic cleansing and population displacement; decolonization and the Cold War; the challenges of postcolonial migration; transformations in society and economy, including changes in class and gender relations; new social and protest movements in the 1960s and 1970s; mass culture and consumption; the collapse of Communism; and European integration at the end of the twentieth century.
Instructor(s): T. Zahra
Terms Offered: Winter
Note(s): Open to first-year students.
Equivalent Course(s): LLSO 23306

HIST 23610. Modern German History I, 1740-1866. 100 Units.
What is German history before the foundation of the German state? This course introduces students to a broad perspective on this question, taking up the monumental shifts in borders, citizenship, social hierarchies, economic development, and political orientation from the War of Austrian Succession to the Austro-Prussian War. While the course will focus on the cultural, social, political, and intellectual histories of these transformations in the kleindeutsch states, we will be concerned throughout with the larger Habsburg empire and with Germans’ place in the world as we consider the relationship of the German lands to eastern and western Europe and German participation in international commerce, imperial networks, and global migration. Course materials will emphasize primary sources, including written documents, music, works of art, literature, and historical artifacts as we approach the central themes of the period from a variety of registers of experience.
Instructor(s): A. Goff
Note(s): No background in German or European history is required.
HIST 23611. Modern German History II, 1866-Present. 100 Units.
This course introduces students to German history from the unification of Germany through the Kaiserreich, the Weimar Republic, the Third Reich, the East and West German states, and reunification. Throughout, our focus will be on the political, social, economic, cultural, and intellectual life of the period, including such themes as German colonialism, industrialization, the First World War, cultural modernism, the rise of National Socialism, the Holocaust, the Cold War, migration, the environmental movement, the European Union, and the rise of the far right in contemporary German politics. As we approach these themes from a variety of registers of experience, course materials will emphasize primary sources, including written documents, music, works of art, literature, and historical artifacts.
Instructor(s): A. Goff
Note(s): No background in German or European history is required.

HIST 24310. China: Rise or Return? Historical Perspectives on Chinese Culture. 100 Units.
This course addresses the development through time of the Chinese state, society, and culture from its beginning to the present. Only the most general of treatments is possible in addressing such an enormous subject, but the course provides an opportunity for individual research on a specialized topic of the student's choosing within this framework. No background in Chinese studies is required. The class discusses and critiques the weekly readings. Each set of readings centers on a broad historical question of crucial historical significance.
Instructor(s): G. Alitto
Equivalent Course(s): EALC 24302

HIST 24500. Reading Qing Documents. 100 Units.
This course introduces Chinese documents of the Qing (1644-1912) and the Republican (1912-1949) periods, with an emphasis upon critical use of these documents and the related historiography. Students read a wide variety of genres, including imperial edicts, secret memorials, local gazetteers, newspapers, funeral essays, as well as selections from the Qing "Veritable Records" (Qing Shilu) and the Draft History of the Qing Dynasty (Qing Shigao). We first translate the documents into English and then analyze them.
Instructor(s): G. Alitto Terms Offered: Winter
Equivalent Course(s): HIST 34500, EALC 24500, EALC 34500

HIST 24612. Chinese Frontier History, circa 1600-Present. 100 Units.
A study of frontier regions, migration, and border policies in Qing (1644-1912) and twentieth-century China, focusing on selected case studies. Cases will include both actual border regions (where the Qing/China was adjacent to some other polity it recognized), ethnically diverse internal frontiers, and places where migrants moved into previously uninhabited regions (e.g., high mountains). Topics include the political economy and geopolitics of migration and frontier regions, the formation of ethnic and national identities in frontier contexts, borderland society (e.g., marriage, social stratification, and social mobility), and the environmental effects of migration.
Instructor(s): K. Pomeranz Terms Offered: Autumn
Note(s): Assignments for undergraduates are two short papers, a midterm (which can be waived under certain circumstances), a final, and class participation; requirements for graduate students are negotiable, but will include roughly twenty pages of writing (and no in-class exams).
Equivalent Course(s): HIST 34612, EALC 34712, EALC 24712

HIST 24803. Histories in Japan. 100 Units.
An examination of the discipline of history as practiced in Japan from ancient times to the modern. Readings in translation of works such as the Kojiki, Okagami, Taiheiki, and others will be used to explore both the Japanese past and the manner of interpretation of that past.
Instructor(s): J. Ketelaar Terms Offered: Autumn
Equivalent Course(s): EALC 24803, EALC 34803, HIST 34803

HIST 25308. Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences. 100 Units.
In this course we will examine the ways in which different groups of people--in different times and places--have understood the nature of life and living things, bodies and bodily processes, and health and disease, among other notions. We will address these issues principally, though not exclusively, through the lens of the changing sets of methods and practices commonly recognizable as science and medicine. We will also pay close attention to the methods through which scholars in history and anthropology have written about these topics, and how current scientific and medical practices affect historical and anthropological studies of science and medicine.
Instructor(s): M. Rossi Terms Offered: Winter
Note(s): This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40202 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): ANTH 24307, ANTH 34307, HIST 35308, KNOW 40202, CHSS 35308, HIPS 25808, KNOW 25308
HIST 25425. Censorship, Info Control, & Revolutions in Info Technology from the Printing Press to the Internet. 100 Units.
The digital revolution is triggering a wave of new information control efforts and censorship attempts, ranging from monopolistic copyright laws to the “Great Firewall” of China. The print revolution after 1450 was a moment like our own, when the explosive dissemination of a new information technology triggered a wave of information control efforts. Many of today’s attempts at information control closely parallel early responses to the printing press, so the premodern case gives us centuries of data showing how diverse attempts to control or censor information variously incentivized, discouraged, curated, silenced, commodified, or nurtured art, thought, and science. This unique course is part of a collaborative research project funded by the Neubauer Collegium for Culture and Society and is co-organized with digital information expert Cory Doctorow. The course will bring pairs of experts working on the print and digital revolutions to campus to discuss parallels between their research with the class. Classes will be open to the public, filmed, and shared on the Internet to create an international public conversation. This is also a Department of History “Making History” course: rather than writing traditional papers, students will create web resources and publications (print and digital) to contribute to the ongoing collaborative research project.
Instructor(s): A. Johns & A. Palmer Terms Offered: Autumn
Note(s): Making History courses forgo traditional paper assignments for innovative projects that develop new skills with professional applications in the working world. Open to students at all levels, but especially recommended for 3rd- and 4th-yr students. This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40103 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): KNOW 25425, SIGN 26035, HIPS 25425, KNOW 40103, BPRO 25425, HIST 35425, HREL 35425, CHSS 35425

HIST 25704-25804-25904. Islamic History and Society I-II-III.
This sequence meets the general education requirement in civilization studies. This sequence surveys the main trends in the political history of the Islamic world, with some attention to economic, social, and intellectual history. Taking these courses in sequence is recommended but not required.

HIST 25704. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.
This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): HIST 35704, ISLM 30500, NEHC 30501, CMES 30501, RLST 20501, NEHC 20501

HIST 25804. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, NEHC 30502, NEHC 20502, ISLM 30600, CMES 30502

HIST 25904. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the “modern” Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): NEHC 30503, NEHC 20503, HIST 35904
HIST 26129. Paris Noir: African American Refuge in the City of Light. 100 Units.
This course explores the phenomenal history of Paris as a place of refuge for people of African descent, focusing especially on black Americans during the middle decades of the 20th century. Beginning in the years when the US Jim Crow regime was being consolidated and continuing through the era of the civil rights movement, when that regime was being contested, black Americans considered Paris a place of refuge. Novelist, musicians, and sports and political figures all found opportunity for creativity and freedom of expression in the "city of light," notwithstanding the fact that France had itself been one of the principal slave powers in the Americas and maintained a major colonial empire—all of which complicated its image of racial liberalism. How both French and African American sojourners negotiated that apparent contradiction will be the principal issues addressed in course readings and discussions, which will focus on political activists like W.E.B Du Bois and Black Panther member Elaine Brown; literary figures like Richard Wright and James Baldwin; and sports and entertainment personalities like Jack Johnson and Josephine Baker. Course readings will be a mix of primary and secondary sources, including James Baldwin, "Notes of a Native Son"; Richard Wright, "I Choose Exile"; Hazel Rowley, "Richard Wright: The Life and Times"; Tyler Stovall, "Paris Noir: African Americans in the City of Light"; Brent Hayes Edwards, "The Practice of Diaspora"; James Campbell, Instructors: T. Holt Terms Offered: Spring
Prerequisite(s): Admission to the Paris Humanities Program.

HIST 26515. Political and Cultural History of Modern Mexico. 100 Units.
This course is not a survey of Mexican history but a discussion of the recent contributions to the cultural and historical imagination of modern Mexico. It will blend lectures and discussion of such topics as the new meanings of citizenship, peace, war, national culture, violence, avant-garde art, and cinema.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): HIST 36515, LACS 26515, LACS 36515

HIST 26516. The United States and Latin America, a History from 1840s to Trump. 100 Units.
Over the second half of the twentieth century, it became a cliché that the United States was an empire and that the so-called Latin America was its backyard, the region where the empire paraded, with largesse, its mighty will. And yet, on one hand, over the last 150 years both the United States and "Latin America" have had variegated forms of interactions, which cannot be easily characterized as one single historical constant; on the other, in today's world the question seems unavoidable: is "Latin America" still a homogenous unique region with which the United States interacts collectively in the same ways whether in political, economic, or military terms? Making use of historical analysis in tandem with constant discussions of current events in the United States and "Latin America," the course seeks to invite students to add a disciplined historical imagination to the historian/political scientist/analyst toolbox. The course will consist of lectures, student presentations, and class discussions. Each student will be required to introduce readings in class at least once, depending on the number of students. In addition, there will be two take-home essays over the semester. The essay questions will be distributed a week in advance of the due dates.
Instructor(s): M. Tenorio Terms Offered: Spring
Equivalent Course(s): LACS 26516, HIST 36516, LACS 36516

HIST 27006. Not Just the Facts: Telling About the American South. 100 Units.
The great jurist Oliver Wendell Holmes Jr. once observed: "The main part of intellectual education is not the acquisition of facts but learning how to make facts live." This course concerns itself with the various ways people have striven to understand the American South, past and present. We will read fiction, autobiography, and history (including meditations on how to write history). Main themes of the course include the difference between historical scholarship and writing history in fictional form; the role of the author in each and consideration of the interstitial space of autobiography; the question of authorial authenticity; and the tension between contemporary demands for truthfulness and the rejection of "truth."
Instructor(s): J. Dailey Terms Offered: Winter
Prerequisite(s): Open to upper-level undergraduates.
Equivalent Course(s): LLSO 25411, AMER 27006

HIST 27508. Conspiracy Theory in American History. 100 Units.
This course examines conspiracy theories in American history—and some actual conspiracies—ranging from the seventeenth century to the 1990s. The alleged conspiracies that we will study include slave uprisings, monarchical plots against liberty, Catholic secret agents, Freemasons and other secret societies, the abolitionist movement and the Southern "Slave Power," the JFK assassination, and the modern fascination with UFOs, among others. What ties these diverse topics together is a sense that hidden forces are pulling the strings behind the scenes, exercising power in secret to control the course of events, invariably with sinister agendas. We will examine these conspiracy theories not to prove or disprove them, but to understand how such beliefs come about, why they become popular, and how even paranoid fantasies can exert a decisive influence on culture and politics in America.
Instructor(s): M. Kruer Terms Offered: Autumn
HIST 28000. United States Latinos: Origins and Histories. 100 Units.
An examination of the diverse social, economic, political, and cultural histories of those who are now commonly identified as Latinos in the United States. Particular emphasis will be placed on the formative historical experiences of Mexican Americans and mainland Puerto Ricans, although some consideration will also be given to the histories of other Latino groups, i.e., Cubans, Central Americans, and Dominicans. Topics include cultural and geographic origins and ties; imperialism and colonization; the economics of migration and employment; legal status; work, women, and the family; racism and other forms of discrimination; the politics of national identity; language and popular culture; and the place of Latinos in US society. Equivalent Course(s): AMER 28001, CRES 28000, GNSE 28202, HIST 38000, LACS 28000, LACS 38000, CRES 38000, GNSE 38202, AMER 38001
Instructor(s): R. Gutiérrez Terms Offered: Autumn
Equivalent Course(s): GNSE 38202, HIST 38000, CRES 28000, LACS 28000, AMER 38001, GNSE 28202, LACS 38000, CRES 38000, AMER 28001

HIST 28607. War, Diplomacy, and Empire in US History. 100 Units.
World politics have profoundly shaped the United States from its colonial origins to the war on terror. Yet only recently have US historians made a sustained effort to relate the foreign relations of the country to its domestic history. For a century and a half prior to independence, empire, trade, great-power politics, and violent conflict with Native Americans formed the large structures of power and meaning within which colonists pursued their everyday lives. In violently repudiating the claims of the British Empire, the revolutionaries commenced a political tradition that sought to avoid the perils of great-power statecraft for roughly the next century and a half. Yet even as it lent a distinctive cast to US politics and society, this pursuit of exceptionalism had to reckon with the requirements of state power and geopolitics from the Civil War onward. With its sudden embrace of great-power politics and the “rise to globalization” from WWII onward the United States became increasingly like the European societies it had repudiated at the founding, even as its exceptional military and economic power set it apart as a “unipolar power” by the turn of the millennium. To understand these developments in depth students will write two modest-length “deep-dive” analytical essays and three brief reports on targeted expeditions into primary materials, while reading broadly across the historiography of the new diplomatic and international history.
Instructor(s): J. Sparrow Terms Offered: Winter
Equivalent Course(s): HIST 38607

HIST 29000. Latin American Religions, New and Old. 100 Units.
This course will consider select pre-twentieth-century issues, such as the transformations of Christianity in colonial society and the Catholic Church as a state institution. It will emphasize twentieth-century developments: religious rebellions; conversion to evangelical Protestant churches; Afro-diasporan religions; reformist and revolutionary Catholicism; new and New Age religions.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): HCHR 39200, MAPS 39200, CRES 39000, CRES 29000, LACS 39000, HIST 39000, LACS 29000, RLST 21401

HIST 29324. Slavery and Capitalism. 100 Units.
The course examines how the interrelated transnational forces of slavery and capitalism shaped our modern world from the 1400s to the present. We will examine the history of this relationship and the living legacy of that history in the narratives of everyday people. Are recent frameworks theorizing a global hegemonic system of “slavery and racial capitalism” really our ultimate horizon? Are there any redemptive possibilities in older renderings committed to a more distinctive and disaggregated parsing of slavery and capitalism? Critical to approaching these questions are how people of African descent have themselves remembered slavery, experienced capitalism, and marshalled those memories in the service of emancipatory political movements. As such this course will focus on primary documents that give voice to enslaved peoples as well as secondary literature written by black historians attempting to shape international thought on this question. The ultimate aim is a wider understanding of the rise of Western modernity and how peoples of the African diaspora navigated and, at times, contested its consequences.
Instructor(s): G. Mount
Prerequisite(s): Prior undergraduate course on the African diaspora.
Equivalent Course(s): CRES 29324
HIST 29325. A Transnational History of Reparative Justice. 100 Units.
In light of recent revelations tying the University of Chicago to slavery, this course will explore the long history of reparations as a global, national, and local set of questions. How does a given polity go about repairing the un-repairable and forgiving the unforgivable? Are the discursive norms of reparations irredeemably bound to our current conceptualizations of politics, governance, private-property rights, individualism, and the law or can reparations, and how we talk about them, serve as a means of reimagining these categories? How might the practice and performance of reparations actually be structured to foster both intra-group and inter-group unity while avoiding a potentially divisive backlash? Beginning with ancient forms of restorative justice and proceeding briskly into more recent attempts at truth and reconciliation, this course aims to take a transnational and comparative approach to exploring the history of reparations from an interdisciplinary perspective. The ultimate aim is a greater understanding of the possibilities of reparations as they relate to slavery, Jim Crow, and post-1968 discrimination against people of African descent in the United States, which constitutes the second half of this course.
Instructor(s): G. Mount
Prerequisite(s): Prior or concurrent enrollment in a college-level African American history course; instructor may waive PQ on a case by case basis.
Equivalent Course(s): CRES 29325

HIST 29412. The Face in Western Culture from the Mona Lisa to the Selfie. 100 Units.
The course will approach the history of the human face from a variety of disciplinary perspectives, ranging across art history through to the history of science and technology. Topics will include the Mona Lisa and Renaissance portraiture; early modern identity and identity documents; the discipline of physiognomy; Johann Kaspar Lavater and the makings of racial science; the impact of photography; Alphonse Bertillon and the “mug shot”; smiles in advertisements; biometrics to facial recognition technologies; and the art and science of the selfie. The course will draw on specialized readings from secondary literature alongside a wide range of literary and visual primary sources, including scientific texts, paintings, drawings, identity documents, photographs, advertisements, cosmetics, and prosthetic parts. The subject offers a great deal of room for the selection of a topic for a research paper on a subject of students’ choices.
Equivalent Course(s): HIPS 29412, ARTH 29412

HIST 29413. The Politics of Memory in Modern France. 100 Units.
Most of a nation’s past is forgotten, and even momentous, heroic, or villainous events fade from memory within a generation or two. Governments, organized groups, and individuals often do not agree about what should be remembered and what forgotten, nor is there consensus concerning appropriate forms of and audiences for commemoration. Does everyone see commemorations the same? How effective is naming of a street sign or a metro stop? Do people see statues or just walk past? Is it legitimate to shock with graphic representations of violence? What memorial work do histories, novels, poems, films, and museums do? We will analyze French, starting with the heart of state commemoration—the Pantheon—where those deemed of the highest national service are interred. Next, we focus on revolution, such as the Place de la Bastille column, the Mur des Fédérés, or the Sorbonne amphitheater, occupied in 1968. Regarding WW2, while the government and civil society accepted responsibility for the deportation and murder of some 76,000 Jews quite late. There are now, however, numerous monuments to their lives and deaths across Paris. Concerning France’s imperial past, we will focus on debates over remembering metropolitan France’s long and fraught relationship with North Africa and North Africans. Our approach will be multidisciplinary: secondary readings will be drawn from anthropology, sociology, and history, and primary sources will include poetry, novels, memoirs, film, and site visits.
Instructor(s): L. Auslander Terms Offered: Winter
Prerequisite(s): Admission to the Paris Social Sciences program.

HIST 29522. Europe’s Intellectual Transformations, Renaissance through Enlightenment. 100 Units.
This course will consider the foundational transformations of Western thought from the end of the Middle Ages to the threshold of modernity. It will provide an overview of the three self-conscious and interlinked intellectual revolutions which reshaped early modern Europe: the Renaissance revival of antiquity, the “new philosophy” of the seventeenth century, and the light and dark faces of the Enlightenment. It will treat scholasticism, humanism, the scientific revolution, Bacon, Descartes, Hobbes, Locke, Voltaire, Diderot, and Sade.
Instructor(s): A. Palmer Terms Offered: Winter
Prerequisite(s): Students taking FREN 29322/39322 must read French texts in French.
Note(s): First-year students and non-History majors welcome.
Equivalent Course(s): FREN 29322, SIGN 26036, HIST 39522, RLST 22605, FREN 39322, HCHR 39522
HIST 29525. The Global Life of Things. 100 Units.
What is a commodity? And can we read capitalism’s global history through the commodity form? This course will investigate how historians and anthropologists have studied commodities and commodification to account for the environmental, social, and cultural developments of capitalism over the last four centuries. We will begin by considering canonical theoretical approaches, including Marx, Polanyi, and Appadurai. Readings will then be based around case studies of, among other things, land, cotton, and slavery; sugar, guano, and mushrooms. Readings will span from the early modern Atlantic World through to the nineteenth-century Pacific, the twentieth-century Middle East, and the United States and Japan in the present day. The course should appeal to students pursuing studies of the early modern Atlantic world, economic history, or environmental history.
Instructor(s): O. Cussen Terms Offered: Spring
Equivalent Course(s): ENST 29525, GLST 29525

HIST 29533. Economic History III: The Global Economy from Great Depression to Great Recession. 100 Units.
This is the third part in the economic history sequence. Topics include the second Industrial Revolution and the new imperialism, the Great Depression and World War II, the American postwar world economic order, communism, and third-world development; globalization, growth, inequality, and climate change; the great recession. This course is part of the College Course Cluster program: Economic History, from Sumer to the Global World.
Instructor(s): J. Levy Terms Offered: Spring
Equivalent Course(s): ECON 12220, HIST 39533

HIST 29663. History Colloquium: The American Vigilante. 100 Units.
From the Regulators to Rambo, the vigilante has played a leading role in the history and culture of the United States. This junior colloquium traces a long history of the American vigilante as a character, as well as episodes of vigilante violence from early America to the present. We will focus on the questions central to this history: What is the relationship between the vigilante and the state? Where can we draw distinctions between vigilantism, terrorism, and rebellion? How has the vigilante contributed to nation-building? We will also explore the predominance of the vigilante in popular culture, focusing on figures such as Jesse James, Dirty Harry, Machete, the Punisher, superheroes, the movies of John Wayne, and the lyrics of Toby Keith. Students will write substantial final papers based on primary sources that explore one element of this discussion.
Instructor(s): K. Belew Terms Offered: Winter
Prerequisite(s): Priority registration is given to History majors.

HIST 29673. History Colloquium: The Politics of Housing. 100 Units.
This course examines the struggle of Americans to find and access housing from the first Gilded Age of the late nineteenth century to the Gilded Age of the present. Conceptualizing housing as more than a place where people live, we address the ways in which shelter is bound up with race, gender, labor, law, consumption, and immigration. Topics include company towns, homelessness, redlining, public housing, suburbanization, and gentrification. This course exposes students to the methodologies of writing history (social, architectural, intellectual, cultural, and political economy). We will also engage with historical documents such as maps, magazines, census records, congressional documents, rental listings, music, and films. Students will be expected to conduct original research and produce a fifteen- to twenty-page research paper.
Instructor(s): D. Jenkins Terms Offered: Autumn
Prerequisite(s): Priority registration is given to History majors

HIST 29674. History Colloquium: American Indian History. 100 Units.
This colloquium will explore the history of the indigenous peoples of North America from the century before contact with Europeans to the present day. Topics will range from early encounters between American Indians and European colonists, the contested creation of a shared world in the seventeenth and eighteenth centuries, the Native struggle for independence in the early United States, the nineteenth-century subjugation of Indian tribes in the west, and the twentieth-century indigenous resurgence of "Red Power" movements and other groups advocating for self-determination. Readings are primarily scholarly monographs, which provide examples for discussion, and guidebooks on project design and writing techniques. Readings will also include theoretical pieces on the development of the field and methodological discussions of scholarly practice, with the aim of "decolonizing" the study of Native American societies and their histories. Students are expected to plan, research, and write an original paper using resources available through the University of Chicago libraries and the special collections of the Newberry Library, a national center for the study of Native American history.
Instructor(s): M. Kruer Terms Offered: Spring
Prerequisite(s): Priority registration is given to History majors
HIST 29675. History Colloquium: Urban History. 100 Units.
According to Hank V. Savitch and Paul Kantor, “cities are the crucibles through which radical experiments become convention. They are concentrated environments in which people adapt and their resilience is tested. They are the world’s incubators of innovation-made possible by critical mass, diversity, and rich interaction.” This undergraduate research colloquium will explore American cities and their influence on United States history, with an emphasis on the nineteenth century. We will discuss a range of secondary historical monographs and will examine primary sources, including print culture, material objects, images, architecture, and the built environment. Requirements include careful reading, active and thoughtful participation, and a fifteen-page work of original research that will be presented in class.
Instructor(s): A. Lippert Terms Offered: Spring
Prerequisite(s): Priority registration is given to History majors; consent of instructor

HIST 29677. History Colloquium: Religion and History. 100 Units.
The study of religion presents an enormous challenge to the historian. On the one hand, religious beliefs typically posit a reality beyond that accessible to the tools of analysis employed by most historians; on the other, such beliefs and their associated practices have given shape and purpose to human society and psyches throughout human history, making them one of the most important drivers of human thought and behavior. In this colloquium, we will wrestle with the question of how, as historians, it is possible to make sense of the role of religion in history. We will explore different methodologies for thinking about religion and test them with specific examples of belief and practice across various religious traditions. To ensure a variety of perspectives, students will be able to choose the tradition they want to focus on for their class presentations and final projects.
Instructor(s): R. Fulton Brown Terms Offered: Spring
Prerequisite(s): Priority registration is given to History majors.

HIST 29678. History Colloquium: Medicine and Society. 100 Units.
How does medical knowledge change? How do medical practices transform over time? What factors influence the ways in which doctors and patients—and scientists, artists, politicians, legislators, activists, and educators, among others—understand matters of health and disease, of proper and improper interventions, of the rights of individuals and the needs of communities? This course treats these questions as a starting point for exploring the interactions of medicine and society from 1800 to the present. Through a combination of primary and secondary sources we will examine changing causes of morbidity and mortality, the development of new medical technologies and infrastructures, shifting patterns of disease and shifting ideas about bodies, and debates about health care policy, among other topics. Students will be expected to conduct original research and produce an original research paper of fifteen to twenty pages.
Instructor(s): M. Rossi Terms Offered: Winter
Prerequisite(s): Priority registration is given to History majors.
Equivalent Course(s): HIPS 29678

HIST 29700. Readings in History. 100 Units.
Students are required to submit the College Reading and Research Course Form. Prerequisite(s): Consent of instructor and the History undergraduate advisor.
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): Consent of instructor and the History undergraduate advisor.

HIST 29801-29802. BA Thesis Seminar I-II.
History students in the research track are required to take HIST 29801-29802. Third-year students in the research track and in residence in Chicago take BA Thesis Seminar I in Spring Quarter. Those who are out of residence take the seminar in Autumn Quarter of their fourth year.

HIST 29801. BA Thesis Seminar I. 100 Units.
History majors are required to take HIST 29801-29802. BA Thesis Seminar I provides a systematic introduction to historical methodology and approaches (e.g., political, intellectual, social, cultural, economic, gender, environmental history), as well as research techniques. It culminates in students’ submission of a robust BA thesis proposal that will be critiqued in class. Guidance will also be provided for applications for research funding.
Instructor(s): S. Burns Terms Offered: Autumn Spring
Prerequisite(s): All third-year history students in the research track and in residence in Chicago take HIST 29801 in spring quarter. Those who are out of residence take it in autumn quarter of their fourth year. You must receive a B grade in BA Seminar I to continue in the research track and enroll in BA Seminar II.

HIST 29802. BA Thesis Seminar II. 100 Units.
BA Thesis Seminar II is a forum to discuss and critique BA theses. Ideally, students will have completed most of their research for the thesis and will use this quarter to produce a complete draft. Early weeks of the seminar will be devoted to writing strategies and discussion of the introduction. Sections of the theses will be critiqued in the middle weeks of term, while in the final weeks of the quarter full rough drafts will be read. The final deadline for submission of the BA thesis is second week of Spring Quarter.
Instructor(s): S. Burns Terms Offered: Winter
Prerequisite(s): HIST 29801
HIST 29802. BA Thesis Seminar II. 100 Units.
BA Thesis Seminar II is a forum to discuss and critique BA theses. Ideally, students will have completed most of their research for the thesis and will use this quarter to produce a complete draft. Early weeks of the seminar will be devoted to writing strategies and discussion of the introduction. Sections of the theses will be critiqued in the middle weeks of term, while in the final weeks of the quarter full rough drafts will be read. The final deadline for submission of the BA thesis is second week of Spring Quarter.
Instructor(s): S. Burns Terms Offered: Winter
Prerequisite(s): HIST 29801
The BA program in the History, Philosophy, and Social Studies of Science and Medicine (HIPS) is designed for College students interested in studying science in terms of its historical development, conceptual structure, and social role. Students in the program must do sufficient work in one or more sciences to acquire a sound foundation for studying the nature of science. After securing this basis, they are expected to gain an understanding of how science arose, as well as how the content of scientific thought has changed and is changing, because of both its own internal dynamic and its interaction with the larger society in which it is embedded.

The HIPS program is designed to make possible the study of a wide range of social, historical, and conceptual issues relating to science. Students completing the program follow a number of different careers. Some pursue graduate study in the history and philosophy of science or in some field of science. Others find the program valuable preparation for the study of medicine, law, public policy, or science journalism. More generally, the goal of the program is to provide students with a sound basis on which to interpret and evaluate science and science policy. Some students choose to construct a degree program combining the requirements for the HIPS major with those for a major in the physical or biological sciences. Others, having met the HIPS program requirements, use electives to broaden their liberal arts education.

Students in other fields of study may also complete a minor in HIPS. Information follows the description of the major.

**HIPS Sponsor**
The Morris Fishbein Center for the History of Science and Medicine sponsors the HIPS program. Further information can be obtained in the center’s office (SS 207) and at fishbein.uchicago.edu.

**Program Requirements**

**Elements of the Curriculum.** The curriculum of the program contains five principal elements:

1. **The Foundation.** All students must:
   a. complete an approved sequence that fulfills the biological sciences general education requirement;
   b. complete the general education requirement in the physical sciences with a physics sequence (PHYS 12100-12200 General Physics I-II or equivalent) or a chemistry sequence (CHEM 11100-11200 Comprehensive General Chemistry I-II, CHEM 10100 Introductory General Chemistry I and CHEM 10200 Introductory General Chemistry II, or equivalent), or have earned a score of 5 on the AP Chemistry or Physics test or a score of 4 or 5 on the AP Physics C Mechanics and E&M test;
   c. complete a calculus sequence (MATH 13100-13200 Elementary Functions and Calculus I-II or higher), or have earned a score of 5 on the AP Calculus BC test;
   d. complete three courses on the origins and development of science in the West: one course in each of the following three chronological periods: ancient (numbered HIPS 17300–17310), early modern (HIPS 17400–17410), and modern (HIPS 17500–17510).

2. **Advanced Science.** In addition to the science courses typically taken as part of the general education requirements, students are expected to take three courses in science, social sciences, or mathematics beyond the introductory level. They select these advanced courses according to their special aims, their area of concentration, and the subject of their bachelor’s thesis.

3. **Areas of Concentration.** All students in the program determine an area of concentration in the anthropology, ethics, history, philosophy, or sociology of science and medicine. In consultation with the program director and their program adviser, students select five courses to constitute this concentration area. For example, some students may be particularly interested in the intellectual and social interactions between changing scientific knowledge and institutions, on the one hand, and evolving social institutions, on the other; a second group may be concerned with either epistemological issues related to the growth of science or moral and political problems attending the employment of technology; and a third group may wish to emphasize the study of science as a social or cultural activity.

4. **Tutorials.** Students are required to take two tutorial courses; this is typically done early in their program. With a specific focus that changes each year, these tutorials are small classes (from three to ten students) that emphasize discussion and writing. An updated list of courses is available in the HIPS office (SS 207) or at registrar.uchicago.edu/classes.

5. **Bachelor’s Thesis and Junior Seminar.** Third-year students enroll in a designated one-quarter seminar (HIPS 29800 Junior Seminar: My Favorite Readings in the History and Philosophy of Science) that deals with
general aspects of history, philosophy, and social studies of science and medicine. In Spring Quarter of their third year, students must discuss their proposal for their bachelor’s thesis with the program director. In consultation with the program director, students then sign up for a reading and research course (HIPS 29700 Readings and Research in History, Philosophy, and Social Studies of Science and Medicine) with an appropriate faculty member. In their fourth year, this research course should lead to a bachelor’s thesis (HIPS 29900 Bachelor’s Thesis) that integrates each student’s academic studies, bringing them to bear on a significant question related to some historical, conceptual, ethical, or social aspect of science. Fourth-year students also enroll in a two-quarter HIPS 29810 Bachelor’s Thesis Workshop, which is comprised of meetings that focus on organizing, researching, writing, and revising the thesis.

**SUMMARY OF REQUIREMENTS**

**GENERAL EDUCATION**

Three courses: one from each of the following chronological periods: 300
- Ancient: HIPS 17300–17310
- Early Modern: HIPS 17400–17410
- Modern: HIPS 17500–17510

An approved sequence that fulfills the biological sciences general education requirement 200
One of the following sequences: 200
- CHEM 10100 & CHEM 10200 Introductory General Chemistry I and Introductory General Chemistry II (or equivalent) *
- CHEM 11100-11200 Comprehensive General Chemistry I-II (or equivalent) *
- PHYS 12100-12200 General Physics I-II (or higher) *
- MATH 13100-13200 Elementary Functions and Calculus I-II (or higher) *

Total Units 900

**MAJOR**

Three courses in science, social sciences, or mathematics beyond the introductory level 300
Five courses in an area of concentration 500
Two tutorials 200

HIPS 29700 Readings and Research in History, Philosophy, and Social Studies of Science and Medicine 100

HIPS 29800 Junior Seminar: My Favorite Readings in the History and Philosophy of Science 100

HIPS 29900 Bachelor’s Thesis 100

HIPS 29810 Bachelor’s Thesis Workshop 100

Total Units 1400

* Credit may be granted by examination.

**Examples of Concentrations**

The following are meant to illustrate areas of concentration. They are not prescriptive, only suggestive. For the particular courses that might constitute their area of concentration, students should consult with the director of the program, examine this course catalog, and visit registrar.uchicago.edu/classes.

**History and Philosophy of Biological Science**

HIPS 23600 History and Theory of Human Evolution 100
BIOS 29321 Problem of Evil: Disease? 100
HIPS 23900 Biological and Cultural Evolution 100
HIPS 25801 Evolutionary Theory and Its Role in the Human Sciences 100

Total Units 400

**Philosophy of Science**

HIPS 20300 Scientific/Technological Change 100
HIPS 22000 Intro: Philosophy of Science 100
HIPS 22708 Planetary Britain, 1600-1900 100
HIPS 24900 Natural Philosophy 1200-1800 100
HIPS 25400 Philosophy of Mind and Science Fiction 100

Total Units 500
History of Medicine and Medical Ethics

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>HIPS 21600</td>
<td>Advanced Medical Ethics: Health Care</td>
<td>100</td>
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<tr>
<td>HIPS 21911</td>
<td>Medical Ethics: Who Decides and on What Basis?</td>
<td>100</td>
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<td>HIPS 25900</td>
<td>Darwinian Medicine</td>
<td>100</td>
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<td>HIPS 26901</td>
<td>History and Philosophy of Psychology</td>
<td>100</td>
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<tr>
<td>HIPS 27300</td>
<td>Medicine and Culture</td>
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Total Units 500

Admission

To be eligible for admission, students should have completed at least two of the four foundation course sequences listed in the preceding section and should have maintained a 3.2 GPA or higher in previous course work. Students should apply for admission no later than Autumn Quarter of their third year to the director of the program. The director advises students about the requirements, arranges a preliminary plan of study, and discusses scheduling conflicts and special cases. Thereafter, a student chooses, in consultation with the director, a BA adviser from the staff.

HONORS

Students who meet the following criteria are considered for graduation with honors: (1) overall GPA of 3.3 or higher, (2) completion of a bachelor’s thesis of A quality, and (3) a majority vote by the faculty in favor of honors.

GRADING

Students majoring in HIPS must receive quality grades in all courses meeting the requirements of the degree program, except HIPS 29810 Bachelor’s Thesis Workshop must be taken for P/F grading. Nonmajors may take courses for P/F grading with consent of instructor.

ADVISERS

Drawn from many parts of the University, those listed in the Faculty Section of the HIPS program have direct responsibility for admitting students, formulating curriculum, and advising students.

MINOR PROGRAM IN HISTORY, PHILOSOPHY, AND SOCIAL STUDIES OF SCIENCE AND MEDICINE

Students in other fields of study may complete a minor in HIPS, in particular, the minor program in HIPS offers students who are majoring in science the opportunity to gain an understanding of the conceptual, historical, and social contexts in which their disciplines are situated.

The minor requires a total of six courses. Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Students should take at least two courses focusing on the origins and development of science in the West: one course in each of two of the following chronological periods: ancient (numbered HIPS 17300–17310), early modern (HIPS 17400–17410), and modern (HIPS 17500–17510), to meet the general education requirement in civilization studies. Additional courses in these sequences that are not used to meet the general education requirement can count toward courses required for the minor.

Students must complete one tutorial course.

The remaining five courses for the minor program should constitute an area of concentration in the anthropology, ethics, history, philosophy, or sociology of science and medicine. Students select the courses that constitute this concentration in consultation with the program director and their program adviser.

Students who elect the minor program in HIPS should meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the program. The director’s approval for the minor program should be submitted to the student’s College adviser by the deadline above on a form obtained from the adviser.

The following groups of courses would satisfy the requirements for a minor in HIPS. They are only meant to illustrate possible plans of study; they are not prescriptive.

Group 1

<table>
<thead>
<tr>
<th>Tutorial:</th>
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<tbody>
<tr>
<td>HIPS 29405  Tutorial: Evolution and Pragmatism</td>
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<tr>
<td>Concentration in History and Philosophy of Biology:</td>
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<tr>
<td>HIPS 22700  Philosophical Problems in the Biological Sciences</td>
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<tr>
<td>HIPS 23600  History and Theory of Human Evolution</td>
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History, Philosophy, and Social Studies of Science and Medicine (HIPS)

HIPS 23900  Biological and Cultural Evolution
HIPS 25801  Evolutionary Theory and Its Role in the Human Sciences

Total Units 600

Group 2

Tutorial:
HIPS 29606  Tutorial: Medicine, Disease, and Death in American History

Concentration in History of Medicine and Medical Ethics:
HIPS 17501  Science, Culture, and Society in Western Civilization III (if not taken to meet general education requirements)
HIPS 21400  Intro To Medical Ethics
HIPS 21600  Advanced Medical Ethics: Health Care
HIPS 24800  Gender: Hist of Sci Tech Med
HIPS 27300  Medicine and Culture

Total Units 600

History, Philosophy, and Social Studies of Science and Medicine Courses

HIPS 14903. History of Information. 100 Units.
Information” in all its forms is perhaps the defining phenomenon of our age. But although we tend to think of it as something distinctively modern, in fact it came into being through a long history of thought, practice, and technology. This course will therefore suggest how to think historically about information. Using examples that range from the Middle Ages to the twenty-first century, we shall explore how different societies have conceptualized the subject and how they have sought to control it. We shall address how information has been collected, classified, circulated, contested, and destroyed. The aim is to provide a different kind of understanding of information practices—one that can be put to use in other historical inquiries, as well as casting an unfamiliar light on our own everyday lives.

Instructor(s): A. Johns
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): HIST 14903

HIPS 17300–17310, HIPS 17400–17410, HIPS 17500–17510
These courses focus on the origins and development of science in the West. They aim to trace the evolution of the biological, psychological, natural, and mathematical sciences as they emerge from the culture and social matrix of their periods and, in turn, affect culture and social. In order to satisfy the general education requirement in civilization studies, students must take a course in two or three of the following chronological periods: ancient (numbered HIPS 17300-17310), early modern (HIPS 17400-17410), and modern (HIPS 17500-17510). Taking these courses in sequence is recommended but not required. Only one course per category may count toward the requirement unless special approval is granted.

HIPS 17300. Science, Culture, and Society in Western Civilization I. 100 Units.
This undergraduate core course represents the first quarter of the Science, Culture, and Society in Western Civilization sequence. Taking these courses in sequence is recommended but not required. This quarter will focus on aspects of ancient Greek and Roman intellectual history, their perceived continuities or discontinuities with modern definitions and practices of science, and how they were shaped by the cultures, politics, and aesthetics of their day. Topics surveyed include history-writing and ancient science, the cosmos, medicine and biology, meteorology, ethnography and physiognomics, arithmetic and geometry, mechanics, taxonomy, optics, astronomy, and mechanical computing.

Instructor(s): J. Wee
Terms Offered: Winter
Equivalent Course(s): HIST 17300

HIPS 17400. Science, Culture, and Society in Western Civilization II. 100 Units.
This course addresses one of the great transformations in Western history. During the period from the early sixteenth century to the late seventeenth, European understandings of the natural world - and ways of achieving such understandings - underwent a series of radical and far-reaching transformations. The process affected every aspect of life as it was then lived, and as it has been lived since. It is often called the Scientific Revolution. Many people think that it was the central process in the development of modern culture itself.

Instructor(s): A. Johns
Terms Offered: TBD
Note(s): Not Offered in 2018-2019 academic year.
Equivalent Course(s): HIST 17400
HIPS 17402. Science, Culture, and Society in Western Civilization II: History of Medicine I. 100 Units.
This course examines the theory and practice of medicine between 1500 and 1900. Topics include traditional early modern medicine; novel understandings of anatomy, physiology, and disease from the Renaissance on; and new forms of medical practice, training, and knowledge-making that developed in the eighteenth and nineteenth centuries.
Instructor(s): M. Rossi Terms Offered: TBD. Not offered in 2018-2019
Equivalent Course(s): HIST 17402

HIPS 17403. Science, Culture, and Society in Western Civilization II: Early Modern Period. 100 Units.
Section 1, offered by Robert J. Richards - "Renaissance & Enlightenment." This lecture-discussion course examines the development science and scientific philosophy from the mid-fifteenth to the mid-nineteenth centuries. The considerations begin with the recovery of an ancient knowledge in the works of Leonardo, Vesalius, Harvey, and Copernicus. Thereafter the course will focus on Enlightenment science, as represented by Galileo, Descartes, Newton, and Hume. The course will culminate with the work of Darwin, who utilized traditional concepts to inaugurate modern science. For each class, the instructor will provide a short introductory lecture on the texts, and then open discussion to pursue with students the unexpected accomplishments of the authors under scrutiny. Section 2, offered by Margaret Carlyle - "Revolutions in Astronomy & Anatomy." This course explores scientific developments in Western Europe from the sixteenth-century Scientific Revolution to the eighteenth-century Enlightenment. During this period, European understandings of the natural world-and ways of achieving such understandings-underwent a series of radical and far-reaching transformations that are often called the Scientific Revolution.
Instructor(s): Robert J. Richards, Margaret Carlyle Terms Offered: Autumn Winter
Note(s): Offered by Robert J. Richards in Fall 2018, and by Margaret Carlyle in Winter 2019.
Equivalent Course(s): KNOW 17403, HIST 17403

HIPS 17500. Sci/Culture/Society In W Civ-3. 100 Units.
No description available
Equivalent Course(s): HIST 17500

HIPS 17501. Science, Culture, and Society in Western Civilization III. 100 Units.
Full course title: Science, Culture, and Society in Western Civilization III: Medicine since the Renaissance. This course is an examination of various themes in the history of medicine in Western Europe and America since the Renaissance. Topics include key developments of medical theory (e.g., the circulation of the blood and germ theory), relations between doctors and patients, rivalries between different kinds of healers and therapists, and the development of the hospital and laboratory medicine.
Instructor(s): M. Rossi Terms Offered: Spring
Equivalent Course(s): HIST 17501

HIPS 17502. Science, Culture, and Society in Western Civilization III. 100 Units.
The course is organized around a series of broad questions about science. These questions are addressed by means of examples drawn from both the past and the present. The historical cases arise in chronological sequence, ranging from the development of experimental methods in the late seventeenth century to the advent of biotechnology in the modern era. They furnish a selective set of materials for a history of scientific practice. Their other purpose here, however, is to highlight the depth and importance of many problems still confronting the world of science today - problems that are cultural as well as scientific, and that demand of us an understanding of what science is and how it works.
Instructor(s): A. Johns Terms Offered: Spring
Equivalent Course(s): HIST 17502

HIPS 17503. Sci/Cult/Soc in Western Civilization III - The History of Medicine Part II: 1900 -Present. 100 Units.
Full course title: Science, Culture, and Society in Western Civilization III: History of Medicine 2. This three-quarter sequence focuses on the origins and development of science in the West. The twentieth century is sometimes called the "golden age" of medicine: a period in which medicine broke free of tradition and combined with science to provide powerful new ways of understanding disease, and spectacular new technologies for fighting sickness. Along with amelioration of suffering, however, came new diseases, new medical systems, and new ways of thinking about the relationship between medical bodies, political bodies, and the nature and scope of human misery. This course examines some of the many transformations of (predominantly Euro-American) medicine in the twentieth century, looking not only at advances in medical knowledge and technologies, but also at the social, political, moral and affective ramifications of new ways of thinking about the promise - and perils - of (bio)medical practice.
Instructor(s): Michael Paul Rossi Terms Offered: Spring
Equivalent Course(s): HIST 17503
HIPS 17504. Science, Culture, and Society in Western Civilization III: The Environment. 100 Units.
This course charts the development of modern science and technology with special reference to the environment. Major themes include natural history and empire, political economy in the Enlightenment, the discovery of deep time and evolutionary theory, the dawn of the fossil fuel economy, Malthusian anxieties about overpopulation, the birth of ecology, the Cold War development of climate science, the postwar debates about the limits to growth, and the emergence of modern environmentalism. We will end with the new science of the Anthropocene.
Instructor(s): Fredrik Albritton Jonsson Terms Offered: TBD. Not offered in 2018-2019 Academic Year
Equivalent Course(s): HIST 17504

HIPS 20003. Discovering Anthropology: Reading Race. 100 Units.
Before and since Anthropology became a discrete scientific field of study, questions about the biological reality, potential utility and misuse of the concept of race in Homo sapiens have been debated. We will read and discuss a sample of writings by 18th, 19th, and 20th century and contemporary authors who attempted to define human races and those who have promoted or debunked the utility of the concept of race with special attention to its role in retarding social progress, and the extermination and exploitation of some populations and individuals.
Instructor(s): R. Tuttle Terms Offered: Winter
Equivalent Course(s): ANTH 20003, ANTH 38305, CRES 20003

HIPS 20300. Scientific/Technological Change. 100 Units.
Equivalent Course(s): CHSS 42300, PHIL 20300, PHIL 30300

HIPS 20401. Philosophy of Mind. 100 Units.
This is a survey of some of the central questions in the philosophy of mind. These questions include: What is consciousness? How can mental states represent things in the world? How do our minds relate to our bodies? Do we have free will? Can we blame someone for the beliefs or desires she has? What are the emotions? To help us with these questions, we will focus on 20th-century analytic work (by Putnam, Nagel, Searle, Jackson, Dennett, Chalmers, Block, Dretske, and others), but we will also read important historical texts on the nature of the mind by Aristotle, Descartes, and Hume.
Instructor(s): B. Callard Terms Offered: Autumn
Equivalent Course(s): PHIL 23501

HIPS 20500. Intermediate Logic. 100 Units.
In this course, we will prove the soundness and completeness of deductive systems for both sentential and first-order predicate logic. We will also establish related results in elementary model theory, such as the compactness theorem for first-order logic, the L*wenheim-Skolem theorem and Lindström's theorem. (B) (II)
Instructor(s): A. Vasudevan Terms Offered: Winter
Equivalent Course(s): PHIL 29400, CHSS 33600, PHIL 39600

HIPS 20700. Elementary Logic. 100 Units.
An introduction to the concepts and principles of symbolic logic. We learn the syntax and semantics of truth-functional and first-order quantificational logic, and apply the resultant conceptual framework to the analysis of valid and invalid arguments, the structure of formal languages, and logical relations among sentences of ordinary discourse. Occasionally we will venture into topics in philosophy of language and philosophical logic, but our primary focus is on acquiring a facility with symbolic logic as such.
Instructor(s): K. Davey Terms Offered: Autumn
Note(s): Course not for field credit.
Equivalent Course(s): PHIL 20100, CHSS 33500, PHIL 30000

HIPS 20905. Advanced Logic. 100 Units.
Since Russell's discovery of the inconsistency of Frege's foundation for mathematics, much of logic has resolved around the question of to what extent we can or cannot prove the consistency of the basic principles with which we reason. This course will explore two main efforts in this direction. We will first look at proof-theoretic efforts towards demonstrating the consistency of various foundational systems, discussing the virtues and limitations of this approach. We will then closely examine Godel's theorems, which are famous for demonstrating limits on the extent to which we can formulate consistency proofs. Much has been written on the implications of Godel's theorems, and we will spend some time trying to carefully separate what they really entail from what they do not entail. Assessment will be by regular homework sets. Intermediate logic or prior equivalent required. (II) and (B).
Instructor(s): K. Davey Terms Offered: Spring
Prerequisite(s): Elementary Logic or equivalent
Equivalent Course(s): PHIL 29405, PHIL 39405, CHSS 39405

HIPS 21000. Introduction To Ethics. 100 Units.
In this course, we will read, write, and think about philosophical work meant to provide a systematic and foundational account of ethics. We will focus on close reading of two books, Immanuel Kant's Groundwork of the Metaphysics of Morals and John Stuart Mill's Utilitarianism, along with a handful of more recent essays. Throughout, our aim will be to engage in serious thought about good and bad in our lives. (A)
Instructor(s): C. Vogler Terms Offered: Winter
Equivalent Course(s): PHIL 21000, FNDL 23107
HIPS 21100. Celebrity and Science in Paleoanthropology. 100 Units.
This seminar explores the balance among research, "showbiz" big business, and politics in the careers of Louis, Mary, and Richard Leakey; Alan Walker; Donald Johanson; Jane Goodall; Dian Fossey; and Biruté Galdikas. Information is gathered from films, taped interviews, autobiographies, biographies, pop publications, instructor's anecdotes, and samples of scientific writings.
Instructor(s): R. Tuttle Terms Offered: Autumn
Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.
Equivalent Course(s): ANTH 38300, ANTH 21406

HIPS 21407. The Vocation of a Scientist. 100 Units.
Max Weber wrote that to be a scientist one needed a "strange intoxication" with scientific work and a "passionate devotion" to research as a calling. And yet, such passion seemed to conflict with the ideal of value-neutral inquiry. This class considers the vocation of science since the turn of the twentieth century. What political, economic, and cultural forces have shaped scientific professions in the United States? How are scientists represented in public culture? How was American science experienced during the colonization of the Philippines? By exploring these questions, this class will examine the values and norms that make science into a meaningful vocation.
Equivalent Course(s): ANTH 22129, KNOW 21407

HIPS 21408. History of Medicine. 100 Units.
This course surveys the history of medicine from the medieval period to the present. How did medicine emerge as a defined body of knowledge? To what extent do diseases and disorders have an independent existence, and to what extent are they cultural constructs? How have social mores—particularly those related to religion, class, nationality, race, and gender—translated the ways in which health was and is understood and maintained, and illness treated? What does it mean to practice medicine ethically, and how has that changed over time? Topics include the emergence and evolution of the medical profession, the history of medical research and method, the interpretation and treatment of the unhealthy and healthy alike, eugenics, euthanasia, the quest for immortality, and the changing relationship between technology and disease.
Equivalent Course(s): KNOW 21408, HIST 25314, CCTS 21408

HIPS 21409. History of Extraterrestrial Life. 100 Units.
In 2014, the Vatican Radio made a splash when it reported that the pontiff, Pope Francis, condoned the baptism of extraterrestrials—if they so desired it. "Who are we to close doors?" he asked rhetorically. It was both a metaphor for spiritual inclusion and an accurate representation of the modern Vatican's position on the possibilities of modern astrobiology and the search for extrasolar planets, fields whose rapid growth over the past two decades make serious consideration of extraterrestrial life seem like a uniquely modern phenomena. Its history, however, is in fact many centuries old. In this course we will examine the development of beliefs concerning life in the universe from the sixteenth century to the present. How did historical actors understand the nature, abilities, and location of extraterrestrial life, and its relationship to man and god? We will analyze connections between these beliefs and contemporary political, social, scientific, and religious developments. These include the role of the plurality of worlds in the debates over heliocentrism, its impact and application in the context of deism and social and political freethought, its literary and artistic depictions and use as a tool of satire and social commentary, its influence on natural philosophy, its decline and the subsequent rise of alien conspiracists and their critics, and how and why conceptions of the extraplanetary other took a dark and sinister turn toward the early-to-mid twentieth century.
Equivalent Course(s): KNOW 21409, HIST 24917, ECEV 31409

HIPS 21410. Politics of Technoscience in Africa. 100 Units.
Euro-American discourse has often portrayed Africa as either a place without science and technology or as the home of deep and ancient wisdom. European imperialists used the alleged absence of science and technology as a justification for colonialism while pharmaceutical companies sought out African knowledge about healing plants. In addition to their practical applications, science and technology carry significant symbolic weight in discussions about Africa. In this class, we examine the politics of scientific and technical knowledge in Africa with a focus on colonialism and its aftermath. How have different people produced and used knowledge about the environment, medicine, and technology? What kinds of knowledge count as indigenous and who gets credit for innovation? How have independent African governments dealt with the imperial legacies of science? From the interpretation of archaeological ruins to the design of new medical technologies, this class will examine science and technology as political practice in Africa.
Equivalent Course(s): ANTH 22165, KNOW 21410, CRES 21410
HIPS 21411. Sex, Race, and Empire. 100 Units.
This course surveys how science, race, and gender interacted in the early modern Atlantic world from 1500-1800. We will critically examine how new modes of scientific inquiry brought Africans, Americans, and Europeans into contact and conflict. Along the way, we will ask how, why, and with consequences imperial science created new knowledge claims about human inequality, especially racial and sexual difference. We will draw primarily on British, Iberian, and French imperial agendas in order to track the experiences of men and women from all corners of the Atlantic world, including indigenous peoples, enslaved black Africans, free people of color, and white Europeans. Through a variety of primary and secondary sources, we will uncover European aspirations to curate, control, and exploit the natural world and the agency of subjugated peoples in responding to and resisting these designs. Topics covered include natural history collecting and classification; the invention of racial theory; slavery and maroons; women, gender, and reproduction; consumption; and violence, resistance, and revolution.
Equivalent Course(s): CRES 21411, HIST 25315, GNSE 21411, KNOW 21411

HIPS 21413. Sex and Enlightenment Science. 100 Units.
What do a lifelike wax woman, a birthing dummy, and a hermaphrodite have in common? This interdisciplinary course seeks answers to this question by exploring how eighteenth-century scientific and medical ideas, technologies, and practices interacted with and influenced contemporary notions of sex, sexuality, and gender. In our course, the terms "sex," "Enlightenment," and "science" will be problematized in their historic contexts using a variety of primary and secondary sources. Through these texts, as well as images and objects, we will see how emerging scientific theories about sex, sexuality, and gender contributed to new understandings of the human, especially female, body. We will also see how the liberating potential of Enlightenment thought gave way to sexual and racial theories that insisted on fundamental human difference. Topics to be covered include theories of generation, childbirth, homosexuality, monstrosities, race and procreation, and hermaphrodites and questions about the "sex" of the enlightened scientist and the gendering of scientific practices.
Equivalent Course(s): GNSE 21413, HIST 22218, KNOW 21413, CHSS 31413

HIPS 21414. What is Technology? 100 Units.
In the nineteenth century, the word "technology" referred to the science of the useful and industrial arts. While the term is today synonymous with machinery and other material tools, this contemporary usage dates only to the 1930s. A word once used to describe a specialist mode of writing about applied knowledge has come to refer to tools and their use.
Equivalent Course(s): KNOW 21414

HIPS 21428. Apes and Human Evolution. 100 Units.
This course is a critical examination of the ways in which data on the behavior, morphology, and genetics of apes have been used to elucidate human evolution. We emphasize bipedalism, hunting, meat eating, tool behavior, food sharing, cognitive ability, language, self-awareness, and sociability. Visits to local zoos and museums, film screenings, and demonstrations with casts of fossils and skeletons required.
Instructor(s): R. Tuttle Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Equivalent Course(s): BIOS 13253, ANTH 21428, EVOL 38600, ANTH 38600

HIPS 21911. Medical Ethics: Who Decides and on What Basis? 100 Units.
Decisions about medical treatment take place in the context of changing health care systems, changing ideas about rights and obligations, and among doctors and patients who have diverse religious and cultural backgrounds. By means of historical, philosophical, and medical readings, this course examines such issues as paternalism, autonomy, the commodification of the body, and the enhancement of mental and/or physical characteristics. (A)
Instructor(s): D. Brudney, Staff
Prerequisite(s): Third- or fourth-year standing
Note(s): This course does not meet requirements for the biological science major.
Equivalent Course(s): PHIL 31610, PHIL 21610, HIST 35009, HIST 25009, BPRO 22610

HIPS 22000. Intro: Philosophy of Science. 100 Units.
We will begin by trying to explicate the manner in which science is a rational response to observational facts. This will involve a discussion of inductivism, Popper’s deductivism, Lakatos and Kuhn. After this, we will briefly survey some other important topics in the philosophy of science, including underdetermination, theories of evidence, Bayesianism, the problem of induction, explanation, and laws of nature. (B) (II)
Instructor(s): K. Davey Terms Offered: Winter
Equivalent Course(s): HIST 35109, CHSS 33300, PHIL 32000, HIST 25109, PHIL 22000
HIPS 22001. Introduction to Science Studies. 100 Units.
This course provides an introduction to the interdisciplinary study of science, medicine, and technology. During the twentieth century, sociologists, historians, philosophers, and anthropologists raised original, interesting, and consequential questions about the sciences. Often their work drew on and responded to each other, and, taken together, their various approaches came to constitute a field, "science studies." The course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches and findings, but will also get a chance to apply science-studies perspectives themselves by performing a fieldwork project. Among the topics we may examine are: the sociology of scientific knowledge and its applications; actor-network theories of science; constructivism and the history of science; and efforts to apply science studies approaches beyond the sciences themselves.
Equivalent Course(s): SOCI 40137, CHSS 32000, HIST 56800, KNOW 31408, ANTH 32305

HIPS 22401. Darwinian Health. 100 Units.
This course will use an evolutionary, rather than clinical, approach to understanding why we get sick. In particular, we will consider how health issues such as menstruation, senescence, pregnancy sickness, menopause, and diseases can be considered adaptations rather than pathologies. We will also discuss how our rapidly changing environments can reduce the benefits of these adaptations.
Instructor(s): J. Mateo Terms Offered: Winter
Prerequisite(s): Permission of instructor only.
Note(s): CHDV Distribution: A
Equivalent Course(s): CHDV 21500, GNSE 21500

HIPS 22708. Planetary Britain, 1600-1900. 100 Units.
What were the causes behind Britain's Industrial Revolution? In the vast scholarship on this problem, one particularly heated debate has focused on the imperial origins of industrialization. How much did colonial resources and markets contribute to economic growth and technological innovation in the metropole? The second part of the course will consider the global effects of British industrialization. To what extent can we trace anthropogenic climate change and other planetary crises back to the environmental transformation wrought by the British Empire? Topics include ecological imperialism, metabolic rift, the sugar revolution, the slave trade, naval construction and forestry, the East India Company, free trade and agriculture, energy use and climate change.
Equivalent Course(s): KNOW 32808, ENST 22708, HIST 32708, KNOW 22708, CHSS 32708

HIPS 22709. Introduction to Quantum Mechanics, Introduction to Philosophy of Quantum Mechanics. 100 Units.
In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. In this course we examine some of the conceptual problems associated with quantum mechanics. We will discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. (B)
Instructor(s): T. Pashby Terms Offered: Winter
Prerequisite(s): Prior knowledge of quantum mechanics is not required since we begin with an introduction to the formalism, but familiarity with matrices, freshman calculus and high school geometry will be presupposed.
Equivalent Course(s): KNOW 22709, PHIL 22709, PHIL 22709, KNOW 22709

HIPS 22800. Experiencing Madness: Empathic Methods in Cultural Psychiatry. 100 Units.
This course provides students with an introduction to the phenomenological approach in cultural psychiatry, focusing on the problem of "how to represent mental illness" as a thematic anchor. Students will examine the theoretical and methodological groundings of cultural psychiatry, examining how scholars working in the phenomenological tradition have tried to describe the lived experiences of various forms of "psychopathology" or "madness." By the end of the course, students will have learned how to describe and analyze the social dimension of a mental health experience, using a phenomenologically-grounded anthropological approach, and by adopting a technical vocabulary for understanding the lived experiences of mental illness (for instance, phenomena, life-world, being-in-the-world, intentionality, epoché, embodiment, madness, psychopathology, melancholia/depression, schizophrenia, etc). In addition, given the ongoing problematic of "how to represent mental illness," students will also have the opportunity to think through the different ways of presenting their analysis, both in the form of weekly blog entries and during a final-week mock-workshop, where they will showcase their work in a creative medium appropriate to that analysis.
Equivalent Course(s): MAPS 32800, CHDV 32822, CHSS 32800, ANTH 24355, ANTH 35135
HIPS 24300. Foucault and The History of Sexuality. 100 Units.
This course centers on a close reading of the first volume of Michel Foucault’s "The History of Sexuality", with some attention to his writings on the history of ancient conceptualizations of sex. How should a history of sexuality take into account scientific theories, social relations of power, and different experiences of the self? We discuss the contrasting descriptions and conceptions of sexual behavior before and after the emergence of a science of sexuality. Other writers influenced by and critical of Foucault are also discussed.
Instructor(s): A. Davidson Terms Offered: Autumn
Prerequisite(s): One prior philosophy course is strongly recommended.
Equivalent Course(s): KNOW 27002, CMLT 25001, PHIL 24800, GNSE 23100, FNDL 22001

HIPS 24401. Freud & Psychoan: Lec/Cse Stud. 100 Units.
TBD
Equivalent Course(s): PSYC 38501, PSYC 28501, FNDL 23302

HIPS 24706. Science in the South: Decolonizing the Study of Knowledge in Latin America & the Caribbean. 100 Units.
This seminar will bridge anthropologies and histories of science, technology, and medicine to Latin American decolonial thought. Throughout Latin America, techno-scientific objects and practices, with their presumed origin in the Euro-Atlantic North, are often complexly entangled with neo-imperial projects of development and modernization that elongate social forms of colonization into the present. Technoscience and its objects, however, can also generate new creative, political, and life-enhancing potentials beyond or despite their colonial resonances, or even provide tools to ongoing struggles for decolonization. Together, seminar participants will explore what a decolonial approach to the study of science, technology, and medicine in the Global South, particularly in Latin America, has been and could become and how decolonial theory can inflect our own disciplinary, conceptual, and political commitments as anthropologists of technoscience.
Instructor(s): S. Graeter Terms Offered: Spring
Equivalent Course(s): ANTH 23026, LACS 24706

HIPS 25001. Kant: Critique of Pure Reason. 100 Units.
This will be a careful reading of what is widely regarded as the greatest work of modern philosophy, Immanuel Kant’s Critique of Pure Reason. Our principal aims will be to understand the problems Kant seeks to address and the significance of his famous doctrine of “transcendental idealism”. Topics will include: the role of mind in the constitution of experience; the nature of space and time; the relation between self-knowledge and knowledge of objects; how causal claims can be justified by experience; whether free will is possible; the relation between appearance and reality; the possibility of metaphysics. (B) (V)
Instructor(s): J. Conant Terms Offered: Winter
Equivalent Course(s): FNDL 27800, CHSS 37901, PHIL 37500, PHIL 27500

HIPS 25014. Introduction to Environmental History. 100 Units.
How have humans interacted with the environment over time? This course introduces students to the methods and topics of environmental history by way of classic and recent works in the field: Crosby, Cronon, Worster, Russell, and McNeill et al. Major topics of investigation include preservationism, ecological imperialism, evolutionary history, forest conservation, organic and industrial agriculture, labor history, the commons and land reform, energy consumption, and climate change. Our scope covers the whole period from 1492 with case studies from European, American and British imperial history.
Equivalent Course(s): HIST 25014, ENST 25014, HIST 35014, CHSS 35014

HIPS 25114. Natural History and Empire, circa 1500-1800. 100 Units.
This course will examine natural history-broadly defined as a systematic, observational body of knowledge devoted to describing and understanding the physical world of plants, animals, natural environments, and (sometimes) people—in the context of European imperial expansion during the early modern era. Natural history was upended by the first European encounters with the New World. The encounter with these new lands exposed Europeans for the first time to unknown flora and fauna, which required acute empirical observation, collection, cataloguing, and circulation between periphery and metropole in order to understand their properties and determine their usefulness. As the Spanish, Portuguese, British, French, and Dutch competed with one another to establish overseas trade and military networks in the sixteenth, seventeenth, and eighteenth centuries, they also competed over and shared information on natural resources. The course will combine lecture and discussion and mix primary source readings on natural history in the early modern world with modern historical writings. Though the readings skew a bit toward Britain and the British Atlantic world, every effort has been made to include texts and topics from multiple European and colonial locales. Topics and themes will include early modern sources of natural history from antiquity and their (re)interpretation in imperial context; early modern collecting cultures and cabinets of curiosities; Linnaeus and the origins of
Equivalent Course(s): HIST 25114, ENST 25114
HIPS 25121. The Brazil-Argentina Nuclear Cooperation Agreement and Thermoelectric Transition in Brazil. 100 Units.
The course will be developed in a series of theory-practice based sessions. Due to the richness that the University offers, in terms of faculties and other resources, some of the sessions will be accompanied by scholars from other faculties to address a particular topic or expertise relevant to the session.
Instructor(s): Ramos, Alexandre Terms Offered: Autumn
Note(s): Tinker Visiting Professor Autumn 2018
Equivalent Course(s): LACS 35121, LACS 25121, CHSS 35121

HIPS 25205. Computers, Minds, Intelligence & Data. 100 Units.
How are we co-evolving with our machines? How do we teach ourselves and our computers how to learn? What kinds of human intelligences do we promote in liberal education in comparison with artificial intelligence(s)? Through our distributed cognition with tools of all kinds, as we engage in participatory culture using digital computers and networks, we provide information that generates the basis for big (and small) data. At the crux of our investigation-on the one hand into reading and conversation and on the other hand into algorithms and information theory—are issues about human action and the multifaceted agency of the universal Turing machine—as mobile phone, laptop, internet, robot.
Equivalent Course(s): MAAD 25205, HUMA 25205

HIPS 25206. Digital Culture: Artificial Intelligence, Algorithms, and the Web. 100 Units.
In contrast to print culture and electronic culture, yet embedded in them, contemporary digital culture engages us in human-computer systems empowered as media for mobile communication in the global network society. In our conjoined online and offline environments, we inhabit human-computer hybrids in which (for instance) we learn, imagine, communicate, pay attention, and experience affect. How can we understand and critique our theories, concepts, practices, and technologies of intelligence and information in relation to the capacities of these digital machines with which we co-evolve? For exploring this question, our case studies include comparing artificial and natural intelligences, as well as examining algorithms and their socio-political impacts, in current web functionalities such as search (Google) and social media (Facebook, Twitter).
Instructor(s): Browning, Margot Terms Offered: Autumn
Equivalent Course(s): HUMA 25206, LLSO 25206

HIPS 25309. History of Perception. 100 Units.
Knowing time. Feeling space. Smelling. Seeing. Touching. Tasting. Hearing. Are these universal aspects of human consciousness, or particular experiences contingent upon time, place, and culture? How do we come to know about our own perceptions and those of others? This course examines these and related questions through detailed readings of primary sources, engagement in secondary scholarship in the history and anthropology of sensation, and through close work with participants’ own sensations and perceptions of the world around them.
Equivalent Course(s): ANTH 24308, CHSS 35309, ANTH 34308, KNOW 31404, KNOW 21404, HIST 35309, HIST 25309

HIPS 25421. Censorship from the Inquisition to the Present. 100 Units.
Collaborative research seminar on the history of censorship and information control, with a focus on the history of books and information technologies. The class will meet in Special Collections, and students will work with the professor to prepare an exhibit, The History of Censorship, to be held in the Special Collections exhibit space in the spring. Students will work with rare books and archival materials, design exhibit cases, write exhibit labels, and contribute to the exhibit catalog. Half the course will focus on censorship in early modern Europe, including the Inquisition, the spread of the printing press, and clandestine literature in the Renaissance and Enlightenment. Special focus on the effects of censorship on classical literature, both newly rediscovered works like Lucretius and lost books of Plato, and authors like Pliny the Elder and Seneca who had been available in the Middle Ages but became newly controversial in the Renaissance. The other half of the course will look at modern and contemporary censorship issues, from wartime censorship, to the censorship of comic books, to digital-rights management, to free speech on our own campus. Students may choose whether to focus their own research and exhibit cases on classical, early modern, modern, or contemporary censorship. This course is part of the College Course Cluster, The Renaissance.
Equivalent Course(s): CLAS 35417, HIST 25421, CHSS 35421, RLST 22121, SIGN 26010, KNOW 21403, HIST 35421, HREL 34309, CLCV 25417, KNOW 31403
HIPS 25425. Censorship, Info Control, & Revolutions in Info Technology from the Printing Press to the Internet. 100 Units.
The digital revolution is triggering a wave of new information control efforts and censorship attempts, ranging from monopolistic copyright laws to the "Great Firewall" of China. The print revolution after 1450 was a moment like our own, when the explosive dissemination of a new information technology triggered a wave of information control efforts. Many of today's attempts at information control closely parallel early responses to the printing press, so the premodern case gives us centuries of data showing how diverse attempts to control or censor information variously incentivized, discouraged, curated, silenced, commodified, or nurtured art, thought, and science. This unique course is part of a collaborative research project funded by the Neubauer Collegium for Culture and Society and is co-organized with digital information expert Cory Doctorow. The course will bring pairs of experts working on the print and digital revolutions to campus to discuss parallels between their research with the class. Classes will be open to the public, filmed, and shared on the Internet to create an international public conversation. This is also a Department of History "Making History" course: rather than writing traditional papers, students will create web resources and publications (print and digital) to contribute to the ongoing collaborative research project.
Instructor(s): A. Johns & A. Palmer Terms Offered: Autumn
Note(s): Making History courses forgo traditional paper assignments for innovative projects that develop new skills with professional applications in the working world. Open to students at all levels, but especially recommended for 3rd- and 4th-yr students. This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40103 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): KNOW 25425, SIGN 26035, KNOW 40103, BPRO 25425, HIST 35425, HREL 35425, CHSS 35425, HIST 25425

HIPS 25600. History of Statistics. 100 Units.
This course covers topics in the history of statistics, from the eleventh century to the middle of the twentieth century. We focus on the period from 1650 to 1950, with an emphasis on the mathematical developments in the theory of probability and how they came to be used in the sciences. Our goals are both to quantify uncertainty in observational data and to develop a conceptual framework for scientific theories. This course includes broad views of the development of the subject and closer looks at specific people and investigations, including reanalyses of historical data.
Instructor(s): S. Stigler Terms Offered: Spring
Prerequisite(s): Prior statistics course
Equivalent Course(s): STAT 26700, CHSS 32900, STAT 36700

HIPS 25808. Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences. 100 Units.
In this course we will examine the ways in which different groups of people—in different times and places—have understood the nature of life and living things, bodies and bodily processes, and health and disease, among other notions. We will address these issues principally, though not exclusively, through the lens of the changing sets of methods and practices commonly recognizable as science and medicine. We will also pay close attention to the methods through which scholars in history and anthropology have written about these topics, and how current scientific and medical practices affect historical and anthropological studies of science and medicine.
Instructor(s): M. Rossi Terms Offered: Winter
Note(s): This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40202 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): ANTH 24307, ANTH 34307, HIST 25808, HIST 35808, CHSS 25808, HIST 25808

HIPS 26000. History of Philosophy II: Medieval and Early Modern Philosophy. 100 Units.
A survey of the thought of some of the most important figures of this period, including Anselm, Aquinas, Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkeley, and Hume.
Instructor(s): B. Callard Terms Offered: Winter
Prerequisite(s): Completion of the general education requirement in humanities required; PHIL 25000 recommended.
Equivalent Course(s): PHIL 26000

Full title: "Nature, Science, and Empire in the Early Modern Iberian World, 1400-1800." Historians have often relegated Iberia and its New World domains from accounts of the developments of modern science. They have traditionally claimed that strict censorship and a commitment to orthodox Catholicism prevented Spain, once the most powerful empire of the world, from embarking on the path towards scientific modernity in the eighteenth century. Modern scholars, however, have challenged this narrative by embracing more inclusive concepts of "science" to explain the many ways in which early modern people related to nature. Some of these practices include the writing of natural histories, botanical research, and linguistic studies, all fields that Iberian scholars pioneered in their efforts to govern their vast domains. This course will introduce students to a diversity of scientific practices that flourished in the Hispanic world between 1400 and 1800.
Equivalent Course(s): HIST 26121, LACS 26121

HIPS 26617. Sciences as Solutions to Latin American Challenges, 1500-2000. 100 Units.
Equivalent Course(s): HIST 26107, LACS 26617
HIPS 27004. Babylon and the Origins of Knowledge. 100 Units.
In 1946 the famed economist John Maynard Keynes declared that Isaac Newton "was the last of the magicians, the last of the Babylonians." We find throughout history, in the writings of Galileo, Jorge Luis Borges, Ibn Khaldun, Herodotus, and the Hebrew Bible, a city of Babylon full of contradictions. At once sinful and reverential, a site of magic and science, rational and irrational, Babylon seemed destined to resound in the historical imagination as the birthplace of knowledge itself. But how does the myth compare to history? How did the Babylonians themselves envisage their own knowledge? And is it reasonable to draw, as Keynes did, a line that begins with Babylon and ends with Newton? In this course we will take a cross comparative approach, investigating the history of the ancient city and its continuity in the scientific imagination.
Instructor(s): E. Escobar Terms Offered: Autumn
Equivalent Course(s): KNOW 27004, HIST 25617, NEHC 20215

HIPS 27005. Secrecy and Science. 100 Units.
This course traces the relationship between openness, secrecy, and the construction of scientific knowledge. Our sources span several millennia of intellectual history, from cuneiform tablets containing glassmaking recipes and the "secrets of the gods," to Medieval alchemical recipes, and to the first museums of natural history. We will investigate how and why science shifted from a subject intended for the elite few, to a more democratic ideal that embraced public demonstration. The role of patronage in the development of scientific knowledge, and the complex interaction between science and religion will be central to our discussions. Writing assignments will respond to thematic questions based on the readings.
Equivalent Course(s): RLST 27550, KNOW 27005, HIST 24918

HIPS 27301. Medical Anthropology. 100 Units.
This course introduces students to the central concepts and methods of medical anthropology. Drawing on a number of classic and contemporary texts, we will consider both the specificity of local medical cultures and the processes which increasingly link these systems of knowledge and practice. We will study the social and political economic shaping of illness and suffering and will examine medical and healing systems-including biomedicine-as social institutions and as sources of epistemological authority. Topics covered will include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; structural violence; modernity and the distribution of risk; the meanings and effects of new medical technologies; and global health.
Instructor(s): E. Raikhel Terms Offered: Winter
Prerequisite(s): SOSC sequence
Note(s): CHDV Distribution: C, D; 4
Equivalent Course(s): ANTH 24330, CHDV 43204, CHDV 23204, ANTH 40330

HIPS 27302. Culture, Mental Health, and Psychiatry. 100 Units.
While mental illness has recently been framed in largely neurobiological terms as "brain disease," there has also been an increasing awareness of the contingency of psychiatric diagnoses. In this course, we will draw upon readings from medical and psychological anthropology, cultural psychiatry, and science studies to examine this paradox and to examine mental health and illness as a set of subjective experiences, social processes, and objects of knowledge and intervention. On a conceptual level, the course invites students to think through the complex relationships between categories of knowledge and clinical technologies (in this case, mainly psychiatric ones) and the subjectivities of persons living with mental illness. Put in slightly different terms, we will look at the multiple links between psychiatrists' professional accounts of mental illness and patients' experiences of it. Questions explored include: Does mental illness vary across social and cultural settings? How are experiences of people suffering from mental illness shaped by psychiatry's knowledge of their afflictions?
Instructor(s): E. Raikhel Terms Offered: Winter
Note(s): CHDV Distribution, C, D
Equivalent Course(s): CHDV 23301, ANTH 35115, CHDV 33301, ANTH 24315

HIPS 27501. Freud: Human Dev/Personality. 100 Units.
Equivalent Course(s): HUDV 31300

HIPS 27860. History of Evolutionary Behavioral Sciences. 100 Units.
This course will consist in lectures and discussion sessions about the historical and conceptual foundations of evolutionary behavioral sciences (evolutionary anthropology, evolutionary psychology, ethology, comparative behavioral biology), covering the period from the publication of Charles Darwin’s The Origin of Species up to the present day. Topics will include new theoretical developments, controversies, interdisciplinary expansions, and the relationships between evolutionary behavioral sciences and other disciplines in the sciences and the humanities.
Instructor(s): D. Maestripieri Terms Offered: Autumn 2018
Prerequisite(s): N/A
Equivalent Course(s): CHDV 37860, CHDV 27860, KNOW 27860, CHSS 37860
HIPS 28101. Psychoanalysis and Philosophy. 100 Units.

An introduction to psychoanalytic thinking and its philosophical significance. A question that will concern us throughout the course is: What do we need to know about the workings of the human psyche-in particular, the Freudian unconscious-to understand what it would be for a human to live well? Readings from Plato, Aristotle, Freud, Bion, Betty Joseph, Paul Gray, Lacan, Lear, Loewald, Edna O'Shaughnessy, and others.

Equivalent Course(s): PHIL 28210, SCTH 37501, PHIL 38209, FNDL 28210

HIPS 29400-29500. Tutorial.

HIPS 29400. Tutorial. 100 Units.
Terms Offered: Autumn

HIPS 29500. Tut: Hist/Bio Of Emotions. 100 Units.

HIPS 29412. The Face in Western Culture from the Mona Lisa to the Selfie. 100 Units.

The course will approach the history of the human face from a variety of disciplinary perspectives, ranging across art history through to the history of science and technology. Topics will include the Mona Lisa and Renaissance portraiture; early modern identity and identity documents; the discipline of physiognomy; Johann Kaspar Lavater and the makings of racial science; the impact of photography; Alphonse Bertillon and the “mug shot”; smiles in advertisements; biometrics to facial recognition technologies; and the art and science of the selfie. The course will draw on specialized readings from secondary literature alongside a wide range of literary and visual primary sources, including scientific texts, paintings, drawings, identity documents, photographs, advertisements, cosmetics, and prosthetic parts. The subject offers a great deal of room for the selection of a topic for a research paper on a subject of students’ choices.

Equivalent Course(s): ARTH 29412, HIST 29412

HIPS 29629. Tutorial: Romantic Bodies: Theater in the History of Science and Medicine. 100 Units.

It seems that science and theater have longed shared an ambiguous treatment as amoral yet bordering the ethically suspect. Scientific, medical, and technological advancements alter our everyday lives in profound ways and theater can play with the development and repercussions of these advancements, altering our memories of history. This stimulates a line of questioning for historians who view “science plays,” or plays that use science as the basis of their content and often also their form. In this tutorial, we will explore how these plays can (or cannot) fit into intellectual history as well as social and cultural histories of science. We will investigate how these plays can act as vehicles for remembering (or reconstructing) histories of science, reminding ourselves that the moral quandaries and ethical dilemmas that we juggle in science and medicine are as recurring as the theatrical productions are.

Instructor(s): Ashley Clark Terms Offered: Autumn. Autumn 2018

Equivalent Course(s): KNOW 29629, HIST 24920

HIPS 29630. Tutorial: History and Philosophy of Social Science. 100 Units.

Sociology and anthropology are highly self-reflexive disciplines. Their own contested histories have been taught and critiqued as a matter of course in the majority of sociology and anthropology departments in the US and Europe since their inception—hardly a surprise, given how dense, kaleidoscopic, and political they are. Meanwhile, the philosophy of social science has been gaining popularity in philosophy departments, apparently independently of the centuries-old reflection on social scientific methodologies that can be found within sociological and anthropological texts. In true interdisciplinary fashion, this course seeks to marry these areas of scholarship, bringing together readings in philosophy, sociology, anthropology, and classical social theory, under the common themes that unite (and divide) them. We will cover debates on the epistemological priority of the individual or of society, the priority of naturalist or humanist perspectives, and the generalisability or spatio-temporal specificity of social scientific explanations.

Instructor(s): Parysa Mostajir Terms Offered: Autumn. Autumn 2018

Equivalent Course(s): KNOW 29630

HIPS 29631. Tutorial: History of Cryptography. 100 Units.

People have used codes and ciphers to keep their communications secret for thousands of years. Codebreakers, meanwhile, have been battling in parallel to break into those secrets nearly as long. From Roman generals to Arabic mathematicians to the Zimmerman telegram, cryptography has long been important to military and diplomatic history, while technological developments in the last forty years have brought cryptography to the masses, securing bank transactions, text messages, and countless other data on the Internet. This course will survey the long history of cryptography from the ancient world to today, with a focus on its uses in society. We will discuss, among other things, changing ideas of secrecy, privacy, and freedom of speech; the relationship between the state and science; and how technological developments influence and are influenced by cultural context. No technical or mathematical background is necessary for this course, although those with such background are welcome. (Syllabus and CV attached.)

Instructor(s): Jillian Foley Terms Offered: Winter. Winter 2019

Equivalent Course(s): HIST 24919
HIPS 29632. Tutorial: The Poet’s Scientist: A pre-disciplinary course in science & literature. 100 Units.
This course is a way of gathering three interests. I’m interested in understanding a way of writing about scientists that is not readily available to historians of science, a more expressive, more intuited way of writing that we can find in some poets and novelists: Osip Mandelstam writing of the way "Lamarck wept his eyes out over his magnifying glass"; Arthur Koestler of how Kepler laid "a monstrous egg" with his elliptical orbit. I am interested in the particular license taken in these instances—that flash of soul; I think the same license is taken to great effect in, for instance, the historical fiction of Hilary Mantel, and I want to see what we can win by it if we permit ourselves to tolerate it in real histories, and particularly in histories of science. That’s a larger inquiry than this course undertakes, but I try to begin here by studying some writers who have won by it.
Instructor(s): Lily Huang Terms Offered: Spring. Spring 2019
Equivalent Course(s): KNOW 29632

HIPS 29678. History Colloquium: Medicine and Society. 100 Units.
How does medical knowledge change? How do medical practices transform over time? What factors influence the ways in which doctors and patients—and scientists, artists, politicians, legislators, activists, and educators, among others—understand matters of health and disease, of proper and improper interventions, of the rights of individuals and the needs of communities? This course treats these questions as a starting point for exploring the interactions of medicine and society from 1800 to the present. Through a combination of primary and secondary sources we will examine changing causes of morbidity and mortality, the development of new medical technologies and infrastructures, shifting patterns of disease and shifting ideas about bodies, and debates about health care policy, among other topics. Students will be expected to conduct original research and produce an original research paper of fifteen to twenty pages.
Instructor(s): M. Rossi Terms Offered: Winter
Prerequisite(s): Priority registration is given to History majors.
Equivalent Course(s): HIST 29678

HIPS 29700. Readings and Research in History, Philosophy, and Social Studies of Science and Medicine. 100 Units.
Reading and Research for HIPS seniors working on their senior thesis.
Terms Offered: Autumn Spring Winter
Note(s): Students are required to submit the College Reading and Research Course Form.

HIPS 29800. Junior Seminar: My Favorite Readings in the History and Philosophy of Science. 100 Units.
This course introduces some of the most important and influential accounts of science to have been produced in modern times. It provides an opportunity to discover how philosophers, historians, anthropologists, and sociologists have grappled with the scientific enterprise, and to assess critically how successful their efforts have been. Authors likely include Karl Popper, Thomas Kuhn, Robert Merton, Steven Shapin, and Bruno Latour.
Instructor(s): R. Richards Terms Offered: Autumn
Equivalent Course(s): HIST 25503

HIPS 29810. Bachelor’s Thesis Workshop. 100 Units.
Thesis writing workshop for HIPS seniors.
Terms Offered: Autumn, Spring, Winter

HIPS 29900. Bachelor’s Thesis. 100 Units.
This is a research course for independent study related to thesis preparation.
Terms Offered: Autumn, Winter, Spring
Note(s): Students are required to submit the College Reading and Research Course Form.
THE POZEN FAMILY CENTER FOR HUMAN RIGHTS

The Pozen Family Center for Human Rights, founded in 1997 as the Human Rights Program, supports innovative, interdisciplinary teaching and research projects that explore the theory and practice of human rights. The Pozen Center advances the global study of human rights through:

- A rigorous liberal arts curriculum that combines humanities and social sciences perspectives and analysis with practice-oriented teaching;
- Research initiatives that bring together faculty and students from across the University to address the challenges of human rights in a global world of diverse histories, politics, religions, and cultures;
- Programs to enhance the University community’s engagement with local, national, and international human rights issues, practices, and organizations.

The Human Rights Internship Program provides funded summer fellowships to College, graduate, and professional students to gain hands-on experience at host organizations around the world and in the United States. The Pozen Center also advances human rights research through grants to faculty and doctoral students that support innovative scholarship, as well as conferences and symposia. Multi-year faculty initiatives develop projects such as health and human rights, philosophical approaches to labor rights, and changing norms of refugee protection. The Pozen Center fosters a human rights culture at the University of Chicago and in the broader community with public events throughout the year. Conferences, lectures, workshops, performances, and exhibitions bring scholars and practitioners from around the world to explore human rights in theory and practice.

HUMAN RIGHTS CURRICULUM

The Human Rights Curriculum includes a College Human Rights civilization studies sequence, a College minor, an introduction to contemporary concepts and issues in human rights, a Spring Human Rights Study Abroad Program in Vienna, and a variety of elective courses with distinct disciplinary, thematic, and/or regional perspectives.

HMRT 10100 Human Rights in World Civilizations I and HMRT 10200 Human Rights in World Civilizations II comprise a two-quarter sequence that explores how human rights have been constructed across transnational, imperial, national, and local spaces in a variety of civilizational vernaculars while exposing students to their contested genealogies, limits, and silences. The sequence is primary source driven and discussion based, with readings drawn from a range of texts from the political and the legal to the literary, aural, and visual. This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

UNDERGRADUATE MINOR IN HUMAN RIGHTS

College students in any field of study may complete a minor in Human Rights. The minor is an interdisciplinary plan of study that provides students the opportunity to become familiar with the theoretical, historical, and comparative perspectives on human rights. The flexibility of this course of study complements majors in any of the disciplines. A minor in Human Rights will provide a background for graduate study in many disciplines or for careers that incorporate human rights analysis or advocacy, including medicine, law, filmmaking, social work, public policy, teaching, journalism, or government service.

The Human Rights minor requires a total of five courses, including:

1. One introductory course. Choose from one of the following:

   - HMRT 21001 Human Rights: Contemporary Issues
   - HMRT 21002 Human Rights: Philosophical Foundations
   - HMRT 20101 Human Rights I in Vienna: Philosophical Foundations of Human Rights
   - HMRT 20201 Human Rights II in Vienna: History and Theory
   - HMRT 20301 Human Rights III in Vienna: Contemporary Issues in Human Rights

2. Four approved Human Rights (HMRT) courses or cross-listed courses.

   It is recommended but not required that students who minor in Human Rights take HMRT 10100-10200 Human Rights in World Civilizations I-II to fulfill their general education requirement in civilization studies.
Summary of Requirements for the Minor in Human Rights

One of the following: 100

- HMRT 21001 Human Rights: Contemporary Issues
- HMRT 21002 Human Rights: Philosophical Foundations
- HMRT 20101 Human Rights I in Vienna: Philosophical Foundations of Human Rights
- HMRT 20201 Human Rights II in Vienna: History and Theory
- HMRT 20301 Human Rights III in Vienna: Contemporary Issues in Human Rights

Four approved HMRT courses or cross-listed courses 400

Total Units 500

To apply for the minor, students must receive the Pozen Center Executive Director’s approval on a form obtained from their College adviser. This form must then be returned to the College adviser by the end of Spring Quarter of their third year.

Courses in the minor program may not be (1) double counted with the student’s major(s) or with other minors or (2) counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Due to recent changes in the Human Rights minor, students in the Classes of 2017 and 2018 who have enrolled in the minor as of July 1, 2016, can seek approval of other combinations of Human Rights courses from the Pozen Center Executive Director.

HUMAN RIGHTS COURSES

HMRT 10100-10200. Human Rights in World Civilizations I-II.
This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

HMRT 10100. Human Rights in World Civilizations I. 100 Units.
The first quarter begins with a set of conceptual problems and optics designed to introduce students to the critical study of human rights, opening up questions of the universal, human dignity, and the political along with the practices of witness and testimony. It is followed by two thematic clusters. “Anti-Slavery, Humanitarianism, and Rights” focuses on the late eighteenth and early nineteenth centuries to historicize notions of dignity, sympathy, and witness. “Declarations as a Human Rights Genre” examines revolutionary eighteenth-century rights declarations in France, the United States, and Haiti against the aspirations of the 1948 UN Universal Declaration of Human Rights.

Instructor(s): J. Ransmeier, B. Laurence, Staff Terms Offered: Autumn

Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.

HMRT 10200. Human Rights in World Civilizations II. 100 Units.
Four thematic clusters structure the second quarter. “Migration, Minorities, and Refugees” examines minority rights, the evolution of legal norms around refugees, and human trafficking. “Late Twentieth Century Human Rights Talk” explores the contestations between rights claims in the political-civil and socio-economic spheres, calls for sexual rights, and cultural representations of human rights abuses. “Global Justice” considers forms of international criminal law, transitional justice, and distributive justice. “Indigenous Rights as Human Rights” takes up the relatively new domain of the rights of indigenous peoples and how they relate to contemporary human rights practice.

Instructor(s): B. Laurence, E. Osborn, Staff Terms Offered: Winter

Prerequisite(s): HMRT 10100

Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.

HMRT 10200. Human Rights in World Civilizations II. 100 Units.
Four thematic clusters structure the second quarter. “Migration, Minorities, and Refugees” examines minority rights, the evolution of legal norms around refugees, and human trafficking. “Late Twentieth Century Human Rights Talk” explores the contestations between rights claims in the political-civil and socio-economic spheres, calls for sexual rights, and cultural representations of human rights abuses. “Global Justice” considers forms of international criminal law, transitional justice, and distributive justice. “Indigenous Rights as Human Rights” takes up the relatively new domain of the rights of indigenous peoples and how they relate to contemporary human rights practice.

Instructor(s): B. Laurence, E. Osborn, Staff Terms Offered: Winter

Prerequisite(s): HMRT 10100

Note(s): This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence; students must have taken HMRT 10100 to enroll in this course.
HMRT 20101. Human Rights I in Vienna: Philosophical Foundations of Human Rights. 100 Units.
Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic, and pressing problems, such as global poverty, torture, and genocide. (V) (I)
Instructor(s): D. Brudney Terms Offered: Spring

HMRT 20201. Human Rights II in Vienna: History and Theory. 100 Units.
This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.
Instructor(s): T. Zahra Terms Offered: Spring

HMRT 20301. Human Rights III in Vienna: Contemporary Issues in Human Rights. 100 Units.
This interdisciplinary course presents a practitioner's overview of human rights problems as a means to explore the utility of human rights norms and mechanisms, as well as the advocacy roles of civil society organizations, legal and medical professionals, traditional and new media, and social movements. The Vienna edition of the course will expose the students to issues in contemporary human rights relevant to Europe today. Topics will include the relationship between rights and citizenship in contemporary Europe, the balance between rights and security (including the prohibition against torture), and the recognition of children's rights as human rights.
Instructor(s): S. Gzesh Terms Offered: Spring

Equivalent Course(s): HIST 39302, LLSO 27100, HIST 29302, CRES 29302, INRE 31700, HMRT 30200

HMRT 20200. Human Rights II: History and Theory. 100 Units.
This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.
Instructor(s): TBA Terms Offered: Winter

HMRT 20201. Human Rights II in Vienna: History and Theory. 100 Units.
This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.
Instructor(s): T. Zahra Terms Offered: Spring

HMRT 20301. Human Rights III in Vienna: Contemporary Issues in Human Rights. 100 Units.
This interdisciplinary course presents an overview of several major contemporary human rights problems as a means to explore the use of human rights norms and mechanisms. The course addresses the roles of states, inter-governmental bodies, national courts, civil society actors including NGOs, victims, and their families, and other non-state actors. Topics are likely to include universalism, enforceability of human rights norms, the prohibition against torture, U.S. exceptionalism, and the rights of women, racial minorities, and non-citizens.
Instructor(s): S. Gzesh Terms Offered: Spring

Equivalent Course(s): HMRT 31001, HIST 39304, LLSO 21001, LACS 31001, INRE 31801, LACS 21001, HIST 29304
HMRT 21001. Human Rights: Contemporary Issues. 100 Units.
This interdisciplinary course presents an overview of several major contemporary human rights problems as a means to explore the use of human rights norms and mechanisms. The course addresses the roles of states, intergovernmental bodies, national courts, civil society actors including NGOs, victims, and their families, and other non-state actors. Topics are likely to include universalism, enforceability of human rights norms, the prohibition against torture, U.S. exceptionalism, and the rights of women, racial minorities, and non-citizens.
Equivalent Course(s): HMRT 31001, HIST 39304, LLSO 21001, LACS 31001, INRE 31801, LACS 21001, HIST 29304

HMRT 21002. Human Rights: Philosophical Foundations. 100 Units.
Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (A) (I)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): HMRT 31002, LLSO 21002, INRE 31602, HIST 39319, MAPH 42002, PHIL 21002, PHIL 31002, HIST 29319

HMRT 21002. Human Rights: Philosophical Foundations. 100 Units.
Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (A) (I)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): HMRT 31002, LLSO 21002, INRE 31602, HIST 39319, MAPH 42002, PHIL 21002, PHIL 31002, HIST 29319

HMRT 21400. Health and Human Rights. 100 Units.
This course attempts to define health and health care in the context of human rights theory and practice. Does a “right to health” include a “right to health care”? We delineate health care financing in the United States and compare these systems with those of other nations. We explore specific issues of health and medical practice as they interface in areas of global conflict: torture, landmines, and poverty. Readings and discussions explore social determinants of health: housing, educational institutions, employment, and the fraying of social safety nets. We study vulnerable populations: foster children, refugees, and the mentally ill. Lastly, does a right to health include a right to pharmaceuticals? What does the big business of drug research and marketing mean for our own country and the world?
Instructor(s): R. Sherer, E. Lyon Terms Offered: Winter
Equivalent Course(s): HMRT 31400, MEDC 60405

HMRT 24701. Human Rights: Alien and Citizen. 100 Units.
This course addresses how international human rights doctrines, conventions, and mechanisms can be used to understand the situation of the "alien" (or foreigner) who has left his or her country of origin to work, seek safe haven, or simply reside in another country. If human rights are universal, human rights are not lost merely by crossing a border. We use an interdisciplinary approach to study concepts of citizenship and statelessness, as well as the human rights of refugees and migratory workers.
Instructor(s): S. Gzesh Terms Offered: Autumn
Equivalent Course(s): HMRT 34701, LACS 25303, LACS 35303

HMRT 25210. Anthropology of Disability. 100 Units.
This seminar undertakes to explore "disability" from an anthropological perspective that recognizes it as a socially constructed concept with implications for our understanding of fundamental issues about culture, society, and individual differences. We explore a wide range of theoretical, legal, ethical, and policy issues as they relate to the experiences of persons with disabilities, their families, and advocates. The final project is a presentation on the fieldwork.
Instructor(s): M. Fred Terms Offered: Autumn
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HMRT 35210, CHDV 30405, ANTH 30405, MAPS 36900, SOSC 36900, ANTH 20405, CHDV 20505
HMRT 27061. United States Legal History. 100 Units.
This course focuses on the connections between law and society in modern America. It explores how legal doctrines and constitutional rules have defined individual rights and social relations in both the public and private spheres. It also examines political struggles that have transformed American law. Topics to be addressed include the meaning of rights; the regulation of property, work, race, and sexual relations; civil disobedience; and legal theory as cultural history. Readings include legal cases, judicial rulings, short stories, and legal and historical scholarship.
Instructor(s): A. Stanley Terms Offered: Autumn
Equivalent Course(s): GNSE 27605, CRES 27605, HMRT 37605, AMER 27605, GNSE 37605, LLSO 28010, CRES 37605, HIST 37605, HIST 27605

HMRT 27306. U.S. Women and Gender. 100 Units.
This course studies the history of women, gender relations, and ideas of sex difference from the emergence of the women’s rights movement in the 1840s to the rise of women’s liberation in the 1960s. Issues of work, rights, citizenship, race, and sexuality take center stage as we explore the social, political, and cultural forces that shaped women’s lives and the aspirations and agency of women who sought to transform the rules and relations of gender in the United States. Readings include primary sources as well as classic and recent historical scholarship.
Instructor(s): A. Stanley Terms Offered: Winter
Equivalent Course(s): HIST 27306, GNSE 27306, CRES 23700, LLSO 27306

HMRT 28310. Vulnerability and Human Rights. 100 Units.
The course discusses current theories of vulnerability and passivity in relation to human rights. It pays particular attention how human rights and social justice can be thought of in relation to people with severe disabilities, animals, and others who are not traditionally thought of as subjects of justice. We will discuss philosophical texts by Jacques Derrida, Emmanuel Levinas, John Rawls, Martha Nussbaum, and others, and sociological texts by scholars like Bryan Turner and Tom Shakespeare.
Instructor(s): D. Kulick Terms Offered: Winter
Equivalent Course(s): HMRT 38310, CHDV 26310

HMRT 29120. Poverty Law and Policy Reform. 100 Units.
This seminar seeks to give students a comprehensive understanding of the major anti-poverty programs in the United States with an emphasis on current challenges and reform proposals. We will spend the first half of the course exploring the implementation and evaluation of the programs that make up the traditional safety net for poor Americans: income supports, health insurance, and housing assistance. We will spend the rest of the quarter exploring topics that complicate the traditional social policy regime, including how the safety net is more robust for some groups, such as the elderly and veterans, than others. We will explore how the legal systems of immigration and incarceration hamper anti-poverty policy and how safety net programs address the needs of rural and Native Americans. Finally, we will investigate two recent developments in the field: social entrepreneurship and the critique of procedural rights.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): No first year students; attendance on the first day of class is required.
Note(s): Not Offered in 2018-2019
Equivalent Course(s): LLSO 29120, PBPL 29120
INTERDISCIPLINARY STUDIES
IN THE HUMANITIES

Department Website: http://ishum.uchicago.edu

PROGRAM OF STUDY

The Bachelor of Arts degree program in Interdisciplinary Studies in the Humanities (ISHU) offers qualified undergraduates the opportunity to shape an interdisciplinary plan of course work centered in, but not necessarily restricted to, study in the humanities. The program is meant to accommodate a course of study that could not otherwise be carried out easily within the structures of a single disciplinary major.

One of the notable features of the program is the requirement that all ISHU majors complete a formal BA paper at the end of their term of study that integrates the disparate fields of each student's study in a truly interdisciplinary manner. A BA paper will normally consist of an analytical research paper. An alternative option is a creative BA project, which would be accompanied by an analytical write-up of the project's background, conceptual problem(s), and methodology.

To be considered for admission to this BA program, a student must submit an application. This application consists of the student's selection and rationalization of a plan of courses that form a discrete field of interdisciplinary study. (The specific materials and protocol necessary for the application are described below.) The application process is designed to make clear in each individual case what intellectual concerns are to be related to one another through interdisciplinary study and what method of comparative analysis is suited to such an approach.

Students should discuss plans and proposed courses with both the ISHU chair and College adviser. These meetings will help students evaluate the available courses of study to arrive at a balanced and coherent interdisciplinary plan.

Once a student is admitted to ISHU, she or he will come to have the support also of the BA preceptor and, by the end of the third year, a faculty BA adviser. The preceptor is typically a graduate student with interdisciplinary expertise who will help the student to progress towards successful completion of the degree program, including completion of the BA paper. The faculty adviser is a faculty member who has expertise in the student's main field of study, and agrees to supervise the development of the BA paper specifically. (The student is responsible for securing a faculty BA adviser, but can ask the ISHU staff for assistance in doing so.)

A student in the ISHU BA program will take courses in two or three academic departments, and it is common for ISHU majors to have two or three sets of chosen courses that do not intersect with each other at all. (Your program is interdisciplinary; your courses, individually, need not be interdisciplinary.) There is, however, a required structure to the distribution of courses that a student takes, and there are two specific courses that every ISHU major must take. These requirements are explained below.

PROGRAM REQUIREMENTS

Each student's program of study must meet the following six distribution requirements. Students can ensure that these requirements are met by completing the application worksheet that is available from the ISHU College adviser or ishum.uchicago.edu:

1. Six courses in a primary field or in closely integrated subject areas in more than one field.
2. Three courses in a first supporting field or in closely integrated subject areas in more than one field.
3. Three courses in a second supporting field or in closely integrated subject areas in more than one field.

A "field" is defined in one of three ways: (a) a selection of courses from a traditional department (such as Near Eastern Languages and Civilizations or Philosophy), (b) a traditional discipline spread over more than one department (such as a "Theater" field containing South Asian Languages and Civilizations and Theater and Performance Studies courses), or (c) an interdisciplinary set of courses under a certain rubric (such as an "American studies" field containing courses from English, History, and Sociology, or a "Narrative/Storytelling" field containing courses from Romance or Slavic Languages and Literatures, Anthropology, and Psychology). Students are encouraged to create their six-course field from a single, traditional discipline, so that, however broad their program, they can also have some depth of learning in a single discipline.

Any one of the fields listed under (1), (2), and (3) may be drawn from outside the humanities.

4. Two courses or one sequence of two courses (drawn from offerings in the humanities) that emphasizes intellectual approaches or critical methods germane to a student's particular interdisciplinary course program.

5. ISHU 29802 The BA Colloquium in the Spring Quarter of the third year, which meets three times over the quarter and is taught by the ISHU BA preceptor. The purpose of this course is for each student to begin working on the structure and argument of the BA paper that he or she will complete the following year. At the end of the course, each student will have written a proposal for the BA paper, which will generally be a
précis of the argument that the student anticipates making. Grading for this course is Pass/Fail (P/F) for all students.

Students should note that the course carries no numerical credit towards their degree (it is a “zero-unit” course). It cannot fill any role in the student’s degree program other than the one it is designed to fill; it also cannot be an elective. Because it is a noncredit course, students must carry at least three additional courses while registered for ISHU 29802 in order to meet requirements for full-time student status. Regardless of these technical qualifications, the course is compulsory for ISHU majors in their third year unless an exemption is granted for unusual circumstances, such as the student’s being in residence at a study-abroad program that quarter.

6. ISHU 29900 Preparation of the BA Project. This course is structured as an independent study. The instructor will be the student’s faculty BA adviser. It should be taken in the Autumn or Winter Quarter of fourth year, but in special circumstances may be taken in Spring Quarter of fourth year. The faculty adviser will devise a plan of reading and writing for the student and will critique drafts of the student’s BA paper as they develop.

**SUMMARY OF REQUIREMENTS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six primary field courses</td>
<td>600</td>
</tr>
<tr>
<td>Three secondary field courses</td>
<td>300</td>
</tr>
<tr>
<td>Three supporting field courses</td>
<td>300</td>
</tr>
<tr>
<td>Two critical/intellectual methods courses</td>
<td>200</td>
</tr>
<tr>
<td>ISHU 29802 The BA Colloquium</td>
<td>000</td>
</tr>
<tr>
<td>ISHU 29900 Preparation of the BA Project</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>1500</strong></td>
</tr>
</tbody>
</table>

**BA PAPER PREPARATION RELATED DEADLINES**

In order to maintain good standing in the program, fourth-year ISHU majors are expected to meet certain deadlines as they move toward completing their BA paper: (This schedule is based upon a normal Spring Quarter graduation plan; students planning to graduate in another quarter should adjust the various deadlines accordingly.)

Fourth year ISHU students will meet with the BA preceptor at least twice during the Autumn Quarter and twice again during the Winter Quarter. In these meetings they will discuss their work with the preceptor and show him or her drafts of the BA paper or, in the minimal case, evidence of their progress toward the completion of the paper. By the end of the Autumn Quarter, fourth-year students will turn in a preliminary draft/first iteration of the BA paper to the preceptor. There will then be a pre-final draft due to the faculty BA adviser, the ISHU chair, and the preceptor for perusal and critique by the end of the Winter Quarter. The final BA paper should be turned in to each of these three people and also to the academic advisor by Friday of fourth week in Spring Quarter.

In addition to these departmental requirements, a student’s faculty BA adviser may impose earlier deadlines and further conditions in relation to the work expected of the student in ISHU 29900 Preparation of the BA Project.

**SAMPLE PROGRAMS**

While the potential for developing individual BA programs in Interdisciplinary Studies is as great as the combined ingenuity, imagination, and interest of each student in consultation with his or her advisers, there are identifiable patterns in the choices of fields and lines of inquiry currently being implemented in the ISHU program. The most prominent of these include the following:

1. Study in philosophy and literature (with either literature or philosophy emphasized) to investigate differences in handling concepts and language in philosophy and literature and/or mutual influence between the two fields.
2. Study in verbal and nonverbal art forms and expressions (art and literature; and music and literature) leading to consideration of the implications of the verbal and nonverbal distinction for interpretation and criticism.
3. Study in the history, philosophy, language, religious expression, and literary and artistic productions of a given culture or of a given historical period within one or more cultures. Examples include American studies, the Renaissance, the Near East, or Greece (and the Mediterranean) in the preclassical and classical ages.
4. Study in humanistic fields (e.g., literature and philosophy) and in a social science field (e.g., sociology, psychology, anthropology, political science). This option is particularly adapted to a focus on gender studies. Please note, however, that the College offers a major in Gender Studies.
5. Study of modern culture in its various aspects of popular and elite forms of cultural expression.
6. Study in humanistic approaches to biological or physical science. This option is particularly adapted to interest in problems or aspects of intellectual and cultural history (e.g., the impact of Newtonian physics on eighteenth-century European thought) or to study of modern society and science’s role within it (medical ethics being one possible focus among many).

7. Study in human rights in relation to one or two humanistic disciplines such as philosophy, literature, or history.

APPLICATION

Interested students should make application to the ISHU program as soon as possible upon completion of general education requirements (typically by the end of the second year and, except in extraordinary circumstances, no later than the end of Autumn Quarter of the third year). Transfer students in particular are urged to apply at the earliest point that they can. An application is initiated by securing an interview with the ISHU chair and College adviser, to discuss the feasibility of shaping and implementing a given set of interdisciplinary concerns into a course of study for the BA.

Application materials include:

- A personal statement
- A course prospectus

Personal Statement

The first part of the proposal consists of a personal reflective statement of approximately 500 to 1,000 words in length, explaining the character of their interdisciplinary interests and stating as thoughtfully as possible how they propose to channel and expand them within course offerings currently available. Some consideration of prospects and possibilities for a BA paper or project is a desirable part of these statements, if it can be provided.

Course Prospectus

The second part of the proposal consists of a list of courses to fill the headings given in the above set of guidelines. This list will include courses the student has already taken as well as ones he or she intends to take. While a list of courses the student proposes to take is a required part of the application, it is understood that these will undergo modification. Any changes to the course prospectus should be discussed with (and approved by) the College adviser.

After the application materials have been reviewed by the ISHU chair and academic adviser, a twenty-minute interview will be scheduled with the ISHU chair. The ISHU chair will inform the student via email of the result of the application.

GRADING

All courses in the major must be taken for a quality grade (that is, A, B, C, D, or F, with + and – grades), with the exception of the zero-unit course ISHU 29802 The BA Colloquium, for which students will receive a grade of Pass or Fail.

HONORS

To be eligible for honors, a student must maintain an overall GPA of 3.25 or higher and a GPA in the major of 3.5 or higher. Honors are reserved for the student whose BA project shows exceptional intellectual merit in the judgment of the faculty adviser, ISHU chair, and master of the Humanities Collegiate Division.

ADVISING

Close contact with the faculty and staff relevant to the student’s career in ISHU—including the ISHU College adviser, chair, and preceptor, and the faculty adviser of the BA paper—is essential in a program that involves so much individual initiative and experimentation. Students are encouraged to seek their advice whenever they have an intellectual or practical concern about progress in the major.

FACULTY

Since ISHU is an interdisciplinary major whose field of study encompasses all the offerings in the various departments and programs of the University (particularly in the Humanities Division), all faculty members of these varied departments and programs are related to ISHU. ISHU students may approach any University of Chicago faculty member who works in his or her field of interest with a request to serve as faculty adviser for the BA paper. Similarly, ISHU students may take courses with any faculty member from any department of the University.

COURSES

For the same reason—that ISHU is an interdisciplinary major whose field of study encompasses all the offerings in the various departments and programs of the University (particularly in the Humanities Division)—all substantive and methodology courses offered in these varied departments and programs are viable courses for the program. ISHU students may take any courses offered in the University that fit in with their program of study, provided these are approved by the ISHU College adviser and chair.
In addition to the above courses that are grounded in particular fields of study, the program requires all ISHU students to take two courses that are related to the preparation of the BA paper:

**ISHU 29802. The BA Colloquium. 000 Units.**
Required of third-year students who are majoring in ISHU. This zero-unit, noncredit course must be taken for P/F grading. To meet requirements for full-time student status, students must carry at least three additional courses while registered for this course.
Terms Offered: Spring
Prerequisite(s): Consent of ISHU College adviser and chair
Note(s): Required of third-year students who are majoring in ISHU. This zero-unit, noncredit course must be taken for P/F grading. To meet requirements for full-time student status, students must carry at least three additional courses while registered for this course.

**ISHU 29900. Preparation of the BA Project. 100 Units.**
No description available.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of faculty adviser and ISHU chair
Note(s): Students are required to submit the College Reading and Research Course Form.

More details of these two courses have been provided earlier in the Program Requirements section.

Moreover, inasmuch as the ability to write clear, effective prose is part of the essential skill set required of the humanist endeavor, ISHU students are encouraged (but not required) to take a course on academic writing such as:

**ENGL 13000. Academic and Professional Writing (The Little Red Schoolhouse) 100 Units.**
Academic and Professional Writing, a.k.a. "The Little Red Schoolhouse" or "LRS" (English 13000/33000) is an advanced writing course for third- and fourth-year undergraduates who are taking courses in their majors or concentrations, as well as graduate students in all of the divisions and university professional programs. LRS helps writers communicate complex and difficult material clearly to a wide variety of expert and non-expert readers. It is designed to prepare students for the demands of academic writing at various levels, from the B.A. thesis to the academic article or book--and for the tasks of writing in professional contexts.
Instructor(s): L. McEnerney, K. Cochran, T. Weiner Terms Offered: Spring Winter
Prerequisite(s): Third- or fourth-year standing
Note(s): This course does not count towards the ISHU program requirements. May be taken for P/F grading by students who are not majoring in English. Materials fee $20.
Equivalent Course(s): ENGL 33000
JEWISH STUDIES

Program Website: http://ccjs.uchicago.edu

Program of Study

The BA program in Jewish Studies provides a context in which College students may examine the texts, cultures, languages, and histories of Jews and Judaism over three millennia. The perspective is contextual, comparative, and interdisciplinary. The long and diverse history of Jews and Judaism affords unique opportunities to study modes of continuity and change, interpretation and innovation, and isolation and integration of a world historical civilization. Students are encouraged to develop appropriate skills (in texts, languages, history, and culture) for independent work.

Students in other fields of study may also complete a minor in Jewish Studies. Information follows the description of the major.

Jewish Civilization Sequence

A two-course Jewish Civilization sequence is offered in the Autumn and Winter Quarters. The first course begins in antiquity and extends to the early medieval period (JWSC 12000 Jewish Civilization I: Ancient Beginnings to Early Medieval Period). The second course begins in the medieval period and extends to the present (JWSC 12001 Jewish Civilization II: Late Medieval to Modern Period). Jewish civilization courses may be used to fulfill the College’s general education requirement in civilization studies. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.

Note: Jewish Studies revised its civilization studies courses for academic year 2018-2019. Students who began the requirement prior to Autumn Quarter 2018, under the previous course options, may complete it with those courses that remain available, or they may combine them with the new course options. However, students must have at least one course on the ancient/medieval period (JWSC 20120-20199 or JWSC 12000 Jewish Civilization I: Ancient Beginnings to Early Medieval Period) and at least one on the modern period (JWSC 20220-20299 or JWSC 12001 Jewish Civilization II: Late Medieval to Modern Period). Students who begin the requirement in Autumn Quarter 2018 or later may only use the new sequence to meet the general studies requirement in civilization studies.

Students may also fulfill the Jewish civilization requirement by participating in the “Jerusalem in Middle Eastern Civilizations” Study Abroad program. (For more information about this program, please see the Study Abroad page of this catalog.)

Program Requirements

Advising

Students who have not completed the College’s general education requirements before starting the major should do so during their first year as Jewish Studies majors. Students are required to meet with the director of undergraduate studies before declaring a major in Jewish Studies. Each student in the major will have as an adviser a faculty member who is affiliated with the Greenberg Center for Jewish Studies.

Major in Jewish Studies

The major requires twelve courses distributed according to the guidelines that follow. A full, constantly updated list of courses approved for the major and minor is available on the Greenberg Center for Jewish Studies website at ccjs.uchicago.edu.

Language

Students must typically take three quarters of Hebrew. If the student’s research project requires knowledge of a language other than Hebrew, the student may petition the committee to substitute that language in the place of Hebrew.

Jewish Civilization and Electives

Students in the major must take nine additional courses in Jewish Studies, for a total of twelve courses.

Jewish Civilization: Students in the major must complete either the two-quarter Jewish Civilization sequence or the Jerusalem Study Abroad program.

If students take one of these sequences to satisfy the general education requirement in civilization studies, one elective in the major must come from another civilization studies sequence pertinent to the area and period of the student’s primary interest in Jewish Studies.

For students who take a sequence outside Jewish Studies to satisfy the general education requirement in civilization studies, the two-course Jewish Civilization sequence (or three-course sequence offered in Jerusalem) will count among the JWSC electives required for the major.
**Other Electives:** The remaining courses must come from JWSC course offerings. These elective courses should normally focus in a specific area of concentration within Jewish Studies and should be chosen in consultation with the director of undergraduate studies. Students who complete the option BA these (as described under Optional BA Paper) may count JWSC 29900 among these courses.

Beyond the requirements for the major, students are encouraged to take at least one course in method or theory pertaining to their area of concentration in Jewish Studies, whether it is a JWSC course that can count in the major or is simply a general elective credit.

**SUMMARY OF REQUIREMENTS**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three courses in Hebrew (or other language, with approval)</td>
<td>300</td>
</tr>
<tr>
<td>Nine total JWSC courses</td>
<td>900</td>
</tr>
<tr>
<td>Note: Must include 1-3 Jewish civilization courses, as described under the Program Requirements</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>1200</td>
</tr>
</tbody>
</table>

**Optional BA Paper**

Students who choose this option are to meet with their advisers by May 15 of their third year to determine the focus of the research project, and they are expected to begin reading and research for the BA paper during the summer before their fourth year. After further consultation, students are to continue guided readings and participate in a (formal or informal) tutorial during Autumn Quarter of their fourth year. Credit toward the major is received only for the Winter Quarter tutorial during which the BA paper is finally written and revised. The BA tutorial may count toward one of the courses related to Jewish Studies. The BA paper must be received by the primary reader by the end of fifth week of Spring Quarter. A BA paper is a requirement for consideration for honors.

This program may accept a BA paper or project used to satisfy the same requirement in another major if certain conditions are met and with the consent of the other program chair. Approval from both program chairs is required. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of their third year, if neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

**Honors**

Honors are awarded to students who demonstrate excellence in their course work, as well as on the BA paper. To qualify for honors, students must register for JWSC 29900 (http://collegecatalog.uchicago.edu/search/?P=JWSC%2029900) BA Paper Preparation Course in addition to the twelve courses required in the general program of study, bringing the total number of courses required to thirteen. Students must maintain an overall GPA of 3.0 or higher and a GPA of 3.5 or higher in the major, and the BA paper must be judged to be at least of A- quality.

**Grading**

Students take all courses required for the major for quality grades.

**MINOR IN JEWISH STUDIES**

The minor in Jewish Studies provides a basic introduction to the texts, cultures, languages, and history of the Jews and Judaism. Six courses are required for the minor, two of which are the Jewish Civilization sequence. The other courses may be in any area of Jewish Studies, including languages such as Hebrew and Yiddish; such courses can be identified by their JWSC prefix. Students can earn credit for three courses in Jewish civilization (ancient, medieval, and modern) by participating in the “Jerusalem in Middle Eastern Civilizations” Study Abroad program. (For more information about this program, please see the Study Abroad (http://collegecatalog.uchicago.edu/thecollege/offcampusstudyprograms) page of this catalog.)

Students who wish to do a minor in Jewish Studies must meet with the director of undergraduate studies before the end of the Spring Quarter of their third year to declare their intention to complete the minor. The director's approval for the minor program will then be communicated to the student's College adviser.

Courses taken to fulfill the requirements for the minor in Jewish Studies may not be double-counted with courses taken for the student's major(s) or courses taken for other minors. Courses taken for the minor in Jewish Studies must be taken for quality grades.

**JEWISH STUDIES COURSES**

**JWSC 11000-11100-11200. Biblical Aramaic; Old Aramaic Inscriptions; Imperial Aramaic.**

Three quarter sequence in Aramaic spanning Biblical Aramaic (Autumn), Old Aramaic (Spring), and Imperial Aramaic (Winter).
JWSC 11000. Biblical Aramaic. 100 Units.
This course provides a thorough introduction to the grammar of the Aramaic portions of the Hebrew Bible during the first few weeks. The remainder of the course is spent reading texts from the books of Daniel and Ezra.
Instructor(s): S. Creason Terms Offered: Autumn
Prerequisite(s): HEBR 10103 or equivalent.
Equivalent Course(s): ARAM 10101

JWSC 11100. Old Aramaic Inscriptions. 100 Units.
Course in Old Aramaic Inscriptions
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): ARAM 10102

JWSC 11200. Imperial Aramaic. 100 Units.
Course in Imperial Aramaic
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): ARAM 10103

JWSC 11100. Old Aramaic Inscriptions. 100 Units.
Course in Old Aramaic Inscriptions
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): ARAM 10102

JWSC 11200. Imperial Aramaic. 100 Units.
Course in Imperial Aramaic
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): ARAM 10103

JWSC 12000-12001. Jewish Civilization I-II.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbincic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary — students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. Note: Jewish Studies revised its civilization studies courses for academic year 2018–19. Students who began the requirement prior to Autumn Quarter 2018, under the previous course options, may complete it with those courses that remain available, or they may combine them with the new course options. However, students must have at least one course on the ancient/medieval period (JWSC 20120-20199 or JWSC 12000 Jewish Civilization I: Ancient Beginnings to Early Medieval Period) and at least one on the modern period (JWSC 20220-20299 or JWSC 12001 Jewish Civilization II: Late Medieval to Modern Period). Students who begin the requirement in Autumn Quarter 2018 or later may only use the new sequence to meet the general studies requirement in civilization studies.

JWSC 12000. Jewish Civilization I: Ancient Beginnings to Early Medieval Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbincic and medieval transformations to its modern manifestations. Through investigation of primary texts—biblical, Talmudic, philosophical, mystical, historical, documentary, and literary—students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Autumn course will deal with antiquity to the early medieval periods. Its readings will include works from the Bible, the Dead Sea Scrolls, Philo, Josephus, the Rabbis, Yehudah Halevy, and Maimonides. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Chavel Terms Offered: Autumn
Equivalent Course(s): RLST 22010, NEHC 22010
JWSC 12001. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelssohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Rokem Terms Offered: Winter
Equivalent Course(s): RLST 22011, NEHC 22011

JWSC 12001. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelssohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Rokem Terms Offered: Winter
Equivalent Course(s): RLST 22011, NEHC 22011

JWSC 20120. Introduction to the Hebrew Bible. 100 Units.
The Hebrew Bible (Old Testament) is a complex anthology of disparate texts and reflects a diversity of religious, political, and historical perspectives from ancient Israel, Judah, and Yehud. Because this collection of texts continues to play an important role in modern religions, new meanings are often imposed upon it. In this course, we will attempt to read biblical texts apart from modern preconceptions about them. We will also contextualize their ideas and goals through comparison with texts from ancient Mesopotamia, Syro-Palestine, and Egypt. Such comparisons will demonstrate that the Hebrew Bible is fully part of the cultural milieu of the Ancient Near East. To accomplish these goals, we will read a significant portion of the Hebrew Bible in English, along with representative selections from secondary literature. We will also spend some time thinking about the nature of biblical interpretation.
Instructor(s): J. Stackert Terms Offered: Autumn
Equivalent Course(s): BIBL 31000, NEHC 30504, NEHC 20504, RLST 11004

JWSC 20300-20400-20500. Elementary Yiddish I-II-III.
The goal of this sequence is to develop proficiency in Yiddish reading, writing, listening, and speaking skills. Touchstones of global Yiddish culture are also introduced through song, film, and contemporary Yiddish websites.

JWSC 20300. Elementary Yiddish I. 100 Units.
Elementary Yiddish I
Instructor(s): Sunny Yudkoff Terms Offered: Autumn

JWSC 20400. Elementary Yiddish for Beginners-II. 100 Units.
In this course, students will extend basic Yiddish speaking, listening, reading, and writing skills. By the end of the course, students should have a basic understanding of regional Yiddish variations in pronunciation and spelling, be able to understand and participate in a conversation in an increasingly comfortable and complex way, read simple texts with ease, have experience tackling more complex texts with the aid of a dictionary, and write short compositions with grammatical complexity. In the course of language study, students will also be exposed to key topics in the history of the Yiddish language and culture.
Instructor(s): Sunny Yudkoff Terms Offered: Winter
Prerequisite(s): YDDH 10100/37300 or consent of instructor
Equivalent Course(s): YDDH 37400, YDDH 10200
JWSC 20500. Elementary Yiddish III. 100 Units.
In this course, students will acquire intermediate Yiddish speaking, listening, reading, and writing skills. By the end of the course, students should be able to conduct a conversation on a wide range of topics, be comfortable tackling complex texts with the aid of a dictionary, and write short compositions with grammatical complexity. In the course of language study, students will also be exposed to key topics in the history of the Yiddish language and culture. Students will also be introduced to basic Yiddish research skills.
Instructor(s): Jessica Kirzane Terms Offered: Spring
Prerequisite(s): YDDH 10100, 10200 or consent of instructor. No auditors.
Equivalent Course(s): YDDH 10300, YDDH 37500

JWSC 20400. Elementary Yiddish for Beginners-II. 100 Units.
In this course, students will extend basic Yiddish speaking, listening, reading, and writing skills. By the end of the course, students should have a basic understanding of regional Yiddish variations in pronunciation and spelling, be able to understand and participate in a conversation in an increasingly comfortable and complex way, read simple texts with ease, have experience tackling more complex texts with the aid of a dictionary, and write short compositions with grammatical complexity. In the course of language study, students will also be exposed to key topics in the history of the Yiddish language and culture.
Instructor(s): Sunny Yudkoff Terms Offered: Winter
Prerequisite(s): YDDH 10100/37300 or consent of instructor
Equivalent Course(s): YDDH 37400, YDDH 10200

JWSC 21107. Rdg: Maimonides’ Guide of the Perplexed. 100 Units.
A careful study of select passages in Maimonides’ Guide of the Perplexed, focusing on the method of the work and its major philosophical-theological themes, including: divine attributes, creation vs. eternity, prophecy, the problem of evil and divine providence, law and ethics, the final aim of human existence.
Instructor(s): James Robinson Terms Offered: Winter
Equivalent Course(s): RLST 21107, HIJD 45400, FNDL 24106, ISLM 45400, HREL 45401, RLVC 45400, NEHC 40470

JWSC 22000-22100-22200. Elementary Classical Hebrew I-II-III.
The purpose of this three-quarter sequence is to enable the student to read biblical Hebrew prose with a high degree of comprehension. The sequence is divided into two segments: (1) the first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis); and (2) the third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.

JWSC 22000. Elementary Classical Hebrew I. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Autumn
Note(s): This class meets 5 times a week
Equivalent Course(s): HEBR 10101, JWSC 30101

JWSC 22100. Elementary Classical Hebrew II. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): HEBR 10101 or equivalent
Note(s): This class meets 5 times a week
Equivalent Course(s): HEBR 10102

JWSC 22200. Elementary Classical Hebrew-3. 100 Units.
The third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): HEBR 10102
Note(s): This class meets 5 times a week
Equivalent Course(s): HEBR 10103, JWSG 30300
JWSC 22100. Elementary Classical Hebrew II. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including
translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): HEBR 10101 or equivalent
Note(s): This class meets 5 times a week
Equivalent Course(s): HEBR 10102

JWSC 22200. Elementary Classical Hebrew-3. 100 Units.
The third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): HEBR 10102
Note(s): This class meets 5 times a week
Equivalent Course(s): HEBR 10103, JWSG 30300

JWSC 22300-22400-22500. Intermediate Classical Hebrew I-II-III.
A continuation of Elementary Classical Hebrew. The first quarter consists of reviewing grammar, and of reading
and analyzing further prose texts. The last two quarters are devoted to an introduction to Hebrew poetry with
readings from Psalms, Proverbs, and the prophets.

JWSC 22300. Intermediate Classical Hebrew I. 100 Units.
The first quarter consists of reviewing grammar, and of reading and analyzing further prose texts.
Instructor(s): D. Pardee Terms Offered: Autumn
Prerequisite(s): HEBR 10103 or equivalent
Equivalent Course(s): HEBR 20104

JWSC 22400. Intermediate Classical Hebrew II. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs,
and the prophets.
Instructor(s): D. Pardee Terms Offered: Winter
Prerequisite(s): HEBR 20104 or equivalent
Equivalent Course(s): HEBR 20105

JWSC 22500. Intermediate Classical Hebrew III. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs,
and the prophets.
Instructor(s): D. Pardee Terms Offered: Spring
Prerequisite(s): HEBR 20105 or equivalent
Equivalent Course(s): HEBR 20106

JWSC 22400. Intermediate Classical Hebrew II. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs,
and the prophets.
Instructor(s): D. Pardee Terms Offered: Winter
Prerequisite(s): HEBR 20104 or equivalent
Equivalent Course(s): HEBR 20105

JWSC 22500. Intermediate Classical Hebrew III. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs,
and the prophets.
Instructor(s): D. Pardee Terms Offered: Spring
Prerequisite(s): HEBR 20105 or equivalent
Equivalent Course(s): HEBR 20106

JWSC 24105. Letters to Zion. 100 Units.
This seminar centers the question: what do we mean when we describe Jewish authors and thinkers from the
past as Zionist, anti-Zionist, or non-Zionist? We will approach this question by reading three correspondences:
Kafka’s letters to Felice Bauer, and the correspondences between Gershom Scholem and Hannah Arendt
and between Paul Celan and Ilana Shmueli. In each case, the question of Zionism and of Israel looms in the
background of the exchange in some way. Our key question is: can we definitively determine the position of each
of these letter-writers on the question of Zionism? And do we want to? Or does the form of the correspondence
rather open a possibility for a more flexible, complex account of their positions, allowing us to think of them as
changing and evolving, indeed as dialogic? In addition to the letters themselves, we will read other texts by these
authors and about them, as well as background reading on the letter as genre and as historical document. We will
also take note of the fact that these are all exchanges that cross the gender divide and ask how the question of
Zionist ideology intersects with issues of gender in Jewish history.
Instructor(s): Na’ama Rokem Terms Offered: Autumn
Equivalent Course(s): CMLT 24105, CMLT 34105
**JWSC 24650. Introduction to Kabbalah. 100 Units.**
A general introduction to the origins and development of Kabbalah, focusing on the classic period of the twelfth and thirteenth centuries. We will read samples from the major texts and most important movements, including the Bahir and Isaac the Blind in Provence, the Gerona circle (Ezra, Azriel, Nachmanides), and developments in Castile, from Ibn Latif and Ibn Sahula to Abraham Abulafia and Joseph Ibn Gikatilla to Moses de Leon and the Zohar.
Instructor(s): James T. Robinson Terms Offered: Autumn
Equivalent Course(s): HIJD 35500

**JWSC 25000-25100-25200. Introductory Modern Hebrew I-II-III.**
This three-quarter sequence introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write a short essay.

**JWSC 25000. Introductory Modern Hebrew-I. 100 Units.**
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Autumn
Equivalent Course(s): HEBR 10501

**JWSC 25100. Introductory Modern Hebrew-II. 100 Units.**
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Winter
Prerequisite(s): HEBR 10501 or equivalent
Equivalent Course(s): HEBR 10502

**JWSC 25200. Introductory Modern Hebrew III. 100 Units.**
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essays.
Instructor(s): A. Almog Terms Offered: Spring
Prerequisite(s): HEBR 10502 or equivalent
Equivalent Course(s): HEBR 10503

**JWSC 25100. Introductory Modern Hebrew-II. 100 Units.**
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Winter
Prerequisite(s): HEBR 10501 or equivalent
Equivalent Course(s): HEBR 10502
JWSC 25200. Introductory Modern Hebrew III. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essays.
Instructor(s): A. Almog Terms Offered: Spring
Prerequisite(s): HEBR 10502 or equivalent
Equivalent Course(s): HEBR 10503

JWSC 25149. Anthropology of Israel. 100 Units.
This seminar explores the dynamics of Israeli culture and society through a combination of weekly screenings of Israeli fiction and documentary films with readings from ethnographic and other relevant research. Among the (often overlapping) topics to be covered in this examination of the institutional and ideological construction of Israeli identity/ies: the absorption of immigrants; ethnic, class, and religious tensions; the kibbutz; military experience; the Holocaust; evolving attitudes about gender and sexuality; the struggle for minorities’ rights; and Arab-Jewish relations.
Equivalent Course(s): NEHC 35147, ANTH 25150, CMES 35150, NEHC 25147, ANTH 35150, MAPS 35150

JWSC 26210. Oedipus in Zion: The Oedipal Figure in Modern Hebrew Literature. 100 Units.
Historians often refer to the emergence of Zionism as an “Oedipal Revolution. Hence, the secular son’s rebellion against his orthodox father is understood as the thrust that triggered the modern Jewish revolution. Alan Mintz aptly described the inter-generational rift between fathers and sons at the turn of the 20th century as a tragic yet inevitable consequence of modernity, underscoring the psychological difficulties and political dilemmas that haunted the sons who were “banished form their father’s table. This seminar will focus on the (highly androcentric) oedipal figure in literary theory and explore its prominence in modern Hebrew literature. Freud’s preoccupation with the Oedipus complex at the turn of the century coincided with the emergence of a powerful oedipal narrative in modern Hebrew culture. This confluence provides a fascinating backdrop to the “invention” of the Oedipus complex. We will read a variety of literary texts which rework the oedipal figure from the late 19th century to the 1980s and beyond.
Instructor(s): Michael Gluzman
Equivalent Course(s): CMLT 36210, CMLT 26210

JWSC 27401. Intermediate Yiddish-II. 100 Units.
Instructor(s): S. Yudkoff Terms Offered: Winter
Prerequisite(s): YDDH 10300 or consent of instructor. No auditors.
Equivalent Course(s): YDDH 20200, YDDH 39600

JWSC 28110. Queer Jewish Literature. 100 Units.
Spanning medieval Hebrew to contemporary Yiddish, this course will explore the intersections of Jewish literature and queer theory, homophobia and antisemitism. While centered on literary studies, the syllabus will also include film, visual art, and music. Literary authors will include Bashevis Singer, Qalonymus ben Qalonymus, Irena Klepfisz, and others. Theorists will include Eve Sedgwick, Zohar Weiman-Kelman, Sander Gilman, and others. Readings will be in English translation.
Instructor(s): Anna Elena Torres Terms Offered: Winter
Equivalent Course(s): GNSE 38110, CMLT 38110, CMLT 28110, GNSE 28110

JWSC 29550. Cinema and the Holocaust. 100 Units.
Focuses on cinematic responses by several leading film directors from East & Central Europe to a central event of 20th century history -- the Holocaust. Nazis began a cinematic documentation of WWII at its onset, positioning cameras in places of actual atrocities. Documentary footage produced was framed by hostile propagandistic schemes; contrary to this ‘method’, Holocaust feature films are all but a representation of Jewish genocide produced after the actual traumatic events. This class aims at discussing the challenge of representing the Jewish genocide which has often been defined as un-representable. Because of this challenge, Holocaust films raise questions of ethical responsibility for cinematic production & a search for relevant artistic means with which to engage post-traumatic representation. Therefore, among major tropes we will analyze voyeuristic evocation of death & suffering; a truthful representation of violence versus purported necessity of its cinematic aesthetization; intertwined notions of chance & hope as conditions of survival versus hagiographic representation of victims. The main goal is to grasp the potential of cinema for deepening our understanding of the Holocaust, the course simultaneously explores extensive & continuous cinematic production of the genre & its historical development in various European countries, to mention the impact of censorship by official ideologies in the Soviet Union, Poland, Hungary, & Czechoslovakia during the Cold War.
Instructor(s): Bozena Shallcross Terms Offered: Winter
Note(s): Course requirements: film screenings, class participation, reading assignments, one class presentation, and a final project. All readings for the core texts are in English; they can be downloaded from Canvas.
Equivalent Course(s): CMST 32507, CMST 22507, REES 27027, REES 37027
JWSC 29700. Reading/Research: Jewish Std. 100 Units.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and Undergraduate Program Adviser
Note(s): Students are required to submit the College Reading and Research Course Form.

JWSC 29900. BA Preparation Course. 100 Units.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and Undergraduate Program Adviser
Note(s): Students are required to submit the College Reading and Research Course Form. Required of honors candidates. May be taken for P/F grading with consent of instructor.
LATIN AMERICAN AND CARIBBEAN STUDIES

Department Website: http://clas.uchicago.edu

MAJOR PROGRAM IN LATIN AMERICAN AND CARIBBEAN STUDIES

Students who major in Latin American and Caribbean Studies gain a thorough grounding in selected aspects of Latin American societies, cultures, histories, politics, and economics through one or more of the social sciences as they deal with Latin American materials, and through competence in Spanish or Portuguese (an added intellectual asset). The BA program in Latin American and Caribbean Studies can provide an appropriate background for careers in business, journalism, government, teaching, or the nonprofit sector, or for graduate studies in one of the social sciences disciplines. Students who are more interested in the languages and/or literatures of Latin America may wish to consider the major in Romance Languages and Literatures. Students in other fields of study may also complete a minor in Latin American and Caribbean Studies. Information about the minor follows the description of the major.

APPLICATION TO THE MAJOR PROGRAM

Students who plan to declare a major in Latin American and Caribbean Studies should follow the guidelines below. An informational meeting is held each autumn to describe the program and its requirements, as well as to explain and facilitate the declaration process.

1. As early as possible in their studies and in consultation with their College adviser and the LACS program adviser, students should prepare a preliminary plan of study that would meet program requirements.
2. Students must meet with the LACS program adviser no later than the Autumn Quarter of their third year to discuss their major progress and to discuss the BA Colloquium and their proposed BA thesis topic and relevant readings and resources. Students will choose a suitable faculty adviser to supervise the development of their BA essay project no later than Autumn Quarter of their fourth year.

NOTE: Students who plan to study abroad during the Winter or Spring Quarter of their third year should meet with the LACS program adviser before leaving campus.

MAJOR PROGRAM REQUIREMENTS

As early as possible in their studies, students should obtain a worksheet from the LACS program adviser, who will assist them with selecting the five required LACS content courses. For a list of approved courses, visit the LACS website at clas.uchicago.edu or consult with the LACS program adviser.

Depending on whether the student counts two or three Latin American civilization courses toward the general education requirement, the major requires either eleven or twelve courses. Students who use all three quarters of a Latin American civilization sequence to meet the general education requirement will complete an eleven-course major. Students who fulfill the general education requirement with two quarters of the sequence will count the third quarter of the sequence toward the major, for a total of twelve courses in the major.

Students participating in a study abroad program may petition to have courses accepted in partial fulfillment of requirements for the major.

GENERAL EDUCATION COURSES

Students who are majoring in Latin American and Caribbean Studies must complete the general education requirement in civilization studies with LACS 16100-16200-16300 Introduction to Latin American Civilization I-II-III or SOSC 19019-19020-19021 Latin American Civilization in Oaxaca I-II-III. Either of these sequences provides an excellent introduction to the program.

LANGUAGE COURSES

Students should complete three courses in second-year Spanish or Portuguese to meet the language requirement for the major. Eligible students may petition for credit.

CONTENT COURSES AND ELECTIVES

To meet requirements for the major in Latin American and Caribbean Studies, students must also take five courses that focus on Latin America or the Caribbean—at least four of the five must be in the social sciences—and two additional courses that cover any social science topic. Students may find listings of quarterly Latin American themed courses on the Latin American and Caribbean Studies website at clas.uchicago.edu.

BA COLLOQUIUM

All students who are majoring in Latin American and Caribbean Studies are required to participate in the BA Colloquium and to submit a BA essay. The BA Colloquium in Latin American Studies (LACS 29801 BA Colloquium) is a yearlong course led by the preceptor and BA adviser. Fourth-year students are
required to participate in all three quarters, although they register for the colloquium only once in Autumn Quarter. The colloquium assists students in formulating approaches to the BA essay and developing their research and writing skills, while providing a forum for group discussion and critiques. Graduating students present their BA essays in a public session of the colloquium during Spring Quarter.

**BA ESSAY**

All students who are majoring in Latin American and Caribbean Studies are required to write a BA essay under the supervision of a faculty member. The BA essay is due Spring Quarter of the year of graduation. During the Spring Quarter of their third year, all BA majors (double majors included) will be required to participate in a thesis proposal workshop series. This series will help third-year majors develop a thesis topic, find a faculty adviser, and begin conducting thesis research prior to the start of the Autumn Quarter of their fourth year. Students will be contacted in the Winter Quarter of their third year with information regarding the workshop series.

Registration for a BA essay preparation course (LACS 29900 Prep: BA Essay) is optional. Students who do register for LACS 29900 Prep: BA Essay may count this course as one of the five they must take dealing with Latin America. The grade students will receive for this course depends on the successful completion of the BA essay.

This program may accept a BA essay project used to satisfy the same requirement in another major if certain conditions are met and with the consent of both program chairs. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of their third year, if neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College advising office. It must be completed and returned to the student’s College adviser by the end of Autumn Quarter of the student’s year of graduation.

**SUMMARY OF REQUIREMENTS: LATIN AMERICAN AND CARIBBEAN STUDIES MAJOR**

**GENERAL EDUCATION**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LACS 16100 &amp; LACS 16200</td>
<td>200</td>
</tr>
<tr>
<td>SOSC 19019 &amp; SOSC 19020</td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>200</td>
</tr>
</tbody>
</table>

**MAJOR**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LACS 16300</td>
<td>0-100</td>
</tr>
<tr>
<td>SOSC 19021</td>
<td></td>
</tr>
<tr>
<td><strong>One of the following sequences:</strong></td>
<td>300</td>
</tr>
<tr>
<td>SPAN 20100-20200-20300</td>
<td></td>
</tr>
<tr>
<td>PORT 20100 &amp; PORT 20200 &amp; PORT 21500</td>
<td></td>
</tr>
<tr>
<td><strong>Five courses dealing with Latin America or the Caribbean (four in the social sciences)</strong></td>
<td>500</td>
</tr>
<tr>
<td><strong>Two courses in the social sciences</strong></td>
<td>200</td>
</tr>
<tr>
<td>LACS 29801</td>
<td>100</td>
</tr>
<tr>
<td><strong>BA Essay</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1100-1200</td>
</tr>
</tbody>
</table>

* Or credit for the equivalent as determined by petition.

**GRADING**

Each of the required courses for the Latin American and Caribbean Studies major must be taken for a quality grade.

**HONORS**

Students who have done exceptionally well in their course work and on their BA essay are considered for honors. Candidates must have a GPA of 3.0 or higher overall and 3.25 or higher in the major.
**MINOR PROGRAM IN LATIN AMERICAN AND CARIBBEAN STUDIES**

The minor program in Latin American and Caribbean Studies provides students majoring in other disciplines the opportunity to become familiar with selected aspects of Latin American and Caribbean societies, cultures, histories, politics, and economics through one or more of the social sciences as they deal with Latin American and Caribbean materials, and one or more major language of the region. It can provide an appropriate cultural background for careers in business, journalism, government, teaching, or the nonprofit sector, or for graduate studies in the social sciences. The course of study is designed to be flexible so as to serve students in the humanities, social sciences, biological sciences, and physical sciences. The minor, which can be completed in one year, requires five to six courses depending on how the student meets the general education requirement in civilization studies.

No courses in the minor can be double counted with the student's major(s) or with other minors, nor can they be counted toward general education requirements. They must be taken for quality grades and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

**MINOR PROGRAM REQUIREMENTS**

Students who elect the minor program should meet with the program adviser before the end of Spring Quarter of their third year to declare their intention to complete the program. The LACS program adviser's approval for the minor must be submitted to the student's College adviser, on a form obtained from the College adviser, no later than the end of the student's third year.

**GENERAL EDUCATION**

Students must complete the general education requirement in civilization studies with LACS 16100-16200-16300 Introduction to Latin American Civilization I-II-III or SOSC 19019-19020-19021 Latin American Civilization in Oaxaca I-II-III. Students who use all three quarters of a Latin American civilization sequence to meet the general education requirement will complete a five-course minor. Students who meet the general education requirement with two quarters of the civilization sequence will count the third quarter of the sequence toward the minor, for a six-course minor.

**LANGUAGE**

The minor requires two courses in Spanish or Portuguese at the level of the second year or beyond. Credit may be granted by petition for one of these courses.

**CONTENT COURSES**


**RESEARCH PAPER**

Students must submit a research paper treating a Latin American and Caribbean topic for one of their Latin American and Caribbean content courses. The research paper is of intermediate length (ten to fifteen pages) in a course with Latin American and Caribbean content. Each student is responsible for making appropriate arrangements with the course's instructor. Completion of the course research paper must be demonstrated to the program adviser in Latin American and Caribbean Studies.

**Summary of Requirements: Latin American and Caribbean Studies Minor**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the following if not taken to meet the general education requirement:</td>
<td></td>
</tr>
<tr>
<td>LACS 16300 Introduction to Latin American Civilization III</td>
<td></td>
</tr>
<tr>
<td>SOSC 19021 Latin American Civilization in Oaxaca III</td>
<td></td>
</tr>
<tr>
<td>One of the following sequences:*</td>
<td>200</td>
</tr>
<tr>
<td>SPAN 20100, SPAN 20100-20200, PORT 20100-20200</td>
<td></td>
</tr>
<tr>
<td>&amp; SPAN 20100 &amp; SPAN 20200 &amp; PORT 20100-20200</td>
<td></td>
</tr>
<tr>
<td>Language, History, and Culture I and Language, History, and Culture II</td>
<td></td>
</tr>
<tr>
<td>Intermediate Portuguese; Advanced Portuguese</td>
<td></td>
</tr>
<tr>
<td>Three courses dealing with Latin America or the Caribbean</td>
<td>300</td>
</tr>
<tr>
<td>Total Units</td>
<td>500-600</td>
</tr>
</tbody>
</table>

* Eligible students may petition for partial credit (for only one language course).
LATIN AMERICAN AND CARIBBEAN STUDIES COURSES

The following courses are for reference only. See Class Search at registrar.uchicago.edu/classes for specific offerings. See the Center for Latin American Studies Courses webpage at clas.uchicago.edu/page/courses for further information on quarterly offerings.

LACS 16100-16200-16300. Introduction to Latin American Civilization I-II-III.
Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies. This sequence is offered every year. This course introduces the history and cultures of Latin America (e.g., Mexico, Central and South America, and the Caribbean Islands).

LACS 16100. Introduction to Latin American Civilization I. 100 Units.
Autumn Quarter examines the origins of civilizations in Latin America with a focus on the political, social, and cultural features of the major pre-Columbian civilizations of the Maya, Inca, and Aztec. The quarter concludes with an analysis of the Spanish and Portuguese conquest, and the construction of colonial societies in Latin America.
Instructor(s): A. Kolata Terms Offered: Autumn
Equivalent Course(s): CRES 16101, SOSC 26100, LACS 34600, ANTH 23101, HIST 36101, HIST 16101

LACS 16200. Introduction to Latin American Civilization II. 100 Units.
Winter Quarter addresses the evolution of colonial societies, the wars of independence, and the emergence of Latin American nation-states in the changing international context of the nineteenth century.
Instructor(s): M. Tenorio Terms Offered: Winter
Equivalent Course(s): SOSC 26200, HIST 16102, LACS 34700, ANTH 23102, HIST 36102, CRES 16102

LACS 16300. Introduction to Latin American Civilization III. 100 Units.
Spring Quarter focuses on the twentieth century, with special emphasis on the challenges of economic, political, and social development in the region.
Instructor(s): D. Borges Terms Offered: Spring
Equivalent Course(s): LACS 34800, HIST 36103, ANTH 23103, HIST 16103, SOSC 26300, CRES 36103

LACS 24512-24513-24514. Intermediate Haitian Kreyol I-II-III.
This three-course sequence will enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context, with emphasis on developing students' proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.

LACS 24512. Intermediate Haitian Kreyol I. 100 Units.
This three-course sequence will enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context, with emphasis on developing students' proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.
Instructor(s): Balan-Gaubert, William Terms Offered: Autumn
Equivalent Course(s): LACS 34512

LACS 24513. Intermediate Haitian Kreyol II. 100 Units.
The second course in a three-course sequence designed to enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context. Emphasis on developing proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.
Instructor(s): Balan-Gaubert, William Terms Offered: Winter
Equivalent Course(s): LACS 34513

LACS 24514. Intermediate Haitian Kreyol III. 100 Units.
This 3 course sequence will provide students with an in-depth study of the Haitian Kreyol language in its modern context, with emphasis on developing students' proficiency in speaking and writing, and in listening and reading comprehension. The course will also provide necessary cultural and historical context.
Instructor(s): Balan-Gaubert, William Terms Offered: Spring
Equivalent Course(s): LACS 34514
LACS 24513. Intermediate Haitian Kreyol II. 100 Units.
The second course in a three-course sequence designed to enhance students' understanding of Haitian Kreyol with continued study of the language in its modern context. Emphasis on developing proficiency in speaking, writing, listening, and reading comprehension at an intermediate level.
Instructor(s): Balan-Gaubert, William Terms Offered: Winter
Equivalent Course(s): LACS 34513

LACS 24514. Intermediate Haitian Kreyol III. 100 Units.
This 3 course sequence will provide students with an in-depth study of the Haitian Kreyol language in its modern context, with emphasis on developing students' proficiency in speaking and writing, and in listening and reading comprehension. The course will also provide necessary cultural and historical context.
Instructor(s): Balan-Gaubert, William Terms Offered: Spring
Equivalent Course(s): LACS 34514

LACS 24706. Science in the South: Decolonizing the Study of Knowledge in Latin America & the Caribbean. 100 Units.
This seminar will bridge anthropologies and histories of science, technology, and medicine to Latin American decolonial thought. Throughout Latin America, techno-scientific objects and practices, with their presumed origin in the Euro-Atlantic North, are often complexly entangled with neo-imperial projects of development and modernization that entangle social forms of colonization into the present. Technoscience and its objects, however, can also generate new creative, political, and life-enhancing potentials beyond or despite their colonial resonances, or even provide tools to ongoing struggles for decolonization. Together, seminar participants will explore what a decolonial approach to the study of science, technology, and medicine in the Global South, particularly in Latin America, has been and could become and how decolonial theory can inflect our own disciplinary, conceptual, and political commitments as anthropologists of technoscience.
Instructor(s): S. Graeter Terms Offered: Spring
Equivalent Course(s): ANTH 23026, HIPS 24706

LACS 25117. The Audience, The Archaeologist, and the Art Historian. 100 Units.
This course will address archaeological objects as well as the techniques that have been developed in order to capture them in a broader sense: to capture their meaning, to capture their form, to capture their trajectories. Archaeological objects change depending on the place where they are and the people who manipulate them.
Instructor(s): Castillo Deball, Mariana Terms Offered: Autumn
Note(s): Tinker Visiting Professor 2018; There is a studio component to this course.
Equivalent Course(s): ARTV 25117, LACS 35117, ARTV 35117

LACS 25118. Historical Sociology of Racism Latin America. 100 Units.
The course will examine the discourse on race, racism, and racial inequalities through the available sociological literature. Special emphasis will be placed on the emergency of social movements and collective agencies that have shaped the present racial order in the region. This course will first present how racialization processes intermingled with the formation of mestizo nation-states in Latin America, and, by doing so, establishing racial democracy as the corner stone of modern democracies (1920s to 1960s). Second, examine how authoritarian regimes promoted economic development but were incapable of curtailing social inequalities in the region, eventually dismantling the international perception of these countries as racial democracies (1960s to 1980s). And, finally, explore how processes of racial formation operated in the whole region, giving way to the formation of multiracial nations and to the visibility of racism as a structural component of these societies (1990s to 2010s).
Instructor(s): Antonio Sergio Guimarães Terms Offered: Spring
Equivalent Course(s): LACS 35118, SOCI 20279, SOCI 30279

LACS 25120. Territorial Identities, State Formation, and the Experience of Modernity in the Modern World. 100 Units.
During the last twenty years, scholars interested in the history of the crisis of the Spanish Monarchy focused on the development of the idea of nation and nationhood in the Spanish and Portuguese Atlantic. Criticizing the idea of the birth of post-colonial Latin American republics as the triumph of a national sentiment, historians reconceptualized the nation as a result of the imperial crisis. However, considerably less attention has been paid to the parallel process of state building in the Iberian World. This course will offer an introductory overview of the process that led from imperial monarchy to national republics from the point of view of statehood formation. It will focus on the complexity of the process of emancipation as a transition from monarchical tutorship to the birth of modern “Administración,” while also addressing territorial identities as forms of non-national self-recognition that transcended from colonial monarchy to post-colonial state.
Instructor(s): J. Portillo Valdés Terms Offered: Winter
Equivalent Course(s): HIST 26221, LACS 35120, HIST 36221
LACS 25121. The Brazil-Argentina Nuclear Cooperation Agreement and Thermoelectric Transition in Brazil. 100 Units.
The course will be developed in a series of theory-practice based sessions. Due to the richness that the University offers, in terms of faculties and other resources, some of the sessions will be accompanied by scholars from other faculties to address a particular topic or expertise relevant to the session.
Instructor(s): Ramos, Alexandre
Terms Offered: Autumn
Note(s): Tinker Visiting Professor Autumn 2018
Equivalent Course(s): HIPS 25121, LACS 35121, CHSS 35121

LACS 26416. Latin American Extractivisms. 100 Units.
This course will survey the historical antecedents and contemporary politics of Latin American extractivisms. While resource extraction in Latin America is far from new, the scale and transnational scope of current “neoextractivisms” have unearthed unprecedented rates of profit as well as social conflict. Today’s oil wells, open-pit mines, and vast fields of industrial agriculture have generated previously unthinkable transformations to local ecologies and social life, while repeating histories of indigenous land dispossession in the present. Yet parallel to neo-extractive regimes, emergent Latin American social movements have unleashed impassioned and often unexpected forms of local and transnational resistance. Readings in the course will contrast cross-regional trends of extractive economic development and governance with fine-grained accounts of how individuals, families, and communities experience and respond to land dispossession, local and transregional conflict, and the ecological and health impacts of Latin American extractivisms.
Equivalent Course(s): PBPL 26416, ANTH 23093

LACS 26417. Toxic States: Corrupted Ecologies in Latin America and the Caribbean. 100 Units.
Concepts of purity and danger, the sacred and profane, and contamination and healing constitute central analytics of anthropological inquiry into religion, medicine, and ecology. This course brings diverse theories of corporeal corruption to bare on contemporary ethnography of toxicity, particularly in order to examine the impact of political corruption on ecological matters in Latin America and the Caribbean. We will both historicize a growing disciplinary preoccupation with materiality, contamination, and the chemical, as well as conceptualize its empirical significance within neo-colonial/liberal states throughout the region.
Instructor(s): S. Graeter
Terms Offered: Autumn
Equivalent Course(s): LACS 36417

LACS 29700. Reading and Research in Latin American Studies. 100 Units.
Students and instructors can arrange a Reading and Research course in Latin American Studies when the material being studied goes beyond the scope of a particular course, when students are working on material not covered in an existing course or when students would like to receive academic credit for independent research.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of undergraduate thesis/project adviser required
Note(s): College students are required to submit the College Reading and Research Course Form. Must be taken for a quality grade.

LACS 29801. BA Colloquium. 100 Units.
This colloquium, which is led by the LACS BA Preceptor, assists students in formulating approaches to the BA essay and developing their research and writing skills, while providing a forum for group discussion and critiques. Graduating students present their BA essays in a public session of the colloquium during the spring quarter.
Instructor(s): CLAS Staff
Terms Offered: Autumn
Prerequisite(s): For fourth year (graduating) students majoring in Latin American and Caribbean Studies.
Note(s): Required of students who are majoring in Latin American Studies. Students must participate in all three quarters but register only in autumn quarter.

LACS 29900. Prep: BA Essay. 100 Units.
Independent study course intended to be used by 4th year BA students who are writing the BA thesis.
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): Consent of undergraduate thesis/project adviser required
Note(s): Typically taken for a quality grade.
APPLICATION TO THE PROGRAM

Students must apply in Spring Quarter of their first year to enter the program in their second year. Autumn Quarter 2017 matriculants only are eligible to apply to begin the program in 2018–19. Students who entered the College prior to Autumn Quarter 2017 will not be considered.

Application forms may be obtained from the Office of the New Collegiate Division in Harper Memorial (HM) 235. Applications are available in HM 235 on Friday of tenth week of Winter Quarter and must be submitted to HM 235 by noon on Friday of the first week of Spring Quarter. No applications will be distributed or accepted during spring break. Students are evaluated on the basis of the application statement and previous performance in the College. Because of the nature of the requirements of the program, no more than twenty-five students can be admitted per year.

PROGRAM OF STUDY

The program in Law, Letters, and Society is concerned with law in civilian and customary legal systems, both historically and contemporaneously. The program is designed to develop the student’s analytical skills to enable informed and critical examination of law broadly construed. The organizing premise of the program is that law is a tool of social organization and control, not simply an expression of will or aspiration, and that it is best understood by careful study of both rhetorical artifacts and empirical consequences of its application.

Program requirements are constructed to support the organizing premise, and, because of the nature of the requirements, transfer students are not eligible to register as Law, Letters, and Society majors.

The program requires course work in three areas, although there is a reasonably broad latitude both expected and permitted in satisfaction of the distributional requirement. There is a substantial writing requirement for all majors; majors are expected to produce substantial written work (sometimes called "the BA Paper") under the close supervision of a faculty member whose area of scholarly concern is related to the broad objectives of the program.

PROGRAM REQUIREMENTS

Course work is required in three areas. After successfully completing the Introductory Course, students must take two courses in Letters and two courses in Society. In addition, students must complete six other courses that, while not necessarily offered or listed formally under either rubric, are substantively supportive of the topics, areas, skills, or concerns of the two areas. Courses satisfying the additional requirement are identified on a quarterly basis, and final approval of additional required course work is made by consultation between the student and the program chairman.

The Introductory Course

The Introductory Course establishes the intellectual moorings of the program. The importance of the Introductory Course lies not in its content (indeed, its precise focus and scope may be different from time to time) but on its approach to the nature of law. Recently, for example, the Introductory Course has been LLSO 24200 Legal Reasoning, a study, based primarily on cases, of the classic conventions of legal argument in the Anglo-American legal system. In other years, the Introductory Course might be Roman Law or Greek Law, Medieval Law, or a text-based course on ancient legal philosophy, or a comparison of modern legal categories and policies with those of former societies and cultures. The objective is not so much to establish a historical foundation for modern studies as to demonstrate that legal systems are culturally rooted; that urgent, present concerns may obscure important characteristics of legal ideas and behavior; and that many recurrent themes in Western legal thought are shaped or driven by both common and uncommon features. Unlike many legal studies programs that attempt to orient study of the law primarily in contemporary debates, usually in the field of American constitutional law, the program seeks to organize its exploration of law as a system rather than as a forum or an instrument.

Other Course Work

Students must also take two courses each in the Letters and Society divisions of the program, plus six other courses complementary to the required work, as outlined previously (the other six courses may be ones cross listed in the program or may be from other disciplines). Letters and Society are not meant as fixed or self-defining fields, but instead as organizational categories emphasizing two fundamental modes of examining law in a systemic fashion. Courses under the rubric of Letters (whether based in the program or in English, philosophy, or political theory) tend to be based on the study of literary and historical artifacts, such as cases, tracts, conventional literature, or other texts, and emphasize the ways in which law formally constitutes itself. Questions of interpretative and normative theory, rhetorical strategy, and the like are central to such courses. Society serves to organize studies from a variety of different disciplines (including history, political science, economics, and sociology) that try to measure, with different techniques and at different times, the effect of
law on society. The combined objective is to treat law as an intellectual activity and as a phenomenon, and to emphasize that both occur in contexts that help to shape them, whether ancient or modern.

Research

In addition to satisfying the course requirements, each student in the program must produce evidence of sustained research in the form of a substantial research paper during either the junior or senior year and obtain approval of a member of the faculty, although not necessarily a member of the program faculty. Papers may be written in conjunction with Law, Letters, and Society courses, under the auspices of reading and research courses, or in a Research Seminar. (The paper is an independent requirement, however, and need not be accomplished in conjunction with enrollment in a specific course.) The scope, method, and objective of the paper, as well as its length, are subject to negotiation between the student and the instructor.

Summary of Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLSO 24200 Legal Reasoning (Introductory Course)</td>
<td>100</td>
</tr>
<tr>
<td>Two Letters courses (List II)</td>
<td>200</td>
</tr>
<tr>
<td>Two Society courses (List III)</td>
<td>200</td>
</tr>
<tr>
<td>Six Complementary courses *</td>
<td>600</td>
</tr>
<tr>
<td>Total Units</td>
<td>1100</td>
</tr>
</tbody>
</table>

* Complementary courses are courses from other departments that support work done in the major. Some students prefer to concentrate their work on a specific issue or problem, e.g., urban politics and policy, historic societal discrimination, or the role of international institutions in policy implementation. Other students prefer to examine a series of discrete topics that are not directly related but that concern the operation of regimes of social control. Lists of Pre-Approved Complementary Courses are published quarterly, and students who believe that a course not so listed nonetheless supports work in the major may petition the program chair for approval at any time while enrolled in the course or within one quarter of completing the course. Courses taken in Autumn Quarter of the second year simultaneously with the Introductory Course may count as Complementary Courses.

HONORS

Students who wish to be considered for honors must notify the program chairman and their faculty supervisor in writing no later than two quarters before the quarter in which they expect to receive their degree. Eligible students must maintain a GPA of at least 3.50 both overall and in the major, and they must write a distinguished research paper. The paper must be submitted by noon on Friday of fifth week in the quarter of proposed graduation (other papers must be submitted by noon on Friday of seventh week), and the student’s faculty supervisor and a second reader must agree that honors are merited. It should be noted that honors are awarded sparingly.

READING AND RESEARCH COURSES

For students with a legitimate interest in pursuing study that cannot be met by means of regular courses, there is an option of devising a reading and research course to be supervised by a member of the faculty and taken for a quality grade. Such courses may not be used to satisfy the requirements of either the two-course Letters or two-course Society requirements, but may be used to satisfy part of the other six required courses, with the written permission of the program chairman obtained in advance of initiation of the work. Only two research courses may be used within the major. LLSO 29400 Research Seminar: LLSO may also be used as one of the six Complementary Courses.

GRADING

Two of the six complementary courses required in the program may, with consent of instructor, be taken for Pass/Fail grading. Students who enroll in LLSO 29400 Research Seminar: LLSO, offered annually, beginning Autumn 2010, are graded on a P/F basis, and the seminar counts as one of the two P/F-graded complementary courses.

ADVISING

Students who wish to major in Law, Letters, and Society must register for LLSO 24200 Legal Reasoning in Autumn Quarter of their second year. This requirement is not negotiable. Students should note that, as an interdisciplinary major, the program has a strictly limited enrollment and that registration for the Introductory Course is determined during the preceding Spring Quarter. Upon deciding to major in Law, Letters, and Society, students should arrange to consult with the program chairman and the associate director on their course of study in the program. Students should continue to consult with their College advisers on general education degree requirements.

COURSE DISTRIBUTION LISTS

I. The Introductory Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLSO 24200</td>
<td>Legal Reasoning</td>
</tr>
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### II. Letters

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLSO 20019</td>
<td>Mesopotamian Law</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 20802</td>
<td>Machiavelli’s Literary Works</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 22401</td>
<td>Topics in Judicial Studies</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 22403</td>
<td>Free Speech and the First Amendment</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 22612</td>
<td>Introduction to Political Philosophy</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 23008</td>
<td>Montesquieu’s &quot;The Spirit of the Laws&quot;</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 23900</td>
<td>Introduction to Constitutional Law</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 23910</td>
<td>Rulership Ancient and Modern: Xenophon’s Education of Cyrus</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>and Machiavelli’s Prince</td>
<td></td>
</tr>
<tr>
<td>LLSO 23915</td>
<td>Plato’s Republic</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 24711</td>
<td>Lincoln: Slavery, War &amp; the Constitution</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 25411</td>
<td>Not Just the Facts: Telling About the American South</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 27950</td>
<td>The Declaration of Independence</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 28233</td>
<td>Machiavelli’s Political Thought</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 29133</td>
<td>Due Process</td>
<td>100</td>
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### III. Society

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>LLSO 20019</td>
<td>Mesopotamian Law</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 21001</td>
<td>Human Rights: Contemporary Issues</td>
<td>100</td>
</tr>
<tr>
<td>LLSO 21002</td>
<td>Human Rights: Philosophical Foundations</td>
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<td>LLSO 23100</td>
<td>Environmental Law</td>
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<td>LLSO 23262</td>
<td>International Human Rights</td>
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<td>LLSO 23313</td>
<td>Democracy and Equality</td>
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<td>LLSO 24102</td>
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<td>LLSO 24810</td>
<td>Politics of the U.S. Congress</td>
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<td>LLSO 24901</td>
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<td>LLSO 25206</td>
<td>Digital Culture: Artificial Intelligence, Algorithms, and the Web</td>
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<td>LLSO 25215</td>
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<td>LLSO 25902</td>
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<td>LLSO 25904</td>
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<td>LLSO 26703</td>
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<td>LLSO 26802</td>
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<td>LLSO 27101</td>
<td>Democracy and the Information Technology Revolution</td>
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<td>Democracy and the Politics of Wealth Redistribution</td>
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<td>LLSO 29050</td>
<td>Youth Law and Policy: Child Welfare and Juv. Just. in the U.S.</td>
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<td>LLSO 29120</td>
<td>Poverty Law and Policy Reform</td>
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<td>LLSO 29122</td>
<td>Comparative Law and the Welfare State</td>
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### IV. Research and Reading

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<th>Course Code</th>
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<td>LLSO 29400</td>
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Please refer to the tables above and/or the quarterly Class Search (http://registrar.uchicago.edu/classes) for the most up-to-date list of course offerings.
LAW, LETTERS, AND SOCIETY COURSES

LLSO 20019. Mesopotamian Law. 100 Units.
Ancient Mesopotamia—the home of the Sumerians, Babylonians, and Assyrians who wrote in cuneiform script on durable clay tablets—was the locus of many of history’s firsts. No development, however, may be as important as the formations of legal systems and legal principles revealed in contracts, trial records, and law collections (codes), among which The Laws of Hammurabi (r. 1792-1750 BC) stands as most important for understanding the subsequent legal practice and thought of Mesopotamia’s cultural heirs in the Middle East and Europe until today. This course will explore the rich source materials of the Laws and relevant judicial and administration documents (all in English translations) to investigate topics of legal, social, and economic practice, including family formation and dissolution, crime and punishment (sympathetic or talionic eye for an eye, pecuniary, corporal), and procedure (contracts, trials, ordeals).
Instructor(s): M. Roth Terms Offered: Winter
Equivalent Course(s): NEHC 30019, NEHC 20019, SIGN 26022

LLSO 21001. Human Rights: Contemporary Issues. 100 Units.
This interdisciplinary course presents an overview of several major contemporary human rights problems as a means to explore the use of human rights norms and mechanisms. The course addresses the roles of states, inter-governmental bodies, national courts, civil society actors including NGOs, victims, and their families, and other non-state actors. Topics are likely to include universalism, enforceability of human rights norms, the prohibition against torture, U.S. exceptionalism, and the rights of women, racial minorities, and non-citizens.
Equivalent Course(s): HMRT 31001, HIST 39304, HMRT 21001, LACS 31001, INRE 31801, LACS 21001, HIST 29304

LLSO 21002. Human Rights: Philosophical Foundations. 100 Units.
Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (A) (I)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): HMRT 31002, INRE 31602, HIST 39319, HMRT 21002, MAPH 42002, PHIL 21002, PHIL 31002, HIST 29319

LLSO 22401. Topics in Judicial Studies. 100 Units.
This seminar examines three topics in current judicial studies: the appointment process, judicial reputation, and ideological “drift.” Two short papers are required. Seminar. Mr. Hutchinson. Autumn. Consent, limit 15.
Instructor(s): Dennis Hutchinson Terms Offered: Not offered in 2018-19
Prerequisite(s): Consent only
Note(s): Not offered in 2018-19

LLSO 22403. Free Speech and the First Amendment. 100 Units.
This course will examine the Supreme Court’s First Amendment jurisprudence, focusing on such issues as speech critical of the government, the hostile audience, classified information, libel, commercial advertising, obscenity, symbolic expression, campaign finance regulation and the freedom of the press.
Instructor(s): Geoffrey Stone Terms Offered: Winter

LLSO 22612. Introduction to Political Philosophy. 100 Units.
In this course we will investigate what it is for a society to be just. In what sense are the members of a just society equal? What freedoms does a just society protect? Must a just society be a democracy? What economic arrangements are compatible with justice? In the second portion of the course we will consider one pressing injustice in our society in light of our previous philosophical conclusions. Possible candidates include, but are not limited to, racial inequality, economic inequality, and gender hierarchy. Here our goal will be to combine our philosophical theories with empirical evidence in order to identify, diagnose, and effectively respond to actual injustice. (A)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): PLSC 22600, PHIL 21600, GNSE 21601
LLSO 23008. Montesquieu’s "The Spirit of the Laws" 100 Units.
From its publication in 1748, "The Spirit of the Laws" has been interpreted, among other things, as a foundational work in method in historical jurisprudence; a paean to the English constitution and an inspiration for that of the future United States; a precocious call for penal reform and the abolition of slavery; a monument to the Enlightenment’s capacity for cultural relativism that laid the groundwork for the discipline of sociology; a historical treatise on the rise of globalized commerce and its political effects in Europe; and a manifesto for a reactionary feudal aristocracy. We will read "The Spirit of the Laws" with attention to these and other possible interpretations. This course is mainly an exercise in close reading, but we will also think about the contexts for the writing and reception of this landmark work of Enlightenment social and political thought.
Instructor(s): P. Cheney Terms Offered: Autumn
Prerequisite(s): Completion of one of these Core sequences: "Classics of Social and Political Thought," “Power, Identity, Resistance” or “Self, Culture, and Society.”
Equivalent Course(s): FNDL 23008, HIST 23008

LLSO 23100. Environmental Law. 100 Units.
This lecture/discussion course examines the development of laws and legal institutions that address environmental problems and advance environmental policies. Topics include the common law background to traditional environmental regulation, the explosive growth and impact of federal environmental laws in the second half of the twentieth century, regulations and the urban environment, and the evolution of local and national legal structures in response to environmental challenges.
Instructor(s): R. Lodato Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): PBPL 23100, ENST 23100

LLSO 23262. International Human Rights. 100 Units.
This course is an introduction to international human rights law, covering the major instruments and institutions that operate on the international plane. It includes discussion of the conceptual underpinnings of human rights, the structure of the United Nations System, the major international treaties, regional human rights machinery, and the interplay of national and international systems in enforcing human rights. There are no prerequisites.
Grading will be on the basis of a take-home exam at the end of the quarter. Students who wish to write, in lieu of the exam, a paper sufficient to satisfy the substantial writing requirement, may do so upon approval of the topic in advance.
Equivalent Course(s): HMRT 37700, PLSC 56101

LLSO 23313. Democracy and Equality. 100 Units.
Democracy has often been celebrated (and often criticized) for expressing some kind of equality among citizens. This course will investigate a series of questions prompted by this supposed relationship between democracy and equality. Is democracy an important part of a just society? What institutions and practices does democracy require? Is equality a meaningful or important political ideal? If so, what kind of equality? Does democracy require some kind of equality, or vice-versa? The course will begin by studying classical arguments for democracy by Jean-Jacques Rousseau and John Stuart Mill, and then focus on contemporary approaches to these questions. The course will conclude with some treatment of current democratic controversies, potentially including issues of race and representation; the fair design of elections; the role of wealth in political processes; and the role of judicial review. The course aims to deepen participants' understanding of these and related issues, and to develop our abilities to engage in argument about moral and political life. This course is part of the College Course Cluster program, Inequality.
Instructor(s): J. Wilson Terms Offered: Autumn
Equivalent Course(s): PLSC 43301, PLSC 23313

LLSO 23900. Introduction to Constitutional Law. 100 Units.
This course is designed as an introduction to the constitutional doctrines and political role of the U.S. Supreme Court, focusing on its evolving priorities and its responses to basic governmental and political problems. Topics include the development of judicial power, the interaction of states and the federal government, judicial involvement in economic policy, and the Court's treatment of minority rights. The course aims to provide students with an understanding of the political history of the Court as well as some knowledge of doctrinal developments. Students should complete the course with an awareness of the political nature of much of what the Court does and with the ability to read, follow, and intelligently discuss Supreme Court decisions. It is not a law school course. No prior knowledge of the U.S. Supreme Court or its decisions is expected or required. There are no prerequisites.
Instructor(s): G. Rosenberg Terms Offered: Winter
Equivalent Course(s): PLSC 28800, PLSC 48800
LLSO 23901. The Federalist Papers and Anti-Federalist Writings. 100 Units.
This course examines the debate over the ratification of the Constitution through a reading of The Federalist Papers and selected Anti-Federalist writings as works of continuing relevance to current practical and theoretical debates. Issues include war and peace, interests and the problem of faction, commerce, justice and the common good as ends of government, human nature, federalism, republican government, representation, separation of powers, executive power, the need for energy and stability, the need for a bill of rights, and constitutionalism.
Instructor(s): Nathan Tarcov Terms Offered: Winter. Course will be taught Winter 2019
Prerequisite(s): Open to undergrads
Equivalent Course(s): PLSC 33930, FNDL 21719, PLSC 23901, SCTH 31715

LLSO 23915. Plato's Republic. 100 Units.
This course is devoted to reading and discussion of Plato's Republic and some secondary work with attention to justice in the city and the soul, war and warriors, education, theology, poetry, gender, eros, and actually existing cities.
Instructor(s): Nathan Tarcov Terms Offered: Winter 2013
Prerequisite(s): Undergrad course by consent
Equivalent Course(s): SCTH 31770, PLSC 43820, FNDL 29503

LLSO 24102. Environmental Politics. 100 Units.
This course examines the different theoretical underpinnings of environmental activism and elucidates the manner in which they lead to different ends. We explore several contrasting views of environmentalism, including the land ethic, social ecology, and deep ecology. Discussions are based on questions posed about the readings and the implications they suggest. Class participation is required.
Instructor(s): R. Lodato Terms Offered: Spring
Equivalent Course(s): PBPL 24102, ENST 24102

LLSO 24200. Legal Reasoning. 100 Units.
This course introduces legal reasoning in a customary legal system. The first part examines the analytical conventions that lawyers and judges purport to use. The second part examines fundamental tenets of constitutional and statutory interpretation. Both judicial decisions and commentary are used, although the case method is emphasized.
Instructor(s): A. Hammond Terms Offered: Autumn
Prerequisite(s): Open only to second-year students who are beginning the LLSO major.

LLSO 24300. American Law and the Rhetoric of Race. 100 Units.
This course presents an episodic study of the ways in which American law has treated legal issues involving race. Two episodes are studied in detail: the criminal law of slavery during the antebellum period and the constitutional attack on state-imposed segregation in the twentieth century. The case method is used, although close attention is paid to litigation strategy as well as to judicial opinions. Undergraduate students registering in the LLSO, PLSC, HIST, AMER cross-listed offerings must go through the undergraduate pre-registration process. Law students do NOT need consent.
Note(s): Not Offered in 2018-2019
Equivalent Course(s): HIST 27116, AMER 49801, PLSC 22300

LLSO 24711. Lincoln: Slavery, War & the Constitution. 100 Units.
This course is a study of Abraham Lincoln's view of the Constitution, based on close readings of his writings, plus comparisons to judicial responses to Lincoln's policies.
Note(s): Not offered 2018-19.
Equivalent Course(s): HIST 27102, FNDL 24411

LLSO 24810. Politics of the U.S. Congress. 100 Units.
This course examines Congress from the perspective of the 535 senators and representatives who constitute it. It examines congressional elections, legislators' relationships with their constituents, lawmakers' dealings in and with committees, and representatives' give-and-take with congressional leadership, the executive, and pressure groups.
Instructor(s): M. Hansen Terms Offered: Autumn
Equivalent Course(s): PLSC 24810

LLSO 24901. U.S. Environmental Policy. 100 Units.
Making environmental policy is a diverse and complex process. Environmental advocacy engages different governmental agencies, congressional committees, and courts, depending on the issue. This course examines how such differentiation has affected policy making over the last several decades.
Instructor(s): R. Lodato Terms Offered: Autumn
Equivalent Course(s): PBPL 24701, ENST 24701
LLSO 25110. Empire and International Justice. 100 Units.
How did European thinkers from 1492 onward understand and evaluate the extraordinary developments by which some European countries came to rule over much of the non-European world? This seminar examines theories of international justice and global relations from the early sixteenth through the nineteenth centuries. Philosophers, theologians, and political actors in this period responded to the key issues of global politics in the modern age, including the seizure of non-European lands; the establishment of slavery and the slave trade; the religious and cultural conversion of colonized peoples; the emerging institutions and practices of global commerce; and the impact of these developments upon both European and non-European societies. Indeed, many dilemmas that confront citizens and states today about humanitarian intervention, national sovereignty, conquest and occupation, empire, and human rights in a global context have an intriguing and complex intellectual history. The readings are primary texts by influential thinkers from the period of the initial Spanish conquests of the Americas through the mid-nineteenth century, including Montesquieu, Diderot, Burke, Bentham, Adam Smith, Cugoano, Kant, Herder, Constant, Tocqueville, John Stuart Mill, and Karl Marx.
Instructor(s): S. Muthu Terms Offered: Spring
Equivalent Course(s): PLSC 25110

LLSO 25205. Racial Justice and Injustice. 100 Units.
The course will explore moral and political problems of racial justice and injustice. Topics may include antidiscrimination theory, the fair political representation of racial minorities, reparations for racial injustice, racial segregation, the use of racial preferences in various practices of selection, and the evaluation of practices of law enforcement and punishment. We will use reflections on particular problems such as these to inquire about the uses of racial concepts in political theory; the connections between racial justice and ostensibly more general conceptions of justice; and the connections between racial equality and other egalitarian ideals.
Instructor(s): J. Wilson Terms Offered: Autumn
Equivalent Course(s): PLSC 25205, PLSC 35205

LLSO 25206. Digital Culture: Artificial Intelligence, Algorithms, and the Web. 100 Units.
In contrast to print culture and electronic culture, yet embedded in them, contemporary digital culture engages us in human-computer systems empowered as media for mobile communication in the global network society. In our conjoined online and offline environments, we inhabit human-computer hybrids in which (for instance) we learn, imagine, communicate, pay attention, and experience affect. How can we understand and critique our theories, concepts, practices, and technologies of intelligence and information in relation to the capacities of these digital machines with which we co-evolve? For exploring this question, our case studies include comparing artificial and natural intelligences, as well as examining algorithms and their socio-political impacts, in current web functionalities such as search (Google) and social media (Facebook,Twitter).
Instructor(s): Browning, Margot Terms Offered: Autumn
Equivalent Course(s): HIPS 25206, HUMA 25206

LLSO 25215. The American Presidency. 100 Units.
This course examines the institution of the American presidency. It surveys the foundations of presidential power, both as the Founders conceived it, and as it is practiced in the modern era. This course also traces the historical development of the institutional presidency, the president's relationships with Congress and the courts, the influence presidents wield in domestic and foreign policymaking, and the ways in which presidents make decisions in a system of separated powers.
Instructor(s): W. Howell Terms Offered: Winter
Equivalent Course(s): AMER 25215, PLSC 25215, PBPL 25216, PLSC 35215

LLSO 25411. Not Just the Facts: Telling About the American South. 100 Units.
The great jurist Oliver Wendell Holmes Jr. once observed: "The main part of intellectual education is not the acquisition of facts but learning how to make facts live." This course concerns itself with the various ways people have striven to understand the American South, past and present. We will read fiction, autobiography, and history (including meditations on how to write history). Main themes of the course include the difference between historical scholarship and writing history in fictional form; the role of the author in each and consideration of the interstitial space of autobiography; the question of authorial authenticity; and the tension between contemporary demands for truthfulness and the rejection of "truth."
Instructor(s): J. Dailey Terms Offered: Winter
Prerequisite(s): Open to upper-level undergraduates.
Equivalent Course(s): HIST 27006, AMER 27006
LLSO 25902. Contemporary African American Politics. 100 Units.
This course explores the issues, actions, and arguments that comprise black politics today. Our specific task is to explore the question of how do African Americans currently engage in politics and political struggles in the United States. This analysis is rooted in a discussion of contemporary issues, including the election of the first African American president, Barack Obama, the emergence of the Movement for Black Lives, the exponential incarceration of black people, and the intersection of identities and the role black feminism in shaping the radical freedom tradition in black politics. Throughout the course we attempt to situate the politics of African Americans into the larger design we call American politics. Is there such a thing as black politics? If there is, what does it tell us more generally about American politics?
Instructor(s): C. Cohen Terms Offered: Winter
Equivalent Course(s): CRES 22150, PLSC 22150

LLSO 25904. America in the Twentieth Century. 100 Units.
This is a thematic lecture course on the past 115 years of US history. The main focus of the lectures will be politics, broadly defined. The readings consist of novels and nonfiction writing, with a scattering of primary sources.
Instructor(s): J. Dailey Terms Offered: Autumn
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): HIST 17805, AMER 17805

LLSO 26615. Democracy's Life and Death. 100 Units.
How are democracies founded and maintained? What are their advantages and disadvantages with respect to stability, security, liberty, equality, and justice? Why do democracies decline and die? This course addresses these questions by examining democracies, republics, and popular governments in both the ancient and modern worlds. We will read and discuss primary texts from and social scientific analyses of Athenian democracy, the Roman Republic, the United States, and modern representative governments throughout the globe.
Instructor(s): J. McCormick Terms Offered: Winter
Equivalent Course(s): PLSC 26615

LLSO 26703. Political Parties in the United States. 100 Units.
Political parties are a central feature of American government. In this course we will explore their role in contemporary politics and learn about their development over the course of American history. We will start by asking the following questions: What is a political party? Why do we have a two-party system, and how did that system develop? We will then proceed to study shifts in party coalitions, parties' evolving structures, their role in policymaking, and trends in popular attitudes about parties. Although our primary empirical focus will be on parties in the United States, we will spend some time on comparative approaches to political parties.
Instructor(s): R. Bloch Rubin Terms Offered: Spring
Equivalent Course(s): PLSC 26703

LLSO 26802. Public Opinion. 100 Units.
What is the relationship between the mass citizenry and government in the U.S.? Does the public meet the conditions for a functioning democratic polity? This course considers the origins of mass opinion about politics and public policy, including the role of core values and beliefs, information, expectations about political actors, the mass media, economic self-interest, and racial attitudes. This course also examines problems of political representation, from the level of political elites communicating with constituents, and from the possibility of aggregate representation.
Instructor(s): J. Brehm Terms Offered: Spring
Equivalent Course(s): PLSC 22400, CRES 22400

LLSO 27100. Human Rights II: History and Theory. 100 Units.
This course is concerned with the theory and the historical evolution of the modern human rights regime. It discusses the emergence of a modern "human rights" culture as a product of the formation and expansion of the system of nation-states and the concurrent rise of value-driven social mobilizations. It proceeds to discuss human rights in two prevailing modalities. First, it explores rights as protection of the body and personhood and the modern, Western notion of individualism. Second, it inquires into rights as they affect groups (e.g., ethnicities and, potentially, transnational corporations) or states.
Instructor(s): TBA Terms Offered: Winter
Equivalent Course(s): HIST 39302, HIST 29302, CRES 29302, INRE 31700, HMRT 20200, HMRT 30200
LLSO 27101. Democracy and the Information Technology Revolution. 100 Units.
The revolution in information technologies has serious implications for democratic societies. We concentrate, though not exclusively, on the United States. We look at which populations have the most access to technology-based information sources (the digital divide), and how individual and group identities are being forged online. We ask how is the responsiveness of government being affected, and how representative is the online community. Severe conflict over the tension between national security and individual privacy rights in the U.S., United Kingdom, and Ireland will be explored as well. We analyze both modern works (such as those by Turkle and Gilder) and the work of modern democratic theorists (such as Habermas).
Instructor(s): M. Dawson Terms Offered: Spring
Equivalent Course(s): PLSC 23100

LLSO 27200. Human Rights III. 100 Units.
This interdisciplinary course presents an overview of several major contemporary human rights problems as a means to explore the use of human rights norms and mechanisms. The course addresses the roles of states, intergovernmental bodies, national courts, civil society actors including NGOs, victims, and their families, and other non-state actors. Topics are likely to include universalism, enforceability of human rights norms, the prohibition against torture, U.S. exceptionalism, and the rights of women, racial minorities, and non-citizens.
Instructor(s): S. Czesh Terms Offered: Autumn 2015
Equivalent Course(s): INRE 31800, HMRT 30300, HIST 39030, HIST 29030, HMRT 20300

LLSO 27250. Religious Trials. 100 Units.
The rhetoric and practice of "trial" -- as testing and as adjudication -- is central to religious thought and religious practice. This course will examine the idea and the act of "trial" comparatively, via the classics of the religious literatures of Judaism and of Christianity (Genesis 22, Job, the Gospel of Mark, "The Pilgrim’s Progress," Kafka), and also cinema (Dreyer’s "Joan of Arc," R. & S. Elbazet’s "Gett").
Instructor(s): R. Rosengarten Terms Offered: Winter
Equivalent Course(s): RLST 27250

LLSO 27950. The Declaration of Independence. 100 Units.
This course explores important intellectual, political, philosophical, legal, economic, social, and religious contexts for the Declaration of Independence. We begin with a consideration of the English Revolution, investigating the texts of the Declaration of Rights of 1689 and Locke’s Second Treatise and their meanings to American revolutionaries. We then consider imperial debates over taxation in the 1760s and 1770s, returning Benjamin Franklin’s Autobiography to its original context. Reading Paine’s Common Sense and the letters of Abigail Adams and John Adams we look at the multiple meanings of independence. We study Jefferson’s drafting process, read the Declaration over the shoulders of people on both sides of the Atlantic, and consider clues to contemporary meanings beyond the intentions of Congress. Finally, we briefly engage the post-revolutionary history of the place and meaning of the Declaration in American life. (1650-1830, 1830-1940) This is a 2018-19 College Signature Course.
Instructor(s): Eric Slauter Terms Offered: Winter
Equivalent Course(s): HMRT 17950, HIST 17604, FNDL 27950, ENGL 17950, SIGN 26039

LLSO 28233. Machiavelli’s Political Thought. 100 Units.
This course is devoted to the political writings of Niccolò Machiavelli. Readings include The Prince, Discourses on Livy’s History of Rome, selections from the Florentine Histories, and Machiavelli’s proposal for reforming Florence’s republic, “Discourses on Florentine Affairs.” Topics include the relationship between the person and the polity; the compatibility of moral and political virtue; the utility of class conflict; the advantages of mixed institutions; the principles of self-government, deliberation, and participation; the meaning of liberty; and the question of military conquest.
Instructor(s): J. McCormick Terms Offered: Spring
Equivalent Course(s): PLSC 52316, FNDL 28102, PLSC 27216

This course explores how legal institutions protect and punish children in the United States. We will spend the first part of the course exploring the child welfare system, which purports to protect children from abuse and neglect through various mechanisms including foster care and the termination of parental rights. We will spend the second part of the course exploring the juvenile justice system, which purports to prosecute and rehabilitate children for their criminal acts in a system separate from the criminal justice system. In the final part of the course, we will consider special topics in this area of law and policy including “cross-over youth” (i.e. children involved in both systems), unaccompanied immigrant children, homeless and runaway youth, and the so-called “school-to-prison-pipeline.” This course will place special emphasis on the judges, lawyers, law enforcement officers, and social workers that comprise these legal institutions.
Terms Offered: Autumn
Prerequisite(s): Course limited to 3rd and 4th year students only.
Equivalent Course(s): PBPL 29050, HMRT 29050
LLSO 29120. Poverty Law and Policy Reform. 100 Units.
This seminar seeks to give students a comprehensive understanding of the major anti-poverty programs in
the United States with an emphasis on current challenges and reform proposals. We will spend the first half of
the course exploring the implementation and evaluation of the programs that make up the traditional safety
net for poor Americans: income supports, health insurance, and housing assistance. We will spend the rest of
the quarter exploring topics that complicate the traditional social policy regime, including how the safety net
is more robust for some groups, such as the elderly and veterans, than others. We will explore how the legal
systems of immigration and incarceration hamper anti-poverty policy and how safety net programs address the
needs of rural and Native Americans. Finally, we will investigate two recent developments in the field: social
entrepreneurship and the critique of procedural rights.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): No first year students; attendance on the first day of class is required.
Note(s): Not Offered in 2018-2019
Equivalent Course(s): PBPL 29120, HMRT 29120

LLSO 29122. Comparative Law and the Welfare State. 100 Units.
How do welfare states, complex public systems of the twentieth century, respond to various challenges of
the twenty-first? Drawing on both comparative legal methods and social science, this course explores how
contemporary societies manage globalization, population aging and inequality through social welfare law.
Specific areas of study may include old age insurance, childcare, healthcare, labor market regulation and
immigration law.
Instructor(s): Andrew Hammond
Note(s): Not offered in 2018/19.

LLSO 29133. Due Process. 100 Units.
This course will explore how courts interpret the due process clauses of the Fifth and Fourteenth Amendments of
the United States Constitution. Drawing predominantly on judicial opinions, topics may include protections for
recipients of government services, workers, parents, prisoners, and non-citizens.
Instructor(s): Andrew Hammond Terms Offered: Spring
Prerequisite(s): Not open to first year students.

LLSO 29400. Research Seminar: LLSO. 100 Units.
A seminar for students preparing BA papers in LLSO.
Instructor(s): D. Hutchinson Terms Offered: Autumn
Note(s): Not Offered in 2018-2019
Linguistics

Department Website: http://linguistics.uchicago.edu

PROGRAM OF STUDY

The purpose of the BA program in linguistics is to provide a solid, integrated introduction to the scientific study of language through course work in the core subdisciplines of linguistics, as well as to ensure that the student has a language background sufficient to provide a complement to the theoretical parts of the program and for an understanding of the complexities of human language. This program provides students with a general expertise in the field and prepares them for productive advanced study in linguistics.

Students who are majoring in linguistics may visit linguistics.uchicago.edu to learn about events and resources on and off campus and for links to information on employment opportunities.

Students who are majoring in other fields of study may also complete a minor in linguistics. Information follows the description of the major.

PROGRAM REQUIREMENTS

The BA in linguistics requires thirteen courses, which fall into two categories: courses that provide expertise in linguistics and courses that ensure breadth of study in a non–Indo-European language. Students have flexibility to construct a course of study that accords with their interests, but their final tally of thirteen courses must include the following:

LING 20001 Introduction to Linguistics 100
LING 20101 Introduction to Phonetics and Phonology 100
LING 20201 Introduction to Syntax 100
LING 20301 Introduction to Semantics and Pragmatics 100

Study of a non-Indo-European language

The language requirement is designed to ensure breadth of study in a non–Indo-European language. This requirement can be met in four different ways:

1. Registration in a three-quarter course in a non–Indo-European language on campus
2. Examination credit in a non–Indo-European language for which the University offers placement examinations
3. Registration for an intensive one-quarter course in the structure of a non–Indo-European language offered by a member of the linguistics faculty (or by another faculty member upon approval by the director of undergraduate studies)
4. Completion of an approved intensive language program taken elsewhere for languages not offered or tested for at the University of Chicago.

Students who fulfill the non–Indo-European language requirement with fewer than three quarters of study must substitute elective courses for the language course quarters not taken. At least six electives for the major must be courses offered by the Department of Linguistics (i.e., courses whose numbers begin with LING). For any further electives, a student may petition the department to substitute a related course that does not have a LING number.

The complete list of available languages can be viewed at humanities.uchicago.edu/about/languages-uchicago.

SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>LING 20001</td>
<td>Introduction to Linguistics</td>
<td>100</td>
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<tr>
<td>LING 20101</td>
<td>Introduction to Phonetics and Phonology</td>
<td>100</td>
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<tr>
<td>LING 20201</td>
<td>Introduction to Syntax</td>
<td>100</td>
</tr>
<tr>
<td>LING 20301</td>
<td>Introduction to Semantics and Pragmatics</td>
<td>100</td>
</tr>
</tbody>
</table>

Nine courses from the following:

* 0-3 courses in a non-Indo-European language
** 6-9 Linguistics electives

Total Units 1300

* Credit may be granted by examination. When any part of the language requirement is met by examination, the equivalent number of electives in linguistics must be substituted for quarter credit granted. With prior approval of the director of undergraduate studies, such electives may be taken in other departments.
** A minimum of six must be courses with LING numbers.
GRADING

All courses used to satisfy requirements for the major and minor must be taken for quality grades. With consent of the instructor, nonmajors may take linguistics courses for P/F grading.

NOTE: Students who entered the University prior to Autumn 2009 may choose to fulfill either the requirements stated here or those that were in place when they entered the University.

HONORS

In order to receive the degree in linguistics with honors, a student must write an honors essay. At the end of a student’s third year, any student who has maintained a 3.0 or better overall GPA and a 3.5 or better GPA in linguistics courses may consult with the director of undergraduate studies about submitting an honors essay. The honors essay must be submitted by fifth week of the quarter in which the student plans to graduate. Complete guidelines and requirements for the honors essay can be obtained from the director of undergraduate studies.

Students wishing to write an honors essay are required to take two graduate-level courses (numbered 30000 or above) in areas most relevant to their thesis work, as determined in consultation with their adviser(s) and approved by the director of undergraduate studies.

This program may accept a BA paper or project used to satisfy the same requirement in another major with the consent of both program chairs. Students should consult with the chairs by the earliest BA proposal deadline (or by the end of their third year, when neither program publishes a deadline). A consent form, to be signed by both chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

MINOR PROGRAM IN LINGUISTICS

Students in other fields of study may complete a minor in linguistics. The minor in linguistics requires a total of seven courses, which must include three linguistics electives (courses whose numbers begin with LING) and the following four courses:

LING 20001 Introduction to Linguistics 100
LING 20101 Introduction to Phonetics and Phonology 100
LING 20201 Introduction to Syntax 100
LING 20301 Introduction to Semantics and Pragmatics 100

Students who elect the minor program in linguistics must contact the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. The adviser’s approval for the minor program should be submitted to a student’s College adviser by the deadline above on a form obtained from the College adviser. Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades (not P/F), and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

LINGUISTICS COURSES

LING 20001. Introduction to Linguistics. 100 Units.
This course offers a brief survey of how linguists analyze the structure and the use of language. Looking at the structure of language means understanding what phonemes, words, and sentences are, and how each language establishes principles for the combinations of these things and for their use; looking at the use of language means understanding the ways in which individuals and groups use language to declare their social identities and the ways in which languages can change over time. The overarching theme is understanding what varieties of language structure and use are found across the world’s languages and cultures, and what limitations on this variety exist.
Terms Offered: Autumn,Spring,Winter

LING 20101. Introduction to Phonetics and Phonology. 100 Units.
This course is an introduction to the study of speech sounds and their patterning in the world’s languages. The first half of the course focuses on how sound sequences are described with respect to their articulatory, acoustic, and perceptual structures. There are lab exercises both in phonetic transcription and in the acoustic analysis of speech sounds. The second half focuses on fundamental notions that have always been central to phonological analysis and that transcend differences between theoretical approaches: contrast, neutralization, natural classes, distinctive features, and basic phonological processes (e.g., assimilation).
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): LING 20001
LING 20150. Language and Communication. 100 Units.
This course can also be taken by students who are not majoring in Linguistics but are interested in learning something about the uniqueness of human language, spoken or signed. It covers a selection from the following topics: What is the position of spoken language in the usually multimodal forms of communication among humans? In what ways does spoken language differ from signed language? What features make spoken and signed language linguistic? What features distinguish linguistic means of communication from animal communication? How do humans communicate with animals? From an evolutionary point of view, how can we account for the fact that spoken language is the dominant mode of communication in all human communities around the world? Why cannot animals really communicate linguistically? What do the terms language “acquisition” and “transmission” really mean? What factors account for differences between “language acquisition” by children and by adults? Are children really perfect language learners? What factors bring about language evolution, including language speciation and the emergence of new language varieties? How did language evolve in mankind? This is a general education course without any prerequisites. It provides a necessary foundation to those working on language at the graduate and undergraduate levels.
Instructor(s): Salikoko Mufwene Terms Offered: Autumn
Equivalent Course(s): CHDV 20150, LING 30150, CHDV 30150

LING 20201. Introduction to Syntax. 100 Units.
This course is an introduction to basic goals and methods of current syntactic theory through a detailed analysis of a range of phenomena, with emphasis on argumentation and empirical justification. Major topics include phrase structure and constituency, selection and subcategorization, argument structure, case, voice, expletives, and raising and control structures.
Instructor(s): Chris Kennedy Terms Offered: Winter
Prerequisite(s): LING 20001

LING 20202. Advanced Syntax. 100 Units.
This course is a continuation of Introduction to Syntax (LING 20201). We will discuss movement and agreement phenomena in a variety of constructions, based on selected readings from the primary literature, and data from a number of typologically diverse languages, such as Irish, Wolof, Chamorro, Kinande, Berber, West Germanic languages.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): LING 20201

LING 20301. Introduction to Semantics and Pragmatics. 100 Units.
This course familiarizes students with what it means to study meaning and use in natural language. By “meaning” we refer to the (for the most part, logical) content of words, constituents, and sentences (semantics), and by “use” we intend to capture how this content is implemented in discourse and what kinds of additional dimensions of meaning may then arise (pragmatics). Some of the core empirical phenomena that have to do with meaning are introduced: lexical (i.e., word) meaning, reference, quantification, logical inferencing, presupposition, implicature, context sensitivity, cross-linguistic variation, speech acts. Main course goals are not only to familiarize students with the basic topics in semantics and pragmatics but also to help them develop basic skills in semantic analysis and argumentation.
Instructor(s): Itamar Francez Terms Offered: Spring
Prerequisite(s): LING 20001
Equivalent Course(s): LING 30310

LING 21000. Morphology. 100 Units.
Looking at data from a wide range of languages, we will study the structure of words. We will consider the nature of the elements out of which words are built and the principles that govern their combination. The effects of word structure on syntax, semantics, and phonology will be examined. We will think critically about the concepts of morpheme, inflection, derivation, and indeed, the concept of word itself.
Terms Offered: Winter
Prerequisite(s): LING 20001

LING 21310. Introduction to Indo-European Linguistics. 100 Units.
An introduction to the comparative study of the Indo-European languages. We will survey the major branches of the Indo-European family and discuss various aspects of PIE grammar as it is currently reconstructed.
Instructor(s): Yaroslav Gorbachov Terms Offered: Spring
Equivalent Course(s): LING 31310
LING 21920. The Evolution of Language. 100 Units.
How did language emerge in the phylogeny of mankind? Was its evolution saltatory or gradual? Did it start late or early and then proceed in a protracted way? Was the emergence monogenetic or polygenetic? What were the ecological prerequisites for the evolution, with the direct ecology situated in the hominine species itself, and when did the prerequisites obtain? Did there ever emerge a language organ or is this a post-facto construct that can be interpreted as a consequence of the emergence of language itself? What function did language evolve to serve, to enhance thought processes or to facilitate rich communication? Are there modern “fossils” in the animal kingdom that can inform our scholarship on the subject matter? What does paleontology suggest? We will review some of the recent and older literature on these questions and more.
Instructor(s): Salikoko Mufwene Terms Offered: Winter
Equivalent Course(s): PSYC 41920, CHDV 41920, CHSS 41920, ANTH 47305, EVOL 41920, LING 41920, CHDV 21920

LING 22750. Laboratory Phonology. 100 Units.
This course is intended to provide a foundation for students to pursue the quantitative study of phonology in the context of human interaction, and of speech and perception in the context of language. Specifically, this course focuses on how to design, conduct, and analyze a phonological experiment. We will approach laboratory phonology from the perspectives of both the speaker and the listener, with each perspective constituting roughly half the course. In the process, we will gain and practice skills in experimental phonetic and psycholinguistic work, while testing aspects of current phonological theory.
Instructor(s): Alan Yu Terms Offered: Winter
Equivalent Course(s): LING 32750

LING 23115. Old Church Slavonic. 100 Units.
This course is an introduction to the language of the oldest Slavic texts. It begins with a brief historical overview of the relationship of Old Church Slavonic to Common Slavic and the other Slavic languages. This is followed by a short outline of Old Church Slavonic inflectional morphology. The remainder of the course is spent in the reading and grammatical analysis of original texts in Cyrillic or Cyrillic transcription of the original Glagolitic.
Equivalent Course(s): REES 23115, REES 33115, LING 35100

LING 23200. Topics in Semantics and Pragmatics. 100 Units.
Equivalent Course(s): LING 42010

LING 23450. Language and Violence. 100 Units.
Language is generally associated with the abstract realm of thought, representation and expression, a realm that contrasts sharply with the material realm in which we tend to place violence. Language is furthermore often seen as antithetical to violence: violence is outburst that comes when the rational order of language fails. In fact, however, questions of language, and especially of speech, surface in every aspect of thinking about violence. Speech is a medium within which violence is performed, and is part of the modern machinery of war. It is also a medium through which systems of oppression and subordination are articulated and registered by groups and individuals, socially and psychically. Violence relies on speech for its justification, rationalization, and sustention. At the same time, the rawness of violence challenges our fundamental faith in the representational and expressive capacities of language, in both destructive and creative ways. This intensive reading seminar explores the relation between speech and violence through scholarly and literary texts from a variety of humanistic fields and traditions.
Instructor(s): Itamar Francez Terms Offered: Spring

LING 23920. The Language of Deception and Humor. 100 Units.
In this course we will examine the language of deception and humor from a variety of perspectives: historical, developmental, neurological, and cross-cultural and in a variety of contexts: fiction, advertising, politics, courtship, and everyday conversation. We will focus on the (linguistic) knowledge and skills that underlie the use of humor and deception and on what sorts of things they are used to communicate.
Instructor(s): Jason Riggle Terms Offered: Spring
Equivalent Course(s): SIGN 26030, LING 33920
LING 26020. Truth. 100 Units.
One of the salient features of our culture is that there is so much bullshit,” says the Princeton philosopher Harry Frankfurt in his 1986 essay, ‘On Bullshit.’ Frankfurt distinguishes bullshit from lying, and argues that it is the more insidious of the two because it involves not an attempt to conceal the truth, but rather a failure to even care about the truth in the first place. But what exactly is truth, and why should we care so much about it? This course will begin with an examination of the fundamental role of a truth convention in meaning and communication, the way that such a convention makes bullshit possible, and the causes and consequences of bullshit. We will then turn to foundational questions about the nature of truth, criticisms of the value of truth and why they have had such appeal, and expressions of skepticism about the possibility of “objective” truth. Along the way, we will consider whether it makes sense for everyone to agree that something is the case and yet still be wrong; whether our claims to know certain things are always limited because they come from a particular perspective; paradoxes of truth and falsity and their relevance for scientific inquiry; and what value (if any) truth contributes to the well-lived life.
Instructor(s): Chris Kennedy Terms Offered: Winter
Equivalent Course(s): SIGN 26007

LING 26030. American Deaf Community: Language, Culture, and Society. 100 Units.
This course will focus on the Deaf community that uses American Sign Language (ASL) as a lens into the disciplines of linguistics, psychology, and cultural studies, and how the use of ASL contributes to individual identity and identity within society. In addition to these disciplinary foci, topics of Deaf literature and art forms will figure in the discussion and readings, which come from a variety of sources and include seminal works in the field from historical and contemporary perspectives.
Instructor(s): Diane Brentari Terms Offered: Winter
Equivalent Course(s): SIGN 26018

LING 26601. Intro Programming for Linguists. 100 Units.
No description available
Equivalent Course(s): LING 36601

LING 27010. Psycholinguistics. 100 Units.
This is a survey course in the psychology of language. We will focus on issues related to language comprehension, language production, and language acquisition. The course will also train students on how to read primary literature and conduct original research studies.
Instructor(s): Staff Terms Offered: Autumn
Equivalent Course(s): PSYC 27010

LING 28355. A Linguistic Introduction to Swahili I. 100 Units.
Spoken in ten countries of Eastern and Central Africa, Swahili has more speakers than any other language in the Bantu family, a group of more than 400 languages most prevalent in sub-equatorial Africa. Based on Swahili Grammar and Workbook, this course helps the students master key areas of the Swahili language in a fast yet enjoyable pace. Topics include sound and intonation patterns, noun class agreements, verb moods, and sentence structures. Additionally, this course provides important listening and expressive reading skills. For advanced students, historical interpretations are offered for exceptional patterns observed in Swahili, in relation with other Bantu languages. This is a general introduction course with no specific prerequisites.
Instructor(s): Fidèle Mpiranya Terms Offered: Autumn
Equivalent Course(s): LING 38355

LING 28356. Linguistic Introduction to Swahili II. 100 Units.
Based on Swahili Grammar and Workbook, this course is a continuation of Linguistic Introduction to Swahili I. It addresses complex issues related to grammatical agreement, verb moods, noun and verb derivation, non-typical adjectives and adverbs, double object constructions, subordinate / coordinated clause constructions, and dialectal variation. Additionally, this course provides important listening and expressive reading skills. For advanced students, historical interpretations are offered for exceptional patterns observed in Swahili, in relation with other Bantu languages. This course allows fulfilling the non-Indo-European language requirement.
Instructor(s): Fidele Mpiranya Terms Offered: Spring
Equivalent Course(s): LING 38356

AMERICAN SIGN LANGUAGE COURSES

ASLG 10100-10200-10300. American Sign Language I-II-III.
American Sign Language is the language of the deaf in the United States and much of Canada. It is a full-fledged autonomous language, unrelated to English or other spoken languages. This introductory course teaches the student basic vocabulary and grammatical structure, as well as aspects of deaf culture.
Instructor(s): Drucilla Ronchen Terms Offered: Autumn
ASLG 10200. American Sign Language II. 100 Units.
American Sign Language is the language of the deaf in the United States and much of Canada. It is a full-fledged autonomous language, unrelated to English or other spoken languages. This introductory course teaches the student basic vocabulary and grammatical structure, as well as aspects of deaf culture.
Instructor(s): Drucilla Ronchen Terms Offered: Winter
Prerequisite(s): ASLG 10100

ASLG 10300. American Sign Language-3. 100 Units.
American Sign Language is the language of the deaf in the United States and much of Canada. It is a full-fledged autonomous language, unrelated to English or other spoken languages. This is the third course in the introductory series that teaches the student basic vocabulary and grammatical structure, as well as aspects of deaf culture.
Instructor(s): Drucilla Ronchen Terms Offered: Spring
Prerequisite(s): ASLG 10200

ASLG 10200. American Sign Language II. 100 Units.
American Sign Language is the language of the deaf in the United States and much of Canada. It is a full-fledged autonomous language, unrelated to English or other spoken languages. This introductory course teaches the student basic vocabulary and grammatical structure, as well as aspects of deaf culture.
Instructor(s): Drucilla Ronchen Terms Offered: Winter
Prerequisite(s): ASLG 10100

ASLG 10300. American Sign Language-3. 100 Units.
American Sign Language is the language of the deaf in the United States and much of Canada. It is a full-fledged autonomous language, unrelated to English or other spoken languages. This is the third course in the introductory series that teaches the student basic vocabulary and grammatical structure, as well as aspects of deaf culture.
Instructor(s): Drucilla Ronchen Terms Offered: Spring
Prerequisite(s): ASLG 10200

ASLG 10400-10500-10600. Intermediate American Sign Language I-II-III.
This course continues to increase grammatical structure, receptive and expressive skills, conversational skills, basic linguistic convergence, and knowledge of idioms. Field trip required.

ASLG 10400. Intermediate ASL-1. 100 Units.
This course continues to increase grammatical structure, receptive and expressive skills, conversational skills, basic linguistic convergence, and knowledge of idioms. Field trip required.
Instructor(s): Drucilla Ronchen Terms Offered: Autumn
Prerequisite(s): ASLG 10300

ASLG 10500. Intermediate ASL-2. 100 Units.
Instructor(s): Drucilla Ronchen Terms Offered: Winter
Prerequisite(s): ASLG 10400

ASLG 10600. Intermediate American Sign Language III. 100 Units.
This is the third course in the Intermediate series. In this course we continue to increase grammatical structure, receptive and expressive skills, conversational skills, basic linguistic convergence, and knowledge of idioms. Field trip required.
Instructor(s): Drucilla Ronchen Terms Offered: Spring
Prerequisite(s): ASLG 10500

ASLG 10500. Intermediate ASL-2. 100 Units.
Instructor(s): Drucilla Ronchen Terms Offered: Winter
Prerequisite(s): ASLG 10400

ASLG 10600. Intermediate American Sign Language III. 100 Units.
This is the third course in the Intermediate series. In this course we continue to increase grammatical structure, receptive and expressive skills, conversational skills, basic linguistic convergence, and knowledge of idioms. Field trip required.
Instructor(s): Drucilla Ronchen Terms Offered: Spring
Prerequisite(s): ASLG 10500

BASQUE COURSES

BASQ 12000-12100-12200. Elementary Basque I-II-III.
Elementary Basque I-II-III
BASQ 12000. Elementary Basque I. 100 Units.
This course will be an approach to the puzzling language and culture that defines Basque people. A challenge for those who dare to learn a language different from any they have ever heard. A journey to the wonderful land of the Basques, full of enigmas, strong traditions, and peculiar customs that will be discovered through very dynamic activities, such as interactive presentations, brief dialogues, games. The aim of the course is to introduce students to the Basque language through the development of some basic written and conversational skills and through structural analysis. The instructor will propose real communicative situations that will encourage the students to learn the language for the purpose of visiting the Basque Country and being able to communicate in basic ways with Basque speakers. These are usually small classes where it is easy to get a lot of first-hand exposure to the language, and the instructor creates an enriching atmosphere full of entertaining activities and possibilities to hone all skills: speaking, listening, reading, and writing-as well as gaining a good grasp of the structure of the language.
Instructor(s): Diana Palenzuela Terms Offered: Autumn

BASQ 12100. Elementary Basque II. 100 Units.
This course will be a continuation of Elementary Basque I, advancing the students’ knowledge of grammatical structure and their receptive, expressive, and conversational skills. The module uses a task-based approach to learning Basque. By means of this methodology, the accumulation of task cycles promotes the acquisition of communicative goals. We will work on different tasks on each lesson, and the progressive build-up of those tasks will cause the gradual improvement of the students’ communicative skills and overall fluency. By the end of the quarter the student should be able to produce grammatically accurate short texts in Basque, interact with speakers of Basque at a basic level while employing a variety of complex cases and tenses, understand a range of basic written and oral texts in Basque, and understand a range of cases and the differences between them. This is achieved by creating a motivating atmosphere where all the students want to take part in the activities, while the teacher guides them during their learning process, providing them with the vocabulary and grammar they need to reach these goals.
Instructor(s): Diana Palenzuela Terms Offered: Winter
Prerequisite(s): BASQ 12000 or instructor's consent

BASQ 12200. Elementary Basque III. 100 Units.
A continuation of Elementary Basque II, with more emphasis in reading/writing and conversation. To consolidate linguistic competence in Basque and expand knowledge of specific areas of grammar. Emphasis will be placed on oral and written competence. Teamwork and personal input will be essential aspects of this module. We will work on practical objectives and will enact real-life situations in groups. Our final aim will be to achieve a relevant and useful command of the Basque language. As in the previous levels, most activities will be very dynamic and interactive.
Instructor(s): Diana Palenzuela Terms Offered: Spring
Prerequisite(s): BASQ 12100 or instructor's consent

BASQ 12100. Elementary Basque II. 100 Units.
This course will be a continuation of Elementary Basque I, advancing the students’ knowledge of grammatical structure and their receptive, expressive, and conversational skills. The module uses a task-based approach to learning Basque. By means of this methodology, the accumulation of task cycles promotes the acquisition of communicative goals. We will work on different tasks on each lesson, and the progressive build-up of those tasks will cause the gradual improvement of the students’ communicative skills and overall fluency. By the end of the quarter the student should be able to produce grammatically accurate short texts in Basque, interact with speakers of Basque at a basic level while employing a variety of complex cases and tenses, understand a range of basic written and oral texts in Basque, and understand a range of cases and the differences between them. This is achieved by creating a motivating atmosphere where all the students want to take part in the activities, while the teacher guides them during their learning process, providing them with the vocabulary and grammar they need to reach these goals.
Instructor(s): Diana Palenzuela Terms Offered: Winter
Prerequisite(s): BASQ 12000 or instructor's consent

BASQ 12200. Elementary Basque III. 100 Units.
A continuation of Elementary Basque II, with more emphasis in reading/writing and conversation. To consolidate linguistic competence in Basque and expand knowledge of specific areas of grammar. Emphasis will be placed on oral and written competence. Teamwork and personal input will be essential aspects of this module. We will work on practical objectives and will enact real-life situations in groups. Our final aim will be to achieve a relevant and useful command of the Basque language. As in the previous levels, most activities will be very dynamic and interactive.
Instructor(s): Diana Palenzuela Terms Offered: Spring
Prerequisite(s): BASQ 12100 or instructor's consent
BASQ 24700. Introduction to Basque Culture. 100 Units.
Straddling the border of southern France and northern Spain, the land of the Basques has long been home to a people who had no country of their own but have always viewed themselves as a nation. No one has ever been able to find their roots, and their peculiar language is not related to any other in the world, but they have managed to keep their mysterious identity alive, even if many other civilizations tried to blot it out. The aim of this course is to create real situations that will enable the students to learn the meaning of Basque culture. It will be a guided tour throughout Basque history and society. They will learn about the mysterious origins of the language; they will visit the most beautiful places of the Basque country; they will get to know and appreciate Basque traditions, gastronomy, music... and most importantly, they will be able to compare and contrast their own cultures and share their ideas during the lessons, creating an enriching atmosphere full of entertaining activities, such as listening to music, reading legends and tales, watching documentaries, and much more. This course will be conducted in English. It is not necessary to have prior knowledge of Basque language or culture to take this course.
Instructor(s): Diana Palenzuela Terms Offered: Spring

MODERN GREEK COURSES

MOGK 10100-10200-10300. Elementary Modern Greek I-II-III.
Sequence description not available.

MOGK 10100. Elementary Modern Greek I. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge. The course will familiarize the students with the Greek alphabet, Modern Greek pronunciation rules and the basic morphology and syntax, with an emphasis on reading and conversational skills. The students will be able to communicate minimally with formulaic and rote utterances and produce words, phrases and lists.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Autumn
Equivalent Course(s): MOGK 30100

MOGK 10200. Elementary Modern Greek II. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge. The course will familiarize the students with the basic morphology and syntax, with an emphasis on reading and conversational skills. The students will be able to handle a variety of tasks and manage an uncomplicated situation using mostly formulaic and rote utterances. They will also be able to express personal meaning forming paragraphs.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Winter
Prerequisite(s): MOGK 10100/30100 or consent of instructor
Equivalent Course(s): NELG 10200, MOGK 30200

MOGK 10300. Elementary Modern Greek III. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Spring
Prerequisite(s): MOGK 10200/30200 or consent of instructor
Equivalent Course(s): MOGK 30300

MOGK 10200. Elementary Modern Greek II. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge. The course will familiarize the students with the basic morphology and syntax, with an emphasis on reading and conversational skills. The students will be able to handle a variety of tasks and manage an uncomplicated situation using mostly formulaic and rote utterances. They will also be able to express personal meaning forming paragraphs.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Winter
Prerequisite(s): MOGK 10100/30100 or consent of instructor
Equivalent Course(s): NELG 10200, MOGK 30200

MOGK 10300. Elementary Modern Greek III. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Spring
Prerequisite(s): MOGK 10200/30200 or consent of instructor
Equivalent Course(s): MOGK 30300

MOGK 20100-20200-20300. Intermediate Modern Greek I-II-III.
No sequence description available.
MOGK 20100. Intermediate Modern Greek-I. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy. They are expected to handle successfully a variety of uncomplicated communicative tasks and to express personal meaning by creating with the language; to ask a variety of questions to obtain simple information to satisfy needs, such as directions, prices and services. Overall they are expected to have a significant quantity and quality of language.
Prerequisite(s): MOGK 10300/30300
Equivalent Course(s): NELG 20100
Instructor(s): Chrysanthi Koutsiviti
Terms Offered: Autumn
Prerequisite(s): MOGK 10300/30300

MOGK 20200. Intermediate Modern Greek II. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy. They are able to handle successfully uncomplicated tasks and social situations requiring an exchange of basic information related to their work, school, recreation, particular interests and areas of competence. They can also speak about some topics related to employment, current events and matters of public and community interest. They are able to create with language, ask questions, narrate and describe in all major time frames using connected discourse of paragraph length.
Instructor(s): Chrysanthi Koutsiviti
Terms Offered: Winter
Prerequisite(s): MOGK 20100
Equivalent Course(s): NELG 20200

MOGK 20300. Intermediate Modern Greek III. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy.
Instructor(s): Chrysanthi Koutsiviti
Terms Offered: Spring
Prerequisite(s): MOGK 20200

MOGK 20200. Intermediate Modern Greek II. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy. They are able to handle successfully uncomplicated tasks and social situations requiring an exchange of basic information related to their work, school, recreation, particular interests and areas of competence. They can also speak about some topics related to employment, current events and matters of public and community interest. They are able to create with language, ask questions, narrate and describe in all major time frames using connected discourse of paragraph length.
Instructor(s): Chrysanthi Koutsiviti
Terms Offered: Winter
Prerequisite(s): MOGK 20100
Equivalent Course(s): NELG 20200

MOGK 20300. Intermediate Modern Greek III. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy.
Instructor(s): Chrysanthi Koutsiviti
Terms Offered: Spring
Prerequisite(s): MOGK 20200

Swahili Courses

SWAH 25200-25300-25400. Swahili I-II-III.
No sequence description available.

SWAH 25200. Swahili I. 100 Units.
This course is designed to help students acquire communicative competence in Swahili and a basic understanding of its structures. Through a variety of exercises, students develop both oral and writing skills.
Instructor(s): Fidele Mpiranya
Terms Offered: Autumn
Equivalent Course(s): SWAH 35200

SWAH 25300. Swahili II. 100 Units.
This course is designed to help students acquire communicative competence in Swahili and a basic understanding of its structures. Through a variety of exercises, students develop both oral and writing skills.
Instructor(s): Fidele Mpiranya
Terms Offered: Winter
Prerequisite(s): SWAH 25200 or consent of instructor
Equivalent Course(s): SWAH 35300

SWAH 25400. Swahili III. 100 Units.
This course is designed to help students acquire communicative competence in Swahili and a basic understanding of its structures. Through a variety of exercises, students develop both oral and writing skills.
Instructor(s): F. Mpiranya
Terms Offered: Spring
Prerequisite(s): SWAH 25300 or consent of instructor
Equivalent Course(s): SWAH 35400
SWAH 25300. Swahili II. 100 Units.
This course is designed to help students acquire communicative competence in Swahili and a basic understanding of its structures. Through a variety of exercises, students develop both oral and writing skills. Instructor(s): Fidele Mpiranya Terms Offered: Winter
Prerequisite(s): SWAH 25200 or consent of instructor
Equivalent Course(s): SWAH 35300

SWAH 25400. Swahili III. 100 Units.
This course is designed to help students acquire communicative competence in Swahili and a basic understanding of its structures. Through a variety of exercises, students develop both oral and writing skills. Instructor(s): F. Mpiranya Terms Offered: Spring
Prerequisite(s): SWAH 25300 or consent of instructor
Equivalent Course(s): SWAH 35400
PROGRAM OF STUDY

The Department of Mathematics provides an environment of research and comprehensive instruction in mathematics and applied mathematics at both undergraduate and graduate levels. Both a BA and a BS program in mathematics are offered, including a BS degree in applied mathematics and a BS degree in mathematics with a specialization in economics. Students in other fields of study may also complete a minor in mathematics; information follows the description of the major.

The requirements for a degree in mathematics or in applied mathematics express the educational intent of the Department of Mathematics; they are drawn with an eye toward the cumulative character of an education based in mathematics, the present emerging state of mathematics, and the scholarly and professional prerequisites of an academic career in mathematics.

Requirements for each bachelor’s degree look to the advancement of students’ general education in modern mathematics and their knowledge of its relation with the other sciences (BS) or with the other arts (BA).

Descriptions of the detailed requirements that give meaning to these educational intentions follow. Students should understand that any particular degree requirement can be modified if persuasive reasons are presented to the department; petitions to modify requirements are submitted in person to the director of undergraduate studies or to one of the departmental counselors. Students should note that only one undergraduate degree may be earned from the Department of Mathematics.

PLACEMENT

At what level does an entering student begin mathematics at the University of Chicago? Every entering student must take the mathematics placement test. This online test must be taken during the summer before arrival on campus. Scores on the mathematics placement test, combined with a student’s high school record, determine the appropriate beginning mathematics course for each student:

- MATH 11200 Studies In Mathematics I
- MATH 13100 Elem Functions and Calculus I
- MATH 15100 Calculus I
- MATH 15200 Calculus II
- MATH 15300 Calculus III

Students who receive a sufficiently high score on the mathematics placement test may receive an invitation to enroll in MATH 16100 Honors Calculus I /MATH 16110 Honors Calculus I (IBL). On the basis of placement exam results, students may also be invited to sit an on-campus calculus accreditation examination prior to the start of Autumn Quarter, which would allow placement into courses at a higher level than MATH 15300 Calculus III.

Students who have scored at a high level on the online mathematics placement test will receive an invitation to take the calculus accreditation examination. Students planning to continue with higher level mathematics or other disciplines requiring advanced mathematics are urged to take this College-administered accreditation exam. On the basis of this exam, a student may receive placement into:

- MATH 15910 Introduction to Proofs in Analysis
- MATH 19520 Mathematical Methods for Social Sciences
- MATH 19620 Linear Algebra
- MATH 20000 Mathematical Methods for Physical Sciences I

Students may also be invited to begin MATH 16100 Honors Calculus I/MATH 16110 Honors Calculus I (IBL) or MATH 20700 Honors Analysis in Rn I. Students who are invited to begin Honors Calculus are encouraged to forgo credit in MATH 15100 Calculus I and/or MATH 15200 Calculus II in order to take the full Honors Calculus sequence, MATH 16100-16200-16300 Honors Calculus I-II-III or MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL) MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL) MATH 16100-16200-16300 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL) MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL) MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL).

On the basis of the Calculus Accreditation Examination or with a score of 5 on the Calculus BC Advanced Placement exam, students may also be invited to begin MATH 16100-16200-16300 Honors Calculus I-II-III or MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL). These sequences build on the sound practical background provided in strong high school calculus courses and best prepare entering students for further study in mathematics. Students who take either version of Honors Calculus
forgo placement out of MATH 15100 Calculus I and/or MATH 15200 Calculus II in order to take one of these full Honors Calculus sequences.

A small number of students each year receive placement recommendations beyond Honors Calculus. Admission to MATH 20700 Honors Analysis in Rn I is by invitation only to those first-year students with superior performance on the Calculus Accreditation Examination or to those sophomores who receive a strong recommendation from their instructor in MATH 16100-16200-16300 Honors Calculus I-II-III or MATH 16110-16210-16310 Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL). Students who are granted three quarters of calculus placement on the basis of the Calculus Accreditation Examination and who do not qualify for admission to MATH 20700 Honors Analysis in Rn I will place into MATH 15910 Introduction to Proofs in Analysis. This latter option includes the possible starting points of MATH 19520 Mathematical Methods for Social Sciences, MATH 19620 Linear Algebra, or MATH 20000 Mathematical Methods for Physical Sciences I. Such students may also consult with one of the departmental counselors about the option of beginning with MATH 16100 Honors Calculus I/ MATH 16110 Honors Calculus I (IBL) so that they would be eligible for admission to Honors Analysis the following year.

Students who submit a score of 5 on the Calculus AB Advanced Placement exam in mathematics receive placement into MATH 15100 Calculus I. Students who submit scores of 4 or 5 on the AP Calculus BC exam or a 7 on the International Baccalaureate Higher Level Calculus exam receive placement into MATH 15200 Calculus II. Currently no course credit or placement is offered in the Department of Mathematics at the University of Chicago for British A-level or O-level examinations, and students with these backgrounds are strongly encouraged to take the calculus accreditation examination.

PROGRAM REQUIREMENTS

Undergraduate Programs

Four bachelor’s degrees are available in the Department of Mathematics: the BA in mathematics, the BS in mathematics, the BS in applied mathematics, and the BS in mathematics with specialization in economics. Programs qualifying students for the degree of BA provide more elective freedom. Programs qualifying students for the degrees of BS require more emphasis in the physical sciences, while the BS in mathematics with specialization in economics has its own set of specialized courses with more electives in economics in place of electives in the physical sciences. All degree programs, whether qualifying students for a degree in mathematics or in applied mathematics, require fulfillment of the College’s general education requirements. The general education sequence in the physical sciences must be selected from either first-year chemistry or first-year physics.

Except for the BS in mathematics with specialization in economics, each degree requires at least five courses outside mathematics (detailed descriptions follow for each degree). These courses must be within the Physical Sciences Collegiate Division (PSCD) or from Computational Neuroscience (CPNS). One of these courses must complete the three-quarter sequence in basic chemistry or basic physics. At least two of these courses must be from a single department and all must be chosen from among Astronomy (20000 or above), Chemistry, Computer Science (not including 10100, 10200, 11000, 11100, or 11200), Physics (12000s or above), Geophysical Sciences, Statistics (22000 or above), CPNS, or Molecular Engineering. Graduate courses from these departments may also be used to fulfill these requirements. No courses from the Financial Mathematics program may be used in any of the undergraduate degree programs in mathematics. Please note in particular the different requirements outside of mathematics described below in the degree program for the BS in mathematics with specialization in economics.

Degree Programs in Mathematics

Students who are majoring in mathematics are required to complete: a 10000-level sequence in calculus (or to demonstrate equivalent competence on the calculus accreditation examination); either MATH 16300 Honors Calculus III or MATH 16310 Honors Calculus III (IBL) as the third quarter of the calculus sequence or MATH 15910 Introduction to Proofs in Analysis; the linear algebra course MATH 20250 Abstract Linear Algebra; a three-quarter sequence in analysis (MATH 20300-20400-20500 Analysis in Rn I-II-III or MATH 20310-20410-20510 Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)) or MATH 20700-20800-20900 Honors Analysis in Rn I-II-III; and one quarter of an algebra sequence (MATH 25400-25500 Basic Algebra I-II or MATH 25700-25800-25900 Honors Basic Algebra I-II-III). Students may not use both MATH 15910 Introduction to Proofs in Analysis and (MATH 16300 Honors Calculus III/MATH 16310 Honors Calculus III (IBL)) to meet major or minor requirements. For students whose first mathematics course at the University of Chicago is MATH 20700 Honors Analysis in Rn I, the MATH 15910 Introduction to Proofs in Analysis/MATH 16300 Honors Calculus III/MATH 16310 Honors Calculus III (IBL) requirement is waived. For students who complete MATH 20700 Honors Analysis in Rn I, the MATH 20250 Abstract Linear Algebra requirement is waived, but the student must then take an additional course from the List of Approved Courses.

Candidates for the BA and BS in mathematics take at least one course in basic algebra. BA candidates may opt for the first quarter of either the regular or the honors sequence ( or MATH 25700-25800-25900 Honors Basic Algebra I-II-III), whereas candidates for the BS degree must take the first two quarters of one of the two sequences. MATH 25700-25800-25900 Honors Basic Algebra I-II-III is designated as an honors version of Basic Algebra. Registration for this course is the option of the individual student, but consultation with one of the departmental counselors is strongly advised.
The remaining mathematics courses needed in the programs (three for the BA, two for the BS) must be selected, with due regard for prerequisites, from the following list of approved mathematics courses. Note that STAT 25100 Introduction to Mathematical Probability or STAT 25150 Introduction to Mathematical Probability-A also meet the requirement. BA candidates may include MATH 25500 Basic Algebra II or MATH 25800 Honors Basic Algebra II. Mathematics courses in the Paris Mathematics program each Spring Quarter may also be used to meet this requirement.

List of Approved Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 17500</td>
<td>Basic Number Theory</td>
<td>100</td>
</tr>
<tr>
<td>MATH 17600</td>
<td>Basic Geometry</td>
<td>100</td>
</tr>
<tr>
<td>MATH 21100</td>
<td>Basic Numerical Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MATH 21200</td>
<td>Advanced Numerical Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MATH 23500</td>
<td>Markov Chains, Martingales, and Brownian Motion</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24100</td>
<td>Topics in Geometry</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24200</td>
<td>Algebraic Number Theory</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24300</td>
<td>Intro To Algebraic Curves</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24400</td>
<td>Introduction to Algebraic Geometry</td>
<td>100</td>
</tr>
<tr>
<td>MATH 25900</td>
<td>Honors Basic Algebra III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26200</td>
<td>Point-Set Topology</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26300</td>
<td>Introduction to Algebraic Topology</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26700</td>
<td>Introduction to Representation Theory of Finite Groups</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26800</td>
<td>Introduction to Commutative Algebra</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27100</td>
<td>Measure and Integration</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27200</td>
<td>Basic Functional Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27400</td>
<td>Introduction to Differentiable Manifolds and Integration on Manifolds</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27500</td>
<td>Basic Theory of Partial Differential Equations</td>
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<tr>
<td>MATH 27700</td>
<td>Mathematical Logic-1</td>
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<tr>
<td>MATH 27800</td>
<td>Mathematical Logic II</td>
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<tr>
<td>MATH 28000</td>
<td>Introduction to Formal Languages</td>
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<tr>
<td>MATH 28100</td>
<td>Introduction to Complexity Theory</td>
<td>100</td>
</tr>
<tr>
<td>MATH 28410</td>
<td>Honors Combinatorics</td>
<td>100</td>
</tr>
<tr>
<td>MATH 29200</td>
<td>Chaos, Complexity And Computers</td>
<td>100</td>
</tr>
<tr>
<td>MATH 29700</td>
<td>Proseminar in Mathematics</td>
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<tr>
<td>MATH 30200</td>
<td>Computability Theory I</td>
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<tr>
<td>MATH 30300</td>
<td>Computability Theory II</td>
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<td>MATH 30900</td>
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<td>MATH 31200</td>
<td>Analysis I</td>
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<td>MATH 31400</td>
<td>Analysis III</td>
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<tr>
<td>MATH 31700</td>
<td>Topology and Geometry I</td>
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</tr>
<tr>
<td>MATH 31800</td>
<td>Topology/Geometry-2</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31900</td>
<td>Topology/Geometry - 3</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32500</td>
<td>Algebra I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32600</td>
<td>Algebra II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32700</td>
<td>Algebra III</td>
<td>100</td>
</tr>
<tr>
<td>STAT 25100</td>
<td>Introduction to Mathematical Probability</td>
<td>100</td>
</tr>
<tr>
<td>STAT 25150</td>
<td>Introduction to Mathematical Probability-A</td>
<td>100</td>
</tr>
</tbody>
</table>

* as approved

BS candidates are further required to select a minor field, which consists of three additional courses that are outside the Department of Mathematics and either are within the same department in the Physical Sciences Collegiate Division (PSCD) or are among Computational Neuroscience (CPNS) courses. These courses must be chosen in consultation with one of the departmental counselors.
## Summaries of Requirements

### Summary of Requirements: Mathematics BA

**GENERAL EDUCATION**

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100</td>
<td>Introductory General Chemistry I</td>
</tr>
<tr>
<td>CHEM 10200</td>
<td>Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II (or equivalent) *</td>
</tr>
<tr>
<td>PHYS 12100-12200</td>
<td>General Physics I-II (or higher) **</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II *</td>
</tr>
<tr>
<td>MATH 16110 &amp; MATH 16210</td>
<td>Honors Calculus I (IBL) and Honors Calculus II (IBL) *</td>
</tr>
</tbody>
</table>

Total Units 400

### MAJOR

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (or equivalent) *</td>
</tr>
<tr>
<td>PHYS 12300</td>
<td>General Physics III (or higher) **</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 16310</td>
<td>Honors Calculus III (IBL)</td>
</tr>
<tr>
<td>MATH 15910</td>
<td>Introduction to Proofs in Analysis</td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20300-20400-20500</td>
<td>Analysis in Rn I-II-III</td>
</tr>
<tr>
<td>MATH 20310-20410-20510</td>
<td>Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)</td>
</tr>
<tr>
<td>MATH 20700-20800-20900</td>
<td>Honors Analysis in Rn I-II-III **</td>
</tr>
</tbody>
</table>

Two mathematics courses chosen from the List of Approved Courses 200

Four courses within the PSCD or from CPNS but outside of mathematics, at least two of which should be taken in a single department ***400

### BA Specific

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 25400</td>
<td>Basic Algebra-I</td>
</tr>
<tr>
<td>MATH 25700</td>
<td>Honors Basic Algebra I</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 25500</td>
<td>Basic Algebra II</td>
</tr>
<tr>
<td>MATH 25800</td>
<td>Honors Basic Algebra II</td>
</tr>
</tbody>
</table>

A course from the List of Approved Courses

Total Units 1400

### Summary of Requirements: Mathematics BS

**GENERAL EDUCATION**

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100  &amp; CHEM 10200</td>
<td>Introductory General Chemistry I and Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II (or equivalent) *</td>
</tr>
<tr>
<td>PHYS 12100-12200</td>
<td>General Physics I-II (or higher) **</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II *</td>
</tr>
</tbody>
</table>
Mathematics

MAJOR

One of the following:

- CHEM 11300 Comprehensive General Chemistry III (or equivalent) *
- PHYS 12300 General Physics III (or higher) *

One of the following: **

- MATH 16300 Honors Calculus III
- MATH 16310 Honors Calculus III (IBL)
- MATH 15910 Introduction to Proofs in Analysis
- MATH 20250 Abstract Linear Algebra

One of the following:

- MATH 20300-20400-20500 Analysis in Rn I-II-III
- MATH 20310-20410-20510 Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)
- MATH 20700-20800-20900 Honors Analysis in Rn I-II-III *

Two Mathematics courses chosen from the List of Approved Courses 200

Four courses within the PSCD or from CPNS but outside of mathematics, at least two of which should be taken in a single department 400 ***

BS Specific

One of the following:

- MATH 25400-25500 Basic Algebra I-II
- MATH 25700 Honors Basic Algebra I
- MATH 25800 and Honors Basic Algebra II

Three courses that are not MATH courses but are either from the same PSCD department or CPNS 300

Total Units 1700

* Credit may be granted by examination.

** Students who complete (or receive credit for) MATH 13300 Elementary Functions and Calculus III or MATH 15300 Calculus III must use these courses as general electives, and MATH 15910 Introduction to Proofs in Analysis must be completed for the major.

*** May include BIOS 24231 Methods in Computational Neuroscience and BIOS 24232 Computational Approaches to Cognitive Neuroscience, or AP credit for STAT 22000 Statistical Methods and Applications, CHEM 11100 Comprehensive General Chemistry I, and/or PHYS 12100-12200 General Physics I-II. May not include CMSC 10100 Introduction to Programming for the World Wide Web I, CMSC 10200 Introduction to Programming for the World Wide Web II, CMSC 11000 Multimed Programming as an Interdisciplinary Art I, CMSC 11100 Multimedia Programming as an Interdisciplinary Art II, or any PHSC course.

+ The sequence PHYS 13100-13200 Mechanics; Electricity and Magnetism is recommended for mathematics majors.

^ Students who complete MATH 20700 Honors Analysis in Rn I will not be required to take MATH 20250 Abstract Linear Algebra; in its place they will take an additional course from the List of Approved Courses.

Degree Program in Applied Mathematics

Candidates for the BS in applied mathematics all take prescribed courses in numerical analysis, algebra, complex variables, ordinary differential equations, and partial differential equations. In addition, candidates are required to select, in consultation with one of the departmental counselors, a secondary field, which consists of three additional courses from a single department that is outside the Department of Mathematics but within the Physical Sciences Collegiate Division or among Computational Neuroscience (CPNS) courses.

Summary of Requirements: BS in Applied Mathematics

GENERAL EDUCATION

One of the following:

- CHEM 10100 Introductory General Chemistry I
- CHEM 10200 and Introductory General Chemistry II
- CHEM 11100-11200 Comprehensive General Chemistry I-II (or equivalent) *
### Degree Program in Mathematics with Specialization in Economics

This program is a version of the BS in mathematics. The BS degree is in mathematics with the designation "with specialization in economics" included on the final transcript. Candidates are required to complete a yearlong sequence in calculus, MATH 15910 Introduction to Proofs in Analysis if the calculus sequence did not terminate with MATH 16300 Honors Calculus III/MATH 16310 Honors Calculus III (IBL), the one-quarter course MATH 20250 Abstract Linear Algebra, a yearlong sequence in analysis (MATH 20300-20400-20500 Analysis in Rn I-II-III or MATH 20310-20410-20510 Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated) or MATH 20700-20800-20900 Honors Analysis in Rn I-II-III), and one quarter of abstract algebra (MATH 25400 Basic Algebra-I or MATH 25700 Honors Basic Algebra I), and earn a grade of at least C– in each course. Students must also take STAT 25100 Introduction to Mathematical Probability or STAT 25150 Introduction to Mathematical Probability-A. The remaining two mathematics courses must be among the following five: MATH 27000 Basic Complex Variables, MATH 27100 Measure and Integration, MATH 27200 Basic Functional Analysis, MATH 27300 Basic Theory of Ordinary Differential Equations, or MATH 23500 Markov Chains, Martingales, and Brownian Motion. A C average or higher must be earned in these two courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 12100-12200</td>
<td>General Physics I-II (or higher) *+</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
</tr>
<tr>
<td>MATH 16110 &amp; MATH 16210</td>
<td>Honors Calculus I (IBL) and Honors Calculus II (IBL)</td>
</tr>
<tr>
<td><strong>Total Units</strong>:</td>
<td>400</td>
</tr>
<tr>
<td>MAJOR</td>
<td></td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (or equivalent) *</td>
</tr>
<tr>
<td>PHYS 12300</td>
<td>General Physics III (or higher) *+</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 16310</td>
<td>Honors Calculus III (IBL)</td>
</tr>
<tr>
<td>MATH 15910</td>
<td>Introduction to Proofs in Analysis</td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
</tr>
<tr>
<td><strong>Total Units</strong>:</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 20300-20400-20500</td>
<td>Analysis in Rn I-II-III</td>
</tr>
<tr>
<td>MATH 20310-20410-20510</td>
<td>Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)</td>
</tr>
<tr>
<td>MATH 20700-20800-20900</td>
<td>Honors Analysis in Rn I-II-III</td>
</tr>
<tr>
<td><strong>Total Units</strong>:</td>
<td>300</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 21100</td>
<td>Basic Numerical Analysis</td>
</tr>
<tr>
<td>MATH 21200</td>
<td>Advanced Numerical Analysis</td>
</tr>
<tr>
<td><strong>Total Units</strong>:</td>
<td>100</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>MATH 25400</td>
<td>Basic Algebra-I</td>
</tr>
<tr>
<td>MATH 25700</td>
<td>Honors Basic Algebra I</td>
</tr>
<tr>
<td><strong>All three of the following courses:</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
</tr>
<tr>
<td>MATH 27500</td>
<td>Basic Theory of Partial Differential Equations</td>
</tr>
<tr>
<td><strong>Six courses that are not MATH courses but are either within the PSCD or from CPNS, at least three of which should be taken in a single department</strong>:</td>
<td>600</td>
</tr>
<tr>
<td><strong>Total Units</strong>:</td>
<td>1700</td>
</tr>
</tbody>
</table>

* Credit may be granted by examination.

** See restrictions on certain courses listed under previous summary.

+ The sequence PHYS 13100-13200 Mechanics; Electricity and Magnetism is recommended for mathematics majors.
In addition to the third quarter of basic chemistry or basic physics, the eight courses required outside the Department of Mathematics must include STAT 23400 Statistical Models and Methods or STAT 24400 Statistical Theory and Methods I. The remaining seven courses should be in the Department of Economics and must include ECON 20000-20100-20200, The Elements of Economic Analysis I-II-III or ECON 20110 ECON 20210 The Elements of Economic Analysis: Honors I-II-III and either ECON 20900 Econometrics: Honors or ECON 21000 Econometrics A. The remaining two courses may be chosen from any undergraduate economics course numbered higher than ECON 20210. The Elements of Economic Analysis III Honors. A University of Chicago Booth School of Business course may be considered for elective credit if the course requires the equivalent of ECON 20100 as a prerequisite and is numbered as a Chicago Booth 40000 or higher course. Additionally, the course needs to pertain to the application of economic theory to a course subject that is not offered by the Department of Economics. Courses such as accounting, investments, and entrepreneurship will not be considered for economics elective credit. Consideration for elective credit must be done by petition before a student registers for the course. There will be no retroactive consideration for credit. Students must earn a grade of C or higher in each course taken in economics to be eligible for this degree.

It is recommended that students considering graduate work in economics use some of their electives to include at least one programming course (CMSC 15100 Intro To Computer Science-I is strongly recommended) and an additional course in statistics (STAT 24400-24500 Statistical Theory and Methods I-II or STAT 24410 Statistical Theory and Methods I and STAT 24500 Statistical Theory and Methods II are appropriate two-quarter sequences). Students planning to apply to graduate economics programs are strongly encouraged to meet with one of the economics undergraduate program directors before the beginning of their third year.

Summary of Requirements: BS in Mathematics with Specialization in Economics

GENERAL EDUCATION

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100 &amp; CHEM 10200</td>
<td>Introductory General Chemistry I and Introductory General Chemistry II</td>
</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>Comprehensive General Chemistry I-II (or equivalent) *</td>
</tr>
<tr>
<td>PHYS 12100-12200</td>
<td>General Physics I-II (or higher) *</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II *</td>
</tr>
<tr>
<td>MATH 16110 &amp; MATH 16210</td>
<td>Honors Calculus I (IBL) and Honors Calculus II (IBL)</td>
</tr>
</tbody>
</table>

Total Units 400

MAJOR

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (or higher) *</td>
</tr>
<tr>
<td>PHYS 12300</td>
<td>General Physics III (or higher) *</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>MATH 16310</td>
<td>Honors Calculus III (IBL)</td>
</tr>
<tr>
<td>MATH 15910</td>
<td>Introduction to Proofs in Analysis</td>
</tr>
<tr>
<td>MATH 20250</td>
<td>Abstract Linear Algebra</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20300-20400-20500</td>
<td>Analysis in Rn I-II-III</td>
</tr>
<tr>
<td>MATH 20310-20410-20510</td>
<td>Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)</td>
</tr>
<tr>
<td>MATH 20700-20800-20900</td>
<td>Honors Analysis in Rn I-II-III</td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 25400</td>
<td>Basic Algebra-I</td>
</tr>
<tr>
<td>MATH 25700</td>
<td>Honors Basic Algebra I</td>
</tr>
</tbody>
</table>

Two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
</tr>
<tr>
<td>MATH 27100</td>
<td>Measure and Integration</td>
</tr>
<tr>
<td>MATH 27200</td>
<td>Basic Functional Analysis</td>
</tr>
</tbody>
</table>
MATH 27300  Basic Theory of Ordinary Differential Equations
MATH 23500  Markov Chains, Martingales, and Brownian Motion

One of the following: 100
STAT 25100  Introduction to Mathematical Probability
STAT 25150  Introduction to Mathematical Probability-A

One of the following: 100
STAT 23400  Statistical Models and Methods
STAT 24400  Statistical Theory and Methods I
STAT 24410  Statistical Theory and Methods Ia

One of the following: 300
ECON 20000-20100-20200  The Elements of Economic Analysis I-II-III
ECON 20010-20110-20210  The Elements of Economic Analysis: Honors I-II-III

One of the following: 100
ECON 21020  Econometrics
ECON 21030  Econometrics - Honors

Three Economics courses numbered higher than 20210 300

Total Units 1800

* Credit may be granted by examination.
** See restrictions on certain courses listed under earlier summary.
+ The sequence PHYS 13100-13200 Mechanics; Electricity and Magnetism is recommended for mathematics majors.

GRADING

Subject to College grading requirements and grading requirements for the major and with consent of instructor, students (except students who are majoring in mathematics or applied mathematics) may take any mathematics course beyond the second quarter of calculus for either a quality grade or for P/F grading. A Pass grade is given only for work of C- quality or higher.

All courses taken to meet requirements in the mathematics major must be taken for quality grades. A grade of C- or higher must be earned in each calculus, analysis, or algebra course; and an overall grade average of C or higher must be earned in the remaining mathematics courses that a student uses to meet requirements for the major. Students must earn a grade of C or higher in each course taken in economics for the degree in mathematics with a specialization in economics. Mathematics or applied mathematics students may take any 20000-level mathematics courses elected beyond program requirements for P/F grading.

Incompletes are given in the Department of Mathematics only to those students who have done some work of passing quality and who are unable to complete all the course work by the end of the quarter. Arrangements are made between the instructor and the student.

HONORS

The BA or BS with honors is awarded to students who, while meeting requirements for one of the mathematics degrees, also meet the following requirements: (1) a GPA of 3.25 or higher in mathematics courses and a 3.0 or higher overall; (2) no grade below C- and no grade of W in any mathematics course; (3) completion of at least one honors sequence (either MATH 20700-20800-20900 Honors Analysis in Rn I-II-III or MATH 25700-25800-25900 Honors Basic Algebra I-II-III) with grades of B- or higher in each quarter; and (4) completion with a grade of B- or higher of at least five mathematics courses chosen from the list that follows so that at least one course comes from each group (i.e., algebra, analysis, and topology). No course may be used to satisfy both requirement (3) and requirement (4). If both honors sequences are taken, one sequence may be used for requirement (3) and one sequence may be used for up to three of the five courses in requirement (4).

Algebra Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 24100</td>
<td>Topics in Geometry</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24200</td>
<td>Algebraic Number Theory</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24300</td>
<td>Intro To Algebraic Curves</td>
<td>100</td>
</tr>
<tr>
<td>MATH 24400</td>
<td>Introduction to Algebraic Geometry</td>
<td></td>
</tr>
<tr>
<td>MATH 25700</td>
<td>Honors Basic Algebra I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 25800</td>
<td>Honors Basic Algebra II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 25900</td>
<td>Honors Basic Algebra III</td>
<td>100</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>MATH 26700</td>
<td>Introduction to Representation Theory of Finite Groups</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26800</td>
<td>Introduction to Commutative Algebra</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27700</td>
<td>Mathematical Logic-I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27800</td>
<td>Mathematical Logic II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 28410</td>
<td>Honors Combinatorics</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32500</td>
<td>Algebra I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32600</td>
<td>Algebra II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 32700</td>
<td>Algebra III</td>
<td>100</td>
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</tbody>
</table>

**Analysis Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20700</td>
<td>Honors Analysis in Rn I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20800</td>
<td>Honors Analysis in Rn II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 20900</td>
<td>Honors Analysis in Rn III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 23500</td>
<td>Markov Chains, Martingales, and Brownian Motion</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27100</td>
<td>Measure and Integration</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27200</td>
<td>Basic Functional Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27400</td>
<td>Introduction to Differentiable Manifolds and Integration on Manifolds</td>
<td>100</td>
</tr>
<tr>
<td>MATH 27500</td>
<td>Basic Theory of Partial Differential Equations</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31200</td>
<td>Analysis I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31300</td>
<td>Analysis II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31400</td>
<td>Analysis III</td>
<td>100</td>
</tr>
</tbody>
</table>

**Topology Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 26200</td>
<td>Point-Set Topology</td>
<td>100</td>
</tr>
<tr>
<td>MATH 26300</td>
<td>Introduction to Algebraic Topology</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31700</td>
<td>Topology and Geometry I</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31800</td>
<td>Topology/Geometry-2</td>
<td>100</td>
</tr>
<tr>
<td>MATH 31900</td>
<td>Topology/Geometry - 3</td>
<td>100</td>
</tr>
</tbody>
</table>

With departmental approval, MATH 29700 Proseminar in Mathematics, or any course(s) in the Paris Mathematics Program, may be chosen so that it falls in one of the three groups. One of the three Paris courses each year will be designated as a replacement for MATH 25500 Basic Algebra II for students wishing to complete the BS degree. Additionally, one of the three Paris courses each year will be designated as a replacement for MATH 25900 Honors Basic Algebra III for candidates who are working toward graduation with honors. Courses taken for the honors requirements (3) and (4) also may be counted toward courses taken to meet requirements for the major. Students who wish to be considered for honors should consult with one of the departmental counselors no later than Spring Quarter of their third year.

**MINOR PROGRAM IN MATHEMATICS**

The minor in mathematics requires a total of six or seven courses in mathematics, depending on whether or not MATH 15910 Introduction to Proofs in Analysis, MATH 16300 Honors Calculus III or MATH 16310 Honors Calculus III (IBL) is required in another degree program. If it is not used elsewhere, MATH 15910 Introduction to Proofs in Analysis, MATH 16300 Honors Calculus III or MATH 16310 Honors Calculus III (IBL) must be included in the minor, for a total of seven courses. The remaining six courses must include the linear algebra course MATH 20250 Abstract Linear Algebra, a three-course sequence in analysis MATH 20300-20400-20500 Analysis in Rn I-II-III or MATH 20300-20400-20500 Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated) or MATH 20700-20800-20900 Honors Analysis in Rn I-II-III, and the first course in one of the algebra sequences (MATH 25400 Basic Algebra-I or MATH 25700 Honors Basic Algebra I). The sixth course may be chosen from either the second course in one of the algebra sequences (MATH 25500 Basic Algebra II or MATH 25800 Honors Basic Algebra II) or a mathematics course numbered 23000 or higher chosen in consultation with the director of undergraduate studies or one of the departmental counselors. A student who completes MATH 20700 Honors Analysis in Rn I is not obligated to take MATH 20250 Abstract Linear Algebra, but should instead select another mathematics course numbered 23000 or higher. Under special circumstances and to avoid double counting, students may also use mathematics courses numbered 23000 or higher to substitute for up to two quarters of analysis or algebra, if these are required in another degree program.

No course in the minor can be double counted with the student's major(s) or with other minors; nor can it be counted toward general education requirements. Students must earn a grade of at least C- in each of the courses.
in the mathematics minor. More than one-half of the requirements for a minor must be met by registering for courses bearing University of Chicago course numbers.

Students must meet with the director of undergraduate studies or one of the departmental counselors by Spring Quarter of their third year to declare their intention to complete a minor program in mathematics and to obtain approval for the minor on a form obtained from their College adviser. Courses for the minor are chosen in consultation with the director of undergraduate studies or one of the departmental counselors.

PARIS MATHEMATICS PROGRAM (HTTP://STUDY-ABROAD.UCHICAGO.EDU/PROGRAMS/PARIS-MATHEMATICS)

Each Spring Quarter, the Department of Mathematics offers a study abroad opportunity for students to take upper-level mathematics electives at the University’s Center in Paris. Departmental faculty offer three successive three-week courses in specialized topics, and students also take a French language course from local French faculty. Students should have completed one of the analysis sequences (MATH 20300-20400-20500 Analysis in Rn I-II-III or MATH 20310-20410-20510 Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)) or MATH 20700-20800-20900 Honors Analysis in Rn I-II-III) and at least one quarter of one of the algebra sequences (MATH 25400 Basic Algebra-1 or MATH 25700 Honors Basic Algebra I) before attending the Paris program. First round applications are due the prior Spring Quarter and should be submitted to the Study Abroad office. If the program does not reach maximum capacity, second round applications will also be accepted in the Autumn Quarter.

JOINT DEGREE PROGRAMS
BA/MS or BS/MS in Mathematics

Qualified College students may receive both a bachelor’s and a master’s degree in mathematics concurrently at the end of their studies in the College. Qualification consists of satisfying all requirements of each degree in mathematics. To be eligible for the joint program, a student must begin MATH 20700 Honors Analysis in Rn I in the Autumn Quarter of the student’s first year. By following a program of prescribed undergraduate course sequences in mathematics and succeeding in all courses with grades no lower than A–, the student becomes eligible to enroll in graduate courses in mathematics in the student’s third year. While only a few students complete the joint BA/MS program, many undergraduates enroll in graduate-level mathematics courses. Admission to all mathematics graduate courses requires prior written consent of the director or co-director of undergraduate studies.

Students should submit their application for the joint program to one of the departmental counselors as soon as possible, but no later than the Winter Quarter of their third year.

MATHEMATICS COURSES
MATH 11200-11300. Studies in Mathematics I-II.
MATH 11200 AND 11300 cover the basic conceptual foundations of mathematics by examining the ideas of number and symmetry. MATH 11200 addresses number theory, including a study of the rules of arithmetic, integral domains, primes and divisibility, congruences, and modular arithmetic. MATH 11300’s main topic is symmetry and geometry, including a study of polygons, Euclidean construction, polyhedra, group theory, and topology. These courses emphasize the understanding of ideas and the ability to express them through rigorous mathematical arguments. While students may take MATH 11300 without having taken MATH 11200, it is recommended that MATH 11200 be taken first. Either course in this sequence meets the general education requirement in mathematical sciences. These courses are at the level of difficulty of the MATH 13100-13200-13300 calculus sequence.

MATH 11200. Studies In Mathematics I. 100 Units.
MATH 11200 AND 11300 cover the basic conceptual foundations of mathematics by examining the ideas of number and symmetry. MATH 11200 addresses number theory, including a study of the rules of arithmetic, integral domains, primes and divisibility, congruences, and modular arithmetic. These courses emphasize the understanding of ideas and the ability to express them through rigorous mathematical arguments. While students may take MATH 11300 without having taken MATH 11200, it is recommended that MATH 11200 be taken first. Either course in this sequence meets the general education requirement in mathematical sciences. These courses are at the level of difficulty of the MATH 13100-13200-13300 calculus sequence.
Terms Offered: Autumn, Spring

MATH 11300. Studies In Mathematics-2. 100 Units.
MATH 11200 AND 11300 cover the basic conceptual foundations of mathematics by examining the ideas of number and symmetry. MATH 11200 addresses number theory, including a study of the rules of arithmetic, integral domains, primes and divisibility, congruences, and modular arithmetic. These courses emphasize the understanding of ideas and the ability to express them through rigorous mathematical arguments. While students may take MATH 11300 without having taken MATH 11200, it is recommended that MATH 11200 be taken first. Either course in this sequence meets the general education requirement in mathematical sciences. These courses are at the level of difficulty of the MATH 13100-13200-13300 calculus sequence.
Terms Offered: Winter
Prerequisite(s): MATH 11200 recommended
MATH 11300. Studies In Mathematics-2. 100 Units.
MATH 11200 AND 11300 cover the basic conceptual foundations of mathematics by examining the ideas of number and symmetry. MATH 11200 addresses number theory, including a study of the rules of arithmetic, integral domains, primes and divisibility, congruences, and modular arithmetic. These courses emphasize the understanding of ideas and the ability to express them through rigorous mathematical arguments. While students may take MATH 11300 without having taken MATH 11200, it is recommended that MATH 11200 be taken first. Either course in this sequence meets the general education requirement in mathematical sciences. These courses are at the level of difficulty of the MATH 13100-13200-13300 calculus sequence.
Terms Offered: Winter
Prerequisite(s): MATH 11200 recommended

MATH 13100-13200-13300. Elementary Functions and Calculus I-II-III.
MATH 13100-13200-13300 is a sequence in calculus for students who need some precalculus reinforcement. The sequence completes the necessary background and covers basic calculus in three quarters. This is achieved through three regular one-hour class meetings and two mandatory one-and-one-half-hour tutorial sessions each week. A class is divided into tutorial groups of about eight students each, and these meet with an undergraduate junior tutor for problem solving related to the course. Students completing MATH 13100-13200-13300 have a command of calculus equivalent to that obtained in MATH 15100-15200-15300. Students may not take the first two quarters of this sequence for P/F grading. MATH 13100-13200 meets the general education requirement in the mathematical sciences.

MATH 13100. Elem Functions and Calculus I. 100 Units.
MATH 13100 gives a careful treatment of limits, the continuity and differentiability of algebraic functions, and applications of the derivative.
Terms Offered: Autumn Winter
Prerequisite(s): Invitation only, based on adequate performance on the mathematics placement test

MATH 13200. Elem Functions and Calculus II. 100 Units.
Topics examined in MATH 13200 include applications of differentiation; exponential, logarithmic, and trigonometric functions; the definite integral and the Fundamental Theorem of Calculus, and applications of the integral.
Terms Offered: Spring Winter
Prerequisite(s): MATH 13100

MATH 13300. Elementary Functions and Calculus III. 100 Units.
In MATH 13300, subjects include more applications of the definite integral, an introduction to infinite sequences and series and Taylor expansions. MATH 13300 also includes an introduction to multivariable calculus, such as functions of several real variables, partial derivatives, gradients, and the total derivative, and integration of functions of several variables.
Terms Offered: Spring
Prerequisite(s): MATH 13200

MATH 13200. Elem Functions and Calculus II. 100 Units.
Topics examined in MATH 13200 include applications of differentiation; exponential, logarithmic, and trigonometric functions; the definite integral and the Fundamental Theorem of Calculus, and applications of the integral.
Terms Offered: Spring Winter
Prerequisite(s): MATH 13100

MATH 13300. Elementary Functions and Calculus III. 100 Units.
In MATH 13300, subjects include more applications of the definite integral, an introduction to infinite sequences and series and Taylor expansions. MATH 13300 also includes an introduction to multivariable calculus, such as functions of several real variables, partial derivatives, gradients, and the total derivative, and integration of functions of several variables.
Terms Offered: Spring
Prerequisite(s): MATH 13200

MATH 15100-15200-15300. Calculus I-II-III.
This is the regular calculus sequence in the department. Students entering this sequence are to have mastered appropriate precalculus material and, in many cases, have had some previous experience with calculus in high school or elsewhere. All Autumn Quarter offerings of MATH 15100, 15200, and 15300 begin with a rigorous treatment of limits and limit proofs. Students may not take the first two quarters of this sequence for P/F grading. MATH 15100-15200 meets the general education requirement in mathematical sciences.
MATH 15100. Calculus I. 100 Units.
This is the first course in the regular calculus sequence in the department. Students entering this sequence are to have mastered appropriate precalculus material and, in many cases, have had some previous experience with calculus in high school or elsewhere. MATH 15100 undertakes a careful treatment of limits, the differentiation of algebraic and transcendental functions, applications of differentiation, and the Mean Value Theorem. All Autumn Quarter offerings of MATH 15100 begin with a rigorous treatment of limits and limit proofs. Students may not take the first two quarters of this sequence for P/F grading. MATH 15100-15200 meets the general education requirement in mathematical sciences.
Terms Offered: Autumn
Prerequisite(s): Superior performance on the mathematics placement test, or MATH 10500

MATH 15200. Calculus II. 100 Units.
This is the second course in the regular calculus sequence in the department. Students entering this sequence are to have mastered appropriate precalculus material and, in many cases, have had some previous experience with calculus in high school or elsewhere. MATH 15200 covers integration, techniques of integration, applications of the integral, and transcendental functions. All Autumn Quarter offerings of MATH 15200 begin with a rigorous treatment of limits and limit proofs. Students may not take the first two quarters of this sequence for P/F grading. MATH 15100-15200 meets the general education requirement in mathematical sciences.
Terms Offered: Autumn Winter
Prerequisite(s): MATH 15100; or placement based on the Calculus Accreditation Exam or appropriate AP score

MATH 15300. Calculus III. 100 Units.
This is the third course in the regular calculus sequence in the department. MATH 15300 covers applications of integration, an introduction to infinite sequences and series and Taylor expansions, and an introduction to multivariable calculus including functions of several real variables, partial derivatives, gradients, and the total derivative, and integration of functions of several variables. All Autumn Quarter offerings of MATH 15300 begin with a rigorous treatment of limits and limit proofs
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 15200; or placement based on the Calculus Accreditation Exam or appropriate AP score

MATH 15200. Calculus II. 100 Units.
This is the second course in the regular calculus sequence in the department. Students entering this sequence are to have mastered appropriate precalculus material and, in many cases, have had some previous experience with calculus in high school or elsewhere. MATH 15200 covers integration, techniques of integration, applications of the integral, and transcendental functions. All Autumn Quarter offerings of MATH 15200 begin with a rigorous treatment of limits and limit proofs. Students may not take the first two quarters of this sequence for P/F grading. MATH 15100-15200 meets the general education requirement in mathematical sciences.
Terms Offered: Autumn Winter
Prerequisite(s): MATH 15100; or placement based on the Calculus Accreditation Exam or appropriate AP score

MATH 15300. Calculus III. 100 Units.
This is the third course in the regular calculus sequence in the department. MATH 15300 covers applications of integration, an introduction to infinite sequences and series and Taylor expansions, and an introduction to multivariable calculus including functions of several real variables, partial derivatives, gradients, and the total derivative, and integration of functions of several variables. All Autumn Quarter offerings of MATH 15300 begin with a rigorous treatment of limits and limit proofs
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 15200; or placement based on the Calculus Accreditation Exam or appropriate AP score

MATH 15910. Introduction to Proofs in Analysis. 100 Units.
This course is intended for students who are making the transition from MATH 13300 or 15300 to MATH 20250 and MATH 20300, or for students who need more preparation in learning to read and write proofs. This course covers the fundamentals of theoretical mathematics and prepares students for upper-level mathematics courses beginning with MATH 20250 and MATH 20300. Topics include the axioms for the real numbers, completeness and the least upper bound property, the topology of the real line, and sequences and series of real and complex numbers. Students who are majoring or minorin in mathematics may not use both MATH 15910 and MATH 16300 to meet program requirements.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 15300 or MATH 13300 or superior performance on the Calculus Accreditation Exam
MATH 16100-16200-16300. Honors Calculus I-II-III.

MATH 16100-16200-16300 is an honors version of MATH 15100-15200-15300. A student with a strong background in the problem-solving aspects of one-variable calculus may, by suitable achievement on the Calculus Accreditation Exam, be invited to register for MATH 16100-16200-16300. This sequence emphasizes the theoretical aspects of one-variable analysis and, in particular, the consequences of completeness in the real number system. MATH 16300 also includes an introduction to multivariable calculus. At least one section of this sequence is offered as an inquiry-based learning (IBL) course. Students interested in IBL should have fluency in spoken English and an AP score of 5 on the BC Calculus exam or placement into MATH 15300. Students may not take the first two quarters of this sequence for P/F grading. MATH 16100-16200 meets the general education requirement in mathematical sciences.

MATH 16100. Honors Calculus I. 100 Units.

MATH 16100 emphasizes the theoretical aspects of one-variable analysis and, in particular, the consequences of completeness in the real number system. Topics include a rigorous treatment of the real numbers and the least upper bound property, limits, continuity, uniform continuity, and differentiation. Prerequisite(s): Invitation only based on superior performance on the Calculus Accreditation Examination

Terms Offered: Autumn

Prerequisite(s): Invitation only based on superior performance on the Calculus Accreditation Examination

MATH 16200. Honors Calculus II. 100 Units.

MATH 16200 covers integration, the Fundamental Theorem of Calculus, transcendental functions, and other topics.

Terms Offered: Winter

Prerequisite(s): MATH 16100

MATH 16300. Honors Calculus III. 100 Units.

MATH 16300 covers sequences and series, power series, and Taylor series. It also includes an introduction to multivariable calculus, such as functions of several real variables, partial derivatives, gradients, and the total derivative, and integration of functions of several variables.

Terms Offered: Spring

Prerequisite(s): MATH 16200

MATH 16110-16210-16310. Honors Calculus I (IBL); Honors Calculus II (IBL); Honors Calculus III (IBL)

This sequence is an Inquiry Based Learning version of MATH 16100-16200-16300 Honors Calculus I-II-III. In this alternate version of Honors Calculus, rather than having lectures from instructors, students are given “scripts” of carefully ordered theorems whose proofs they prepare outside of class and then present in class for comment and discussion. MATH 16110-16210 meets the general education requirement in mathematical sciences.

MATH 16110. Honors Calculus I (IBL) 100 Units.

MATH 16110 gives a rigorous axiomatic treatment of the continuum and its topological properties.

Instructor(s): Staff

Terms Offered: Autumn

Prerequisite(s): Invitation only based on superior performance on the Calculus Accreditation Examination
MATH 16210. Honors Calculus II (IBL) 100 Units.
MATH 16210 puts an arithmetic structure on the continuum, and constructs the real numbers via Dedekind cuts. There follows a rigorous treatment of limits, continuity, differentiability, integrability, and the Fundamental Theorem of Calculus.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 16110

MATH 16310. Honors Calculus III (IBL) 100 Units.
MATH 16310 continues the rigorous treatment of single-variable Calculus with a discussion of infinite series. There follows an introduction to the main ideas of multivariable Calculus, including functions of several real variables, partial derivatives, gradients, the total derivative, and integration of functions of several variables.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 16210

MATH 16210. Honors Calculus II (IBL) 100 Units.
MATH 16210 puts an arithmetic structure on the continuum, and constructs the real numbers via Dedekind cuts. There follows a rigorous treatment of limits, continuity, differentiability, integrability, and the Fundamental Theorem of Calculus.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 16110

MATH 16310. Honors Calculus III (IBL) 100 Units.
MATH 16310 continues the rigorous treatment of single-variable Calculus with a discussion of infinite series. There follows an introduction to the main ideas of multivariable Calculus, including functions of several real variables, partial derivatives, gradients, the total derivative, and integration of functions of several variables.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 16210

MATH 17500. Basic Number Theory. 100 Units.
This course covers basic properties of the integers following from the division algorithm, primes and their distribution, and congruences. Additional topics include existence of primitive roots, arithmetic functions, quadratic reciprocity, and transcendental numbers. The subject is developed in a leisurely fashion, with many explicit examples.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): MATH 16300 or MATH 16310 or MATH 15910 or MATH 15900 or MATH 19900

MATH 17600. Basic Geometry. 100 Units.
This course covers advanced topics in geometry, including Euclidean geometry, spherical geometry, and hyperbolic geometry. We emphasize rigorous development from axiomatic systems, including the approach of Hilbert. Additional topics include lattice point geometry, projective geometry, and symmetry.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 16300 or MATH 16310 or MATH 15910 or MATH 15900 or MATH 19900

MATH 19520. Mathematical Methods for Social Sciences. 100 Units.
MATH 19520 is a course in mathematical techniques for students in the social sciences. It covers the basic topics of multivariable calculus including vectors and vector functions, partial derivatives, multiple integrals, and Lagrange multipliers. It also covers an introduction to optimization, including linear programming, the simplex method, the duality theorem, and the Kuhn-Tucker theorem.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 13300 or MATH 15300 or MATH 16300 or MATH 16310

MATH 19620. Linear Algebra. 100 Units.
This course takes a concrete approach to the basic topics of linear algebra. Topics include vector geometry, systems of linear equations, vector spaces, matrices and determinants, and eigenvalue problems. Prerequisite(s): MATH 13300 or MATH 15200 or MATH 16200. Note(s): Recommended sequence for ECON majors: MATH 19620, STAT 23400, ECON 21000 in consecutive quarters.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 13200 or MATH 15200 or MATH 16200 or MATH 16210. Note(s): Recommended sequence for ECON majors: MATH 19620, STAT 23400, ECON 21000 in consecutive quarters.

MATH 20000-20100. Mathematical Methods for Physical Sciences I-II.
This sequence is intended for students who are majoring in a department in the Physical Sciences Collegiate Division other than mathematics.
MATH 20000. Mathematical Methods for Physical Sciences I. 100 Units.
MATH 20000 covers multivariable calculus, including the algebra and geometry of Euclidean space, differentiation and integration of functions of several variables, vector valued functions and the classical theorems of vector analysis (i.e., theorems of Green, Gauss, and Stokes), and sequences and series of numbers and functions, including an introduction to Fourier series.
Terms Offered: Autumn Winter
Prerequisite(s): MATH 13300 or 15300 or 16300 or 16310; entering students by invitation only, based on superior performance on the Calculus Accreditation Exam

MATH 20100. Mathematical Methods for Physical Sciences II. 100 Units.
MATH 20100 introduces ordinary differential equations (e.g., first and second order linear differential equations, series solutions, and the Laplace transform) and complex analysis (i.e., basic properties of the complex plane and analytic functions through Cauchy’s theorem).
Terms Offered: Spring Winter
Prerequisite(s): MATH 20000 or (MATH 19520 and MATH 19620)

MATH 20100. Mathematical Methods for Physical Sciences II. 100 Units.
MATH 20100 introduces ordinary differential equations (e.g., first and second order linear differential equations, series solutions, and the Laplace transform) and complex analysis (i.e., basic properties of the complex plane and analytic functions through Cauchy’s theorem).
Terms Offered: Spring Winter
Prerequisite(s): MATH 20000 or (MATH 19520 and MATH 19620)

MATH 20250. Abstract Linear Algebra. 100 Units.
This is a theoretical course in linear algebra intended for students taking higher level mathematics courses. Topics include vector spaces and linear transformations, matrices and the algebra of matrices, determinants and their properties, the geometry of R^n and C^n, bases, coordinates and change of basis, eigenvalues, eigenvectors, characteristic polynomial, diagonalization, special forms including QR factorization and Singular Value Decomposition, and applications.
Terms Offered: Autumn,Spring,Winter
Prerequisite(s): MATH 16300 or MATH 16310 or MATH 15910 or MATH 15900 or MATH 19900

MATH 20300-20400-20500. Analysis in R^n I-II-III.
This three-course sequence is intended for students who plan to major in mathematics or who require a rigorous treatment of analysis in several dimensions. Both theoretical and problem solving aspects of multivariable calculus are treated carefully. All courses in the sequence require experience with a theoretical treatment of the real numbers, and hence MATH 20300 has a prerequisite of either MATH 16300 or MATH 15910. Additionally, MATH 20400 requires a serious treatment of linear algebra, and thus has a prerequisite of either MATH 20250 or STAT 24300. MATH 20300 covers the construction of the real numbers, the topology of R^n including the Bolzano-Weierstrass and Heine-Borel theorems, and a detailed treatment of abstract metric spaces, including convergence and completeness, compact sets, continuous mappings, and more. MATH 20400 covers differentiation in R^n including partial derivatives, gradients, the total derivative, the Chain Rule, optimization problems, vector-valued functions, and the Inverse and Implicit Function Theorems. MATH 20500 covers integration in R^n including Fubini’s Theorem and iterated integration, line and surface integrals, differential forms, and the theorems of Green, Gauss, and Stokes. This sequence is the basis for all advanced courses in analysis and topology.

MATH 20300. Analysis in R^n I. 100 Units.
MATH 20300 covers the construction of the real numbers, the topology of R^n including the Bolzano-Weierstrass and Heine-Borel theorems, and a detailed treatment of abstract metric spaces, including convergence and completeness, compact sets, continuous mappings, and more.
Instructor(s): Staff
Terms Offered: Autumn,Spring,Winter
Prerequisite(s): MATH 16300 or MATH 16310 or MATH 15910 or MATH 15900 or MATH 19900

MATH 20400. Analysis in R^n II. 100 Units.
MATH 20400 covers differentiation in R^n including partial derivatives, gradients, the total derivative, the Chain Rule, optimization problems, vector-valued functions, and the Inverse and Implicit Function Theorems.
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 20300 or ((MATH 20300 or MATH 20310) AND (MATH 20250 or STAT 24300))

MATH 20500. Analysis in R^n III. 100 Units.
MATH 20500 covers integration in R^n including Fubini’s Theorem and iterated integration, line and surface integrals, differential forms, and the theorems of Green, Gauss, and Stokes.
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 20400 or MATH 20410 or MATH 20800
MATH 20400. Analysis in Rn II. 100 Units.
MATH 20400 covers differentiation in R^n including partial derivatives, gradients, the total derivative, the Chain Rule, optimization problems, vector-valued functions, and the Inverse and Implicit Function Theorems.
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 20700 or ((MATH 20300 or MATH 20310) AND (MATH 20250 or STAT 24300))

MATH 20500. Analysis in Rn III. 100 Units.
MATH 20500 covers integration in R^n including Fubini's Theorem and iterated integration, line and surface integrals, differential forms, and the theorems of Green, Gauss, and Stokes
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 20400 or MATH 20410 or MATH 20800

MATH 20310-20410-20510. Analysis in Rn I (accelerated); Analysis in Rn II (accelerated); Analysis in Rn III (accelerated)
This sequence is an accelerated version of MATH 20300-20400-20500 Analysis in Rn I-II-III.

MATH 20310. Analysis in Rn I (accelerated) 100 Units.
This is an accelerated version of MATH 20300.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Invitation only, based on performance on the Calculus Accreditation Exam

MATH 20410. Analysis in Rn II (accelerated) 100 Units.
This is an accelerated version of MATH 20400.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 20700 or (MATH 20310 AND (MATH 20250 or STAT 24300))

MATH 20510. Analysis in Rn III (accelerated) 100 Units.
This is an accelerated version of MATH 20500.
Instructor(s): Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 20800 or MATH 20410

MATH 20700-20800-20900. Honors Analysis in Rn I-II-III.
This highly theoretical sequence in analysis is intended for the most able students. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.

MATH 20700. Honors Analysis in Rn I. 100 Units.
This is the first course in a highly theoretical sequence in analysis, and is intended for the most able students. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Invitation only, based on performance on the Calculus Accreditation Exam

MATH 20800. Honors Analysis in Rn II. 100 Units.
This is the second course in a highly theoretical sequence in analysis. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 20700

MATH 20900. Honors Analysis in Rn III. 100 Units.
This is the third course in a highly theoretical sequence in analysis. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 20800

MATH 20800. Honors Analysis in Rn II. 100 Units.
This is the second course in a highly theoretical sequence in analysis. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 20700
MATH 20900. Honors Analysis in R^n III. 100 Units.
This is the third course in a highly theoretical sequence in analysis. Topics include the real number system, metric spaces, basic functional analysis, and the Lebesgue integral.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 20800

MATH 21100. Basic Numerical Analysis. 100 Units.
This course covers direct and iterative methods of solution of linear algebraic equations and eigenvalue problems. Topics include numerical differentiation and quadrature for functions of a single variable, approximation by polynomials and piece-wise polynomial functions, approximate solution of ordinary differential equations, and solution of nonlinear equations.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 20000 or 20250 or 20400 or 20410

MATH 21200. Advanced Numerical Analysis. 100 Units.
This course covers topics similar to those of Math 21100 but at a more rigorous level. The emphasis is on proving all of the results. Previous knowledge of numerical analysis is not required. Programming is also not required. The course makes extensive use of the material developed in the analysis sequence (ending in Math 20500 or Math 20900) and provides an introduction to other areas of analysis such as functional analysis and operator theory.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): MATH 20500 or 20510 or 20900

MATH 23500. Markov Chains, Martingales, and Brownian Motion. 100 Units.
This course discusses three of the most important types of stochastic processes: Markov chains (in both discrete and continuous time), martingales (the mathematical model of "fair games"), and Brownian motion (random continuous motion). Applications will include random walk, queueing theory, and branching processes, and may also include other areas such as optimal stopping or stochastic integration.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): STAT 25100 or STAT 25150, or STAT 24400, or MATH 20500/MATH 20510/MATH 20900 and permission of the instructor

MATH 24100. Topics in Geometry. 100 Units.
This course focuses on the interplay between abstract algebra (group theory, linear algebra, and the like) and geometry. Several of the following topics are covered: affine geometry, projective geometry, bilinear forms, orthogonal geometry, and symplectic geometry.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 25500 or 25800
Note(s): This course is offered in alternate years.

MATH 24200. Algebraic Number Theory. 100 Units.
Topics include factorization in Dedekind domains, integers in a number field, prime factorization, basic properties of ramification, and local degree.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 25500 or 25800

MATH 24300. Intro To Algebraic Curves. 100 Units.
This course covers the projective line and plane curves, both affine and projective. We also study conics and cubics, as well as the group law on the cubic. Abstract curves associated to function fields of one variable are discussed, along with the genus of a curve and the Riemann-Roch theorem. Curves of low genus are emphasized. Although the formal prerequisite is MATH 25500 or 25800, MATH 25600 or 25900 is strongly recommended.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): MATH 25500 or 25800, or consent of instructor
Note(s): This course is offered in alternate years.

MATH 24400. Introduction to Algebraic Geometry. 100 Units.
This is a first course in algebraic geometry. Topics include: affine and projective varieties; coordinate rings; the Zariski topology; Nullstellensatz; Hilbert basis Theorem; the dictionary between algebraic geometry and commutative algebra; rational functions and morphisms; smoothness; theory of dimension. Other possible topics might include: the classification of plane cubics; elliptic curves; 27 lines on a cubic surface; introduction to the theory of curves (degree, divisors, Bezout's Theorem, etc.). Although the formal algebra prerequisite is MATH 25500 or MATH 25800, in fact MATH 25600 or MATH 25900 is strongly recommended. Additionally, MATH 27000 and MATH 26200 are strongly recommended. Prerequisite(s): (MATH 20500 or MATH 20900) and (MATH 25500 or MATH 25800)
Note(s): This course is offered in alternate years.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): (MATH 20500 or MATH 20510 or MATH 20900) and (MATH 25500 or MATH 25800)
Note(s): This course is offered in alternate years.
MATH 25400-25500. Basic Algebra I-II.
This is the sequence in basic algebra. It requires a prior serious treatment of linear algebra and thus has a prerequisite of MATH 20250. MATH 25400 covers groups, subgroups, permutation groups, group actions, and Sylow Theorems. MATH 25500 covers rings and ideals, PIDS, Euclidean domains, UFDs, fields and field extensions, and the fundamentals of Galois theory.

MATH 25400. Basic Algebra I. 100 Units.
This is the sequence in basic algebra. It requires a prior serious treatment of linear algebra, and thus has a prerequisite of MATH 20250. MATH 25400 covers groups, subgroups, permutation groups, and group actions. MATH 25500 covers rings and ideals, PIDS, Euclidean domains, UFDs, fields and field extensions, and canonical forms of matrices, quadratic forms, and multilinear algebra. MATH 25600 covers the Sylow theorems and the fundamentals of Galois theory. This course covers groups, subgroups, permutation groups, and group actions. Prerequisite(s): MATH 20250 or MATH 20700
Terms Offered: Autumn Winter
Prerequisite(s): MATH 20250 or MATH 20700

MATH 25500. Basic Algebra II. 100 Units.
This course covers rings and ideals, PIDs, Euclidean domains, UFDs, fields and field extensions, modules and canonical forms of matrices, quadratic forms, and multilinear algebra.
Terms Offered: Spring Winter
Prerequisite(s): MATH 25400 or MATH 25700

MATH 25700-25800-25900. Honors Basic Algebra I-II-III.
This sequence is an accelerated version of MATH 25400-25500-25600 that is open only to students who have achieved a B- or better in prior mathematics courses. Topics include the theory of finite groups, commutative and noncommutative ring theory, modules, linear and multilinear algebra, and quadratic forms. We also cover basic field theory, the structure of p-adic fields, and Galois theory.

MATH 25700. Honors Basic Algebra I. 100 Units.
Topics in MATH 25700 include the theory of finite groups, up through and including the proofs of the Sylow Theorems.
Terms Offered: Autumn
Prerequisite(s): MATH 20700 or MATH 20250; no entering student may begin this sequence in their first term.

MATH 25800. Honors Basic Algebra II. 100 Units.
Topics in MATH 25800 include commutative and noncommutative ring theory, modules, and field extensions.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 25700

MATH 25900. Honors Basic Algebra III. 100 Units.
Topics in this course include basic field theory, the structure of p-adic fields, and Galois theory.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 25800

MATH 25800. Honors Basic Algebra II. 100 Units.
Topics in MATH 25800 include commutative and noncommutative ring theory, modules, and field extensions.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 25700

MATH 25900. Honors Basic Algebra III. 100 Units.
Topics in this course include basic field theory, the structure of p-adic fields, and Galois theory.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 25800

MATH 26200. Point-Set Topology. 100 Units.
This course examines topology on the real line, topological spaces, connected spaces and compact spaces, identification spaces and cell complexes, and projective and other spaces. With MATH 27400, it forms a foundation for all advanced courses in analysis, geometry, and topology.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): MATH 20300 or 20310 or 20700, and 25400 or 25700
MATH 26300. Introduction to Algebraic Topology. 100 Units.
Topics include the fundamental group of a space; Van Kampen's theorem; covering spaces and groups of covering transformation; existence of universal covering spaces built up of cells; and theorems of Gauss, Brouwer, and Borsuk-Ulam.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): MATH 26200

MATH 26700. Introduction to Representation Theory of Finite Groups. 100 Units.
Topics include group algebras and modules, semisimple algebras and the theorem of Maschke; characters, character tables, orthogonality relations and calculation; and induced representations and characters.
Applications to permutation groups and solvability of groups are also included
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): MATH 25800 or 25500

MATH 26800. Introduction to Commutative Algebra. 100 Units.
Topics include basic definitions and properties of commutative rings and modules, Noetherian and Artinian modules, exact sequences, Hilbert basis theorem, tensor products, localizations of rings and modules, associated primes and primary decomposition, Artin-Rees Lemma, Krull intersection theorem, completions, dimension theory of Noetherian rings, integral extensions, normal domains, Dedekind domains, going up and going down theorems, dimension of finitely generated algebras over a field, Affine varieties, Hilbert Nullstellensatz, dimension of affine varieties, product of affine varieties, and the dimension of intersection of subvarieties.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): MATH 25800 or 25500

MATH 27000. Basic Complex Variables. 100 Units.
Topics include complex numbers, elementary functions of a complex variable, complex integration, power series, residues, and conformal mapping.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): MATH 20500 or 20510 or 20900

MATH 27100. Measure and Integration. 100 Units.
Instructor(s): Staff
Terms Offered: Winter
Prerequisite(s): MATH 20500 or MATH 20510

MATH 27200. Basic Functional Analysis. 100 Units.
Terms Offered: Spring
Prerequisite(s): MATH 27000 and (MATH 20900 or MATH 27100)

MATH 27300. Basic Theory of Ordinary Differential Equations. 100 Units.
This course is an introduction to the theory of ordinary differential equations in Euclidean space. Topics covered include: first-order equations of one variable, solving higher order systems via reduction of order, linear ODEs in arbitrary dimension, real Jordan form and the matrix exponential, variation of parameters, existence and uniqueness of solutions for Lipschitz vector fields, local analysis near equilibria, stability of solutions, introduction to dynamical systems and the global analysis of flows.
Instructor(s): Staff
Terms Offered: Autumn, Winter
Prerequisite(s): MATH 20500 or MATH 20510 or MATH 20900 or PHYS 22100

MATH 27400. Introduction to Differentiable Manifolds and Integration on Manifolds. 100 Units.
Topics include exterior algebra; differentiable manifolds and their basic properties; differential forms; integration on manifolds; and the theorems of Stokes, DeRham, and Sard. With MATH 26200, this course forms a foundation for all advanced courses in analysis, geometry, and topology.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): MATH 26200

MATH 27500. Basic Theory of Partial Differential Equations. 100 Units.
This course covers classification of second-order equations in two variables, wave motion and Fourier series, heat flow and Fourier integral, Laplace's equation and complex variables, second-order equations in more than two variables, Laplace operators, spherical harmonics, and associated special functions of mathematical physics.
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): MATH 27000 and MATH 27300

MATH 27700-27800. Mathematical Logic I-II.
Mathematical Logic I-II
MATH 27700. Mathematical Logic I. 100 Units.
This course introduces mathematical logic. Topics include propositional and predicate logic and the syntactic notion of proof versus the semantic notion of truth (e.g., soundness, completeness). We also discuss the Gödel completeness theorem, the compactness theorem, and applications of compactness to algebraic problems. Prerequisite(s): MATH 25400 or MATH 25700 or (CMSC 15400 and (MATH 15910 or MATH 15900 or MATH 19900 or MATH 16300)) Equivalent Course(s): CMSC 27700
Terms Offered: Autumn
Prerequisite(s): MATH 25400 or 25700; open to students who are majoring in computer science who have taken CMSC 15400 along with MATH 16300 or MATH 15900 or MATH 19900
Equivalent Course(s): CMSC 27700

MATH 27800. Mathematical Logic II. 100 Units.
Topics include number theory, Peano arithmetic, Turing compatibility, unsolvable problems, Gödel’s incompleteness theorem, undecidable theories (e.g., the theory of groups), quantifier elimination, and decidable theories (e.g., the theory of algebraically closed fields). Terms Offered: Winter
Prerequisite(s): MATH 27700 or equivalent
Equivalent Course(s): CMSC 27800

MATH 27800. Mathematical Logic II. 100 Units.
Topics include number theory, Peano arithmetic, Turing compatibility, unsolvable problems, Gödel’s incompleteness theorem, undecidable theories (e.g., the theory of groups), quantifier elimination, and decidable theories (e.g., the theory of algebraically closed fields). Terms Offered: Winter
Prerequisite(s): MATH 27700 or equivalent
Equivalent Course(s): CMSC 27800

MATH 28000. Introduction to Formal Languages. 100 Units.
This course is a basic introduction to computability theory and formal languages. Topics include automata theory, regular languages, context-free languages, and Turing machines.
Instructor(s): S. Kurtz Terms Offered: Spring
Prerequisite(s): CMSC 12300 or CMSC 15400, or MATH 15900 or MATH 25500.
Equivalent Course(s): CMSC 28000

MATH 28100. Introduction to Complexity Theory. 100 Units.
Computability topics are discussed (e.g., the s-m-n theorem and the recursion theorem, resource-bounded computation). This course introduces complexity theory. Relationships between space and time, determinism and non-determinism, NP-completeness, and the P versus NP question are investigated.
Instructor(s): K. Mulmuley Terms Offered: Autumn
Prerequisite(s): CMSC 27100, or MATH 15900 or MATH 25500; experience with mathematical proofs.
Equivalent Course(s): CMSC 28100

MATH 28410. Honors Combinatorics. 100 Units.
Methods of enumeration, construction, and proof of existence of discrete structures are discussed in conjunction with the basic concepts of probability theory over a finite sample space. Enumeration techniques are applied to the calculation of probabilities, and, conversely, probabilistic arguments are used in the analysis of combinatorial structures. Other topics include basic counting, linear recurrences, generating functions, Latin squares, finite projective planes, graph theory, Ramsey theory, coloring graphs and set systems, random variables, independence, expected value, standard deviation, and Chebyshev’s and Chernoff’s inequalities.
Instructor(s): L. Babai Terms Offered: Spring
Prerequisite(s): MATH 15900 or MATH 25400, or CMSC 27100, or by consent. Experience with mathematical proofs.
Note(s): This course is offered in alternate years.
Equivalent Course(s): CMSC 27410

MATH 29520. Introduction to Error-Correcting Codes. 100 Units.
Cyclic codes, BCH codes, Golay codes, Shannon’s Theorem, and codes approaching Shannon’s bounds will be covered. Applications to electrical engineering, combinatorics, and group theory will be discussed.
Instructor(s): Staff Terms Offered: Winter. in alternate years
Prerequisite(s): MATH 25500 or 25800
MATH 29700. Proseminar in Mathematics. 100 Units.
Consent of instructor and departmental counselor. Students are required to submit the College Reading and Research Course Form. Must be taken for a quality grade.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Completion of general education mathematics sequence
In the early twenty-first century, “design” is no longer a term used simply to describe surface aesthetics or ornamentation. Design, as a field, now encompasses a wide range of human interactions with the technologies, devices, environments, and communities that shape daily life. The largest company in the world (by market capitalization) is fundamentally a design company. Apple Inc.’s products inspire feelings of love and devotion (as well as frustration) with few rivals in any cultural sphere. Design is central to the company’s identity and success. A former Apple engineer observed that when a designer joined a meeting it was “like being in church when the priest walks in.”

Our current historical period, described by some as the “digital revolution” or a “postindustrial society,” relies heavily on media and design, which embed technologies increasingly within everyday life. If you consider the number of screens in your immediate vicinity, it becomes evident how substantial an impact media arts and design have on the ways we learn, work, and play. The design of screens (in their aesthetic, interactive, and technical dimensions) affects how we think, act, and communicate. Extraordinarily rapid developments have changed the character of contemporary life—in ways that remain largely opaque and demand ongoing study, critique, and experimentation. The University of Chicago is now in a position to establish new practice-based research that combines analytical and creative approaches to understanding these problems and to solving them.

MINOR IN MEDIA ARTS AND DESIGN

Distribution Requirement

The minor is comprised of six courses. Of those six courses, students must take at least one course in each of the following core areas: (1) Media Theory, (2) Media History, and (3) Media Practice and Design.

Courses that qualify for each distribution requirement are listed below. Moving forward, updated course lists will be maintained on the College website.

**Media Theory**
- ANTH 20002 Discovering Anthropology: Culture, Technology, Mediation
- ANTH 21015 Media, Culture & Society
- ANTH 21730 Science, Technology and Media via Japan
- ARTH 21314 Fluxus and the Question of Media
- ARTH 21315 Introduction to Art, Technology, and Media
- CMST 20400 Problems in the Study of Gender and Sexuality: Media Wars
- CMST 25204 Media Ecology: Embodiment & Software
- CMST 27110 Digital Cinema
- CMST 28003 Issues in Film Sound
- ENGL 25945 Digital Storytelling
- HIPS 25205 Computers, Minds, Intelligence & Data

**Media History**
- CMST 14507 Margins of the Medium: Text/Image
- ENGL 25990 Always Already New - Printed Books & Electronic Texts
- GRMN 27717 Opera in the Age of Its Mechanical Reproducibility
- HIST 29523 Data History: Information Overload from the Enlightenment to Google
- MUSI 26718 Approaches to Live Electronics
- MUSI 26818 History of Electronic Instruments
- TAPS 22600 Chance in Performance

**Media Practice and Design**
- ARTV 22500 Computational Imaging
- ARTV 23804 Experimental Animation: Exploring Manual Techniques
- ARTV 23806 Video Workshop
- CMSC 20900 Computers for Learning
- CMST 23930 Documentary Production I
- CMST 23931 Documentary Production II
- CMST 27920 Virtual Reality Production
- CMST 25954 Alternate Reality Games: Theory and Production
- ENGL 21110 Imagining Futures: Speculative Design and Social Justice
- MUSI 26618 Electronic Music I
- MUSI 26817 Electronic Music II: Introduction to Computer Music
- MUSI 26718 Approaches to Live Electronics
- TAPS 24410 Transmedia Puzzle Design & Performance
- TAPS 24415 Games & Performance

**Electives**

Students will also need two elective courses from offerings in areas such as video game design, transmedia puzzle development, electronic sound design, digital storytelling, algorithmic theater, data visualization,
computational imaging, speculative design, and media history and theory. Any MAAD course may count; students may use outside courses with approval of the director.

Senior Colloquium and Portfolio

To complete the minor, students must enroll in MAAD 29400 Capstone Colloquium. As part of the colloquium, this student cohort would also be required to prepare a portfolio of digital media artworks and/or historical and theoretical writing that they would submit by the end of Winter Quarter of their final year.

SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Media Theory course</td>
<td>100</td>
</tr>
<tr>
<td>One Media History course</td>
<td>100</td>
</tr>
<tr>
<td>One Media Practice and Design course</td>
<td>100</td>
</tr>
<tr>
<td>Two electives</td>
<td>200</td>
</tr>
<tr>
<td>MAAD 29400 Capstone Colloquium</td>
<td>100</td>
</tr>
<tr>
<td>Portfolio</td>
<td>000</td>
</tr>
<tr>
<td>Total Units</td>
<td>600</td>
</tr>
</tbody>
</table>

ADVISING AND GRADING

To apply for the minor, students must receive the director’s approval on a form obtained from the College adviser. This form must then be returned to the College adviser by the end of Spring Quarter of the student’s third year.

Courses in the minor program may not be (1) double counted with the student’s major(s) or with other minors or (2) counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

MEDIA ARTS AND DESIGN COURSES
PROGRAM OF STUDY

The undergraduate program in medieval studies offers an interdisciplinary major that allows students to explore the history, philosophy, theology, and cultural production of the Middle Ages in an integrated and nuanced fashion, through engagement with a diverse array of textual and material artifacts.

PROGRAM REQUIREMENTS

Students interested in majoring in medieval studies must consult the program director as early as possible in order to design a program of study that meets the student's intellectual interests and goals. Twelve courses are required, including at least two courses in history; two courses in language or literature; two courses in art, archeology, architecture, or music; two courses in philosophy or theology; one course in methods and materials; and at least two electives. Students should determine these courses in consultation with the program coordinator.

The program also requires all students to participate in a one-quarter reading and research course, usually in Autumn or Winter Quarter of their fourth year. This course is typically conducted as an independent study with the student's BA paper advisor. The program requires completion of a BA paper of around 25 pages to be submitted by the sixth week of the quarter in which the student is graduating. All papers require a faculty director and a second reader.

SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two courses in history</td>
<td>200</td>
</tr>
<tr>
<td>Two courses in medieval language or literature *</td>
<td>200</td>
</tr>
<tr>
<td>Two courses in art, archeology, architecture, or music</td>
<td>200</td>
</tr>
<tr>
<td>Two courses in philosophy or theology</td>
<td>200</td>
</tr>
<tr>
<td>Two electives</td>
<td>200</td>
</tr>
<tr>
<td>One course in methods and materials **</td>
<td>100</td>
</tr>
<tr>
<td>One reading and research course</td>
<td>100</td>
</tr>
<tr>
<td>BA paper</td>
<td>000</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td>1200</td>
</tr>
</tbody>
</table>

* Medieval language may include such courses as Old French, Old English, Occitan, or Medieval Latin. Students may also enroll in literature courses taught in the target language or in translation. Students who think they may wish to apply to graduate school in a field related to medieval studies are strongly advised to acquire reading competence in at least one medieval language.

** Students may take courses such as paleography, codicology, manuscript studies, or epigraphy, that will allow them to engage directly with medieval source materials and objects. Alternatively, students may enroll in a course like literary theory, aesthetics, or historiography that will help them develop their methodological orientation.

GRADING

All courses must be taken for a quality grade.

HONORS

Consideration for honors is individually arranged with the program coordinator. For candidacy, a student must have completed a BA paper of the highest quality, and have a GPA of at least 3.0 overall and at least 3.5 within the major.

MINOR PROGRAM IN MEDIEVAL STUDIES

The undergraduate program in medieval studies offers an interdisciplinary minor that allows students to explore the history, philosophy, theology, and cultural production of the Middle Ages in an integrated and nuanced fashion, through engagement with a diverse array of textual and material artifacts.

Students interested in the minor in medieval studies should consult the program director as early as possible in order to design a program of study that meets the student's intellectual interests and goals. The minor requires six courses chosen from the College Catalog or the program website (medieval.uchicago.edu/baCourses.shtml), divided among subject areas as follows:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course in history</td>
<td>100</td>
</tr>
<tr>
<td>One course in medieval language or literature *</td>
<td>100</td>
</tr>
<tr>
<td>One course in art, archeology, architecture, or music</td>
<td>100</td>
</tr>
<tr>
<td>One course in philosophy or theology</td>
<td>100</td>
</tr>
</tbody>
</table>
Two electives 200
Total Units 600

* Medieval language may include such courses as Old French, Old English, Occitan, or Medieval Latin. Students may also enroll in literature courses taught in the target language or in translation. Students who think they may wish to apply to graduate school in a field related to medieval studies are strongly advised to acquire reading competence in at least one medieval language.

Students choose courses in consultation with the program director. Students must complete an approval form for the minor program (available on the program website, at medieval.uchicago.edu/minor_consent_form.pdf), which requires the signature of the director of the undergraduate program in medieval studies. Students must submit a copy of the signed approval form to their College adviser by the deadline on the form.

Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for a quality grade, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

MEDIEVAL STUDIES COURSES

Students completing a major or minor in medieval studies may take courses from across the University. Course offerings may include those listed below. For an updated listing of courses being offered in a given quarter please consult medieval.uchicago.edu/baCourses.shtml.

ARTH 16709. Islamic Art & Architecture, 1100-1500. 100 Units.
This course surveys the art and architecture of the Islamic world from 1100-1500. In that period, political fragmentation into multiple principalities challenged a deeply rooted ideology of unity of the Islamic world. The courts of the various principalities competed not only in politics, but also in the patronage of architectural projects and of arts such as textiles, ceramics, woodwork, and the arts of the book. While focusing on the central Islamic lands, we will consider regional traditions from Spain to India and the importance for the arts of contacts with China and the West. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): P. Berlekamp Terms Offered: Autumn
Note(s): This course meets the general education requirement in the arts.
Equivalent Course(s): NEAA 10630, NEHC 16709

FREN 21700. Le Roman De La Rose. 100 Units.
The mid-thirteenth-century Roman de la Rose was arguably the single most influential vernacular text of the (French) Middle Ages. A sprawling, encyclopedic summa composed by two separate authors writing some forty years apart, whether taken as a source of inspiration or an object of condemnation, the Roman de la Rose became an obligatory point of reference for generations of authors. Over the course of the quarter, we will read the conjoined text, each student focusing their reading through a critical optic of their choice (e.g., gender studies, animal studies, ethics and philosophy, reception studies, manuscript studies, etc.). Students will select and read ancillary texts to enrich their understanding of the Rose, and will collaborate with one another to chart a rich and diverse set of interpretive paths through this complex work.
Equivalent Course(s): FNDL 21700, GNSE 27300, FREN 31700

FREN 23217. Merveilleux et vraisemblable du moyen âge au XVIIe siècle. 100 Units.
What if I told you that the real was imaginary and the imaginary was real? This course will explore the concepts of the marvelous, the imaginary, and the real through a selection of French literature from the Middle Ages to the 17th century. The Middle Ages are often perceived as a rigid feudal society. Yet, fairies abound in stories, people shape-shift, and objects magically transform under our eyes. In the 16th century truth appears to harden through advances in science, mathematics, and art. But simultaneously religious schisms, the discovery of the New World, and political anarchy shake the notion of the world’s stable limits to the core. The 17th century is known for Descartes’ rationalism and classical regularity. But even here there is the unexpected, the surprising je ne sais quoi and overwhelming ineffable. Through the literature of each era, we will see how reality often mixes with the marvelous and everything is not always as it seems.
Instructor(s): E. Van Dyke Terms Offered: Spring
Prerequisite(s): FREN 20500
Note(s): Taught in French.
HIST 22407. Medieval England. 100 Units.
How merry was "Olde England"? This course is intended as an introduction to the history of England from the withdrawal of the Roman legions in the early fifth century to the defeat of Richard III at the Battle of Bosworth Field in AD 1485. Sources will include chronicles, biographies, laws, charters, spiritual and political treatises, romances, and parodies. Themes will include the conversion of the Anglo-Saxons to Christianity; the Viking and Norman invasions; the development of the monarchy and parliament; monastic, peasant, and town life; the role of literacy and education in the development of a peculiarly "English" society; and the place of devotion, art, and architecture in medieval English culture. Students will have the opportunity to do a research paper or craft a project of their choice based on the themes of the course.
Instructor(s): R. Fulton Brown Terms Offered: Spring
Equivalent Course(s): HIST 32407

ITAL 23900. Marsilio Ficino's "On Love" 100 Units.
This course is first of all a close reading of Marsilio Ficino's seminal book On Love (first Latin edition De amore 1484; Ficino's own Italian translation 1544). Ficino's philosophical masterpiece is the foundation of the Renaissance view of love from a Neo-Platonic perspective. It is impossible to overemphasize its influence on European culture. On Love is not just a radically new interpretation of Plato's Symposium. It is the book through which sixteenth- and seventeenth-century Europe read the love experience. Our course will analyze its multiple classical sources and its spiritual connotations. During our close reading of Ficino's text, we will show how European writers and philosophers appropriated specific parts of this Renaissance masterpiece. In particular, we will read extensive excerpts from some important love treatises, such as Castiglione's The Courtier (Il cortigiano), Leone Ebreo's Dialogues on Love, Tullia d'Aragona's On the Infinity of Love, but also selections from a variety of European poets, such as Michelangelo's canzoniere, Maurice Scève's Délie, and Fray Luis de León's Poesia.
Instructor(s): A. Maggi Terms Offered: Autumn
Note(s): Course taught in English.
Equivalent Course(s): ITAL 33900, REMS 33900, CMLT 36701, FNDL 21103, CMLT 26701

ITAL 26002. Philosophical Petrarchism. 100 Units.
This course is a close reading of Petrarch's Latin corpus. Readings include the Coronation Oration, The Secret, and selections from Remedies for Fortune Fair and Foul, On Illustrious Men, On Religious Leisure, and The Life of Solitude. Special attention is devoted to Petrarch's letter collections (Letters on Familiar Matters, Letters of Old Age, Book without a Name, etc.) and his invectives. The aim of the course is to familiarize the student with the new and complete Petrarch that emerged in 2004 on the occasion of the 700th anniversary of his birth. Discussion will focus on Petrarch's self-consciousness as the "father of humanism," his relationship to Dante, autobiographism, dialogical inquiry, anti-scholasticism, patriotism, and Petrarch's "civic" reception in the Quattrocento as well as a comparative evaluation of the nineteenth-century Petrarchs of Alfred Mézières, Georg Voigt, and Francesco De Sanctis.
Equivalent Course(s): ITAL 36002, FNDL 25802

ITAL 26401. Torquato Tasso. 100 Units.
This course investigates the entire corpus of Torquato Tasso, the major Italian poet of the second half of the sixteenth century. We read in detail the Gerusalemme Liberata and Aminta, his two most famous works, in the context of their specific literary genre. We then spend some time examining the intricacies of his vast collection of lyric poetry, including passages from his poem "Il mondo creato." We also consider some of his dialogues in prose that address essential issues of Renaissance culture, such as the theories of love, emblematic expression, and the meaning of friendship.
Equivalent Course(s): FNDL 26401, ITAL 36401

NEAA 20522. Archaeology of Islamic Syria-Palestine. 100 Units.
This course is an exploration of the cultural patterns in the Levant from the late Byzantine period down to modern times, a span of some 1500 years. While the subject matter is archaeological sites of this period in Syria, Lebanon, Jordan, and Israel, the focus is on the role of medieval archaeology in amplifying the history of economic and social systems. It is this connective quality of Islamic archaeology that contributes to our understanding of the earlier history and archaeology of this region.
Instructor(s): D. Whitcomb Terms Offered: Autumn
Prerequisite(s): Introductory course in archaeology
Equivalent Course(s): NEAA 30522

NEHC 20501-20502-20503. Islamic History and Society I-II-III.
This sequence meets the general education requirement in civilization studies. This sequence surveys the main trends in the political history of the Islamic world, with some attention to economic, social, and intellectual history. Taking these courses in sequence is recommended but not required.

NEHC 20501. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.
This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): HIST 35704, ISLM 30500, NEHC 30501, CMES 30501, RLST 20501, HIST 25704
NEHC 20502. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, HIST 25804, NEHC 30502, ISLM 30600, CMES 30502

NEHC 20503. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): HIST 25904, NEHC 30503, HIST 35904

NEHC 20601-20602-20603. Islamic Thought and Literature I-II-III.
This sequence explores the thought and literature of the Islamic world from the coming of Islam in the seventh century C.E. through the development and spread of its civilization in the medieval period and into the modern world. Including historical framework to establish chronology and geography, the course focuses on key aspects of Islamic intellectual history: scripture, law, theology, philosophy, literature, mysticism, political thought, historical writing, and archaeology. In addition to lectures and secondary background readings, students read and discuss samples of key primary texts, with a view to exploring Islamic civilization in the direct voices of the people who participated in creating it. All readings are in English translation. No prior background in the subject is required. This course sequence meets the general education requirement in civilization studies. Taking these courses in sequence is recommended but not required.

NEHC 20601. Islamic Thought and Literature I. 100 Units.
This course covers the period from ca. 600 to 950, concentrating on the career of the Prophet Muhammad; Qur'an and Hadith; the Caliphate; the development of Islamic legal, theological, philosophical, and mystical discourses; sectarian movements; and Arabic literature.
Instructor(s): T. Qutbuddin Terms Offered: Autumn
Equivalent Course(s): NEHC 30601, CMES 30601, RLST 20401, HIST 25610, SOSC 22000, ISLM 30601, HIST 35610

NEHC 20602. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the "gunpowder empires" (Ottomans, Safavids, Moghuls).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

NEHC 20603. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Spring
Equivalent Course(s): SOSC 22200, HIST 25616, RLST 20403, ISLM 30603, NEHC 30603, HIST 35616

NEHC 20840. Radical Islamic Pieties: 1200 to 1600. 100 Units.
Some knowledge of primary languages (i.e., Arabic, French, German, Greek, Latin, Persian, Spanish, Turkish) helpful. This course examines responses to the Mongol destruction of the Abbasid caliphate in 1258 and the background to formation of regional Muslim empires. Topics include the opening of confessional boundaries; Ibn Arabi, Ibn Taymiyya, and Ibn Khaldun; the development of alternative spiritualities, mysticism, and messianism in the fifteenth century; and transconfessionalism, antinomianism, and the articulation of sacral sovereignties in the sixteenth century. All work in English. This course is offered in alternate years.
Instructor(s): C. Fleischer Terms Offered: Winter
Prerequisite(s): Consent of instructor
Equivalent Course(s): RLST 20840, HIST 25901, NEHC 30840, HIST 35901
SPAN 21703. Introducción a las literaturas hispánicas: textos españoles clásicos. 100 Units.
This course involves careful reading and discussion of significant works from the Spanish Middle Ages, Renaissance, and the Golden Age, including Juan Manuel’s Conde Lucanor, Jorge Manrique’s Coplas, the anonymous Lazarillo de Tormes, and the theater of Calderón.
Instructor(s): F. de Armas Terms Offered: Autumn Winter
Prerequisite(s): SPAN 20300 or consent of instructor
Institute for Molecular Engineering

The Institute for Molecular Engineering (IME) was founded on the principle of collaborative problem-solving, not rigid academic disciplines. It is at the forefront of an emerging field that has the potential to address fundamental problems of societal import. This exciting new field involves the incorporation of synthetic molecular building blocks into functional systems that will impact technologies from advanced medical therapeutics to quantum computing.

Created in partnership with Argonne National Laboratory, the IME builds on the tradition of collaboration and cutting-edge research well-established at Argonne and the University of Chicago. It conducts research at the intersection of chemical, electrical, mechanical, and biological engineering, as well as materials, biological, and physical sciences. The institute's exploration of innovative technologies in nanoscale manipulation and design at a molecular scale has the potential for impact in such areas as energy, health care, and the environment.

Major Program in Molecular Engineering

The BS degree program in Molecular Engineering offers undergraduates a cutting-edge engineering curriculum built on a strong foundation in mathematics, physics, chemistry, and biology. Majors choose from three quantitative engineering tracks: one track aimed at engineering with a biology emphasis, a track with a focus on chemical and soft materials, and a track geared toward applied physics. The applied physics track, offered in close collaboration with the Department of Physics, is one of the first initiatives worldwide to formally educate quantum engineers at the undergraduate level.

Courses in the major are designed to develop quantitative reasoning and problem-solving skills; to introduce engineering analysis of physical, chemical, and biological systems; and to address open-ended technological questions across a spectrum of disciplines. The aim is to introduce invention and design, along with inquiry and discovery, as fruitful and complementary intellectual activities. The program will both prepare undergraduates for a wide variety of careers in technology-focused industries and position graduates for further postgraduate study in such fields as science, engineering, medicine, business, or law.

Major Program Requirements

1. A strong and broad background in mathematics, physics, chemistry, and biology. It is imperative for a modern engineer to have a strong and broad background in the sciences. Traditional engineering disciplines have had requirements in math, chemistry, and physics for decades and many programs have evolved to require biology as well. The highly interdisciplinary nature of Molecular Engineering requires a foundation built across the mathematical, physical, and biological sciences. Students are encouraged to complete their general education requirements as early in their academic sequence as possible and at the highest level for which they are prepared. This will better position students to take advantage of advanced electives and research opportunities.

   As discussed in more detail below, there are three tracks for Molecular Engineering majors: the Biology Track, the Chemical and Soft Materials Track, and the Quantum Track. Students in the first two tracks will follow precedents set by Chemistry and Biological Sciences majors in that they will likely take chemistry in year 1, physics in year 2, and follow the recommended mathematics courses in the Chemistry curriculum. Students in the Quantum Track will follow precedent set by Physics majors in that they will likely take physics in year 1, follow the mathematics guidelines of Physics majors, and take chemistry in year 2.

2. MENG 26030 Introduction to Engineering Analysis. One of the first courses for all Molecular Engineering majors, this course teaches students to apply mathematical methods towards solving problems that cut across multiple engineering sub-disciplines. A major objective of the course is to teach simple programming skills and computational methods in applied mathematics, including the use of engineering software such as Matlab, Mathematica, and elements of Python. The skills that are introduced here will be further developed and strengthened throughout the rest of the curriculum.

3. Three Molecular Engineering tracks. Reflecting the research and education themes of the IME, three distinct tracks for the major are available to students. One is aimed at preparing students oriented towards biological engineering; another is aimed toward chemical and soft materials, and the other is aimed at preparing students for the engineering of quantum-based materials, devices, and processes.

4. MENG 29511-29512 Engineering Design I-II (200-unit capstone sequence). This design course is a two-quarter sequence that teaches students how to combine fundamental science and engineering to solve open-ended problems, for example, analyzing the chemical and biological properties of cancer cells to develop new treatment and delivery vehicles or harnessing the properties of electrons in materials to develop quantum information technologies. Engineers from industry, the national laboratories, and academia, including IME
faculty and fellows, will propose real-world projects for which they will serve as mentors. Students will work together in small teams throughout the two quarters to address the diverse engineering challenges that arise.

The design course also serves as a vehicle to teach other equally important non-technical skills, including:

- Problem identification: technology analysis, competitive analysis, market analysis, stakeholder analysis, product definition
- Impact of the project, including sociological and engineering ethics
- Project planning
- Project economics: costs, value/investment analysis, risk analysis and adjustment
- Prototyping, experimental design, data analysis, error analysis
- IP: patenting, prior art, patentability
- Legal and regulatory analysis
- Proposing, presenting, and reporting
- Teamwork

For the 2018–19 academic year only, MENG 29500 Engineering Design will be offered in the Winter Quarter as an alternative capstone option. This intensive, 300-unit course covers many of the same principles as MENG 29511-29512 Engineering Design I-II, with an eye toward similar outcomes. MENG 29501 Undergraduate Research Colloquium will no longer be offered or required. The Molecular Engineering department recommends that majors take MENG 29511-29512 Engineering Design I-II rather than MENG 29500, unless their Autumn Quarter schedule makes doing so unfeasible. Students with questions should contact the adviser for Molecular Engineering as early as possible.

5. Advanced electives (four required courses in the major). The major is structured to allow for considerable flexibility for students to tailor their programs along individualized trajectories, with help from faculty advisers. Not only can students choose between multiple tracks, but they can further build breadth or depth through their choice of advanced electives. Moreover, we anticipate that our students will use their general electives outside of the major requirements to strengthen their backgrounds in specific areas of interest, also in consultation with Molecular Engineering advisers, to achieve desired outcomes such as preparation for graduate school in more traditional engineering disciplines.

6. Laboratory skills and hands-on experience. Critical skills that molecular engineers must acquire as part of their educational program include the ability to apply knowledge of mathematics, science, and engineering and the ability to design and conduct experiments, as well as the ability to analyze and interpret data. Molecular Engineering majors develop these skills through lab components associated with required courses in the physical and biological sciences and Molecular Engineering courses including MENG 26101 Transport Phenomena I: Forces and Flows and MENG 26201-26202 Thermodynamics and Statistical Mechanics I-II. We also anticipate that many Molecular Engineering students will receive advanced laboratory experience pursuing undergraduate research projects.

7. Non-technical skills. Many decades of workshops and panels engaging stakeholders in academia and industry, often associated with the Accreditation Board for Engineering and Technology (ABET), have identified criteria for outcomes of students in engineering education programs. Although there is no plan to seek ABET accreditation for the Molecular Engineering major, many ABET criteria, particularly those related to non-technological skills, are viewed as essential to incorporate into the Molecular Engineering major. Examples of student outcomes that fall into this category include: (a) an ability to formulate or design a system, process, or program to meet desired needs, (b) an ability to function on multidisciplinary teams, (c) an understanding of professional and ethical responsibility, (d) an ability to communicate effectively, (e) the broad education necessary to understand the impact of solutions in a global and societal context, (f) a recognition of the need for and an ability to engage in life-long learning, and (g) a knowledge of contemporary issues. Many of these outcomes will be addressed through both the Molecular Engineering degree curriculum (particularly emphasized in the Design sequence) and the College general education requirements. Students who are able to both develop and articulate these skills will be positioned favorably for employment in industry and for postgraduate study in engineering, medicine, law, and business administration.

Entering the Program

Students must indicate their intent to pursue the BS program at the end of the Autumn Quarter in their second year of study by completing the Intent to Pursue Molecular Engineering questionnaire (https://ime.uchicago.edu/students/undergraduates/undergraduate_faq) available on the IME website. They begin the engineering curriculum in the following Spring Quarter with enrollment in either MENG 26010 Engineering Principles of Conservation or MENG 26020 Engineering Electrodynamics. Both courses require the completion of their stated prerequisites. Students should plan with their College advisers early in their first year of study for these prerequisites to be completed in a timely manner.
### Summary of Requirements for the Major in Molecular Engineering: Biology Track

#### General Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 10100</td>
<td>Introductory General Chemistry I</td>
<td>200</td>
</tr>
<tr>
<td>&amp; CHEM 10200</td>
<td>Introductory General Chemistry II (or higher)</td>
<td></td>
</tr>
<tr>
<td>One of the following sequences:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td></td>
</tr>
<tr>
<td>One of the following sequences:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIOS 20186-20187</td>
<td>Fundamentals of Cell and Molecular Biology; Fundamentals of Genetics</td>
<td>200</td>
</tr>
<tr>
<td>&amp; BIOS 20235</td>
<td>Molecular Biology of the Cell and Biological Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units**: 600

#### Major

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11300</td>
<td>Comprehensive General Chemistry III (or higher)</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 13100-13200-13300</td>
<td>Mechanics; Electricity and Magnetism; Waves, Optics, and Heat (or higher)</td>
<td>300</td>
</tr>
<tr>
<td>One of the following sets of three courses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 13300 Elementary Functions and Calculus III OR MATH 15300 Calculus III OR MATH 16300 Honors Calculus III OR MATH 19620 Linear Algebra, AND MATH 20000-20100 Mathematical Methods for Physical Sciences I-II</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 16300 Honors Calculus III, AND MATH 20500 Analysis in Rn III OR MATH 20900 Honors Analysis in Rn III, AND MATH 27300 Basic Theory of Ordinary Differential Equations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MENG 26010</td>
<td>Engineering Principles of Conservation</td>
<td>100</td>
</tr>
<tr>
<td>MENG 26030</td>
<td>Introduction to Engineering Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MENG 26101-26102</td>
<td>Transport Phenomena I: Forces + Flows; Transport Phenomena II</td>
<td>200</td>
</tr>
<tr>
<td>MENG 26201-26202</td>
<td>Thermodynamics and Statistical Mechanics I-II</td>
<td>200</td>
</tr>
<tr>
<td>MENG 29511-29512</td>
<td>Engineering Design I-II</td>
<td>200</td>
</tr>
<tr>
<td>Four advanced electives selected in consultation with the adviser for Molecular Engineering (at least two should be in the Biological Sciences above BIOS 20242).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Units**: 1900

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1. Credit may be granted by examination.
2. Molecular Engineering majors can take these courses without the Biological Sciences prerequisites (BIOS 20150-20151) unless they pursue a double major in the Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic).
3. Open only to students with a 4 or 5 on the AP Biology exam. Upon completion of BIOS 20234-20235-20236, students will be awarded a total of 200 units to be counted toward the general education requirement in the biological sciences.
4. MATH 13300 requires a grade of A- or higher.
5. For 2018–19 only, students may substitute MENG 29500.
6. Students should seek approval from the adviser for Molecular Engineering for their major electives before registering for and completing the courses.
7. Students who enroll in MENG 29500 will need only 300 units of major electives.
### MAJOR

#### CHEM 11300
Comprehensive General Chemistry III (or higher) ¹

#### PHYS 13100-13200-13300
Mechanics; Electricity and Magnetism; Waves, Optics, and Heat (or higher) ³

One of the following sets of three courses: ³

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III OR MATH 15300 Calculus III OR MATH 16300 Honors Calculus III OR MATH 19620 Linear Algebra, AND MATH 20000-20100 Mathematical Methods for Physical Sciences I-II</td>
<td>300</td>
</tr>
<tr>
<td>OR</td>
<td>MATH 16300 Honors Calculus III, AND MATH 20500 Analysis in Rn III OR MATH 20900 Honors Analysis in Rn III, AND MATH 27300 Basic Theory of Ordinary Differential Equations</td>
<td>300</td>
</tr>
</tbody>
</table>

#### MENG 26010
Engineering Principles of Conservation

#### MENG 26030
Introduction to Engineering Analysis

#### MENG 26101-26102
Transport Phenomena I: Forces + Flows; Transport Phenomena II

#### MENG 26201-26202
Thermodynamics and Statistical Mechanics I-II

#### MENG 29511-29512
Engineering Design I-II

One of the following sequences: ³

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (requires a grade of A- or higher)</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td>200</td>
</tr>
</tbody>
</table>

One of the following electives selected in consultation with the adviser for Molecular Engineering: ⁶, ⁷

#### Total Units
1900

---

¹ Credit may be granted by examination.

² Molecular Engineering majors can take these courses without the Biological Sciences prerequisites (BIOS 20150-20151) unless they pursue a double major in the Biological Sciences. They are expected to show competency in mathematical modeling of biological phenomena covered in BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic).

³ Open only to students with a 4 or 5 on the AP Biology exam. Upon completion of BIOS 20234-20235-20236 Molecular Biology of the Cell; Biological Systems; Biological Dynamics, students will be awarded a total of 200 units to be counted toward the general education requirement in the biological sciences.

⁴ MATH 13300 requires a grade of A- or higher.

⁵ For 2018–19 only, students may substitute MENG 29500.

⁶ Students should seek approval from the adviser for Molecular Engineering for their major electives before registering for and completing the courses.

⁷ Students who enroll in MENG 29500 will only need 300 units of major electives.

---

### SUMMARY OF REQUIREMENTS FOR THE MAJOR IN MOLECULAR ENGINEERING: QUANTUM TRACK

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100-13200</td>
<td>Mechanics; Electricity and Magnetism (or higher)</td>
<td>200</td>
</tr>
</tbody>
</table>

One of the following sequences:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II (requires a grade of A- or higher)</td>
<td>200</td>
</tr>
<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
<td>200</td>
</tr>
</tbody>
</table>

**Total Units**

400

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### MAJOR

#### PHYS 13300
Waves, Optics, and Heat (or higher)

One of the following:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13300</td>
<td>Elementary Functions and Calculus III (requires a grade of A- or higher)</td>
<td>100</td>
</tr>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
<td>100</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>CHEM 10100</td>
<td>Introductory General Chemistry I</td>
<td>300</td>
</tr>
<tr>
<td>&amp; CHEM 10200</td>
<td>and Introductory General Chemistry II</td>
<td></td>
</tr>
<tr>
<td>&amp; CHEM 11300</td>
<td>and Comprehensive General Chemistry III (or higher)</td>
<td>1</td>
</tr>
<tr>
<td>One of the following:</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
<td></td>
</tr>
<tr>
<td>MATH 20500</td>
<td>Analysis in Rn III</td>
<td></td>
</tr>
<tr>
<td>MATH 20900</td>
<td>Honors Analysis in Rn III</td>
<td></td>
</tr>
<tr>
<td>PHYS 15400</td>
<td>Modern Physics</td>
<td></td>
</tr>
<tr>
<td>PHYS 23400-23500</td>
<td>Quantum Mechanics I-II</td>
<td>200</td>
</tr>
<tr>
<td>MENG 26020</td>
<td>Engineering Electrodynamics</td>
<td>100</td>
</tr>
<tr>
<td>MENG 26030</td>
<td>Introduction to Engineering Analysis</td>
<td>100</td>
</tr>
<tr>
<td>One of the following sets of two courses: 2</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>MENG 26201-26202</td>
<td>Thermodynamics and Statistical Mechanics I-II</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 19700</td>
<td>Statistical and Thermal Physics, AND PHYS 23600 Solid State Physics OR PHYS 25000 Computational Physics OR CHEM 26300 Chemical Kinetics and Dynamics</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEM 26200</td>
<td>Thermodynamics, AND PHYS 23600 Solid State Physics OR PHYS 25000 Computational Physics OR CHEM 26300 Chemical Kinetics and Dynamics</td>
<td></td>
</tr>
<tr>
<td>MENG 29511-29512</td>
<td>Engineering Design I-II</td>
<td>200</td>
</tr>
<tr>
<td>Four advanced electives selected in consultation with the adviser for Molecular Engineering. 4, 5</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>1900</td>
<td></td>
</tr>
</tbody>
</table>

Credit may be granted by examination; consult the adviser for Molecular Engineering.

Note: PHYS 19700 requires, and CHEM 26200 expects, prior experience with intermediate quantum mechanics; these options are well-suited to, but not exclusively for, students double-majoring in Physics or Chemistry.

For 2018–19 only, students may enroll in MENG 29500.

Students should seek approval from the adviser for Molecular Engineering for their major electives before registering for and completing the courses.

Students who enroll in MENG 29500 will only need 300 units of major electives.

Approved Quantum Track Advanced Electives
All 20000-level Molecular Engineering courses not otherwise required for the major (except those numbered MENG 20XXX and 29XXX)
All 20000-level Physics courses (except PHYS 29100-29200-29300 and PHYS 29700)
Courses in Mathematics and Statistics (no more than two to be used as program electives):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20400</td>
<td>Analysis in Rn II</td>
</tr>
<tr>
<td>or MATH 20800</td>
<td>Honors Analysis in Rn II</td>
</tr>
<tr>
<td>MATH 20500</td>
<td>Analysis in Rn III</td>
</tr>
<tr>
<td>or MATH 20900</td>
<td>(Neither MATH 20500 nor MATH 20900 can be counted</td>
</tr>
<tr>
<td></td>
<td>toward electives if substituted for PHYS 22100.)</td>
</tr>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
</tr>
<tr>
<td>MATH 27200</td>
<td>Basic Functional Analysis</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
</tr>
<tr>
<td>MATH 27400</td>
<td>Introduction to Differentiable Manifolds and Integration on Manifolds</td>
</tr>
<tr>
<td>MATH 27500</td>
<td>Basic Theory of Partial Differential Equations</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
</tr>
<tr>
<td>or STAT 24400</td>
<td>Statistical Theory and Methods I</td>
</tr>
<tr>
<td>STAT 24500</td>
<td>Statistical Theory and Methods II</td>
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</table>

Other courses in the physical sciences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>CHEM 26300</td>
<td>Chemical Kinetics and Dynamics</td>
</tr>
<tr>
<td>CHEM 26800</td>
<td>Computational Chemistry and Biology</td>
</tr>
<tr>
<td>CMSC 23710</td>
<td>Scientific Visualization</td>
</tr>
<tr>
<td>CMSC 28510</td>
<td>Introduction to Scientific Computing</td>
</tr>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
</tr>
</tbody>
</table>
GEOS 23200 Climate Dynamics of the Earth and Other Planets

Courses in the biological sciences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 29326</td>
<td>Introduction to Medical Physics and Medical Imaging</td>
</tr>
</tbody>
</table>

Courses not listed here can satisfy the advanced elective requirement if explicitly approved, on a case-by-case basis, by the adviser for Molecular Engineering.

Sample Major Programs

Below is a sample four-year program for the Chemical and Soft Materials Track. Students should rely on relevant placement tests and on the direction of the College advisers in creating a personal four-year program that accommodates their individual backgrounds and interests. Again, we recommend that students complete their science and mathematics general education requirements at the highest level for which they are prepared.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 15100</td>
<td>MATH 15200</td>
<td>MATH 15300</td>
<td></td>
</tr>
<tr>
<td>CHEM 11100</td>
<td>CHEM 11200</td>
<td>CHEM 11300</td>
<td></td>
</tr>
<tr>
<td>BIOS 20187</td>
<td>BIOS 20187</td>
<td>BIOS 20186</td>
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</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100</td>
<td>PHYS 13200</td>
<td>PHYS 13300</td>
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<tr>
<td>MATH 20000</td>
<td>MATH 20100</td>
<td>MENG 26010</td>
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</tr>
<tr>
<td>BIOS 20187</td>
<td>BIOS 20187</td>
<td>BIOS 20187</td>
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</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENG 26001</td>
<td>MENG 26101</td>
<td>MENG 26201</td>
<td></td>
</tr>
<tr>
<td>MENG 26030</td>
<td>MENG 26201</td>
<td>Advanced Elective</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENG 29511</td>
<td>MENG 29512</td>
<td>Advanced Elective</td>
<td></td>
</tr>
</tbody>
</table>

Below is a sample four-year program for the Quantum Track. Students should rely on relevant placement tests and on the direction of the College advisers in creating a personal four-year program that accommodates their individual backgrounds and interests. Again, we recommend that students complete their science and mathematics general education requirements at the highest level for which they are prepared.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 15100</td>
<td>MATH 15200</td>
<td>MATH 15300</td>
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</tr>
<tr>
<td>PHYS 14100</td>
<td>PHYS 14200</td>
<td>PHYS 14300</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 11100</td>
<td>CHEM 11200</td>
<td>CHEM 11300</td>
<td></td>
</tr>
<tr>
<td>PHYS 22100</td>
<td>PHYS 23400</td>
<td>PHYS 25000</td>
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</tr>
<tr>
<td>PHYS 15400</td>
<td>PHYS 15400</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Third Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENG 26030</td>
<td>MENG 26201</td>
<td>MENG 26202</td>
<td></td>
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<tr>
<td>PHYS 23500</td>
<td>Advanced Elective</td>
<td>Advanced Elective</td>
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<table>
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<tr>
<th>Fourth Year</th>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
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</thead>
<tbody>
<tr>
<td>MENG 29511</td>
<td>MENG 29512</td>
<td>Advanced Elective</td>
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</table>

Minor Program in Molecular Engineering

The minor program in Molecular Engineering is designed for undergraduates majoring in the physical or biological sciences, mathematics, computer science, economics, or related fields. The overall objective of the program is to provide basic engineering tools and ways of thinking to students that augment scientific approaches and problem solving skills.

Minor Program Requirements

Before a student can declare the minor in Molecular Engineering, the student must complete the general education requirements in mathematics and physical sciences along with the course prerequisites for MENG 26010 Engineering Principles of Conservation. Following completion of all requirements, students must meet with the adviser for Molecular Engineering, Dr. Mark Stoykovich (stoykovich@uchicago.edu), to plan a course of study for the minor in the Molecular Engineering program. A student must then receive approval of the minor program on a Consent to Complete a Minor form (https://college.uchicago.edu/sites/college.uchicago.edu/files/Consent_Minor_Program.pdf). The signed form must then be returned to the student's College adviser by
the end of the Spring Quarter of the student’s third year. Deviations from the course plan agreed upon in the Consent to Complete a Minor form require the approval of Dr. Stoykovich and submission of a revised Consent to Complete a Minor form prior to their implementation.

To earn the minor in Molecular Engineering, a student must complete six courses as outlined below. All courses in Molecular Engineering are pre-approved as advanced electives for the minor. Students should seek approval for all advanced electives that are outside of Molecular Engineering before enrolling in those courses. Before meeting with the adviser for Molecular Engineering, students should invest some thought into which courses they would like to complete for the minor and how those courses relate as a set.

Courses in the minor program may not be (1) double counted with the student’s major(s) or with other minors, or (2) counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor in Molecular Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MENG 26010</td>
<td>Engineering Principles of Conservation</td>
<td>100</td>
</tr>
<tr>
<td>MENG 26030</td>
<td>Introduction to Engineering Analysis</td>
<td>100</td>
</tr>
<tr>
<td>MENG 26201-26202</td>
<td>Thermodynamics and Statistical Mechanics I-II</td>
<td>200</td>
</tr>
<tr>
<td>OR</td>
<td>MENG 26101-26102</td>
<td>Transport Phenomena I: Forces + Flows; Transport Phenomena II</td>
</tr>
<tr>
<td>OR</td>
<td>MENG 26101</td>
<td>Transport Phenomena I: Forces and Flows</td>
</tr>
<tr>
<td>AND</td>
<td>MENG 26201</td>
<td>Thermodynamics and Statistical Mechanics I</td>
</tr>
<tr>
<td></td>
<td>Two advanced electives selected in consultation with the IME adviser*</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>600</td>
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</tbody>
</table>

* Students must secure approval before enrolling in courses they wish to use as advanced electives in the minor program.

MINOR PROGRAM IN MOLECULAR ENGINEERING TECHNOLOGY AND INNOVATION

The overall objective of the minor program in Molecular Engineering Technology and Innovation is to introduce basic engineering concepts as they relate to evolving technologies, scientific innovation and entrepreneurship, scientific policy, and the broader impacts of engineering in society. The minor program is open to undergraduates from any major interested in these topics.

Minor Program Requirements

Students must complete the general education requirements in mathematics and physical sciences before declaring the minor in Molecular Engineering Technology and Innovation. Following completion of these requirements, students must meet with the adviser for Molecular Engineering, Dr. Mark Stoykovich (stoykovich@uchicago.edu), to plan a course of study for the minor. This meeting is mandatory and students who fail to have it may not be allowed to complete the minor. Prior to the meeting, students should invest some thought into which courses they would like to complete for the minor and how those courses relate as a set. The student and Dr. Stoykovich will fill out the Consent to Complete a Minor form (https://college.uchicago.edu/sites/college.uchicago.edu/files/Consent_Minor_Program.pdf) jointly, and once the form is signed the student must bring it to the student’s College adviser. Deviations from the course plan agreed upon in the Consent to Complete a Minor form require the approval of Dr. Stoykovich and submission of a revised Consent to Complete a Minor form prior to their implementation.

To earn the minor in Molecular Engineering Technology and Innovation, a student must complete six courses as outlined below. Advanced electives must be chosen in consultation with Dr. Stoykovich. All courses in Molecular Engineering are pre-approved as advanced electives for the minor.

Courses in the minor program may not be (1) double counted with the student’s major(s) or with other minors, or (2) counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor in Molecular Engineering Technology and Innovation

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>MENG 20000</td>
<td>Introduction to Emerging Technologies</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>2 to 5 additional courses in Molecular Engineering</td>
<td>200-500</td>
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</table>
0 to 3 elective courses selected in consultation with the IME adviser * 000-300
Total Units 600

* The following courses are pre-approved for the minor: BIOS 11140, BUSF 34103, BUSF 34106, BUSF 42703, ECON 22600, ECON 22650, ENST 23900, ENST 24705, ENST 26420, HIPS 17502, HIPS 21301, HIPS 25506, PBPL 21800, PBPL 23100, PBPL 24701, PBPL 29000, PHSC 12400, PHSC 12500. Students must secure approval before enrolling in courses that they wish to use as electives in the minor program and that are not on this pre-approved list.

GRADING
In order to qualify for the BS degree, a GPA of 2.0 or higher (with no grade lower than C-) is needed in all courses required in the major. Students majoring in Molecular Engineering must receive quality grades in all courses required in the degree program. All courses in the minors must be taken for quality grades. Non-majors and non-minors may take Molecular Engineering courses on a P/F basis; only grades of C- or higher constitute passing work.

HONORS
Students who pursue a substantive research project with a faculty member of the Institute for Molecular Engineering are encouraged to write and defend an honors thesis based on their work. Students who wish to be considered for honors are expected to complete their arrangements with the director of undergraduate studies before the end of their third year and to register for one quarter of MENG 29700 Undergraduate Research for Molecular Engineering during their third or fourth years.

To be eligible to receive honors, students in the BS degree program must write a creditable honors paper describing their research. The paper must be submitted before the deadline established by the director of undergraduate studies and must be approved by the department chairperson. In addition, an oral presentation of the research is required. The research paper or project used to meet this requirement may not be used to meet the BA/BS paper or project requirement in another major.

To earn a BS degree with honors in Molecular Engineering, students must also have an overall GPA of 3.0 or higher.

MOLECULAR ENGINEERING COURSES

MENG 20000. Introduction to Emerging Technologies. 100 Units.
This course will examine five emerging technologies (stem cells in regenerative medicine, quantum computing, water purification, new batteries, etc.) over two weeks each. The first of the two weeks will present the basic science underlying the emerging technology; the second of the two weeks will discuss the hurdles that must be addressed successfully to convert a good scientific concept into a commercial product that addresses needs in the market place.
Instructor(s): Matthew Tirrell Terms Offered: Autumn
Prerequisite(s): Completion of the general education requirements in mathematics and physical or biological sciences
Equivalent Course(s): MENG 30000

MENG 20200. Introduction to Materials Science and Engineering. 100 Units.
Synthesis, processing and characterization of new materials are the pervasive, fundamental necessities for molecular engineering. Understanding how to design and control structure and properties of materials at the nanoscale is the essence of our research and education program. This course will provide an introduction to molecularly engineered materials and material systems. The course starts with atomic-level descriptions and means of thinking about the structure of materials, and then builds towards understanding nano- and meso-scale materials architectures and their structure-dependent thermal, electrical, mechanical, and optical properties. Strategies in materials processing (heat treatment, diffusion, self-assembly) to achieve desired structure will also be introduced. In the latter part of the course, applications of the major concepts of the course will be studied in quantum materials, electronic materials, energy-related materials, and biomaterials.
Instructor(s): Paul Nealey Terms Offered: Winter
Prerequisite(s): Completion of the general education requirements in mathematics and physical or biological sciences

MENG 21100. Molecular Science and Engineering of Water. 100 Units.
This course will cover the properties of the water molecule, hydrogen bonding, clusters, supercritical water, condensed phases, solutions, confined and interfacial water, clathrates, and nucleation. In addition, methods of water purification, water splitting and fuel cells, water in atmospheric and climate science, and water in biology, health and medicine will be discussed.
Instructor(s): James Skinner Terms Offered: Autumn
Prerequisite(s): MENG 26201 or CHEM 26200 or PHYS 19700 (or concurrent)
Equivalent Course(s): MENG 31100
MENG 21400. Introduction to Applications of Quantum Mechanical Methods to Materials Design. 100 Units.
Introduction to quantum chemistry and density functional theory (DFT) methods to model the properties of molecules and materials. Brief description of numerical techniques to solve the basic equations of quantum chemistry and DFT. Coupling of DFT with molecular dynamics for finite temperature properties. Applications to the description and design of structural properties of materials and molecules, spectroscopic properties (interaction of materials with electromagnetic fields), and transport properties (electronic and heat transport) from first principles.
Instructor(s): Giulia Galli Terms Offered: Autumn
Prerequisite(s): CHEM 26100 or PHYS 23400 or instructor consent

MENG 21600. Bioengineering Kinetics. 100 Units.
This course focuses on the kinetics of biochemical reactions at the molecular level. It aims to address basic questions at the interface between molecular engineering and cell biology. This course will equip students with knowledge and tools to quantitatively solve problems in biochemical systems at dynamics and equilibrium of molecular reactions.
Instructor(s): Jun Huang Terms Offered: Spring
Prerequisite(s): Completion of the first two quarters of a Biological Fundamentals Sequence

MENG 21900. Biological Physics. 100 Units.
This course is an introduction to the physics of living matter. Its goal is to understand the design principles from physics that characterize the condensed and organized matter of living systems. Topics include: basic structures of proteins, nucleotides, and biological membranes; application of statistical mechanics to diffusion and transport; hydrodynamics of low Reynolds number fluids; thermodynamics and chemical equilibrium; physical chemistry of binding affinity and kinetics; solution electrostatics and depletion effect; biopolymer mechanics; cellular mechanics and motions; molecular motors.
Instructor(s): A. Murugan Terms Offered: Spring
Prerequisite(s): PHYS 13300 or PHYS 14300
Note(s): Students majoring in Physics may use this course either as a Physics elective OR as a upper level elective in the Biological Sciences major.
Equivalent Course(s): PHYS 25500, BIOS 21506

MENG 22100. Chemical Kinetics and Reaction Engineering. 100 Units.
This course introduces the fundamental concepts of reaction kinetics, from the molecular mechanisms and reaction rates of chemical reactions to its applied aspects in the reaction engineering of complex chemical systems. Course topics will include elementary reactions and rate laws, collision theory; transition state theory, reaction dynamics, complex reacting systems, the steady-state hypothesis, heterogeneous catalysis, and diffusion-limited systems. The course will draw upon examples of industrial-scale chemical processes to consider the impact of kinetics on the engineering of batch and continuous-flow reactors.
Instructor(s): Xiaoying Liu Terms Offered: Spring
Prerequisite(s): MENG 26102 and MENG 26201

MENG 22500. Introduction to Polymer Science and Engineering. 100 Units.
This course introduces polymer materials and properties with a special emphasis on how these principles are applied in engineering applications. The course will cover a general overview to polymers, basic terminology and definitions, their classification, and their applications. The mechanistic and kinetic behavior of the major classes of polymerization reactions (step-growth, chain addition, and "living" polymerization) will be introduced with respect to control over polymer structure/architecture, size, and properties. The course will also discuss polymer properties, polymer thermodynamics, and basic structure-property relationships that provide polymers with their unique characteristics compared to small molecules. Techniques for characterizing the chemical and physical properties of polymer solutions and melts will be introduced, including osmometry, viscometry, rheometry, gel permeation chromatography, and NMR and IR spectroscopy. Engineering and processing of polymers will be presented in the context of modern, real-world applications (e.g., in structural materials, packaging, membranes, and lithography).
Instructor(s): Stuart Rowan, Paul Nealey Terms Offered: Autumn
Prerequisite(s): MENG 26201 or CHEM 26200
Equivalent Course(s): MENG 32510

MENG 22530. Advanced Polymer Physics. 100 Units.
This course is an advanced introduction to polymer physics taught at a level suitable for senior undergraduates and graduate students in STEM fields. Topics that will be covered include the statistics and conformations of linear chain molecules; polymer brushes; thermodynamics and dynamics of polymers, polymer blends and polymer solutions; phase equilibria; networks, gels, and rubber elasticity; linear viscoelasticity; and thermal and mechanical properties.
Instructor(s): Paul Nealey Terms Offered: Spring
Prerequisite(s): MENG 22500
Equivalent Course(s): MENG 32530
MENG 23100. Applied Numerical Methods in Molecular Engineering. 100 Units.
The course is intended to provide the fundamental tools of numerical methods for problems in molecular engineering. It includes interpolation, integration, minimization techniques, and weighted residuals. Application of the methods towards multi-scale solutions from atomistic to continuum approximations are covered. Finite differences, finite elements, boundary elements, and collocation methods are explained and used in molecular engineering problems. Fundamental concepts of statistical thermodynamics, transport phenomena, electromagnetism, and rheology are revisited.
Instructor(s): Juan Hernandez-Ortiz Terms Offered: Winter
Prerequisite(s): MATH 20000-20100 or PHYS 22000-22100, and CHEM 11300/12300 or PHYS 13300/14300
Equivalent Course(s): MENG 33100

MENG 23110. Applied Mathematical Methods for Pattern Formation in Soft Matter. 100 Units.
Pattern formation in soft matter will be studied with computational techniques. Linear algebra methods will be applied to the solution of partial differential equations related to stability of such patterns. Methods suited to nonlinear effects, such as Galerkin grid-free methods among others, will be presented and used to study spatial modulation of ideal linear patterns, nonlinear saturation of exponential growth, and non-potential evolution equations. Familiarity with linear algebra and some background in computer programming are expected as prerequisites.
Equivalent Course(s): MENG 33110

MENG 23310. Experimental Techniques and Advanced Instrumentation. 100 Units.
This course aims to provide students with a knowledge of state-of-the-art experimental measurement techniques and laboratory instrumentation for applications in broad scientific research environments, as well as industrial and general engineering practice. Topics include atomic-scale structural and imaging methods, electronic transport in low dimensional matter, magnetic and optical characterization of materials. Basic concepts in electronic measurement such as lock-in amplifiers, spectrum and network analysis, noise reduction techniques, cryogenics, thermometry, vacuum technology, as well as statistical analysis and fitting of data will also be discussed.
Instructor(s): David Awschalom Terms Offered: Spring
Prerequisite(s): Completion of PHYS 23400 & PHYS 23500 for undergraduates
Equivalent Course(s): MENG 33310

MENG 23330. Physics of Solid-State Nano-electronic Devices. 100 Units.
This course covers the fundamental concepts needed to understand nano-electronic solid-state devices. After an overview of the basic properties of semiconductors and electronic transport in semiconductors, the p-n junction, the metal-insulator-semiconductor (MIS) structure and diode are introduced. Following this, we will describe the physics behind four types of devices that all of us use every day and which have collectively changed the world: transistors, light emitting diodes (LEDs), lasers, and solid state memories. We will study the field effect transistor (FET) and describe metal-oxide-semiconductor-field-effect-transistor (MOSFET) technology, then introduce the light-emitting diode (LED) and the semiconductor injection laser. Following this, we will cover the physics behind some of the most common memories used today: the dynamic random access memory (DRAM) and Flash memories. Some simple circuits using these solid-state elements will be covered if time permits. The course is specifically tailored for undergraduate students, however it is also appropriate for graduate students who have less exposure to device physics and would like to learn about the subject.
Instructor(s): Supratik Guha Terms Offered: Autumn
Prerequisite(s): CHEM 26200 or PHYS 23500 or instructor consent
Equivalent Course(s): MENG 33330

MENG 23400. Applied Probability For Engineers. 100 Units.
Not offered in 2018-19 academic year.
Equivalent Course(s): MENG 33400

MENG 23500. Foundations of Quantum Optics. 100 Units.
Quantum optics seeks to illuminate the fundamental quantum mechanics of the interaction of light and matter. These principles can form the basis for quantum technologies in areas such as cryptography, computation, and metrology. This course provides a foundation in the fundamental principles and applications of quantum optics. Topics to be discussed may include Fermi’s Golden Rule, interaction of two-level atoms and light, spontaneous emission, Rabi oscillations, classical and non-classical photon statistics, beam splitters, atom cavity interaction, vacuum-Rabi splitting, coherence, entanglement, and teleportation. The course will assume that students are comfortable with single-particle quantum mechanics at the level of a typical introductory graduate-level course.
Instructor(s): Alex High Terms Offered: Winter
Prerequisite(s): Equivalent to PHYS 23400-23500 or CHEM 26100
Equivalent Course(s): MENG 33500
MENG 23700. Quantum Computation. 100 Units.
This course provides an introduction to the fundamentals of quantum information to students who have not had training in quantum computing or quantum information theory. Some knowledge of quantum mechanics is expected, including bra-ket notation and the time-dependent form of Schroedinger’s equation. Students will learn how to carry out calculations and gain a fundamental grasp of topics that will include some or all of: Entanglement, teleportation, quantum algorithms, cryptography, and error correction.
Instructor(s): Andrew Cleland Terms Offered: Winter
Prerequisite(s): PHYS 22100 or equivalent
Equivalent Course(s): MENG 33700

MENG 23800. Introduction to Nanofabrication. 100 Units.
This course will cover the fundamentals of nanofabrication from a practical viewpoint and will be very useful for students planning on pursuing research involving semiconductor processing technology, as well as broader topics such as microelectromechanical systems (MEMS), quantum devices, optoelectronics, and microfluidics. This course will cover the theory and practice of lithographic patterning; physical and chemical vapor deposition; reactive plasma etching; wet chemical processing; characterization techniques; and other special topics related to state-of-the-art processes used in research and development of nanoscale devices. A good grounding in introductory chemistry and physics is expected.
Instructor(s): Peter Duda Terms Offered: Winter
Prerequisite(s): PHYS 13300 and CHEM 10200 or equivalent
Equivalent Course(s): MENG 33800

MENG 24100-24200. Selected Topics in Molecular Engineering: Molecular/Materials Modelling I-II.
Molecular modeling seeks to develop models and computational techniques for prediction of the structure, thermodynamic properties, and non-equilibrium behavior of gases, liquids, and solids from knowledge of intermolecular interactions.

MENG 24100. Selected Topics in Molecular Engineering: Molecular/Materials Modelling I. 100 Units.
This course will introduce students to the methods of molecular modeling. The topics covered will include an introduction to the origin of molecular forces, a brief introduction to statistical mechanics and ensemble methods, and an introduction to molecular dynamics, Brownian dynamics, and Monte Carlo simulations. The course will also cover elements of advanced sampling techniques, including parallel tempering, umbrella sampling, and other common biased sampling approaches. Course work or research experience is strongly recommended in: (1) elementary programming (e.g., C or C++), and (2) physical chemistry or thermodynamics.
Instructor(s): Juan de Pablo Terms Offered: Winter
Prerequisite(s): MATH 20000 and MATH 20100, or PHYS 22000 and PHYS 22100
Equivalent Course(s): MENG 34100

MENG 24200. Selected Topics in Molecular Engineering: Molecular/Materials Modelling II. 100 Units.
Quantum mechanical methods, including quantum chemistry, density functional theory (DFT) and many body perturbation theory to simulate the properties of molecules and materials. Numerical algorithms and techniques to solve approximate forms of the Schroedinger and Boltzmann Equations to model structural and transport properties of molecules and materials. Coupling of DFT with molecular dynamics and advanced sampling methods to study finite temperature properties. Coupling of DFT with spin Hamiltonians to study dynamical spin correlations in materials. Examples of applications to materials for energy conversion, and quantum information technologies.
Instructor(s): Giulia Galli Terms Offered: Spring
Prerequisite(s): MENG 24100
Equivalent Course(s): MENG 34200

MENG 24200. Selected Topics in Molecular Engineering: Molecular/Materials Modelling II. 100 Units.
Quantum mechanical methods, including quantum chemistry, density functional theory (DFT) and many body perturbation theory to simulate the properties of molecules and materials. Numerical algorithms and techniques to solve approximate forms of the Schroedinger and Boltzmann Equations to model structural and transport properties of molecules and materials. Coupling of DFT with molecular dynamics and advanced sampling methods to study finite temperature properties. Coupling of DFT with spin Hamiltonians to study dynamical spin correlations in materials. Examples of applications to materials for energy conversion, and quantum information technologies.
Instructor(s): Giulia Galli Terms Offered: Spring
Prerequisite(s): MENG 24100
Equivalent Course(s): MENG 34200
MENG 24300. The Engineering and Biology of Tissue Repair. 100 Units.
In this course, students will gain an understanding of the science and application of tissue engineering, a field that seeks to develop technologies for restoring lost function in diseased or damaged tissues and organs. The course will first introduce the underlying cellular and molecular components and processes relevant to tissue engineering: extracellular matrices, cell/matrix interactions such as adhesion and migration, growth factor biology, stem cell biology, inflammation, and innate immunity. The course will then discuss current approaches for engineering a variety of tissues, including bone and musculoskeletal tissues, vascular tissues, skin, nerve, and pancreas. Students will be assessed through in-class discussions, take-home assignments and exams, and an end-of-term project on a topic of the student's choice.
Instructor(s): Jeffrey Hubbell Terms Offered: Spring
Prerequisite(s): BIOS 20186 or BIOS 20234
Equivalent Course(s): MPMM 34300, BIOS 21507, MENG 34300

MENG 24310. Cellular Engineering. 100 Units.
Cellular engineering is a field that studies cell and molecule structure-function relationships. It is the development and application of engineering approaches and technologies to biological molecules and cells. This course is intended to be a bridge between engineers and biologists, to quantitatively study cells and molecules and develop future clinical applications. Topics include fundamental cell and molecular biology; immunology and biochemistry, receptors, ligands, and their interactions; nanotechnology/biomechanics; enzyme kinetics; molecular probes; cellular and molecular imaging; single-cell genomics and proteomics; genetic and protein engineering; and drug delivery and gene delivery.
Instructor(s): Jun Huang Terms Offered: Winter
Prerequisite(s): Completion of the first two quarters of a Biological Fundamentals Sequence
Equivalent Course(s): MENG 34310, BIOS 21508, MOMN 34310

MENG 24500. Microfluidics and Its Applications. 100 Units.
Precision control of fluids at the micrometer scale (hence microfluidics) provides unprecedented capabilities in manipulation and analysis of cells and proteins. Moreover, fluids and particles behave in fundamentally different ways when confined to small dimensions, making microfluidics an interesting topic of basic research. This course aims to provide students with theoretical knowledge and practical skills on the use of microfluidics for the manipulation and analysis of physical, chemical, and biological systems. We will first survey theoretical concepts regarding microfluidics. We will then focus on design considerations and fabrication methods for multi-layer microfluidic chips using PDMS soft-lithography. We will learn how to fabricate, multiplex, and control PDMS membrane valves and integrate them into high-throughput analytical systems. We will survey recent developments in microfluidics and its scientific and industrial applications. Biological systems analysis in cell sorting, culture, cell signaling, single molecule detection, digital nucleic acid and protein quantification, and biosensing are some of the applications we will cover. This course will have a laboratory component where students will design, fabricate, and use microfluidic devices and therefore acquire hands-on skills in microfluidic engineering.
Instructor(s): Savas Tay Terms Offered: Spring
Prerequisite(s): MATH 13300 (or higher), or MATH 13200 (or higher) plus BIOS 20151 or BIOS 20152 or BIOS 20236
Equivalent Course(s): MENG 34500

MENG 24600. Quantitative Systems Biology. 100 Units.
This course aims to provide students with knowledge on the use of modern methods for the analysis, manipulation, and modeling of complex biological systems, and to introduce them to some of the most important applications in quantitative and systems biology. We will first survey theoretical concepts and tools for analysis and modeling of biological systems like biomolecules, gene networks, single cells, and multicellular systems. Concepts from information theory, biochemical networks, control theory, and linear systems will be introduced. Mathematical modeling of biological interactions will be discussed. We will then survey quantitative experimental methods currently used in systems biology. These methods include single cell genomic, transcriptomic, and proteomic analysis techniques, in vivo and in vitro quantitative analysis of cellular and molecular interactions, single molecule methods, live cell imaging, high throughput microfluidic analysis, and gene editing. Finally, we will focus on case studies where the quantitative systems approach made a significant difference in understanding of fundamental phenomena like signaling, immunity, and development, and diseases like infection, autoimmunity, and cancer.
Instructor(s): Savas Tay Terms Offered: Winter
Prerequisite(s): Completion of the first two quarters of a Biological Fundamentals Sequence
Equivalent Course(s): MENG 34600
MENG 25100. Electrochemical Principles and Methods. 100 Units.
This course will cover topics related to basic electrochemical principles, methodologies, and systems. In particular, students will be given an overview of fundamental concepts related to electrochemical potential, electric double layer, electrode kinetics, and mass transport processes. In addition, the application of key electrochemical experimental methods will be covered. A few examples include cyclic voltammetry, AC impedance spectroscopy, and the rotating disk electrode. Throughout the course, students will apply basics principles of thermodynamics, kinetics, and transport phenomena. Lastly, a brief overview of traditional electrochemical systems and emerging technologies related to energy storage and conversion (e.g., lithium-ion batteries, flow batteries, and fuel cells) and bioelectronics applications will be discussed.
Instructor(s): Shrayesh Patel Terms Offered: Spring
Prerequisite(s): Undergraduates must have completed MENG 26102 AND MENG 26201
Equivalent Course(s): MENG 35100

MENG 26010. Engineering Principles of Conservation. 100 Units.
This course is a precursor to both the thermodynamics and transport sequences. Students will be introduced to the mathematical framework of Reynold's transport theorem from a general perspective and in different forms (algebraic, integral and differential), and apply that framework to a wide variety of problems that involve changes in mass, energy, and momentum. Using scaling approximations and dimensional analysis to obtain an intuitive understanding of the mathematical framework will also be emphasized throughout. These concepts will then be carried over to, and reinforced in, the transport and thermodynamics courses that follow sequentially.
Instructor(s): Mark Stoykovich Terms Offered: Spring
Prerequisite(s): MATH 20100, 20500 or PHYS 22100, plus CHEM 11300 or PHYS 13300

MENG 26020. Engineering Electrodynamics. 100 Units.
This is an advanced course in electromagnetism with an engineering focus. Requires good preparation in freshman-level, calculus-based, electrostatics and magnetostatics; also preparation in vector calculus.
Instructor(s): Andrew Cleland Terms Offered: Spring
Prerequisite(s): PHYS 13300 or PHYS 14300, and MATH 20100 or PHYS 22100 or concurrent enrollment in MATH 20500 or MATH 20900

MENG 26030. Introduction to Engineering Analysis. 100 Units.
This course will expose students to enabling numerical algorithms and computational methods for molecular engineering. These numerical methods include root finding, solving systems of linear and non-linear equations, general minimization techniques, optimization strategies, and regression analysis. Numerical integration including Runge-Kutta methods, as well as methods for solving ODEs (i.e., initial value problems and boundary value problems) and PDEs, will also be introduced. A key focus of the course will be to introduce the students to basic structured programming in MATLAB or Python that will provide a foundational tool for applying such algorithms throughout the MENG coursework.
Instructor(s): Mark Stoykovich Terms Offered: Autumn
Prerequisite(s): MENG 26010 or MENG 26020

MENG 26101-26102. Transport Phenomena I: Forces + Flows; Transport Phenomena II.
The sequence will expose students to basic topics in continuum mechanics, with a focus on momentum transfer (part I) and energy and mass transfer (part II).

MENG 26101. Transport Phenomena I: Forces and Flows. 100 Units.
This course will expose students to basic topics in continuum mechanics, with a focus on momentum transfer. Course topics include an overview of tensor mathematics, forces and inertia, Bernoulli’s Equation, Navier-Stokes Equations, and standard examples of Navier-Stokes flows, including Poiseuille flow, falling films, and flow around a sphere. For each of these topics, examples will be provided with dimensionless and scaling analysis to accompany problem solution. Analysis will include computation of approximate solutions, determination of when an approximate solution is adequate and, given the assumptions made, what the limitations of any solution are. Laboratory exercises in microfluidics will be included. (L)
Instructor(s): Shrayesh Patel Terms Offered: Autumn
Prerequisite(s): MENG 26101

MENG 26102. Transport Phenomena II. 100 Units.
This course will expose students to basic topics in continuum mechanics, with a focus on energy and mass transfer. Course topics include an overview of the physical and mathematical basis of diffusion, Fick’s law and definition of fluxes for description in the form of differential equations, a reminder of the Reynolds Transport Theorem and differential forms for mass and energy transfer, mass balances in non-reacting systems (with multiple examples), mass balances with chemical reactions, energy balances, and combined energy and mass balances with chemical reactions.
Instructor(s): M. Tirrell, M. Swartz, A. Esser-Khan Terms Offered: Winter
Prerequisite(s): MENG 26101
MENG 26102. Transport Phenomena II. 100 Units.
This course will expose students to basic topics in continuum mechanics, with a focus on energy and mass transfer. Course topics include an overview of the physical and mathematical basis of diffusion, Fick’s law and definition of fluxes for description in the form of differential equations, a reminder of the Reynolds Transport Theorem and differential forms for mass and energy transfer, mass balances in non-reacting systems (with multiple examples), mass balances with chemical reactions, energy balances, and combined energy and mass balances with chemical reactions.
Instructor(s): M. Tirrell, M. Swartz, A. Esser-Khan Terms Offered: Winter
Prerequisite(s): MENG 26101

MENG 26201-26202. Thermodynamics and Statistical Mechanics I-II.
This sequence covers Thermodynamics and Statistical Mechanics.

MENG 26201. Thermodynamics and Statistical Mechanics I. 100 Units.
This course will include an introduction to postulates of thermodynamics, thermodynamic properties of pure substances, and engineering applications relying on thermodynamic cycles (including engines, heat pumps, and refrigeration). An introduction to statistical mechanics and its connection to molecular thermodynamics will also be included among the course topics. (L)
Instructor(s): Juan de Pablo Terms Offered: Winter
Prerequisite(s): MENG 26030

MENG 26202. Thermodynamics and Statistical Mechanics II. 100 Units.
This course will address the thermodynamics of mixtures. It will include an introduction to phase transformations in mixtures and engineering applications (including separation processes), an introduction to molecular models and simple statistical mechanical theories of mixtures, and the prediction of thermodynamic properties from molecular models. (L)
Instructor(s): Mark Stoykovich Terms Offered: Spring
Prerequisite(s): MENG 26201

MENG 27100. Biological Materials. 100 Units.
In this course, students will gain an understanding of the science and application of biomaterials, a field that utilizes fundamental principles of materials science with cell biology for applications in therapeutics and diagnostics. The course will introduce the basic classes of biomaterials, considering metals used in medicine, ceramics and biological inorganic materials such as hydroxyapatite, and polymers used in medicine. The basis of protein adsorption modulating biological interactions with these materials will be elaborated. Examples to be covered in the course will include polymers used in drug delivery, polymers used in protein therapeutics, polymers used in degradable biomaterial implants, polymers used in biodiagnostics, and hybrid and polymeric nanomaterials used as bioactives and bioactive carriers. An emphasis in the course will be placed on bioactive materials development. Students will be assessed through in-class discussions, take-home assignments and exams, and an end-of-term project on a topic of the student’s choice.
Instructor(s): Jeffrey Hubbell Terms Offered: Autumn
Prerequisite(s): Undergraduates must have completed BIOS 20186 and BIOS 20187. This course does not meet the requirements for the Biological Sciences major.
Equivalent Course(s): MENG 37100

MENG 27200. Electronic and Quantum Materials for Technology. 100 Units.
This is a one-quarter introductory course on the science and engineering of electronic and quantum materials. The intended audience is upper-level undergraduate students and first-year graduate students in Molecular Engineering and other related fields, including Chemistry and Physics. We will learn the basics of electrical and optical properties of electronic materials, including semiconductors, metals, and insulators starting from a simple band picture, and will discuss how these materials enable modern electronic and optoelectronic devices and circuitry. We will also explore the modern synthesis techniques for these materials and the effects of reduced dimensions and emergent quantum properties. No comprehensive exposure to quantum mechanics, thermodynamics, or advanced mathematical skills will be assumed, even though working knowledge of these topics will be helpful.
Instructor(s): Jiwoong Park Terms Offered: Spring
Prerequisite(s): CHEM 26200 or PHYS 23500 or instructor consent
Equivalent Course(s): MENG 37200
MENG 27300. Polymer Physics. 100 Units.
This course is an advanced introduction to polymer physics taught at a level suitable for senior undergraduates and graduate students in STEM fields. Topics that will be covered include the statistics and conformations of linear chain molecules; polymer brushes; thermodynamics and dynamics of polymers, polymer blends and polymer solutions; phase equilibria; networks, gels, and rubber elasticity; linear viscoelasticity; and thermal and mechanical properties.
Instructor(s): Paul Nealey, Stuart Rowan
Terms Offered: Spring
Prerequisite(s): MENG 22500
Equivalent Course(s): MENG 32500

MENG 27320. Polymer Synthesis. 100 Units.
This course introduces the most important polymerization reactions, focusing on their reaction mechanisms and kinetic aspects. Topics include free radical and ionic chain polymerization, step-growth polymerization, ring-opening, insertion, controlled addition polymerization, crosslinking and chemical modification of preformed polymers.
Instructor(s): Stuart Rowan
Terms Offered: Winter
Prerequisite(s): CHEM 22000 and CHEM 22100
Equivalent Course(s): MENG 32520

MENG 29500. Engineering Design. 300 Units.
This 300 unit “immersion” design course teaches students how to bring combinations of the fundamental science and engineering pieces of the curriculum together to solve open-ended and challenging engineering problems. It also serves as a vehicle to teach other equally important non-technical skills.
Instructor(s): Mark Stoykovich
Terms Offered: Winter. To be offered for the last time in 2018-2019.
Prerequisite(s): Instructor consent required

MENG 29511-29512. Engineering Design I-II.
The project-based design courses combine fundamental science and engineering skills to solve open-ended and challenging engineering problems selected among those encountered in the biology, chemical and soft materials, and quantum fields. Specific objectives for the courses include learning how to define a technical problem and how to propose solutions, applying scientific and engineering knowledge to solve real-world problems, and developing an operating plan with defined sub-tasks and project timelines. Additional emphasis will be placed on enhancing skills to communicate results clearly and concisely to various audiences, access and manage resources to achieve objectives, work as part of a team, and interact with external mentors and project managers. These courses also serve as a vehicle to teach other equally important non-technical skills, such as professional and ethical responsibilities in engineering and the impact of engineering in a societal context.

MENG 29511. Engineering Design I. 100 Units.
First quarter of Engineering Design.
Instructor(s): Mark Stoykovich, Xiaoying Liu
Terms Offered: Autumn
Prerequisite(s): Instructor consent required

MENG 29512. Engineering Design II. 100 Units.
Second quarter of Engineering Design.
Instructor(s): Mark Stoykovich, Xiaoying Liu
Terms Offered: Winter
Prerequisite(s): Completion of MENG 29511

MENG 29512. Engineering Design II. 100 Units.
Second quarter of Engineering Design.
Instructor(s): Mark Stoykovich, Xiaoying Liu
Terms Offered: Winter
Prerequisite(s): Completion of MENG 29511

MENG 29700. Undergraduate Research for Molecular Engineering. 100 Units.
IME faculty will offer one-quarter research experiences for all students enrolled in the minor. A quality grade will be given based on performance in this course. In order to assign a quality grade, an agreement between the sponsoring IME faculty member and each student will be made that includes: (1) the content and scope of the project, (2) expectations for time commitment, (3) a well-defined work plan with timelines for particular experiments or calculations to be accomplished (in a true research experience of the sort we intend to offer, of course, timelines for results can’t be constructed in advance), and (4) a summary of academic goals-such as demonstrating knowledge of the literature and developing communication skills (e.g., though presentations at group meetings).
Instructor(s): IME Faculty
Terms Offered: Autumn Spring Winter
Prerequisite(s): Faculty Consent
Note(s): If a student cannot engage an IME faculty research sponsor on their own, the student should consult with the Director of Undergraduate Studies, Institute for Molecular Engineering, Professor Paul Nealey.
MUSIC

Department Website: http://music.uchicago.edu

PROGRAM OF STUDY

The Department of Music aims to broaden the exposure to and enrich the understanding of the various musical traditions of the world. Courses address the materials of tonal music in the Western tradition, the analysis of individual works, the study of composers and genres, non-Western and vernacular repertories, musical composition, critical approaches to music, and the role of music in society. The BA program in music provides a background both for graduate work in music and for study in other fields. The department also sponsors a number of performance organizations and concert series.

Courses for Nonmajors: General Education

Students seeking to meet the general education requirement in the arts with music courses must choose from among the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 10100</td>
<td>Introduction to Western Art Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10200</td>
<td>Introduction to World Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10300</td>
<td>Introduction to Music: Materials and Design</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 10400</td>
<td>Introduction to Music: Analysis and Criticism</td>
<td>100</td>
</tr>
</tbody>
</table>

Students seeking to meet the general education requirement in civilization studies may select the following two-quarter sequence. These courses are open to all students, regardless of previous musical background.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 12100-12200</td>
<td>Music in Western Civilization I-II</td>
<td>200</td>
</tr>
</tbody>
</table>

Other Courses for Nonmajors

In addition to the general education courses, the department offers MUSI 14300 Music Theory Fundamentals for students who have had little or no exposure to reading music. Students who can read music comfortably can take the three-quarter sequence MUSI 15100-15200-15300 Harmony and Voice Leading; a placement examination for this series of courses is given during the first week of Autumn Quarter. Courses numbered from 20000 to 29900 are open to students who have passed a course at the 10000 level or who have equivalent musical background. In addition, courses designed for the major (MUSI 25000 to 29900), as well as certain graduate courses, are open to qualified College students who are not majoring in music, with consent of the instructor.

Students in other programs of study may also complete a minor in music. Information follows the description of the major.

BA PROGRAM REQUIREMENTS

The program for the bachelor's degree in music offers a balance of practical, historical, and conceptual approaches to music.

Students are required to earn at least 1200 units of music course work and participate for at least three quarters in one of the Music Department's major ensembles (numbered MUSI 17000-MUSI 17999).

Students should begin the major by taking the three-quarter, 300-unit sequence MUSI 15100-15200-15300 Harmony and Voice Leading. Students follow this introductory sequence with the following:

1. MUSI 27100-27200-27300 Topics in the History of Western Music I-II-III, a yearlong sequence that covers topics in the history of Western art music;
2. MUSI 23300 Introduction to the Social and Cultural Study of Music;
3. MUSI 28500 Musicianship Skills, a yearlong course (see below for details), and
4. Four additional courses numbered MUSI 20000 or above.

MUSI 27100-27200-27300 Topics in the History of Western Music I-II-III is now offered every year, thus making it possible to complete the major within the space of two years. However, it is highly advisable for students to take MUSI 15100-15200-15300 Harmony and Voice Leading before the MUSI 270s sequence, i.e., during their first or second year.

MUSI 28500 Musicianship Skills is a yearlong, 100-unit course that should be taken after the MUSI 15100-15200-15300 Harmony and Voice Leading sequence. Though students are expected to participate in Musicianship Skills for the full year, the Autumn and Winter Quarter enrollments are worth zero units; credit is earned upon completion of the yearlong course via enrollment in Spring Quarter. To meet requirements for full-time student status, students must be enrolled in at least three other courses (300–400 units) during Autumn and Winter Quarters.

Students must arrange a formal consultation with the director of undergraduate studies before declaring music as their major. Declaration is formalized via my.uchicago.edu.
**Music**

**Summary of Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 15100-15200-15300</td>
<td>Harmony and Voice Leading</td>
<td>300</td>
</tr>
<tr>
<td>MUSI 23300</td>
<td>Introduction to the Social and Cultural Study of Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 27100-27200-27300</td>
<td>Topics in the History of Western Music I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>Four additional courses numbered MUSI 20000 or above</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>MUSI 28500</td>
<td>Musicianship Skills (100 units granted at end of third quarter of participation)</td>
<td>100</td>
</tr>
</tbody>
</table>

Participation for at least three quarters in one of the Music Department’s major ensembles

Total Units 1200

* MUSI 28500 Musicianship Skills is a yearlong course. One quarter’s credit (100 units) is granted by completion of the Spring Quarter enrollment. To meet requirements for full-time student status, students must carry at least three additional courses in Autumn and Winter Quarters.

**Composition**

Students whose interest lies in composition are advised to take MUSI 26100 Introduction to Composition as one of their electives in the major. It is designed for students wishing to learn composition or to improve their compositional technique. Students pursuing composition, particularly those intending to apply to graduate school in music composition, are also advised to take such courses as:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 25300</td>
<td>Analysis of Twentieth-Century Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 26100</td>
<td>Introduction to Composition</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 26618</td>
<td>Electronic Music I</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 26817</td>
<td>Electronic Music II: Introduction to Computer Music</td>
<td>100</td>
</tr>
<tr>
<td>MUSI 26900</td>
<td>Eighteenth-Century Counterpoint</td>
<td>100</td>
</tr>
</tbody>
</table>

By making special arrangements with a composition instructor, students may also register for composition lessons by using MUSI 29700 Independent Study in Music as an elective.

**Ethnomusicology**

Students wishing to specialize in ethnomusicology in the context of a music major are advised to take MUSI 10200 Introduction to World Music for their general education requirement in the arts in addition to MUSI 23300 Introduction to the Social and Cultural Study of Music; these will provide grounding in musical styles and repertoires, as well as the techniques and methods of study central to ethnomusicology. Other courses can be selected at the 23000 level, allowing students to build up specific areas of expertise in fields such as jazz, popular music, Middle Eastern music, and South Asian music. Students considering graduate studies in ethnomusicology are strongly advised to take the MUSI 29500 Undergraduate Honors Seminar and write an honors thesis with a focus on an ethnomusicalogical topic.

**Grading**

Courses used to meet the general education requirement in the arts must be taken for a quality grade. Courses taken to meet requirements in the major or minor also must be taken for a quality grade.

**Honors**

Students may be recommended for honors if they (1) have a GPA of at least 3.0 overall and at least 3.5 in the major, and (2) present an outstanding senior thesis or composition under the approved supervision of a faculty member in the Department of Music. Registration in MUSI 29900 Senior Essay or Composition may be devoted to the preparation of the senior thesis or composition during the student’s fourth year. This research paper or project may not be used to meet the BA paper or project requirement in another major. The optional MUSI 29500 Undergraduate Honors Seminar, typically offered each Spring Quarter, is designed to prepare third-year students to write an honors essay. Students seeking honors should speak with the director of undergraduate studies no later than Winter Quarter of their third year.

**Minor Program in Music**

The minor program in music requires the completion of seven courses and the student’s registration for at least three quarters in one of the Music Department’s major ensembles with the consent of the director of undergraduate studies. Students who elect the minor program in music must meet with the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. The director’s approval for the minor program should be submitted to a student’s College adviser by this deadline on a form obtained from the adviser.

No courses in the minor can be double counted with the student’s major(s) or with other minors; nor can they be counted toward general education requirements. They must be taken for quality grades and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.
Summary of Requirements: Minor Program in Music

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 15100-15200-15300</td>
<td>Harmony and Voice Leading</td>
<td>300</td>
</tr>
<tr>
<td>Four additional music courses numbered as MUSI 20000 or above</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>Participation for at least three quarters in one of the Music Department's major ensembles</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td>700</td>
</tr>
</tbody>
</table>

**Performance Organizations**

Membership in the Department of Music performance organizations is open to qualified students from all areas of the University through competitive auditions held at the beginning of Autumn Quarter. Most organizations rehearse weekly. For further information, students should visit the University of Chicago Music Performance Program website at music.uchicago.edu/page/ensembles-and-programs-overview or contact Barbara Schubert, director of performance programs, at b-schubert@uchicago.edu.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 17000</td>
<td>University Chorus</td>
</tr>
<tr>
<td>MUSI 17001</td>
<td>Motet Choir</td>
</tr>
<tr>
<td>MUSI 17002</td>
<td>Women's Ensemble</td>
</tr>
<tr>
<td>MUSI 17003</td>
<td>Rockefeller Chapel Choir</td>
</tr>
<tr>
<td>MUSI 17010</td>
<td>University Symphony Orchestra</td>
</tr>
<tr>
<td>MUSI 17011</td>
<td>University Chamber Orchestra</td>
</tr>
<tr>
<td>MUSI 17012</td>
<td>University Wind Ensemble</td>
</tr>
<tr>
<td>MUSI 17020</td>
<td>Early Music Ensemble</td>
</tr>
<tr>
<td>MUSI 17021</td>
<td>Jazz X-tet</td>
</tr>
<tr>
<td>MUSI 17022</td>
<td>Jazz Combo</td>
</tr>
<tr>
<td>MUSI 17023</td>
<td>Middle East Music Ensemble</td>
</tr>
<tr>
<td>MUSI 17024</td>
<td>New Music Ensemble</td>
</tr>
<tr>
<td>MUSI 17025</td>
<td>South Asian Music Ensemble</td>
</tr>
</tbody>
</table>

**Other Performance Activities**

These activities do not satisfy the ensemble requirement for the music major or minor. Many other musical activities are available at the University, including the Chamber Music Program (http://music.uchicago.edu/page/related-programs/#Chamber%20Music%20Program), Piano Program (http://music.uchicago.edu/page/related-programs/#Piano%20Program), Vocal Studies Program (http://music.uchicago.edu/page/related-programs/#Vocal%20Studies%20Program), the Tea Time Concert Series (http://music.uchicago.edu/page/tea-time-concert-series), Gilbert and Sullivan Opera Company (http://www.gilbertandsullivanoperacompany.org), and many other campus opportunities (http://music.uchicago.edu/page/other-campus-opportunities).

**Music Courses**

**MUSI 10100. Introduction to Western Art Music. 100 Units.**

This one-quarter course is designed to enrich the listening experience of students, particularly with respect to the art music of the Western European and American concert tradition. Students are introduced to the basic elements of music and the ways that they are integrated to create works in various styles. Particular emphasis is placed on musical form and on the potential for music to refer to and interact with aspects of the world outside.

Instructor(s): section 1 - Seth Brodsky; section 2 - Devon Borowski; section 3 - Barbara Dietlinger Terms Offered: Autumn Spring Winter. Autumn 2018: Section 1 - MW 1:30-2:50 GoH 402 Seth Brodsky Section 2 - TR 12:30-1:50 GoH 402 Devon Borowski Section 3 - TR 3:30-4:50 GoH 402 Barbara Dietlinger

Note(s): Background in music not required. Students must confirm enrollment by attending one of the first two sessions of class. This course meets the general education requirement in the arts.

**MUSI 10200. Introduction to World Music. 100 Units.**

This course is a selected survey of classical, popular, and folk music traditions from around the world. The goals are not only to expand our skills as listeners but also to redefine what we consider music to be and, in the process, stimulate a fresh approach to our own diverse musical traditions. In addition, the role of music as ritual, aesthetic experience, mode of communication, and artistic expression is explored.

Instructor(s): section 1 - Woo Chan Lee; section 2 - Ameera Nimjee Terms Offered: Autumn Spring Winter. Autumn 2018: Section 1 - MW 1:30-2:50 GoH 402 Seth Brodsky Section 2 - TR 12:30-1:50 GoH 402 Devon Borowski Section 3 - TR 3:30-4:50 GoH 402 Barbara Dietlinger

Note(s): Background in music not required. Students must confirm enrollment by attending one of the first two sessions of class. This course meets the general education requirement in the arts. Equivalent Course(s): CRES 10200
MUSI 10300. Introduction to Music: Materials and Design. 100 Units.
This introductory course in music is intended for students who are interested in exploring the language, interpretation, and meaning of music through coordinated listening, analysis, and creative work. By listening to and comprehending the structural and aesthetic considerations behind significant written and improvised works, from the earliest examples of notated Western music to the music of living composers and performers, students will be prepared to undertake analytical and ultimately creative projects. The relationship between cultural and historical practices and the creation and reception of music will also be considered. This course is taught by a practicing composer, whose experience will guide and inform the works studied. No prior background in music is required.
Instructor(s): section 1 - Anthony Cheung; section 2 - Alican Camci; section 3 - Timothy Page Terms Offered: Autumn Spring Winter. Autumn 2018: section 1 - TR 11:00-12:20 LC 901 section 2 - TR 2:00-3:20 LC 901 section 3 - TR 12:30-1:50 LC 901 Note(s): Background in music not required. Students must confirm enrollment by attending one of the first two sessions of class. This course meets the general education requirement in the arts.

MUSI 10400. Introduction to Music: Analysis and Criticism. 100 Units.
This course aims to develop students’ analytical and critical tools by focusing on a select group of works drawn from the Western European and American concert tradition. The texts for the course are recordings. Through listening, written assignments, and class discussion, we explore topics such as compositional strategy, conditions of musical performance, interactions between music and text, and the relationship between music and ideology as they are manifested in complete compositions.
Instructor(s): section 1 - Jennifer Iverson; section 2 - Lawrence Zbikowski; section 3 - Andrew White Terms Offered: Autumn Spring Winter. Autumn 2018: section 1 - MW 1:30-2:50 LC 901 section 2 - TR 11:00-12:20 GoH 402 section 3 - MW 3:00-4:20 LC 901 Note(s): Background in music not required. Students must confirm enrollment by attending one of the first two sessions of class. This course meets the general education requirement in the arts.

MUSI 12100-12200. Music in Western Civilization I-II.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.

MUSI 12100. Music In Western Civilization I: To 1750. 100 Units.
Instructor(s): A. Robertson Terms Offered: Winter
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21100, HIST 12700

MUSI 12200. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21200, HIST 12800

MUSI 12200. Music In Western Civ II. 100 Units.
This two-quarter sequence explores musical works of broad cultural significance in Western civilization. We study pieces not only from the standpoint of musical style but also through the lenses of politics, intellectual history, economics, gender, cultural studies, and so on. Readings are taken both from our music textbook and from the writings of a number of figures such as St. Benedict of Nursia and Martin Luther. In addition to lectures, students discuss important issues in the readings and participate in music listening exercises in smaller sections.
Terms Offered: Spring
Note(s): Prior music course or ability to read music not required. Students must confirm enrollment by attending one of the first two sessions of class. This two-quarter sequence meets the general education requirement in civilization studies; it does not meet the general education requirement in the dramatic, musical, and visual arts.
Equivalent Course(s): SOSC 21200, HIST 12800
MUSI 14300. Music Theory Fundamentals. 100 Units.
This one-quarter elective course covers the basic elements of music theory, including music reading, intervals, chords, meter, and rhythm.
Instructor(s): Various Terms Offered: Various

This three-quarter sequence serves as an introduction to the materials and structure of Western tonal music. The first quarter focuses on fundamentals: scale types, keys, basic harmonic structures, voice-leading and two-voice counterpoint. The second quarter explores extensions of harmonic syntax, the basics of classical form, further work with counterpoint, and nondiatonic seventh chords. The third quarter undertakes the study of modulation, sequences, and additional analysis of classical forms. Musicianship labs in ear training and keyboard skills required.

MUSI 15100. Harmony and Voice Leading I. 100 Units.
The first quarter focuses on fundamentals: scale types, keys, basic harmonic structures, voice-leading and two-voice counterpoint. Musicianship labs in ear training and keyboard skills required.
Instructor(s): Olga Sanchez-Kisielewska (both sections) Terms Offered: Autumn. Autumn 2018: section 1 - MWF 10:30-11:20 GoH 402 section 2 - MWF 11:30-12:20 GoH 402
Prerequisite(s): Ability to read music.

MUSI 15200. Harmony and Voice Leading II. 100 Units.
The second quarter explores extensions of harmonic syntax, the basics of classical form, further work with counterpoint, and nondiatonic seventh chords. Musicianship labs in ear training and keyboard skills required.
Instructor(s): Olga Sanchez-Kisielewska Terms Offered: Winter
Prerequisite(s): MUSI 15100

MUSI 15300. Harmony and Voice Leading III. 100 Units.
The third quarter undertakes the study of modulation, sequences, and additional analysis of classical forms.
Instructor(s): Olga Sanchez-Kisielewska Terms Offered: Spring
Prerequisite(s): MUSI 15200

MUSI 15200. Harmony and Voice Leading II. 100 Units.
The second quarter explores extensions of harmonic syntax, the basics of classical form, further work with counterpoint, and nondiatonic seventh chords. Musicianship labs in ear training and keyboard skills required.
Instructor(s): Olga Sanchez-Kisielewska Terms Offered: Winter
Prerequisite(s): MUSI 15100

MUSI 15300. Harmony and Voice Leading III. 100 Units.
The third quarter undertakes the study of modulation, sequences, and additional analysis of classical forms.
Instructor(s): Olga Sanchez-Kisielewska Terms Offered: Spring
Prerequisite(s): MUSI 15200

MUSI 17000. University Chorus. 000 Units.
The University Chorus is the largest vocal ensemble on campus. Its season includes an annual production of Handel’s Messiah as well as presentations of choral masterworks such as Berlioz’s Roméo et Juliette, Beethoven’s Symphony No. 9, and Verdi’s Messa da requiem. Among its 80 to 100 members are undergraduates, graduates, faculty and staff members, and singers from the Hyde Park and University community: The result is a wonderfully diverse group of vocalists, collaborating in performances of monuments of the literature. The University Chorus presents three to four concerts per season, culminating in a festive year-end performance with the combined choirs and the University Symphony Orchestra.
Prerequisite(s): Ensemble placements subject to Autumn Quarter audition.

MUSI 17001. Motet Choir. 000 Units.
As the premier undergraduate choral ensemble at the University of Chicago, the Motet Choir accepts 28-36 singers each year. Concentrating on a cappella masterworks of all periods, this polished vocal ensemble specializes in music of the Renaissance and also performs historically and culturally diverse repertoire ranging from Gregorian chant to gospel standards. The Motet Choir presents at least three major concerts per year (one each quarter) and sings at convocations and special events on campus and throughout the Chicago area. The ensemble goes on tour every second year, often during the University’s spring break.
Instructor(s): J. Kallembach Terms Offered: Autumn, Winter, Spring
Note(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.
MUSI 17002. Women's Ensemble. 000 Units.
The Women's Ensemble is made up primarily of undergraduate women at the University of Chicago. We explore classical repertoire from the Medieval era up through the present day and music from polyphonic singing traditions across the world, including South Africa, Zimbabwe, the Republic of Georgia, Croatia, Bulgaria, Sweden, and Norway, as well as a variety of American singing traditions. Through diverse repertoire, we strive to bring our voices together in powerful ways.
Instructor(s): Mollie Stone Terms Offered: Autumn,Winter,Spring
Note(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17003. Rockefeller Chapel Choir. 000 Units.
The Rockefeller Chapel Choir and its professional subset, the Decani, sing at Sunday services and festivals throughout the academic year and also in Rockefeller's signature Quire & Place concert series, presenting major works from the entire historical canon, lesser-known gems, and the premières of new work by distinguished composers. The choir's members come from diverse spiritual and cultural backgrounds, sharing together the rich musical experience of singing an array of choral music in the unique religious and cultural contexts of a chapel to which students of all world traditions are drawn.
Instructor(s): J. Kallembach Terms Offered: Autumn Spring Winter
Note(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17010. University Symphony Orchestra. 000 Units.
The 100-member University Symphony Orchestra presents an ambitious season of six major concerts per year (two each quarter). Known for its imaginative presentations of unusual repertoire as well as for its powerful performances of major symphonic literature, the University Symphony opens each year with a costumed Halloween concert—a family-friendly event enhanced by storytelling, dancing, and special effects—and closes with a celebratory year-end collaboration with the combined choirs. Repertoire generally encompasses 19th- and 20th-century works written for large orchestral forces, including masterpieces by Beethoven, Brahms, Dvorák, Mahler, Shostakovich, Sibelius, Vaughan Williams, and more. In recent years the USO has presented several silent films with live orchestral accompaniment, including Eisenstein's Battleship Potemkin, and performed with acclaimed professional soloists every season. USO string sections are coached by the Pacifica Quartet. Membership is chosen on the basis of competitive auditions, and includes both undergraduate and graduate students, faculty and staff, alumni, and some community members.
Instructor(s): B. Schubert Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17011. University Chamber Orchestra. 000 Units.
The University Chamber Orchestra is a 40-member ensemble of strings, woodwinds, and horns that specializes in Baroque, Classical, and 20th-century repertoire for smaller orchestra. The group presents three concerts per year, often pairing a major symphony by Mozart or Haydn with an overture, suite, or concerto for similar forces. The Chamber Orchestra also serves as the pit orchestra for the Music Department's annual collaboration with the Gilbert & Sullivan Opera Company.
Instructor(s): M. Sheppard Terms Offered: Spring Winter, Fall
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17012. University Wind Ensemble. 000 Units.
The University Wind Ensemble is an auditioned group of fifty to sixty instrumentalists with a diverse range of musical interests and experience. The UWE presents one concert per quarter, after an intensive preparation period of six to seven weeks. With a focus on modern literature conceived specifically for the wind ensemble medium, the UWE provides its members with an opportunity to perform music by such renowned wind composers as Malcolm Arnold, Percy Grainger, Gustav Holst, and Frank Ticheli, as well as transcriptions of orchestral masterpieces by J. S. Bach, Mussorgsky, Prokofiev, and others. Membership includes talented undergraduate and graduate students, faculty, staff, and community members who are dedicated to bringing a wide array of music to the University community.
Instructor(s): C. De Stefano Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17020. Early Music Ensemble. 000 Units.
The Early Music Ensemble is an historically oriented performance and study group led by members of the Newberry Consort. Participation in the group is open to anyone in the University community with music-reading experience; private lessons and coaching in voice and early instruments are likewise available through the Newberry Consort. Repertoire is drawn from 15th- to 17th-century sources, with special emphasis given to historically informed performance practices such as reading from original notation, improvisation, and ornamentation. The Early Music Ensemble also provides a forum for undergraduate majors and graduate students in Music who wish to explore repertories particular to their scholarly research. Collaborations with professional performers take place throughout the year, culminating in the Early Music Ensemble's year-end spring concert.
Terms Offered: Autumn Spring Winter
MUSI 17021. Jazz X-tet. 000 Units.
Lauded for its boldness in showcasing cutting-edge compositions, the Jazz X-tet is a versatile collection of 12 to 15 musicians, frequently joined in performance by noted Chicago-area professionals. The X-tet's three-concert season offers a variety of pieces, from jazz standards to hip-hop, often in arrangements that are custom-designed for the ensemble by its own members. In rehearsal and performance, the X-tet focuses on developing the improvisational skills of its musicians, as well as on deepening their understanding of the wide-ranging jazz idiom. The group has issued two CDs and frequently performs for University events on campus and elsewhere in the city. In addition to the Jazz X-tet itself, several small jazz combo groups are set up each year to provide training and experience to interested musicians and to perform informally on campus.
Instructor(s): M. Bowden Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17022. Jazz Combo. 000 Units.
In addition to the Jazz X-tet, several small jazz combo groups are set up each year to provide training and experience to interested musicians and to perform informally on campus.
Instructor(s): M. Bowden Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17023. Middle East Music Ensemble. 000 Units.
The Middle East Music Ensemble explores a variety of classical, neo-classical, and popular musical forms from throughout the Middle East, encompassing compositional and improvisational techniques unique to non-Western musical culture. Members perform on traditional instruments, often in company with noted guest artists, and present multiple concerts both on and off campus. No previous experience in the genre is required, but the ability to read music is necessary. Membership includes students, faculty, and staff of the University, as well as community members interested in the art and music of the Middle East.
Instructor(s): W. Zarour Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17024. New Music Ensemble. 000 Units.
The New Music Ensemble (NME) is a group of highly accomplished musicians who are devoted to presenting world premieres of cutting-edge works by Department of Music graduate students in composition, as well as recent chamber music by faculty members at UChicago and other area institutions and select classics of the late twentieth and early twenty-first centuries. The acclaimed Spektral Quartet, newly appointed Ensemble-in-Residence at the University of Chicago, forms the core of the NME. The quartet is joined by members of the performance faculty and area professionals for the New Music Ensemble's three to four concerts per season, under the leadership of Artistic Director Barbara Schubert. In the past year and a half, the NME has presented over a dozen world premieres and an equal number of U.S. or Chicago premieres, plus works by Drew Baker, Marcos Balter, Matthias Pintscher, Kaija Saariaho, Augusta Read Thomas, and more.
Instructor(s): B. Schubert Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Ensemble placements will be made after auditions at the start of the Autumn Quarter.

MUSI 17025. South Asian Music Ensemble. 000 Units.
The South Asian Music Ensemble explores a variety of classical, vernacular, and popular song repertoires from the Indian Subcontinent, with membership open to beginners as well as to more experienced performers with a background in South Asian music. The ensemble will focus on teaching vocal techniques, stylistic features, compositional forms, improvisational practices, and performance conventions specific to India, Pakistan, Afghanistan, Bangladesh, Nepal, Sri Lanka, and South Asian diasporas. In addition to participating in weekly ensemble rehearsals, members will have the option of attending voice coaching sessions and/or engaging the instructor for private lessons. Membership is open to students, faculty, and staff of the University, as well as community members interested in South Asian music.
Instructor(s): M. Pasupathi Terms Offered: Autumn,Winter,Spring

MUSI 20918. Listening to Movies. 100 Units.
This course shifts our critical attention from watching movies to listening to them. Amid a strong emphasis on cinema-ranging from musical accompaniment during the silent era to sound in experimental films; or from classical Hollywood underscoring to Bollywood musical numbers—we will consider the soundtrack of moving pictures within a growing variety of audiovisual media, including television, music videos, and computer games. Interactive lectures (Mondays and Wednesdays) and discussion sections (Fridays) combine a historical overview with transhistorical perspectives. Supplemented by screenings and readings, the course will address a variety of issues and topics: aesthetic and psychological (such as representation, narration, affect); cultural and political (such as race, ethnicity, propaganda); social and economic (such as technology, production, dissemination).
Instructor(s): Berthold Hoeckner Terms Offered: Spring
Equivalent Course(s): CMST 28118, SIGN 26021
MUSI 23000. Introduction to the Social and Cultural Study of Music. 100 Units.
This course provides an introduction to ethnomusicology and related disciplines with an emphasis on the methods and contemporary practice of social and cultural analysis. The course reviews a broad selection of writing on non-Western, popular, vernacular, and "world-music" genres from a historical and theoretical perspective, clarifying key analytical terms (i.e., "culture," "subculture," "style," "ritual," "globalization") and methods (i.e., ethnography, semiotics, psychoanalysis, Marxism). In the last part of the course, students learn and develop component skills of fieldwork documentation and ethnographic writing.

MUSI 23009. Eurovision Song Contest. 100 Units.
No description available.
Instructor(s): P. Bohlman Terms Offered: Spring. Various
Prerequisite(s): 100-level music course or consent of instructor.
Equivalent Course(s): SIGN 26044, TAPS 23509

MUSI 25100. Analysis of Music of the Classical Period. 100 Units.
This course focuses on the analysis of music by composers associated with the Viennese classical period, including Haydn, Mozart, and Beethoven. Topics include classical phrase structure, standard tonal forms such as sonata-allegro, and basic chromatic harmony. Participants present model compositions and write analytical papers.
Instructor(s): Various Terms Offered: Winter
Prerequisite(s): MUSI 15300 or equivalent
Note(s): This course is typically offered in alternate years.
Equivalent Course(s): MUSI 30809

MUSI 25200. Analysis of Nineteenth-Century Music. 100 Units.
This course focuses on the tonal language of nineteenth-century European composers, including Schubert, Chopin, Brahms, and Wagner. Students confront analytical problems posed by these and other composers’ increasing uses of chromaticism and extended forms through both traditional (classical) models of tonal harmony and form, as well as alternative approaches specifically tailored to this repertory. We will also address the ways in which these analytical perspectives might impinge on or influence matters of performance; students with a performance background will be invited to propose a final project that involves both performance and analysis.
Instructor(s): Various Terms Offered: Spring
Prerequisite(s): MUSI 15300 or equivalent

MUSI 25300. Analysis of Twentieth-Century Music. 100 Units.
This course introduces theoretical and analytical approaches to twentieth-century music. The core of the course involves learning a new theoretical apparatus—often called "set theory"—and exploring how best to apply that apparatus analytically to pieces by composers such as Schoenberg, Bartók, and Stravinsky. We also explore the relevance of the theoretical models to music outside of the high-modernist canon, including some jazz. The course provides an opportunity to confront some foundational questions regarding what it means to "theorize about music."
Instructor(s): Various Terms Offered: Various
Prerequisite(s): MUSI 15300 or equivalent
Note(s): This course typically is offered in alternate years.

MUSI 26100. Introduction to Composition. 100 Units.
This course introduces some of the basic problems in musical composition through a series of simple exercises.
Terms Offered: Spring
Prerequisite(s): MUSI 14300 or 15300, or equivalent

MUSI 26618. Electronic Music I. 100 Units.
Electronic Music I presents an open environment for creativity and expression through composition in the electronic music studio. The course provides students with a background in the fundamentals of sound and acoustics, covers the theory and practice of digital signal processing for audio, and introduces the recording studio as a powerful compositional tool. The course culminates in a concert of original student works presented in multi-channel surround sound. Enrollment gives students access to the Electronic Music Studio in the Department of Music. No prior knowledge of electronic music is necessary.
Instructor(s): Sam Pluta Terms Offered: Winter. MW 1:30-2:50 GoH 205
Equivalent Course(s): MAAD 26618, MUSI 36618

MUSI 26818. History of Electronic Instruments. 100 Units.
This course surveys the history of electronic music in the 20th century by examining its organs-musical and bodily-extended and expanded by the science and technology of electricity. It uses these instruments as conduits to explore tensions latent in electronic music: organic vs. synthetic, analogue vs. digital, and signal vs. noise. We will explore how these tensions manifest in the materials and ideologies of electronic music, contributing to concepts of modernity, sound, and embodiment.
Instructor(s): Theodore Gordon Terms Offered: Spring
MUSI 27100-27200-27300. Topics in the History of Western Music I-II-III.
This sequence is a three-quarter investigation into Western art music, with primary emphasis on the vocal and instrumental repertories of Western Europe and the United States. This sequence is now offered every year, allowing students to complete the music major within the space of two years.

MUSI 27100. Topics in the History of Western Music I. 100 Units.
Part I of a three-quarter investigation into Western art music, with primary emphasis on the vocal and instrumental repertories of Western Europe and the United States. MUSI 27100 begins with the earliest notated music and considers monophonic liturgical chant and the development of sacred and secular vocal polyphony through the sixteenth century. This course is part of the College Course Cluster, The Renaissance.
Instructor(s): Martha Feldman
Terms Offered: Autumn. Autumn 2018 MW 3:00-4:20 GoH 205
Prerequisite(s): MUSI 14300 or 15300. Open to nonmajors with consent of instructor.

MUSI 27200. Topics in the History of Western Music II. 100 Units.
MUSI 27200 addresses topics in music from 1600 to 1800, including opera, sacred music, the emergence of instrumental genres, the codification of tonality, and the Viennese classicism of Haydn and Mozart.
Terms Offered: Winter
Prerequisite(s): MUSI 14300 or 15300. Open to nonmajors with consent of instructor.

MUSI 27300. Topics in the History of Western Music III. 100 Units.
MUSI 27300 treats music since 1800. Topics include the music of Beethoven and his influence on later composers; the rise of public concerts, German opera, programmatic instrumental music, and nationalist trends; the confrontation with modernism; and the impact of technology on the expansion of musical boundaries.
Terms Offered: Spring
Prerequisite(s): MUSI 14300 or 15300. Open to nonmajors with consent of instructor.

MUSI 27200. Topics in the History of Western Music II. 100 Units.
MUSI 27200 addresses topics in music from 1600 to 1800, including opera, sacred music, the emergence of instrumental genres, the codification of tonality, and the Viennese classicism of Haydn and Mozart.
Terms Offered: Winter
Prerequisite(s): MUSI 14300 or 15300. Open to nonmajors with consent of instructor.

MUSI 27300. Topics in the History of Western Music III. 100 Units.
MUSI 27300 treats music since 1800. Topics include the music of Beethoven and his influence on later composers; the rise of public concerts, German opera, programmatic instrumental music, and nationalist trends; the confrontation with modernism; and the impact of technology on the expansion of musical boundaries.
Terms Offered: Spring
Prerequisite(s): MUSI 14300 or 15300. Open to nonmajors with consent of instructor.

MUSI 28500. Musicianship Skills. 000 Units.
This is a yearlong course in ear training, keyboard progressions, realization of figured basses at the keyboard, and reading of chamber and orchestral scores. Classes each week consist of one dictation lab (sixty minutes long) and one keyboard lab (thirty minutes long).
Instructor(s): Olga Sánchez-Kisielewska
Terms Offered: Autumn Spring Winter. Autumn 2018: Friday 1:30-2:20pm, GoH 402
Prerequisite(s): MUSI 15300. Open only to students who are majoring in music.
Note(s): 100 units credit is granted only after successful completion of the year's work.

MUSI 29500. Undergraduate Honors Seminar. 100 Units.
The seminar guides students through the preliminary stages of selecting and refining a topic, and provides an interactive forum for presenting and discussing the early stages of research, conceptualization, and writing. The course culminates in the presentation of a paper that serves as the foundation of the honors thesis. The instructors work closely with honors project supervisors, who may be drawn from the entire music faculty.
Terms Offered: Spring
Prerequisite(s): Consent of instructor. Open only to third years who are majoring in music and wish to develop a research project and prepare it for submission for departmental honors.

MUSI 29700. Independent Study in Music. 100 Units.
This course is intended for students who wish to pursue specialized readings in music or to do advanced work in composition.
Terms Offered: Autumn,Spring,Winter
Prerequisite(s): Consent of instructor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Consent Form.
MUSI 29900. Senior Essay or Composition. 100 Units.
No description available.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Consent of instructor and director of undergraduate studies
Note(s): Students are required to submit the College Reading and Research Consent Form.
NEAR EASTERN LANGUAGES AND CIVILIZATIONS

Department Website: http://nelc.uchicago.edu

PROGRAM OF STUDY

Majors in Near Eastern Languages and Civilizations (NELC) at the University of Chicago pursue rigorous knowledge about a region of the world that is known as “the cradle of civilization” and the home of several important religious and cultural traditions, as well as one of the most important geopolitical areas of our contemporary world. NELC majors acquire languages; learn how archaeologists, economists, historians, linguists, literary scholars, and careful readers of legal, religious, economic, and other kinds of texts critically evaluate evidence; and acquire, largely in small class settings, analytical writing, thinking, and research skills that will help prepare them for a variety of careers.

Geographically centered on the Nile to Oxus and Danube to Indus region, NELC also embraces North Africa and Islamic Spain, as well as Central Asia and the Balkans in its ambit, from the early Bronze Age to the recent era of revolutions. Students can gain expertise in a wide variety of languages, including the living spoken tongues of the modern Middle East and Central Asia (Arabic, Armenian, modern Hebrew, Kazakh, Persian, Turkish, and Uzbek) or languages that open gateways onto the ancient past (Aramaic, Babylonian, Biblical Hebrew, Coptic, Egyptian Hieroglyphics, Elamite, Ge'ez, Hittite, Middle and Old Persian, Ottoman, Syriac, Ugaritic, etc.).

In an interdisciplinary area studies department like NELC, majors learn about the region through primary sources (material, oral, or textual) and scholarly analysis, structuring their curriculum around various disciplines and methodologies, including stratigraphy and paleobotany, comparative literature, cultural and civilizational studies, economics and numismatics, gender studies, history (economic, political, religious, and social), human rights, public policy, and digital humanities approaches.

Areas of specialization within NELC include:

- Arabic Studies
- Armenian Studies
- Archaeology and Art of the Ancient Near East
- Classical Hebrew Language and Civilization
- Cuneiform Studies (including Assyriology, Hittitology, and Sumerology)
- Egyptian Languages and Civilization
- History (Ancient Near East, Islamic History, Modern Middle Eastern History)
- Islamic Thought (including Law, Sufism)
- Israeli and Jewish Studies (including Biblical and Modern Hebrew, Aramaic, Syriac)
- Persian and Iranian Studies (Culture, Language, Literature, History, Religion)
- Semitic Languages and Literatures (Comparative Semitics, Northwest Semitics)
- Turkish and Ottoman Studies (Culture, History, Languages, Literatures)

Students who major in NELC learn one or more of the primary native languages as a means of access to the cultures of the ancient Near East and/or the modern Middle East. In consultation with the Director of Undergraduate Studies, each student chooses an area of specialization and devises a program of study that provides a sound basis for graduate work in that area or for a career in business, education, government, journalism, law, museum, public policy, public service, or a variety of other disciplines and professions.

MAJOR REQUIREMENTS

Requirements for the NELC major are described below. The Director of Undergraduate Studies and the Department Coordinator are available to answer questions, discuss programs of study, and support students as they make their way through the major in NELC. Students are encouraged to track their progress through requirements by using our major worksheet (available on the department website). NELC strongly encourages students to study abroad if they are able.

Thirteen courses and a BA paper are required for a NELC major.

SUMMARY OF REQUIREMENTS

Two or three quarters of one of the following civilization sequences: *

<table>
<thead>
<tr>
<th>NEHC 20001-20002-20003</th>
<th>Ancient Near Eastern History and Society I-II-III</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEHC 20011-20012-20013</td>
<td>Ancient Empires I-II-III</td>
</tr>
<tr>
<td>NEHC 20416-20417-20418</td>
<td>Semitic Languages, Cultures, and Civilizations I-II-III</td>
</tr>
</tbody>
</table>
Six courses in one of the Near Eastern languages (e.g. Arabic, Armenian, Babylonian, Egyptian, Hebrew, Kazakh, Persian, Turkish, Uzbek) **

Three or four elective courses in the student’s area of specialization §

NEHC 29800 BA Paper Seminar

Total Units in the Major

* Note that the course sequence on “Archaeology of the Ancient Near East” does not fulfill the general education requirement in civilization studies. All of the other NELC civilization sequences do fulfill the general education requirement. If a Near Eastern civilization sequence is used to meet the College general education requirement, a second Near Eastern civilization sequence is required for the NELC major.

+ Students who began taking Jewish Civilization courses prior to Autumn 2018 may continue to use the courses that previously satisfied the civilization studies requirement. See the Jewish Studies page for details.

** Credit for language courses may not be granted by examination or petition.

§ These may consist of any NELC courses, including additional language courses, an additional civilization sequence, or NELC courses in areas such as archaeology, art, literature in translation, history, and religion. NEHC 29999 may be counted towards the elective requirement. Contact the NELC Director of Undergraduate Studies for questions about course requirements.

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NELC majors are strongly encouraged to register for an optional one-quarter independent study course NEHC 29999 BA Paper Preparation with their BA preceptor that will allow time in their schedules over Winter Quarter to write and revise their papers. Students will receive a quality grade for this course, equivalent to the final BA paper grade, reported in the Spring Quarter.

**Year 4: Spring Quarter**

The completed BA paper must be submitted to the Department Coordinator by Monday of third week in Spring Quarter. Students should submit two bound hard copies and one pdf of the paper. The Department Coordinator will distribute the BA papers to the faculty adviser. Students who fail to meet the deadline will not be eligible for honors and may not be able to graduate in that quarter.

The faculty adviser will grade the paper and submit grades and honors recommendations to the Director of Undergraduate Studies by Monday of fifth week in Spring Quarter.

**Double Majors**

Students taking a double major may, with the permission of the NELC Director of Undergraduate Studies, write a single BA paper that is designed to meet the requirements of both majors, provided that the faculty research adviser is a member of the NELC faculty. Approval from both program chairs is required. A consent form, to be signed by the chairs, is available from the College adviser. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

**Research Funding**

Students are encouraged to begin the reading/research for the BA paper in the summer before their fourth year. Research grants are available to undergraduates. Please discuss the availability of grants with the Department Coordinator and/or Director of Undergraduate Studies early in the third year and visit the department website for updated information.

NELC is a participant in the PRISM program (https://careeradvancement.uchicago.edu/jobs-internships-research/prism-grants) and majors are encouraged to apply for PRISM grants.

**Honors**

Students who complete their course work and their BA papers with distinction are considered for honors. To be eligible for honors, students must have an overall GPA of 3.25 or higher, they must have a NELC GPA of 3.5 or higher, and they must have earned a grade of A on the BA paper.

**Prizes**

The department awards the Justin Palmer Prize annually to the BA paper judged to be the most outstanding. The Director of Undergraduate Studies makes this determination in consultation with the department chair and faculty members. This monetary prize is made possible by a generous gift from the family of Justin Palmer, AB’04, who completed a minor in NELC.

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**MINOR PROGRAM IN NEAR EASTERN LANGUAGES AND CIVILIZATIONS**

Students in the College with an interest in the languages and cultures of the Middle East or of the ancient Near East may pursue a minor in NELC. Completion of this minor certifies that your undergraduate course work at the University of Chicago has prepared you with language skills and cultural competency that can give you an advantage on the job market for a wide variety of careers—in business, in medicine or law, or in the public sector.

Students who wish to take a minor in NELC must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students must submit the Consent to Complete a Minor Program (https://college.uchicago.edu/sites/college.uchicago.edu/files/Consent_Minor_Program.pdf) form to their College adviser by the deadline above. The Director of Undergraduate Studies and the Department Coordinator are available to answer questions, discuss programs of study, and support students as they make their way through the minor in NELC. Students are encouraged to track their progress through requirements by using our minor worksheet, which can be found on our website (http://nelc.uchicago.edu/undergraduate).

**PROGRAM REQUIREMENTS FOR THE MINOR**

Students may choose one of two tracks: language or culture. Both tracks require a two- or three-quarter NELC civilization sequence (see Major Requirements for more detail on civilization sequences). In addition, the Language Track requires three courses of one NELC language at any level. Students using a NELC sequence to satisfy the general education requirement in civilization studies may seek approval from the department to substitute additional language course work in place of the civilization requirement in the minor. The Culture Track allows students to focus on topics such as archaeology, history, religion, or literature in translation and does not have a language requirement.
The six courses in the minor may not be double counted with a student's major(s) or with other minors, and they may not be counted toward general education requirements. Courses in the minor must be taken for quality grades.

### Language Track Sample Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>NEHC 20001-20002-20003</td>
<td>Ancient Near Eastern History and Society I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>HEBR 10101-10102-10103</td>
<td>Elementary Classical Hebrew I-II-III</td>
<td>300</td>
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<tr>
<td><strong>Total Units</strong></td>
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<td><strong>600</strong></td>
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<tbody>
<tr>
<td>ARAB 20101-20102-20103</td>
<td>Intermediate Arabic I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>NEHC 20601-20602-20603</td>
<td>Islamic Thought and Literature I-II-III</td>
<td>300</td>
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<tr>
<td><strong>Total Units</strong></td>
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### Culture Track Sample Minor

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<tr>
<td>NEHC 20011-20012-20013</td>
<td>Ancient Empires I-II-III</td>
<td>300</td>
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<tr>
<td>NEHC 20004-20005-20006</td>
<td>Ancient Near Eastern Thought and Literature I-II-III</td>
<td>300</td>
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<tr>
<td><strong>Total Units</strong></td>
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<td><strong>600</strong></td>
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</tbody>
</table>

All undergraduate courses being offered in the 2018–19 academic year are listed below, by subject. Upper-level courses and the most up-to-date course information can be found in the NELC section of Class Search (http://registrar.uchicago.edu/classes).

**AKKADIAN COURSES**

**AKKD 10501-10502-10503. Introduction to Babylonian I-II-III.**

**Introduction to Babylonian**

- **AKKD 10501. Introduction to Babylonian I. 100 Units.**
  - Introduction to the grammar of Akkadian, specifically to the Old Babylonian dialect.
  - Instructor(s): Susanne Paulus
  - Terms Offered: Autumn
  - Prerequisite(s): Second-year standing

- **AKKD 10502. Introduction to Babylonian II. 100 Units.**
  - This course is the second quarter of the annual introductory sequence to the Babylonian language and the Cuneiform script. Students will further explore the grammar of Babylonian in its Old Babylonian dialect (19th-16th c. BCE) and read ancient inscriptions (especially the Laws of Hammu-rabi) in the Old Babylonian monumental script. The reference grammar used for this course is John Huehnergard’s A Grammar of Akkadian (third edition), 2011.
  - Instructor(s): Herve Reculeau
  - Terms Offered: Winter
  - Prerequisite(s): AKKD 10501 or equivalent

- **AKKD 10503. Introduction to Babylonian III. 100 Units.**
  - Selected readings of Akkadian texts in the Standard Babylonian dialect of the 1st millennium BC.
  - Instructor(s): John Wee
  - Terms Offered: Spring
  - Prerequisite(s): AKKD 10502 or equivalent

**AKKD 10502. Introduction to Babylonian II. 100 Units.**

This course is the second quarter of the annual introductory sequence to the Babylonian language and the Cuneiform script. Students will further explore the grammar of Babylonian in its Old Babylonian dialect (19th-16th c. BCE) and read ancient inscriptions (especially the Laws of Hammu-rabi) in the Old Babylonian monumental script. The reference grammar used for this course is John Huehnergard’s A Grammar of Akkadian (third edition), 2011.

- Instructor(s): Herve Reculeau
- Terms Offered: Winter
- Prerequisite(s): AKKD 10501 or equivalent

**AKKD 10503. Introduction to Babylonian III. 100 Units.**

Selected readings of Akkadian texts in the Standard Babylonian dialect of the 1st millennium BC.

- Instructor(s): John Wee
- Terms Offered: Spring
- Prerequisite(s): AKKD 10502 or equivalent
AKKD 20603. Intermediate Akkadian: Neo-Assyrian Royal Inscriptions. 100 Units.
This course is specifically aimed at students having completed the first year of Elementary Akkadian (AKKD 10101-10103), but can be taken by more advanced students as well. Building on the knowledge acquired in the Elementary sequence, this course will further explore the Standard Babylonian dialect and Neo-Assyrian Cuneiform scripts, through a detailed analysis of the Annals of king Sennacherib (704-681 BCE) as they are represented in the 'Chicago Prism' acquired by J. H. Breasted in 1920 and currently on display in the Assyrian gallery of the Oriental Institute Museum. These include, among other military and building exploits of the king, his campaign to the Levant against Ezekiah, king of Judah - an episode also recounted in the Hebrew Bible (books of Second Kings, Isaiah and Chronicles) and Josephus' Judean Antiquities.
Instructor(s): Herve Reculeau Terms Offered: Autumn
Prerequisite(s): 1 year of Elementary Akkadian
Equivalent Course(s): AKKD 30603

AKKD 20801. Reforms and Edicts of the Old Babylonian Kings. 100 Units.
This course covers Reforms and Edicts of the Old Babylonian Kings.
Instructor(s): Martha T. Roth Terms Offered: Autumn
Prerequisite(s): HEBR 10103 or equivalent
Equivalent Course(s): AKKD 30801

ANCIENT ANATOLIAN LANGUAGES COURSES
AANL 10101-10102-10103. Elementary Hittite I-II-III.
This three-quarter sequence covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes students with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 BC).
AANL 10101. Elementary Hittite I. 100 Units.
This is the first in a three-quarter sequence that covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes the student with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 B.C.).
Instructor(s): Theo Van Den Hout Terms Offered: Autumn
Prerequisite(s): Second Year Standing
AANL 10102. Elementary Hittite II. 100 Units.
This is the second in a three-quarter sequence that covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes the student with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 B.C.).
Instructor(s): Theo Van Den Hout Terms Offered: Winter
Prerequisite(s): AANL 10101 or equivalent
AANL 10103. Elementary Hittite III. 100 Units.
This is the third in a three-quarter sequence that covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes the student with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 B.C.).
Instructor(s): Theo Van Den Hout Terms Offered: Spring
Prerequisite(s): AANL 10102 or equivalent

AANL 10102. Elementary Hittite II. 100 Units.
This is the second in a three-quarter sequence that covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes the student with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 B.C.).
Instructor(s): Theo Van Den Hout Terms Offered: Winter
Prerequisite(s): AANL 10101 or equivalent
AANL 10103. Elementary Hittite III. 100 Units.
This is the third in a three-quarter sequence that covers the basic grammar and cuneiform writing system of the Hittite language. It also familiarizes the student with the field’s tools (i.e., dictionaries, lexica, sign list). Readings come from all periods of Hittite history (1650 to 1180 B.C.).
Instructor(s): Theo Van Den Hout Terms Offered: Spring
Prerequisite(s): AANL 10102 or equivalent

ARABIC COURSES
ARAB 10101-10102-10103. Elementary Arabic I-II-III.
This sequence concentrates on the acquisition of speaking, reading, and aural skills in modern formal Arabic. The class meets for six hours a week.
ARAB 10101. Elementary Arabic-I. 100 Units.
This sequence concentrates on the acquisition of speaking, reading, and aural skills in modern formal Arabic. The class meets for six hours a week. Note(s): The class meets for six hours a week
Instructor(s): N. Forster, O. abu-Eledam, L. Choudar Terms Offered: Autumn
Note(s): The class meets for six hours a week

ARAB 10102. Elementary Arabic-II. 100 Units.
This sequence concentrates on the acquisition of speaking, reading, and aural skills in modern formal Arabic.
Instructor(s): L. Choudar, O. abu-Eledam, N. Forster Terms Offered: Winter
Prerequisite(s): ARAB 10101 or equivalent
Note(s): The class meets for six hours a week

ARAB 10103. Elementary Arabic-III. 100 Units.
This sequence concentrates on the acquisition of speaking, reading, and aural skills in modern formal Arabic.
Instructor(s): O. abu-Eledam, L. Choudar, N. Forster Terms Offered: Spring
Prerequisite(s): ARAB 10102 or equivalent
Note(s): The class meets for six hours a week

ARAB 10123. Summer Intensive Arabic Level 1. 300 Units.
Summer Intensive Arabic Level I is an eight-week course designed to introduce complete novices to the fundamentals of Arabic in the four language skills (speaking, listening, reading, and writing). Classes are small and use the Alif Baa’ and al-Kitaab textbook (2nd edition), supplemented by authentic materials, both to learn the language and to experience the culture. Cultural proficiency is an integral part of the language instruction (forms of address, youth phrases, phrases used among intimate friends, etc.). Students will spend 4-5 hours per day practicing using Arabic in classroom activities and should plan on studying an additional 3-4 hours most afternoons and evenings. In addition to class time, a full day trip to an Arab neighborhood in Chicago provides an opportunity to use Arabic in an authentic cultural context. Cultural exposure will also be supplemented through guest speakers, songs, and films. At the conclusion of the course, students can expect to have mastered the sounds and shapes of the Arabic alphabet and to be able to speak about themselves and their world in Modern Standard Arabic, as well as to engage in conversations about familiar topics with native speakers, to comprehend basic texts, and to use some common phrases in colloquial Egyptian and Shaami. After the eight-week course, students can expect to advance to the Intermediate Low level on the ACTFL scale.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17

ARAB 10250. Colloquial Levantine Arabic. 100 Units.
Spoken Levantine Arabic is a proficiency-based course designed to develop the linguistic skills necessary for personal day-to-day life. The course focuses on spoken rather than Standard written Arabic, and will therefore target primarily the oral/aural skills. Through the knowledge of Modern Standard Arabic and the introduction of colloquial vocabulary, expressions and grammar, the course will build the students’ competence in spoken Arabic. Students will also be introduced to the Levantine culture of Syria, Lebanon, Jordan, and Palestine.
Instructor(s): O. abu-Eledam Terms Offered: Winter

ARAB 10251. Colloquial Egyptian Arabic: Language and Culture. 100 Units.
This course is meant to supplement the Novice-High student of Modern Standard Arabic with the spoken Arabic of Egypt (more precisely, of urban Egypt). As the largest Arab country (over 90 million), and with a vibrant presence on the cultural scene, the spoken language of Egypt will be introduced to students through this vibrant cultural production. We will use songs and films as well as social media exchanges, both written and oral, to bring Egyptian culture and spoken language to the student.
Instructor(s): N. Forster and Staff Terms Offered: Spring
Prerequisite(s): One year of Modern Standard Arabic
ARAB 10257. Colloquial Levantine Arabic II. 100 Units.  
Colloquial Levantine Arabic is a proficiency-based course designed to develop the linguistic skills necessary for personal day-to-day life. The course focuses on spoken rather than Standard written Arabic, and will therefore target primarily the oral/aural skills. Through the knowledge of Modern Standard Arabic and the introduction of colloquial vocabulary, expressions and grammar, the course will build the students’ competence in spoken Arabic. Students will also be introduced to the Levantine culture.  
Instructor(s): Osama Abu-Eledam  
Terms Offered: Spring

ARAB 10456. Summer Intensive Arabic Level 1.5. 300 Units.  
Summer Arabic Level 1.5 is designed for the student who has begun studying Arabic, but who is not yet fully comfortable in speaking, listening, and/or writing on a wide range of common topics. In this eight-week course, students will consolidate and advance their Arabic language skills (reading, writing, speaking, and listening) to move confidently into the Intermediate range. The class materials (al-Kitaab Part 1, 2nd edition, children’s stories, popular songs, film excerpts) as well as a number of extra activities (a field trip to an Arab neighborhood, guest lecturers) will be geared to integrating language and culture and encouraging students to communicate in culturally rich ways. At the conclusion of the sequence, students should be able to speak about themselves and their world in Modern Standard Arabic, as well as to engage in conversations about familiar topics with native speakers, to comprehend basic texts, and to use some common phrases in colloquial Egyptian and Shaami. At the end of the sequence, students should advance to the Intermediate Low/Intermediate Mid level on the ACTFL scale.  
Instructor(s): Staff  
Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17

ARAB 15001. Elementary Arabic in Jerusalem. 100 Units.  
ARAB 15002. Elementary Arabic in Jerusalem. 100 Units.  
ARAB 15003. Intermediate Arabic in Jerusalem. 100 Units.  
ARAB 15004. Intermediate Arabic in Jerusalem. 100 Units.  
ARAB 15005. Advanced Arabic in Jerusalem. 100 Units.  
ARAB 15006. Advanced Arabic in Jerusalem. 100 Units.  
ARAB 15013. Elementary Arabic in Morocco. 100 Units.  
ARAB 15014. Elementary Arabic in Morocco. 100 Units.  
ARAB 15015. Intermediate Arabic in Morocco. 100 Units.  
ARAB 15016. Intermediate Arabic in Morocco. 100 Units.  
ARAB 15017. Advanced Arabic in Morocco. 100 Units.  
ARAB 15018. Advanced Arabic in Morocco. 100 Units.  
ARAB 15019. Elementary Arabic in Granada. 100 Units.  
ARAB 15020. Elementary Arabic in Granada. 100 Units.  
ARAB 15021. Intermediate Arabic in Granada. 100 Units.  
ARAB 15022. Intermediate Arabic in Granada. 100 Units.  
ARAB 15023. Advanced Arabic in Granada. 100 Units.  
ARAB 15024. Advanced Arabic in Granada. 100 Units.  
ARAB 20100. Intermediate Modern Arabic for CPS Students. 100 Units.  
StarTalk Arabic-Year 2

ARAB 20101-20102-20103. Intermediate Arabic I-II-III.  
This sequence concentrates on speaking, reading, and aural skills at the intermediate level of modern formal Arabic.  
ARAB 20101. Intermediate Arabic I. 100 Units.  
The first quarter of Intermediate Arabic  
Instructor(s): O. Abu Eledam, L. Choudar, K. Heikkinen  
Terms Offered: Autumn  
Prerequisite(s): ARAB 10103 or equivalent

ARAB 20102. Intermediate Arabic II. 100 Units.  
The second quarter of Intermediate Arabic  
Instructor(s): O. Abu Eledam, L. Choudar, K. Heikkinen  
Terms Offered: Winter  
Prerequisite(s): ARAB 20101 or equivalent
ARAB 20103. Intermediate Arabic III. 100 Units.
ARAB 20103 is the spring quarter continuation of the Intermediate Arabic sequence that began with ARAB 20101 last fall, and continued with ARAB 20102 in the winter. We will continue to work through the second half of Al-Kitaab Part 2. As in any language course, we address all four of the fundamental skills: reading, writing, listening, and speaking. A particular focus of this sequence, however, is ensuring that students have a solid, comprehensive understanding of the rules of Arabic syntax. In addition to readings and exercises from the textbook, we will increasingly make use of articles from Arabic-language news media.
Instructor(s): O. Abu Eledam, K. Heikinnen, L. Choudar Terms Offered: Spring  
Prerequisite(s): ARAB 20102 or equivalent

ARAB 20102. Intermediate Arabic II. 100 Units.
The second quarter of Intermediate Arabic.
Instructor(s): O. Abu Eledam, L. Choudar, K. Heikkinen Terms Offered: Winter  
Prerequisite(s): ARAB 20101 or equivalent

ARAB 20103. Intermediate Arabic III. 100 Units.
ARAB 20103 is the spring quarter continuation of the Intermediate Arabic sequence that began with ARAB 20101 last fall, and continued with ARAB 20102 in the winter. We will continue to work through the second half of Al-Kitaab Part 2. As in any language course, we address all four of the fundamental skills: reading, writing, listening, and speaking. A particular focus of this sequence, however, is ensuring that students have a solid, comprehensive understanding of the rules of Arabic syntax. In addition to readings and exercises from the textbook, we will increasingly make use of articles from Arabic-language news media.
Instructor(s): O. Abu Eledam, K. Heikinnen, L. Choudar Terms Offered: Spring  
Prerequisite(s): ARAB 20102 or equivalent

ARAB 20123. Summer Intensive Introductory Arabic Level 2. 300 Units.
Summer Intensive Arabic Level 2 is designed for students who have completed the equivalent of Alif Baa’ and al-Kitaab part 1, or attained a minimum Novice High proficiency on the ACTFL scale. In this eight-week summer course in Arabic, students will improve and refine their language skills using al-Kitaab part 2 (2nd edition), along with authentic stories, poems, and articles. Cultural proficiency is an integral part of the language instruction, as students immerse themselves in readings (literary and journalistic) and engage in conversations with their classmates, with the Arabic-speaking community in Chicago, and with guest lecturers/presenters. Students will also extend their language and cultural skills by working on songs and film extracts. The class will help students develop their ability to initiate and sustain discussion on topics of general interest and to present information and simple narratives in Modern Standard Arabic; to understand a wide range of written genres in Arabic, including formal writing, journalistic texts, and less formal styles; to write and speak with increasing accuracy and fluency; and to carry out basic research with non-technical texts. After the eight-week course, students can expect to reach the Intermediate Mid or Intermediate High level on the ACTFL scale.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/11/17

ARAB 20588. Media Arabic. 100 Units.
Media Arabic is a course designed for the advanced student of Modern Standard Arabic. The course objective is to improve students’ listening comprehension skills. Students will advance toward this goal through listening to a variety of authentic materials from Arabic TV (on politics, literature, economics, education, women, youth, etc.).
Instructor(s): Staff Terms Offered: Winter  
Prerequisite(s): At least two years of Modern Standard Arabic  
Equivalent Course(s): ARAB 30588

ARAB 29001. Arabic Through Film. 100 Units.
This course immerses the student in Arabic through the genre of film, specifically, Egyptian film, a potent and pervasive medium since Arabs started making films in the 1920s, but more pervasive with the advent of television in the early 1960s. Proceeding chronologically, we examine the Egyptian film through distinct stages, from the early musicals and romantic comedies of the forties and fifties, to the slew of post-1952 films offering new notions of the nation, of citizens, of womanhood, to the films of the 1970s with their commentary on the new capitalist society Sadat espoused, to the nuanced realism and focus on individual angst of the 1980s and 90s, to the gritty realism of the pre and post Arab Spring period.
Instructor(s): N. Forster Terms Offered: Autumn  
Prerequisite(s): Prerequisite: 2 years of MSA or equivalent

ARAMAIC COURSES
ARAM 10101-10102-10103. Biblical Aramaic; Old Aramaic Inscriptions; Imperial Aramaic.
Three quarter sequence in Aramaic spanning Biblical Aramaic (Autumn), Old Aramaic (Spring), and Imperial Aramaic (Winter).
ARAM 10101. Biblical Aramaic. 100 Units.
This course provides a thorough introduction to the grammar of the Aramaic portions of the Hebrew Bible during the first few weeks. The remainder of the course is spent reading texts from the books of Daniel and Ezra.
Instructor(s): S. Creason Terms Offered: Autumn
Prerequisite(s): HEBR 10103 or equivalent.
Equivalent Course(s): JWSC 11000

ARAM 10102. Old Aramaic Inscriptions. 100 Units.
Course in Old Aramaic Inscriptions
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): JWSC 11100

ARAM 10103. Imperial Aramaic. 100 Units.
Course in Imperial Aramaic
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): JWSC 11200

ARAM 10102. Old Aramaic Inscriptions. 100 Units.
Course in Old Aramaic Inscriptions
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): JWSC 11100

ARAM 10103. Imperial Aramaic. 100 Units.
Course in Imperial Aramaic
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): ARAM 10101 or equivalent.
Equivalent Course(s): JWSC 11200

ARMENIAN COURSES
ARME 10101-10102-10103. Elementary Modern Armenian I-II-III.
This three-quarter sequence utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.

ARME 10101. Elementary Modern Armenian I. 100 Units.
Elementary Modern Armenian I, II, III. The course utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A language competency exam is offered at the end of spring quarter for those taking this course as college language requirement. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Autumn

ARME 10102. Elementary Modern Armenian II. 100 Units.
Elementary Modern Armenian I, II, III. The course utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A language competency exam is offered at the end of spring quarter for those taking this course as college language requirement. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Winter
Prerequisite(s): ARME 10101
ARME 10103. Elementary Modern Armenian III. 100 Units.
Elementary Modern Armenian I, II, III. The course utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A language competency exam is offered at the end of spring quarter for those taking this course as college language requirement. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Spring
Prerequisite(s): ARME 10102

ARME 10102. Elementary Modern Armenian II. 100 Units.
Elementary Modern Armenian I, II, III. The course utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A language competency exam is offered at the end of spring quarter for those taking this course as college language requirement. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Winter
Prerequisite(s): ARME 10101

ARME 10103. Elementary Modern Armenian III. 100 Units.
Elementary Modern Armenian I, II, III. The course utilizes the most advanced computer technology and audio-visual aids enabling the students to master a core vocabulary, the alphabet and basic grammatical structures and to achieve a reasonable level of proficiency in modern formal and spoken Armenian (one of the oldest Indo-European languages). A language competency exam is offered at the end of spring quarter for those taking this course as college language requirement. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Spring
Prerequisite(s): ARME 10102

ARME 10501. Intro To Classical Armenian. 100 Units.
The course focuses on the basic grammatical structure and vocabulary of the Classical Armenian language, Grabar (one of the oldest Indo-European languages). It enables students to achieve basic reading skills in the Classical Armenian language. Reading assignments include a wide selection of original Armenian literature, mostly works by 5th century historians, as well as passages from the Bible, while a considerable amount of historical and cultural issues about Armenia are discussed and illustrated through the text interpretations. Recommended for students with interests in Armenian Studies, Classics, Divinity, Indo-European or General Linguistics.
Equivalent Course(s): ANCM 32212

ARME 20101-20102-20103. Intermediate Modern Armenian I-II-III.
The goal of this three-quarter sequence is to enable students to reach an advanced level of proficiency in the Armenian language. This sequence covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media.

ARME 20101. Intermediate Modern Armenian i. 100 Units.
This three-quarter sequence enables the students to reach an Intermediate level of proficiency in the Armenian language. The course covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies and related area studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Autumn
Prerequisite(s): ARME 10103

ARME 20102. Intermediate Modern Armenian II. 100 Units.
This three-quarter sequence enables the students to reach an Intermediate level of proficiency in the Armenian language. The course covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies and related area studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Winter
Prerequisite(s): ARME 20101
ARME 20103. Intermediate Modern Armenian III. 100 Units.
This three-quarter sequence enables the students to reach an Intermediate level of proficiency in the Armenian language. The course covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies and related area studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Spring
Prerequisite(s): ARME 20102

ARME 20102. Intermediate Modern Armenian II. 100 Units.
This three-quarter sequence enables the students to reach an Intermediate level of proficiency in the Armenian language. The course covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies and related area studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Winter
Prerequisite(s): ARME 20101

ARME 20103. Intermediate Modern Armenian III. 100 Units.
This three-quarter sequence enables the students to reach an Intermediate level of proficiency in the Armenian language. The course covers a rich vocabulary and complex grammatical structures in modern formal and colloquial Armenian. Reading assignments include a selection of original Armenian literature and excerpts from mass media. A considerable amount of historical-political and social-cultural issues about Armenia are skillfully built into the course for students who have intention to conduct research in Armenian Studies and related area studies or to pursue work in Armenia.
Instructor(s): H. Haroutunian Terms Offered: Spring
Prerequisite(s): ARME 20102

ARME 29700. Rdg/Rsch: Armenian. 100 Units.

EGYPTIAN COURSES

EGPT 10101-10102. Introduction to Middle Egyptian Hieroglyphs I-II.
This sequence examines hieroglyphic writing and the grammar of the language of classical Egyptian literature.

EGPT 10101. Introduction to Middle Egyptian Hieroglyphs I. 100 Units.
Introduction to Middle Egyptian Hieroglyphs I
Instructor(s): Janet Johnson Terms Offered: Autumn
Prerequisite(s): Second-year standing
Equivalent Course(s): ANCM 30500

EGPT 10102. Introduction to Middle Egyptian Hieroglyphs II. 100 Units.
Introduction to Middle Egyptian Hieroglyphs II
Instructor(s): Janet Johnson Terms Offered: Winter
Prerequisite(s): EGPT 10101 or consent of the instructor
Equivalent Course(s): ANCM 30501

EGPT 10102. Introduction to Middle Egyptian Hieroglyphs II. 100 Units.
Introduction to Middle Egyptian Hieroglyphs II
Instructor(s): Janet Johnson Terms Offered: Winter
Prerequisite(s): EGPT 10101 or consent of the instructor
Equivalent Course(s): ANCM 30501

EGPT 10103. Middle Egyptian Texts I. 100 Units.
This course features readings in a variety of genres, including historical, literary, and scientific texts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): EGPT 10101-10102 or consent of the instructor
Equivalent Course(s): ANCM 30502

EGPT 10201. Introduction to Coptic. 100 Units.
This course introduces the last native language of Egypt, which was in common use during the late Roman, Byzantine, and early Islamic periods (fourth to tenth centuries CE). Grammar and vocabulary of the standard Sahidic dialect are presented in preparation for reading biblical, monastic, and Gnostic literature, as well as a variety of historical and social documents.
Instructor(s): Robert Ritner Terms Offered: Autumn
Prerequisite(s): Second-year standing required; knowledge of earlier Egyptian language phases or Classical Greek or Koine Greek helpful but not required
Equivalent Course(s): HCHR 30601
EGPT 10202. Coptic Texts. 100 Units.
This course builds on the basics of grammar learned in EGPT 10201 and provides readings in a variety of Coptic texts (e.g., monastic texts, biblical excerpts, tales, Gnostic literature).
Instructor(s): Robert Ritner Terms Offered: Winter
Prerequisite(s): EGPT 10201
Equivalent Course(s): HCHR 30602

EGPT 20006. Ancient Near Eastern Thought & Literature-3. 100 Units.
This course employs English translations of ancient Egyptian literary texts to explore the genres, conventions and techniques of ancient Egyptian literature. Discussions of texts examine how the ancient Egyptians conceptualized and constructed their equivalent of literature, as well as the fuzzy boundaries and subtle interplay between autobiography, history, myth and fiction.
Instructor(s): Brian Muhs Terms Offered: Autumn
Equivalent Course(s): NEHC 20006, EGPT 30006, NEHC 30006

EGPT 20101. Middle Egyptian Texts II. 100 Units.
This course features readings in a variety of genres, including historical, literary, and scientific texts.
Instructor(s): Brian Muhs Terms Offered: Autumn
Prerequisite(s): EGPT 10101-10102-10103 or consent of the instructor

EGPT 20102. Introduction to Hieratic. 100 Units.
This course introduces the cursive literary and administrative script of Middle Egyptian (corresponding to the Middle Kingdom period in Egypt) and is intended to provide familiarity with a variety of texts written in hieratic (e.g., literary tales, religious compositions, wisdom literature, letters, accounts, graffiti).
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): EGPT 10101-10102-10103 or equivalent required; EGPT 20101 recommended

EGPT 20110. Introduction to Old Egyptian. 100 Units.
This course examines the hieroglyphic writing and grammar of the Old Kingdom (Egypt's 'Pyramid Age'), focusing on monumental readings from private tombs, royal and private stelae, administrative decrees, economic documents, and Pyramid texts. Some attention is given to Old Egyptian texts written in cursive Hieratic.
Instructor(s): Janet Johnson Terms Offered: Spring
Prerequisite(s): EGPT 10101-10102-10103 or equivalent required; EGPT 20101 recommended

Ge'ez Courses

HEBR 10101-10102-10103. Elementary Classical Hebrew I-II-III.
The purpose of this three-quarter sequence is to enable the student to read biblical Hebrew prose with a high degree of comprehension. The course is divided into two segments: (1) the first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis); and (2) the third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.

HEBR 10101. Elementary Classical Hebrew I. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Autumn
Note(s): This class meets 5 times a week
Equivalent Course(s): JWSC 22000, JWSC 30101

HEBR 10102. Elementary Classical Hebrew II. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): HEBR 10101 or equivalent
Note(s): This class meets 5 times a week
Equivalent Course(s): JWSC 22100

HEBR 10103. Elementary Classical Hebrew-3. 100 Units.
The third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): HEBR 10102
Note(s): This class meets 5 times a week
Equivalent Course(s): JWSC 30300, JWSC 22200
HEBR 10102. Elementary Classical Hebrew II. 100 Units.
The first two quarters are devoted to acquiring the essentials of descriptive and historical grammar (including translation to and from Hebrew, oral exercises, and grammatical analysis).
Instructor(s): S. Creason Terms Offered: Winter
Prerequisite(s): HEBR 10101 or equivalent
Note(s): This class meets 5 times a week
Equivalent Course(s): JWSC 22100

HEBR 10103. Elementary Classical Hebrew-3. 100 Units.
The third quarter is spent examining prose passages from the Hebrew Bible and includes a review of grammar.
Instructor(s): S. Creason Terms Offered: Spring
Prerequisite(s): HEBR 10102
Note(s): This class meets 5 times a week
Equivalent Course(s): JWSC 22200

HEBR 10501-10502-10503. Introductory Modern Hebrew I-II-III.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.

HEBR 10501. Introductory Modern Hebrew-I. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Autumn
Equivalent Course(s): JWSC 25000

HEBR 10502. Introductory Modern Hebrew-II. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Winter
Prerequisite(s): HEBR 10501 or equivalent
Equivalent Course(s): JWSC 25100

HEBR 10503. Introductory Modern Hebrew III. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essays.
Instructor(s): A. Almog Terms Offered: Spring
Prerequisite(s): HEBR 10502 or equivalent
Equivalent Course(s): JWSC 25200

HEBR 10502. Introductory Modern Hebrew-II. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essay.
Instructor(s): A. Almog Terms Offered: Winter
Prerequisite(s): HEBR 10501 or equivalent
Equivalent Course(s): JWSC 25100
HEBR 10503. Introductory Modern Hebrew III. 100 Units.
This three quarter course introduces students to reading, writing, and speaking modern Hebrew. All four language skills are emphasized: comprehension of written and oral materials; reading of nondiacritical text; writing of directed sentences, paragraphs, and compositions; and speaking. Students learn the Hebrew root pattern system and the seven basic verb conjugations in both the past and present tenses, as well as simple future. At the end of the year, students can conduct short conversations in Hebrew, read materials designed to their level, and write short essays.
Instructor(s): A. Almog Terms Offered: Spring
Prerequisite(s): HEBR 10502 or equivalent
Equivalent Course(s): JWSC 25200

HEBR 15001. Elementary Hebrew in Jerusalem. 100 Units.
HEBR 15002. Elementary Hebrew in Jerusalem. 100 Units.
HEBR 15003. Intermediate Hebrew in Jerusalem. 100 Units.
HEBR 15004. Intermediate Hebrew in Jerusalem. 100 Units.
HEBR 15005. Advanced Hebrew in Jerusalem. 100 Units.
HEBR 15006. Advanced Hebrew in Jerusalem. 100 Units.

HEBR 20104-20105-20106. Intermediate Classical Hebrew I-II-III.
A continuation of Elementary Classical Hebrew. The first quarter consists of reviewing grammar, and of reading and analyzing further prose texts. The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs, and the prophets.

HEBR 20104. Intermediate Classical Hebrew I. 100 Units.
The first quarter consists of reviewing grammar, and of reading and analyzing further prose texts.
Instructor(s): D. Pardee Terms Offered: Autumn
Prerequisite(s): HEBR 10103 or equivalent
Equivalent Course(s): JWSC 22300

HEBR 20105. Intermediate Classical Hebrew II. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs, and the prophets.
Instructor(s): D. Pardee Terms Offered: Winter
Prerequisite(s): HEBR 20104 or equivalent
Equivalent Course(s): JWSC 22400

HEBR 20106. Intermediate Classical Hebrew III. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs, and the prophets.
Instructor(s): D. Pardee Terms Offered: Spring
Prerequisite(s): HEBR 20105 or equivalent
Equivalent Course(s): JWSC 22500

HEBR 20105. Intermediate Classical Hebrew II. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs, and the prophets.
Instructor(s): D. Pardee Terms Offered: Winter
Prerequisite(s): HEBR 20104 or equivalent
Equivalent Course(s): JWSC 22400

HEBR 20106. Intermediate Classical Hebrew III. 100 Units.
The last two quarters are devoted to an introduction to Hebrew poetry with readings from Psalms, Proverbs, and the prophets.
Instructor(s): D. Pardee Terms Offered: Spring
Prerequisite(s): HEBR 20105 or equivalent
Equivalent Course(s): JWSC 22500

HEBR 20521. Lower Intermediate-Hebrew through Israeli Media. 100 Units.
This one quarter course is designed to provide students with skills for viewing original movies, reading short newspaper articles as well as watching T.V. shows - all dealing with cultural and social issues in Israel. The learning stages include reading and listening comprehension, oral and written expression, vocabulary and grammar enrichment. The movies, articles and shows are supplemented with a simultaneous script and a dictionary. This courseware is suitable for students who had at least one year of Modern Hebrew studies or were placed into Intermediate Modern Hebrew. Consent of instructor is required.
Instructor(s): Staff Terms Offered: Spring

HEBR 29700. Rdg/Rsch: Hebrew. 100 Units.
KAZK 10101-10102-10103. Elementary Kazakh I-II-III.
This sequence introduces students to Kazakh, a Turkic language spoken in Kazakhstan and neighboring countries. The course teaches the fundamentals of grammar and it enables students to read, write, and speak Kazakh. Students will be exposed to the history and culture of Kazakhstan through modern and 19th-century literature, as well as to current events through mass media. The second and third quarters of this sequence and the Intermediate Kazakh sequence (KAZK 20101-20102-20103) are offered based on interest.

Instructor(s): K. Arik
Terms Offered: Autumn
Prerequisite(s): KAZK 10101 or equivalent

KAZK 10102. Elementary Kazakh-2. 100 Units.
This sequence introduces students to Kazakh, a Turkic language spoken in Kazakhstan and neighboring countries. The course teaches the fundamentals of grammar and it enables students to read, write, and speak Kazakh. Students will be exposed to the history and culture of Kazakhstan through modern and 19th-century literature, as well as to current events through mass media. The second and third quarters of this sequence and the Intermediate Kazakh sequence (KAZK 20101-20102-20103) are offered based on interest.

Instructor(s): STAFF
Terms Offered: Winter
Prerequisite(s): KAZK 10101 or equivalent

KAZK 10103. Elementary Kazakh-III. 100 Units.
3rd Quarter or Elementary Modern Kazakh Language.
Terms Offered: Spring
Prerequisite(s): KAZK 10102 or equivalent

KAZK 20101-20102-20103. Intermediate Kazakh I-II-III.
Second-Year Kazakh.

KAZK 20101. Intermediate Kazakh. 100 Units.
Second-Year Kazakh. Prerequisite(s): First Year Kazakh at the University of Chicago, or equivalent coursework AND placement test with proficiency evaluation. Prerequisite(s): First Year Kazakh at the University of Chicago, or equivalent coursework AND placement test with proficiency evaluation.
Instructor(s): K. Arik
Terms Offered: Autumn
Prerequisite(s): First Year Kazakh at the University of Chicago, or equivalent coursework AND placement test with proficiency evaluation.

KAZK 20102. Intermediate Kazakh-2. 100 Units.
Instructor(s): K. Arik
Terms Offered: Winter
Prerequisite(s): KAZK 20101

KAZK 20103. Intermediate Kazakh III. 100 Units.
Instructor(s): K. Arik
Terms Offered: Spring
Prerequisite(s): KAZK 20102

KAZK 20102. Intermediate Kazakh-2. 100 Units.
Instructor(s): K. Arik
Terms Offered: Winter
Prerequisite(s): KAZK 20101

KAZK 20103. Intermediate Kazakh III. 100 Units.
Instructor(s): K. Arik
Terms Offered: Spring
Prerequisite(s): KAZK 20102
NEAR EASTERN ART AND ARCHEOLOGY COURSES

NEAA 20002. Archaeology of the Ancient Near East II: Anatolia. 100 Units.
Situated in the heart of the ancient Mediterranean, Anatolia lies at the crossroads of Mesopotamia, the Levant, Persia, Greece, and the Caucasus. Among Anatolia’s mountains, plains, and rich river valleys, people first experimented with ideas like agriculture and monumental architecture that define human life around the world today. In this course, we will use the archaeological record to delve into the lives of the people of the hillside villages and magnificent cities of Anatolia, from the severed skull cult of the Pre-Pottery Neolithic and the regimented bureaucratization of the Late Chalcolithic, to the thousand gods of the Hittites and the mountain fortresses of Urartu. This material is well-suited for understanding the basis, in material flows and rhythms of daily life, of the development of religious and secular authority, large-scale violence, ideologies of domination, and resistance movements that played out again and again in the ever-changing cultural contexts of the region.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Taking these courses in sequence is not required. This sequence does not meet the general education requirement in civilization studies.
Note(s): Taking these courses in sequence is not required. This sequence does not meet the general education requirement in civilization studies.
Equivalent Course(s): NEAA 30002

NEAA 20061-20062. Ancient Landscapes I-II.
The landscape of the Near East contains a detailed and subtle record of environmental, social, and economic processes that have obtained over thousands of years. Landscape analysis is therefore proving to be fundamental to an understanding of the processes that underpinned the development of ancient Near Eastern society. This sequence provides an overview of the ancient cultural landscapes of this heartland of early civilization from the early stages of complex societies in the fifth and sixth millennia B.C. to the close of the Early Islamic period around the tenth century A.D.

NEAA 20061. Ancient Landscapes I. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI's ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Autumn
Equivalent Course(s): ANTH 26710, NEAA 30061, ANTH 36710, GEOG 35400, GEOG 25400

NEAA 20062. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI's ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, ANTH 26711, NEAA 30062, GEOG 35800, GEOG 25800
NEAA 20062. Ancient Landscapes II. 100 Units.
This is a two-course sequence that introduces students to theory and method in landscape studies and the use of Geographical Information Systems (GIS) to analyze archaeological, anthropological, historical, and environmental data. Course one covers the theoretical and methodological background necessary to understand spatial approaches to landscape and the fundamentals of using ESRI’s ArcGIS software, and further guides students in developing a research proposal. Course two covers more advanced GIS-based analysis (using vector, raster, and satellite remote sensing data) and guides students in carrying out their own spatial research project. In both courses, techniques are introduced through the discussion of case studies (focused on the archaeology of the Middle East) and through demonstration of software skills. During supervised laboratory times, the various techniques and analyses covered will be applied to sample archaeological data and also to data from a region/topic chosen by the student.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): NEAA 20061
Equivalent Course(s): ANTH 36711, ANTH 26711, NEAA 30062, GEOG 35800, GEOG 25800

NEAA 20071. Texts in Context: Documents and Archaeology. 100 Units.
This course investigates public and private buildings in which ancient records have been found in situ, seeking to find correlations based on architecture, artifacts, and the contents of texts. Often, in the past, the findspots of texts have not been meticulously recorded, resulting in the loss of valuable information on the function of specific buildings or even rooms in buildings; the layout of a building can also give information that can add significantly to the interpretation of the texts.
Instructor(s): McGuire Gibson Terms Offered: Spring
Equivalent Course(s): NEAA 30071

NEAA 20512. Egypt after the Pharaohs: Archaeology of Coptic and Islamic Egy. 100 Units.
This course is an exploration of the continuities of Egyptian culture from the Ptolemaic period down to modern times, a span of over 2000 years. The emphasis will be on the archaeology of Coptic and Islamic Egypt. The focus will be on the role of medieval archaeology in amplifying the history of economic and social systems. It is this connective quality of archaeology which contributes to an understanding of Pharaonic culture and fills the gap between ancient and modern Egypt.
Instructor(s): Donald Whitcomb Terms Offered: Spring
Equivalent Course(s): NEAA 30512

NEAA 20532. Problems in Islamic Archaeology: The Islamic City. 100 Units.
This course is intended to follow the Introduction to Islamic archaeology, a survey of the regions of the fertile crescent from the 9th to the 19th century. Beginning with P. Wheatley’s Places where Men Pray Together, the institution of the Islamic are examined in light of its beginnings and definitions. Emphasis is on archaeological remains from the Middle East.
Instructor(s): D. Whitcomb Terms Offered: Spring
Prerequisite(s): Consent Only
Equivalent Course(s): NEAA 30532

NEAA 20535. Problems in Islamic Archaeology: Archaeology of Travel. 100 Units.
This course focuses on the patterns and archaeological evidence for travel throughout the Islamic world. These patterns of movement are combined with evidence of trade essential for urban development, financial instruments, and industrial scale production among the many aspects of medieval Islamic cultures.
Instructor(s): Donald Whitcomb Terms Offered: Winter
Equivalent Course(s): NEAA 30535

Near Eastern History and Civilizations Courses
NEHC 10101. Introduction to the Middle East. 100 Units.
Prior knowledge of the Middle East not required. This course aims to facilitate a general understanding of some key factors that have shaped life in this region, with primary emphasis on modern conditions and their background, and to provide exposure to some of the region’s rich cultural diversity. This course can serve as a basis for the further study of the history, politics, and civilizations of the Middle East.
Instructor(s): Staff Terms Offered: Spring
Equivalent Course(s): SIGN 26005, HIST 15801

NEHC 19043. Study Abroad in Istanbul. 100 Units.
NEHC 20004-20005-20006. Ancient Near Eastern Thought and Literature I-II-III.
This sequence surveys the thought and literature of the Near East. Each course in the sequence focuses on a particular culture or civilization. Texts in English. This sequence meets the general education requirement in civilization studies. Taking these courses in sequence is not required.
NEHC 20004. Ancient Near Eastern Thought and Literature I: Mesopotamian Literature. 100 Units.
This course takes as its topic the literary tradition surrounding Gilgamesh, the legendary king of the Mesopotamian city-state of Uruk. The course will focus on the Babylonian Epic of Gilgamesh and its Sumerian forerunners, and their cultural and historical contexts. We will also read a number of Sumerian and Akkadian compositions that are thematically related to the Gilgamesh tradition, including Atrahasis, the Sumerian Flood story, and the Epics of Enmerkar and Lugalbanda, also of first dynasty of Uruk.
Instructor(s): Susanne Paulus Terms Offered: Winter
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 30004

NEHC 20005. Ancient Near Eastern Thought & Literature-2: Anatolian Lit. 100 Units.
This course will provide an overview of Anatolian/Hittite literature, as "defined" by the Hittites themselves, in the wider historical-cultural context of the Ancient Near East. In the course of discussions, we will try to answer some important questions about Hittite inscriptions, such as: why were they written down, why were they kept, for whom were they intended, and what do the answers to these questions (apart from the primary content of the texts themselves) tell us about Hittite society?
Instructor(s): H. Haroutunian Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies
Equivalent Course(s): NEHC 30005

NEHC 20006. Ancient Near Eastern Thought & Literature-3. 100 Units.
This course employs English translations of ancient Egyptian literary texts to explore the genres, conventions and techniques of ancient Egyptian literature. Discussions of texts examine how the ancient Egyptians conceptualized and constructed their equivalent of literature, as well as the fuzzy boundaries and subtle interplay between autobiography, history, myth and fiction.
Instructor(s): Brian Muhs Terms Offered: Autumn
Equivalent Course(s): EGPT 30006, EGPT 20006, NEHC 30006

NEHC 20005. Ancient Near Eastern Thought & Literature-2: Anatolian Lit. 100 Units.
This course will provide an overview of Anatolian/Hittite literature, as "defined" by the Hittites themselves, in the wider historical-cultural context of the Ancient Near East. In the course of discussions, we will try to answer some important questions about Hittite inscriptions, such as: why were they written down, why were they kept, for whom were they intended, and what do the answers to these questions (apart from the primary content of the texts themselves) tell us about Hittite society?
Instructor(s): H. Haroutunian Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies
Equivalent Course(s): NEHC 30005

NEHC 20006. Ancient Near Eastern Thought & Literature-3. 100 Units.
This course employs English translations of ancient Egyptian literary texts to explore the genres, conventions and techniques of ancient Egyptian literature. Discussions of texts examine how the ancient Egyptians conceptualized and constructed their equivalent of literature, as well as the fuzzy boundaries and subtle interplay between autobiography, history, myth and fiction.
Instructor(s): Brian Muhs Terms Offered: Autumn
Equivalent Course(s): EGPT 30006, EGPT 20006, NEHC 30006

NEHC 200011-20012-20013. Ancient Empires I-II-III.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered. Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.

NEHC 20011. Ancient Empires I. 100 Units.
The first course of this three-course sequence focuses on the Hittite Empire.
Instructor(s): H. Haroutunian Terms Offered: Autumn
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): CLCV 25700, HIST 15602
NEHC 20012. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, HIST 15603

NEHC 20013. Ancient Empires-3: The Roman Empire, Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, CLCV 25900, CLCV 25900, HIST 15604

NEHC 20012. Ancient Empires-II. 100 Units.
This sequence introduces three great empires of the ancient world. Each course in the sequence focuses on one empire, with attention to the similarities and differences among the empires being considered. By exploring the rich legacy of documents and monuments that these empires produced, students are introduced to ways of understanding imperialism and its cultural and societal effects—both on the imperial elites and on those they conquered.
Instructor(s): Hakan Karateke Terms Offered: Winter
Equivalent Course(s): CLCV 25800, HIST 15603

NEHC 20013. Ancient Empires-3: The Roman Empire, Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, CLCV 25900, CLCV 25900, HIST 15604

NEHC 20013. Ancient Empires-3: The Roman Empire, Ancient Empires-3. 100 Units.
For most of the duration of the New Kingdom (1550–1069 BC), the ancient Egyptians were able to establish a vast empire and becoming one of the key powers within the Near East. This course will investigate in detail the development of Egyptian foreign policies and military expansion which affected parts of the Near East and Nubia. We will examine and discuss topics such as ideology, imperial identity, political struggle and motivation for conquest and control of wider regions surrounding the Egyptian state as well as the relationship with other powers and their perspective on Egyptian rulers as for example described in the Amarna letters.
Instructor(s): Staff Terms Offered: Spring
Note(s): Taking these courses in sequence is not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): HIST 20013, CLCV 25900, CLCV 25900, HIST 15604

NEHC 20019. Mesopotamian Law. 100 Units.
Ancient Mesopotamia—the home of the Sumerians, Babylonians, and Assyrians who wrote in cuneiform script on durable clay tablets—was the locus of many of history’s firsts. No development, however, may be as important as the formations of legal systems and legal principles revealed in contracts, trial records, and law collections (codes), among which The Laws of Hammurabi (r. 1792-1750 BC) stands as most important for understanding the subsequent legal practice and thought of Mesopotamia’s cultural heirs in the Middle East and Europe until today. This course will explore the rich source materials of the Laws and relevant judicial and administration documents (all in English translations) to investigate topics of legal, social, and economic practice, including family formation and dissolution, crime and punishment (sympathetic or talionic eye for an eye, pecuniary, corporal), and procedure (contracts, trials, ordeals).
Instructor(s): M. Roth Terms Offered: Winter
Equivalent Course(s): NEHC 30019, LLSO 20019, SIGN 26022
NEHC 20025. Introduction to Islamic Law. 100 Units.
Is Islam a religion or a political ideology? What is sharī’a and what is shari’a law? What do Muslims mean when they use terms like sharī’a, fiqh and Islamic law? Does Islamic law represent a challenge to the authority of the nation-state?” In this course, we will examine all of these issues and more. In this course, we will approach Islamic law from three main angles, jurisprudence, substantive law, and the judiciary. The substantive areas of Islamic law to be covered include the following: ritual worship, family and personal status law, criminal law, contract law, constitutional and international law. We will also be dealing with the challenges posed by the advent of modernity and colonialism to Muslims’ understanding and practice of Islamic law. The course will combine readings in primary and secondary literature with case studies to illustrate the workings of Islamic law. The main textbooks will be Wael Hallaq’s Introduction to Islamic Law and Knut Vikor’s Between God and the Sultan: A History of Islamic Law. Supplemental readings will be provided from other works. Students will be required to write three 3-4 page response papers, take a midterm and a final exam. The final exam will comprise take home essay questions.
Instructor(s): Aamir Bashir Terms Offered: Winter
Equivalent Course(s): RLST 20801, NEHC 30025, ISLM 30025

NEHC 20032. Imagining the Text: Books and Manuscripts in the Ancient ME. 100 Units.
Imagining the Text: Books and Manuscripts in the Ancient Middle East offers a unique perspective within the larger paradigm of approaches to the written word known as the “History of the Book.” While many such courses look only briefly at pre-printed textual material, this course will provide an overview on the use of texts from antiquity (from the earliest writing to the Middle Ages) in the Middle East. Site visits to local repositories will provide hands-on experience with papyri, clay tablets, parchment, vellum, and rare books. Readings and discussions will explore what is meant by the term “text” in order to deeply investigate the methodologies of book history and textual criticism.
Instructor(s): Foy D Scalf Terms Offered: Autumn
Equivalent Course(s): NEHC 30032

NEHC 20091. Al-Ghazali. 100 Units.
This course introduces students to the figure of Abu Hamid al-Ghazali and his enormously influential contributions to philosophy, theology, Sufism, and law. In addition to reading his writings, we examine al-Ghazali’s reception in secondary scholarship and the various roles attributed to him - extinguisher of reason, proponent of double truth, architect of a grand synthesis. Open to undergraduates with sufficient Arabic and instructor permission.
Instructor(s): Ahmed El Shamsy Terms Offered: Winter
Equivalent Course(s): ISLM 30091, RLST 24591, NEHC 30091

NEHC 20165. Religious Minorities in the Islamic Middle East. 100 Units.
This course will explore four broad aspects of Middle Eastern religious minority communities: 1) their origins and histories; 2) their religious beliefs and cultures; 3) their relationships with political power and the religious majority; 4) their contemporary political situation and recent experiences. Prior knowledge of Islam or Middle East studies will be useful, but is not a prerequisite for this course
Instructor(s): Matthew Barber Terms Offered: Spring

NEHC 20212. Introduction to Egyptian Religion and Magic. 100 Units.
The course provides a general introduction to the theology and ritual practice of Ancient Egypt from the Predynastic Period to the late Roman Empire (ca. 3100 BC to AD 543). Illustrated lectures will survey primary mythology, the nature of Egyptian “magic,” the evolving role of the priesthood, the function of temple and tomb architecture, mummification and funerary rites, the Amarna revolution and the origins of monotheism, as well as the impact of Egyptian religion on neighboring belief systems. Students will read a wide array of original texts in translation in addition to modern interpretive studies. Course requirements include two (2) papers and a final exam. In the first paper the student should discuss in 5-10 pages a specific deity or temple site. The second paper should contain a concise analysis (5-10 pages) of a theological issue pertinent to class discussion and readings. All topics must be cleared in advance with the instructor. Proper bibliographies and footnotes are expected, and any internet sources must be cleared with the instructor.
Instructor(s): R. Ritner Terms Offered: Spring
Equivalent Course(s): NEHC 30212

NEHC 20215. Babylon and the Origins of Knowledge. 100 Units.
In 1946 the famed economist John Maynard Keynes declared that Isaac Newton “was the last of the magicians, the last of the Babylonians.” We find throughout history, in the writings of Galileo, Jorge Luis Borges, Ibn Khaldun, Herodotus, and the Hebrew Bible, a city of Babylon full of contradictions. At once sinful and reverential, a site of magic and science, rational and irrational, Babylon seemed destined to resound in the historical imagination as the birthplace of knowledge itself. But how does the myth compare to history? How did the Babylonians themselves envisage their own knowledge? And is it reasonable to draw, as Keynes did, a line that begins with Babylon and ends with Newton? In this course we will take a cross comparative approach, investigating the history of the ancient city and its continuity in the scientific imagination.
Instructor(s): E. Escobar Terms Offered: Autumn
Equivalent Course(s): KNOW 27004, HIST 25617, HIIPS 27004
NEHC 20287. Egypt in Late Antiquity. 100 Units.
Egypt in Late Antiquity was a melting pot of cultures, languages, and religions. With the native Egyptians subject to a series of foreign masters (Greek and Roman), each with their own languages and religious practices, Egyptian society was marked by a rich and richly documented diversity. In this course we will pay special attention to the contact of languages and of religions, discussing on the basis of primary sources in translation different aspects characteristic of this period: the crises of the Roman Empire and their effects in Egypt, the emergence of Christianity and the decline of paganism, the development of monastic communities. The course will end at the Islamic conquest.
Equivalent Course(s): CLCV 20216, CLAS 35716, HREL 30287, NEHC 30287

NEHC 20464. Climate, Culture, and Society in the Ancient Near East. 100 Units.
This course is part of the new curricular initiative Course Cluster on Climate Change, Culture and Society. Using primarily case studies from the Ancient Near East (from prehistory to the first millennium BCE) as a basis for discussion, the course will investigate the nature of the relationship between human societies and their environment, with a specific focus on situations of climatic change. Students will be invited to reflect on discourses on human-environment interactions from Herodotus to the IPCC, on notions such as environmental or social determinism, possibilism and reductionism, societal collapse and resilience, and on recent academic trends at the crossroads of Humanities, Social Sciences and Environmental Studies. This will allow them to develop critical skills that nurture their reflections on current debates on anthropogenic climate change and the Anthropocene. This course is part of the College Course Cluster program: Climate Change, Culture and Society.
Instructor(s): Herve Reculeau Terms Offered: Spring
Equivalent Course(s): HIST 20310

NEHC 20491. Jews and Judaism in the Classical Era and Late Antiquity: From. 100 Units.
This course will address the thousand-year evolvement of post-Biblical Judaism from a Temple and Land orientation to the emergence of Rabbinic Judaism. The first section of the course will focus on the political and cultural effects of the Hellenistic and early Roman periods on Jews and Judaism, with a stress placed not only on the social and political developments in Judea but on the early stages and subsequent growth of Jewish diaspora communities as well. In this context special attention will be given to the variegated literary corpus produced by Jews both in Judea and the diaspora. The second section will analyze the changes in Jewish life and identity in the aftermath of the destruction of Jerusalem and the Second Temple in 70CE, and the gradual emergence of Rabbinic Judaism as an alternative expression of Jewish religious commitment. The Roman Empire’s embracing of Christianity on the one hand, and the growing assertiveness of a Babylonian Rabbinic community on the other, will also be closely examined.
Instructor(s): I. Gafni Terms Offered: Winter 2015
Equivalent Course(s): RLST 20911, JWSC 20911, HIJD 30911

NEHC 20501-20502-20503. Islamic History and Society I-II-III.
This sequence meets the general education requirement in civilization studies. This sequence surveys the main trends in the political history of the Islamic world, with some attention to economic, social, and intellectual history. Taking these courses in sequence is recommended but not required.

NEHC 20501. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.
This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): HIST 35704, ISLM 30500, NEHC 30501, CMES 30501, RLST 20501, HIST 25704

NEHC 20502. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamelukes of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, HIST 25804, NEHC 30502, ISLM 30600, CMES 30502

NEHC 20503. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the "modern" Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): HIST 25904, NEHC 30503, HIST 35904
NEHC 20502. Islamic History and Society II: The Middle Period. 100 Units.
This course covers the period from ca. 1100 to 1750, including the arrival of the Steppe Peoples (Turks and Mongols), the Mongol successor states, and the Mamluks of Egypt and Syria. We also study the foundation of the great Islamic regional empires of the Ottomans, Safavids, and Moghuls.
Instructor(s): J. Woods Terms Offered: Winter
Prerequisite(s): Not open to first-year students
Equivalent Course(s): HIST 35804, HIST 25804, NEHC 30502, ISLM 30600, CMES 30502

NEHC 20503. Islamic History and Society III: The Modern Middle East. 100 Units.
This course covers the period from ca. 1750 to the present, focusing on Western military, economic, and ideological encroachment; the impact of such ideas as nationalism and liberalism; efforts at reform in the Islamic states; the emergence of the “modern” Middle East after World War I; the struggle for liberation from Western colonial and imperial control; the Middle Eastern states in the cold war era; and local and regional conflicts.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): Not open to first-year students
Note(s): This course does not apply to the medieval studies major or minor.
Equivalent Course(s): HIST 25904, NEHC 30503, HIST 35904

NEHC 20504. Introduction to the Hebrew Bible. 100 Units.
The Hebrew Bible (Old Testament) is a complex anthology of disparate texts and reflects a diversity of religious, political, and historical perspectives from ancient Israel, Judah, and Yehud. Because this collection of texts continues to play an important role in modern religions, new meanings are often imposed upon it. In this course, we will attempt to read biblical texts apart from modern preconceptions about them. We will also contextualize their ideas and goals through comparison with texts from ancient Mesopotamia, Syro-Palestine, and Egypt. Such comparisons will demonstrate that the Hebrew Bible is fully part of the cultural milieu of the Ancient Near East. To accomplish these goals, we will read a significant portion of the Hebrew Bible in English, along with representative selections from secondary literature. We will also spend some time thinking about the nature of biblical interpretation.
Instructor(s): J. Stackert Terms Offered: Autumn
Equivalent Course(s): BIBL 31000, NEHC 30504, JWSC 20120, RLST 11004

NEHC 20550. Scandal as Historical Document, 17th-21st Centuries. 100 Units.
How can we use scandals as windows into the cultural history of the modern and early modern worlds? What does a scandal tell us about the public that consumes and disseminates it? In this course, we tackle these questions through an investigation of some of the major scandals of the early modern and modern periods in both Europe and the Middle East. From courtroom dramas in Paris and London to fierce debates in coffee houses and newspapers in Cairo, Beirut, and Istanbul, this course offers a comparative view of how scandals were disseminated, received, and narrativized across time and space. In doing so, we will also examine the central role of the “public” both as a concept and as an actor in early modern and modern scandals. The course will also introduce students to a wide variety of primary sources as well as a rich literature on the subject. All readings are in English. No prior background on the subject is required.
Equivalent Course(s): HIST 22608

NEHC 20568. Balkan Folklore. 100 Units.
Vampires, fire-breathing dragons, vengeful mountain nymphs. 7/8 and other uneven dance beats, heart-rending laments, and a living epic tradition. This course is an overview of Balkan folklore from historical, political, and anthropological perspectives. We seek to understand folk tradition as a dynamic process and consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition firsthand through visits of a Chicago-based folk dance ensemble, “Balkan Dance.”
Instructor(s): A. Ilieva Terms Offered: Winter
Equivalent Course(s): REES 39009, REES 29009, NEHC 30568, ANTH 25908, ANTH 35908, CMLT 23301, CMLT 33301

NEHC 20570. Mughal India: Tradition & Transition. 100 Units.
The focus of this course is on the period of Mughal rule during the late sixteenth, seventeenth, and eighteenth centuries, especially on selected issues that have been at the center of historiographical debate in the past decades.
Instructor(s): M. Alam Terms Offered: Autumn
Prerequisite(s): Advanced standing or consent of instructor. Prior knowledge of appropriate history and secondary literature required.
Equivalent Course(s): SALT 37701, HIST 36602, SALT 27701, HIST 26602, NEHC 30570
NEHC 20573. The Burden of History: The Nation and Its Lost Paradise. 100 Units.
What makes it possible for the imagined communities called nations to command the emotional attachments that they do? This course considers some possible answers to Benedict Anderson’s question on the basis of material from the Balkans. We will examine the transformation of the scenario of paradise, loss, and redemption into a template for a national identity narrative through which South East European nations retell their Ottoman past. With the help of Žižek’s theory of the subject as constituted by trauma and Kant’s notion of the sublime, we will contemplate the national fixation on the trauma of loss and the dynamic between victimhood and sublimity.
Instructor(s): A. Ilieva Terms Offered: Winter
Equivalent Course(s): HIST 34005, CMLT 23401, CMLT 33401, NEHC 30573, REES 39013, HIST 24005, REES 29013

NEHC 20601-20602-20603. Islamic Thought and Literature I-II-III.
This sequence explores the thought and literature of the Islamic world from the coming of Islam in the seventh century C.E. through the development and spread of its civilization in the medieval period and into the modern world. Including historical framework to establish chronology and geography, the course focuses on key aspects of Islamic intellectual history: scripture, law, theology, philosophy, literature, mysticism, political thought, historical writing, and archaeology. In addition to lectures and secondary background readings, students read and discuss samples of key primary texts, with a view to exploring Islamic civilization in the direct voices of the people who participated in creating it. All readings are in English translation. No prior background in the subject is required. This course sequence meets the general education requirement in civilization studies. Taking these courses in sequence is recommended but not required.

NEHC 20601. Islamic Thought and Literature I. 100 Units.
This course covers the period from ca. 600 to 950, concentrating on the career of the Prophet Muhammad; Qur’an and Hadith; the Caliphate; the development of Islamic legal, theological, philosophical, and mystical discourses; sectarian movements; and Arabic literature.
Instructor(s): T. Qutbuddin Terms Offered: Autumn
Equivalent Course(s): NEHC 30601, CMES 30601, RLST 20401, HIST 25610, SOSC 22000, ISLM 30601, HIST 35610

NEHC 20602. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the “gunpowder empires” (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

NEHC 20603. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

NEHC 20602. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 600 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the “gunpowder empires” (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

NEHC 20603. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): RLST 20402, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602
NEHC 20605. Colloquium: Sources for the Study of Islamic History. 100 Units.
This course is designed to acquaint the student with the basic problems and concepts as well as the sources and methodology for the study of premodern Islamic history. Sources will be read in English translation and the tools acquired will be applied to specific research projects to be submitted as term papers.
Instructor(s): J. Woods Terms Offered: Autumn
Equivalent Course(s): NEHC 30605, HIST 36005, HIST 26005

NEHC 20615. Drawn Together: Comics Culture in the Middle East. 100 Units.
This is a course about the rise of the graphic novel and comics culture in the Middle East. We will apply key theoretical materials from the field of comics studies to help us understand the influences, motivations and interventions of these graphic narratives in their cultural contexts. While we will primarily focus on the Arabic-speaking regions of the Middle East, the course will also include texts from Iran, Turkey, and the US and Europe.
Instructor(s): G. Hayek Terms Offered: Spring
Equivalent Course(s): NEHC 30615

NEHC 20645. History of the Fatimid Caliphate. 100 Units.
This course will cover the history of the Fatimid (Shiite) caliphate, from its foundation in the North Africa about 909 until its end in Egypt 1171. Most of the material will be presented in classroom lectures. Sections of the course deal with Fatimid history treated chronologically and others with separate institutions and problems as they changed and developed throughout the whole time period. Readings heavily favored or highly recommended are all in English.
Instructor(s): P. Walker Terms Offered: Spring
Equivalent Course(s): HIST 34401, NEHC 30645, HIST 24401

NEHC 20735. Persia: The First World Empire. 100 Units.
Stretching from Pakistan to Egypt and Greece, the Achaemenid Persian Empire dominated the Middle East for over 200 years (559-330 BCE) and was the first world empire in history. The Persian Empire brought diverse cultures, such as those of Mesopotamia, Egypt, and Greece, under a single rule, and witnessed transformations in the economies, religions, and political structures of the ancient world. In this course, we will trace the rise and fall of the Persian Empire and its afterlife, as the history of the Persian Empire continues to affect how we conceive of the Middle East today.

NEHC 20745. A Social History of the Poet in the Arab and Islamic World. 100 Units.
What constitutes a poet? What role does a poet play in society? Can we think of poets as agents of change? If so, in what capacity? This course asks the student to consider the role of the poet in the shaping of Islamic history. The course traces the changing role of the poet and of poetry in Islamic history with a focus on Arabic poetry (in translation) in the early modern and modern Middle East and North Africa. From early modern mystical poets, to modern Arab nationalist poets, to the street poets of the Arab Spring, the course investigates the role and function of the poet as an agent of change and of poetry as a catalyst for the formation of collective identity. To do this the course also explores the variety of mediums through which poetry was transmitted and remembered. We will thus consider the role of orality, aurality, and memory in the creation, preservation, and transmission of poetry in the early modern and modern Arabic-speaking world.
Equivalent Course(s): CMLT 22609, HIST 22609

NEHC 20765. Introduction to the Musical Folklore of Central Asia. 100 Units.
This course explores the musical traditions of the peoples of Central Asia, both in terms of historical development and cultural significance. Topics include the music of the epic tradition, the use of music for healing, instrumental genres, and Central Asian folk and classical traditions. Basic field methods for ethnomusicology are also covered. Extensive use is made of recordings of musical performances and of live performances in the area.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): Knowledge of Arabic and/or Islamic studies helpful but not required
Equivalent Course(s): MUSI 23503, REES 25001, REES 35001, ANTH 25905, MUSI 33503, NEHC 30765

NEHC 20802. Empires and Peoples: Ethnicity in Late Antiquity. 100 Units.
Late antiquity witnessed an unprecedented proliferation of peoples in the Mediterranean and the Middle East. Vandals, Arabs, Goths, Huns, Franks, and Iranians, among numerous others, took shape as political communities within the Roman and Iranian empires or along their peripheries. Recent scholarship has undone the traditional image of these groups as previously undocumented communities of “barbarians” entering history. Ethnic communities emerge from the literature as political constructions dependent on the very malleability of identities, on specific acts of textual and artistic production, on particular religious traditions, and, not least, on the imperial or postimperial regimes sustaining their claims to sovereignty. The colloquium will debate the origin, nature, and roles of ethno-political identities and communities comparatively across West Asia, from the Western Mediterranean to the Eurasian steppes, on the basis of recent contributions. As a historiographical colloquium, the course will address the contemporary cultural and political concerns—especially nationalism—that have often shaped historical accounts of ethnogenesis in the period as well as bio-historical approaches—such as genetic history—that sometimes sit uneasily with the recent advances of historians.
Instructor(s): R. Payne Terms Offered: Spring
Prerequisite(s): Open to advanced undergraduates and graduate students.
Equivalent Course(s): HIST 20902, NEHC 30802, HIST 30902

Near Eastern Languages and Civilizations
NEHC 20840. Radical Islamic Pieties: 1200 to 1600. 100 Units.
Some knowledge of primary languages (i.e., Arabic, French, German, Greek, Latin, Persian, Spanish, Turkish) helpful. This course examines responses to the Mongol destruction of the Abbasid caliphate in 1258 and the background to formation of regional Muslim empires. Topics include the opening of confessional boundaries; Ibn Arabi, Ibn Taymiyya, and Ibn Khaldun; the development of alternative spiritualities, mysticism, and messianism in the fifteenth century; and transconfessionalism, antinomianism, and the articulation of sacral sovereignties in the sixteenth century. All work in English. This course is offered in alternate years.
Instructor(s): C. Fleischer Terms Offered: Winter
Equivalent Course(s): RLST 20840, HIST 25901, NEHC 30840, HIST 35901

NEHC 20884. The Brighter Side of the Balkans: Humor & Satire in Lit & Film. 100 Units.
In this course, we examine the poetics of laughter in the Balkans. In order to do so, we introduce humor as both cultural and transnational. We unpack the multiple layers of cultural meaning in the logic of "Balkan humor." We also examine the functions and mechanisms of laughter, both in terms of cultural specificity and general practice and theories of humor. Thus, the study of Balkan humor will help us elucidate the "Balkan" and the "World," and will provide insight not only into cultural mores and social relations, but into the very notion of "funny." Our own laughter in class will be the best measure of our success - both cultural and intellectual.
Instructor(s): Angelina Ilieva Terms Offered: Spring
Prerequisite(s): Readings in English. Background in the Balkans will make the course easier, but is not required.
Equivalent Course(s): NEHC 30884, REES 29007, CMLT 26610

NEHC 20885. Returning the Gaze: The Balkans and Western Europe. 100 Units.
This course investigates the complex relationship between South East European self-representations and the imagined Western "gaze" for whose benefit the nations stage their quest for identity and their aspirations for recognition. We also think about differing models of masculinity, the figure of the gypsy as a metaphor for the national self in relation to the West, and the myths Balkans tell about themselves. We conclude by considering the role that the imperative to belong to Western Europe played in the Yugoslav wars of succession. Some possible texts/films are Ivo Andric, Bosnian Chronicle; Aleko Konstantinov, Baj Ganyo; Emir Kusturica, Underground; and Milcho Manchevski, Before the Rain.
Instructor(s): A. Ilieva Terms Offered: Autumn
Equivalent Course(s): CMLT 23201, REES 29012, CMLT 33201, REES 39012, NEHC 30885

NEHC 20895. The Construction of Jewish History in Israel. 100 Units.
The course concerns the ways Jewish history has been constructed and conceptualized in the State of Israel since 1948. It will examine academic and para academic research, popular history books, TV series, educational programs, national archives and public ceremonies.
Instructor(s): Miriam Frenkel Terms Offered: Autumn
Equivalent Course(s): JWSC 20895

NEHC 20896. The Mizrahi Discourse in Israel. 100 Units.
The course concerns the many ways Oriental Jews are represented in Israeli discourse: in academic writings, in history curricula, in Israeli novels and films, in ethnic museums and in political discourse. It will also discuss Mizrahi self-identities as manifested in protest movements, civil organizations, and political parties. The course will take a chronological path and will follow the changes that occurred in the discourse about ethnicity from the state’s early years until recent days.
Instructor(s): Miriam Frenkel Terms Offered: Winter
Equivalent Course(s): HIST 25905, JWSC 20896, NEHC 30896

NEHC 20901. Orality, Literature and Popular Culture of Afghanistan and Pakistan. 100 Units.
Course description unavailable.
Instructor(s): C. R. Perkins Terms Offered: Winter 2013
Equivalent Course(s): CMLT 26901, HIST 26905, HIST 36905, SALC 26901, CMLT 36901, NEHC 30901

NEHC 20911. Prophets in Jewish and Islamic Traditions. 100 Units.
In this course, we will study the tales of the prophets as found in the Bible, the Qur’an, and Jewish and Islamic interpretive traditions. By examining and enjoying the narratives of individual prophets, we will develop an understanding of prophecy as a broad religious phenomenon. The course offers opportunities for comparative enquiry into two sacred scriptures—the Bible and the Qur’an—and the rich interpretive literature that Jewish and Islamic communities created in order to understand them. All readings will be in English translation.
Assignments include three short essays, an oral presentation, and a final exam.
Instructor(s): J. Andruss Terms Offered: Winter
Equivalent Course(s): RLST 20910, JWSC 20910
NEHC 20937. Nationalism & Colonialism in the Middle East. 100 Units.
The seminar covers the history of the region during the 19th and 20th centuries. It looks at how the modern historiography of modern Middle Eastern studies shaped, and was shaped by, post-colonial studies, subaltern studies, and historical perceptions of urbanity, modernity, Orientalism, and class. The class will pay heed to the fluid and constructed nature of Arab national culture, and the terminology used by Arab nationalists concerning “nahda,” “revival,” and “rebirth.” We will explore various “golden ages” Arab nationalists envisioned, like pre-Islamic Semitic empires, the first Islamic state under the leadership of the Prophet Muhammad, the Umayyads, the Abbasids and Muslim Spain, as a way of analyzing the the constructed and temporal nature of national discourses. We will finally examine the distinction between Pan-Arab nationalism (qawmiyya), which considered Arab culture, history, and language as markers of one’s national identity, and often strove for political unity with other Arab states; and territorial-patriotic nationalism (wataniyya), which hailed the national cultures of particular Arab states (Egyptian, Iraqi, Lebanese), focusing on their geography, archaeology, and history the key features of national identity.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): NEHC 30937

NEHC 21000. Before the Zodiac: Astronomy and Mathematics as Ancient Culture. 100 Units.
Taking as its central theme the cultural situatedness of the earliest systems of mathematics and astronomy—from their origins in ancient Mesopotamia (Iraq, c. 3400 BCE) until the Common Era (CE)—this course explores topics in mathematical language and script, metrology, geometry and topology, music theory, definitions of time, models of stars and planets, medical astrology, and pan-astronomical hermeneutics in literature and an ancient board game. Pushing against boundaries separating the humanities and social and physical sciences, students discover how histories of science and mathematics could be decisively shaped not merely by sensory experience or axiomatic definition, but also by ideas and imagery derived from the cultures, societies, and aesthetics of their day.
Instructor(s): J. Wee Terms Offered: Spring
Equivalent Course(s): NEHC 31000, SIGN 26045

NEHC 21010. The Age of Innovation - Famous Firsts 5,000 Years Ago. 100 Units.
The first man on moon”, “the first Thanksgiving,” or “the first kiss”--our society is still fascinated and remembers the exact moment something happened for the first time. The history of the Ancient Near East, especially the ancient civilization of Mesopotamia (modern Iraq), is quite rich of such "firsts in history." From the moment, writing is discovered there is an abundance of textual record, covering the first documents about politics, law, and economics. The first private documents allow us a glimpse into what living and dying were like more than 5,000 years ago. This course will explore what the cultural conditions of those innovations were, how innovations transform societies, and why it matters to study ancient civilizations. By discovering primary sources (in English translation), the fascination of reading those texts for the "first" time will be experienced. Visits at the Oriental Institute Museum will link textual record and object-based inquiry.
Instructor(s): S. Paulus Terms Offered: Spring
Equivalent Course(s): SIGN 26016

NEHC 22010. Jewish Civilization I: Ancient Beginnings to Early Medieval Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Autumn course will deal with antiquity to the early medieval periods. Its readings will include works from the Bible, the Dead Sea Scrolls, Philo, Josephus, the Rabbis, Yehudah Halevy, and Maimonides. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Chavel Terms Offered: Autumn
Equivalent Course(s): JWSC 12000, RLST 22010
NEHC 22011. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelsohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Rokem Terms Offered: Winter
Equivalent Course(s): JWSC 12001, RLST 22011

NEHC 23613. Popular Culture in the Middle East and North Africa. 100 Units.
No description available.
Instructor(s): Travis Jackson Terms Offered: Various
Prerequisite(s): 100-level music course or consent of instructor.
Equivalent Course(s): MUSI 23613

NEHC 24118. Coptic Bible. 100 Units.
The Coptic versions of the Bible present one of the earliest translations of Christian scripture as the new religion spread. Understanding how the Bible (canonical and non-canonical) was read and used in Egypt at this early stage implies studying the development of Christian communities in those agitated times, as well as paying attention to questions of literacy and linguistic environment, book production, Bible (both Greek and Coptic) on papyrus, and translation and interpretation in Antiquity. The course will draw on materials assembled from my work on the critical edition of the Gospel of Mark, but will also look into other materials like the Coptic Old Testament, and non-canonical scriptures such as Nag Hammadi and the Gnostic scriptures. No previous knowledge of Coptic is required. A brief introduction to the Coptic language will be part of the class, and parallel sessions of additional language instruction will be planned for those who are interested in learning more.
Instructor(s): S. Torallas Terms Offered: Autumn
Equivalent Course(s): CLCV 24118, BIBL 31418, RLST 21450, CLAS 34118, NEHC 34118

NEHC 25147. Anthropology of Israel. 100 Units.
This seminar explores the dynamics of Israeli culture and society through a combination of weekly screenings of Israeli fiction and documentary films with readings from ethnographic and other relevant research. Among the (often overlapping) topics to be covered in this examination of the institutional and ideological construction of Israeli identity/ies: the absorption of immigrants; ethnic, class, and religious tensions; the kibbutz; military experience; the Holocaust; evolving attitudes about gender and sexuality; the struggle for minorities’ rights; and Arab-Jewish relations.
Equivalent Course(s): NEHC 35147, ANTH 25150, CMES 35150, ANTH 35150, MAPS 35150, JWSC 25149

NEHC 25148. Israel in Film and Ethnography. 100 Units.
This seminar explores the dynamics of Israeli culture and society through a combination of weekly screenings of Israeli fiction and documentary films with readings from ethnographic and other relevant research. Among the (often overlapping) topics to be covered in this examination of the institutional and ideological construction of Israeli identity/ies: the absorption of immigrants; ethnic, class, and religious tensions; the kibbutz; military experience; the Holocaust; evolving attitudes about gender and sexuality; the struggle for minorities’ rights; and Arab-Jewish relations. In addition to the readings, participants will be expected to view designated films before class related to the topic.
Equivalent Course(s): JWSC 25148, CMES 35148, ANTH 25148, MAPS 35148, ANTH 35148, NEHC 35148

NEHC 26903. History and Literature of Pakistan: Postcolonial Representations. 100 Units.
No description available.
Instructor(s): C.R. Perkins Terms Offered: Autumn
Equivalent Course(s): SALC 26903, SALC 46903, HIST 26608

NEHC 28002. Islamic Art and Architecture of the Medieval Perso-Turkic Courts. 100 Units.
This course considers art and architecture patronized by the Seljuk, Mongol, and Timurid courts from Anatolia to Central Asia from the eleventh to the fifteenth centuries. While the princes of these courts were of Turkic and/or Mongol origin, they adopted many of the cultural and artistic expectations of Perso-Islamicate court life. Further, many objects and monuments patronized by these courts belong to artistic histories variously shared with non-Islamic powers from the Byzantine Empire to China. Questions of how modern scholars have approached and categorized the arts and architecture of these courts will receive particular attention. Each student will write a historiographic review essay with a research component.
Instructor(s): P. Berlekamp Terms Offered: Winter
Equivalent Course(s): NEHC 38002, ARTH 28002, ARTH 38002
NEHC 29023. Returning the Gaze: The West and the Rest. 100 Units.
Aware of being observed. And judged. Inferior... Abject... Angry... Proud... This course provides insight into identity dynamics between the "West," as the center of economic power and self-proclaimed normative humanity, and the "Rest," as the poor, backward, volatile periphery. We investigate the relationship between South East European self-representations and the imagined Western gaze. Inherent in the act of looking at oneself through the eyes of another is the privileging of that other’s standard. We will contemplate the responses to this existential position of identifying symbolically with a normative site outside of oneself-self-consciousness, defiance, arrogance, self-exoticization-and consider how these responses have been incorporated in the texture of the national, gender, and social identities in the region. Orhan Pamuk, Ivo Andrić, Nikos Kazantzakis, Aleko Konstantinov, Emir Kusturica, Milcho Manchevski.
Instructor(s): Angelina Ilieva Terms Offered: Autumn
Equivalent Course(s): NEHC 39023, CMLT 39023, HIST 23609, REES 39023, HIST 33609, REES 29023, CMLT 29023

NEHC 29502. South India 1300-1700: Persons, Politics, Perceptions. 100 Units.
Equivalent Course(s): HIST 36610, SALC 39502, SALC 29502, HREL 39502, ISLM 39502, NEHC 39502, HIST 26610

NEHC 29800. BA Paper Seminar. 100 Units.
Required of fourth-year students who are majoring in NELC. This is a workshop course designed to survey the fields represented by NELC and to assist students in researching and writing the BA paper. Students must get a Reading and Research form from their College Adviser and complete the form in order to be registered. Signatures are needed from the adviser and Director of Undergraduate Studies. Please indicate on the form that you wish to register for NEHC 29800 Section 01.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): 4th year NELC majors only. Approval of Director of Undergraduate Studies.

NEHC 29999. BA Paper Preparation. 100 Units.
Students are required to submit the College Reading and Research Course Form. In consultation with a faculty research adviser and with consent of the Director of Undergraduate Studies, students devote the equivalent of a one-quarter course to the preparation of the BA paper. Please indicate that you wish to register for NEHC 29999 Section 01 with the Director of Undergraduate Studies.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): 4th year NELC majors only. Approval of Director of Undergraduate Studies.

Near Eastern Languages Courses
NELG 10200. Elementary Modern Greek II. 100 Units.
This course aims to develop elementary proficiency in spoken and written Modern Greek and to introduce elements of cultural knowledge. The course will familiarize the students with the basic morphology and syntax, with an emphasis on reading and conversational skills. The students will be able to handle a variety of tasks and manage an uncomplicated situation using mostly formulaic and rote utterances. They will also be able to express personal meaning forming paragraphs.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Winter
Prerequisite(s): MOGK 10100/30100 or consent of instructor
Equivalent Course(s): MOGK 10200, MOGK 30200

NELG 20200. Intermediate Modern Greek II. 100 Units.
This course aims to enable students to attain conversational fluency and to become independent users of the language who deal effectively and with a good deal of accuracy. They are able to handle successfully uncomplicated tasks and social situations requiring an exchange of basic information related to their work, school, recreation, particular interests and areas of competence. They can also speak about some topics related to employment, current events and matters of public and community interest. They are able to create with language, ask questions, narrate and describe in all major time frames using connected discourse of paragraph length.
Instructor(s): Chrysanthi Koutsiviti Terms Offered: Winter
Prerequisite(s): MOGK 20100
Equivalent Course(s): MOGK 20200

NELG 20301. Introduction to Comparative Semitics. 100 Units.
This course examines the lexical, phonological, and morphological traits shared by the members of the Semitic language family. We also explore the historical relationships among these languages and the possibility of reconstructing features of the parent speech community.
Instructor(s): R. Hasselbach-Andee Terms Offered: Winter
Prerequisite(s): Knowledge of two Semitic languages or one Semitic language and Historical Linguistics.
Equivalent Course(s): NELG 30301
NELG 20901. Advanced Seminar: Comparative Semitic Linguistics. 100 Units.
This course is an advanced seminar in comparative Semitics that critically discusses important secondary literature and linguistic methodologies concerning topics in the field, including topics in phonology, morphology, syntax, etc.
Instructor(s): R. Hasselbach Terms Offered: Winter
Prerequisite(s): Introduction to Comparative Semitics. Undergraduates require consent of instructor.
Equivalent Course(s): NELG 40301

PERSIAN COURSES
PERS 10101-10102-10103. Elementary Persian I-II-III.
This sequence concentrates on modern written Persian as well as modern colloquial usage. Toward the end of this sequence, students are able to read, write, and speak Persian at an elementary level. Introducing the Iranian culture is also a goal.

PERS 10101. Elementary Persian-1. 100 Units.
This sequence concentrates on modern written Persian as well as modern colloquial usage. Towards the end of the sequence the students will be able to read, write and speak Persian at an elementary level. Introducing the Iranian culture is also a goal. The class meets three hours a week with the instructor and two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Autumn

PERS 10102. Elementary Persian-2. 100 Units.
This sequence deepens and expands the students' knowledge of modern Persian at all levels of reading, writing and speaking. Grammar will be taught at a higher level and a wider vocabulary will enable the students to read stories, articles and poetry and be introduced to examples of classical literature towards the end of the sequence. Introducing the Iranian culture will be continued. Class meets three hours a week with the instructor and (with enough students) two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Winter
Prerequisite(s): PERS 10101

PERS 10103. Elementary Persian-III. 100 Units.
This sequence concentrates on modern written Persian as well as modern colloquial usage. Towards the end of the sequence the students will be able to read, write and speak Persian at an elementary level. Introducing the Iranian culture is also a goal. The class meets three hours a week with the instructor and two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Spring
Prerequisite(s): PERS 10102

PERS 20101-20102-20103. Intermediate Persian I-II-III.
This sequence deepens and expands students' knowledge of modern Persian at all levels of reading, writing, and speaking. Grammar is taught at a higher level, and a wider vocabulary enables students to read stories, articles, and poetry. Examples of classical literature and the Iranian culture are introduced.
PERS 20101. Intermediate Persian I. 100 Units.
This sequence deepens and expands the students’ knowledge of modern Persian at all levels of reading, writing and speaking. Grammar will be taught at a higher level and a wider vocabulary will enable the students to read stories, articles and poetry and be introduced to examples of classical literature towards the end of the sequence. Introducing the Iranian culture will be continued. Class meets three hours a week with the instructor and (with enough students) two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Autumn
Prerequisite(s): PERS 10103 or consent of instructor

PERS 20102. Intermediate Persian II. 100 Units.
This sequence deepens and expands the students’ knowledge of modern Persian at all levels of reading, writing and speaking. Grammar will be taught at a higher level and a wider vocabulary will enable the students to read stories, articles and poetry and be introduced to examples of classical literature towards the end of the sequence. Introducing the Iranian culture will be continued. Class meets three hours a week with the instructor and (with enough students) two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Winter
Prerequisite(s): PERS 20101 or consent of the instructor

PERS 20103. Intermediate Persian III. 100 Units.
This sequence deepens and expands the students’ knowledge of modern Persian at all levels of reading, writing and speaking. Grammar will be taught at a higher level and a wider vocabulary will enable the students to read stories, articles and poetry and be introduced to examples of classical literature towards the end of the sequence. Introducing the Iranian culture will be continued. Class meets three hours a week with the instructor and (with enough students) two hours with a native informant who conducts grammatical drills and Persian conversation.
Instructor(s): S. Ghahremani Terms Offered: Spring
Prerequisite(s): PERS 20202 or consent of the instructor

PERS 20123. Summer Intensive Intermediate Persian. 300 Units.
This course is designed for students with some previous background in the language, typically a year of elementary Persian at the college level (at the University of Chicago or another school), and who have speaking proficiency at the Novice High/Intermediate Low level on the ACTFL scale. At the conclusion of this course, students can expect to continue to develop their abilities in all aspects of the Persian language (speaking, listening, reading, and writing) and to begin to access authentic Persian-language materials, such as newspaper articles, short fiction, and film. Students should also improve their speaking proficiency to the Intermediate Mid/High level on the ACTFL scale (or above). The course will introduce more complex grammatical structures, with focus on contemporary written Persian, but gradually other levels of language (colloquial, literary) are introduced. Texts include selected articles, stories, and poetry, starting with contemporary texts and introducing some classical examples towards the end of the course. All students enrolled in Summer Intensive Intermediate Persian will conclude the program by participating in an ACTFL Oral Proficiency Interview. Each student will then receive an independent, certified rating of speaking ability to document the student’s speaking abilities.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-8/4/17
Prerequisite(s): Successful completion of PERS 10103 or equivalent placement.
SUMERIAN COURSES
SUMR 10102. Elementary Sumerian II. 100 Units.
Elementary Sumerian II  
Instructor(s): C. Woods Terms Offered: Spring. This sequence is offered in alternate years.
Prerequisite(s): SUMR 10101

TURKISH COURSES
TURK 10101-10102-10103. Elementary Turkish I-II-III.
This sequence features proficiency-based instruction emphasizing grammar in modern Turkish. This sequence consists of reading and listening comprehension, as well as grammar exercises and basic writing in Turkish. Modern stories and contemporary articles are read at the end of the courses.

TURK 10101. Elementary Turkish-1. 100 Units.
This sequence features proficiency-based instruction emphasizing grammar in modern Turkish. This sequence consists of reading and listening comprehension, as well as grammar exercises and basic writing in Turkish. Modern stories and contemporary articles are read at the end of the courses.  
Instructor(s): K. Arik Terms Offered: Autumn
Note(s): The class meets for five hours a week

TURK 10102. Elementary Turkish-2. 100 Units.
This sequence features proficiency-based instruction emphasizing grammar in modern Turkish. This sequence consists of reading and listening comprehension, as well as grammar exercises and basic writing in Turkish. Modern stories and contemporary articles are read at the end of the courses. Note(s): The class meets for five hours a week.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): TURK 10101
Note(s): This class meets for five hours a week

TURK 10103. Elementary Turkish III. 100 Units.
Third Quarter of Elementary Modern Turkish Language.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): TURK 10102
Note(s): This class meets for five hours a week

TURK 10102. Elementary Turkish-2. 100 Units.
This sequence features proficiency-based instruction emphasizing grammar in modern Turkish. This sequence consists of reading and listening comprehension, as well as grammar exercises and basic writing in Turkish. Modern stories and contemporary articles are read at the end of the courses. Note(s): The class meets for five hours a week.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): TURK 10101
Note(s): This class meets for five hours a week

TURK 10103. Elementary Turkish III. 100 Units.
Third Quarter of Elementary Modern Turkish Language.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): TURK 10102
Note(s): This class meets for five hours a week

TURK 10105-10106-10107. Introduction to Old Turkic I-II-III.
An introductory sequence in the written language of the Orkhon Inscriptions, dating back to the fifth-to-eighth-century Kök Türk State of Central Eurasia, and of related inscriptions from the Yenisei River area, Mongolia, Central Asia, and Eastern Europe. The language of the inscriptions is considered to be the ancestor of the majority of Turkic languages spoken today and uses a distinctive alphabet sometimes known as the Old Turkic Runiform Alphabet. The sequence covers a brief historic overview, basic grammar, reading selections from the inscriptions in the original and in translation, and familiarization with the alphabet itself.

TURK 10105. Introduction to Old Turkic I. 100 Units.
An introductory course in the written language of the Orkhon Inscriptions, dating back to the 5th-8th Century Kök Türk State of Central Eurasia, and of related inscriptions from the Yenisei River area, Mongolia, Central Asia, and Eastern Europe. The language of the inscriptions is considered to be the ancestor of the majority of Turkic languages spoken today, and uses a distinctive alphabet sometimes known as the Old Turkic Runiform Alphabet. The course covers a brief historic overview, basic grammar, reading selections from the inscriptions in the original and in translation, and familiarization with the alphabet itself. K. Arik, Autumn.
Instructor(s): K. Arik Terms Offered: Autumn
Prerequisite(s): One year of a Turkic language or the equivalent, and/or consent of the instructor
TURK 10106. Introduction to Old Turkic II. 100 Units.
An introduction to the language and inscriptions of the Old Turkic period.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): TURK 10105

TURK 10107. Introduction to Old Turkic III. 100 Units.
An introduction to the language and inscriptions of the Old Turkic period.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): TURK 10106

TURK 10106. Introduction to Old Turkic II. 100 Units.
An introduction to the language and inscriptions of the Old Turkic period.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): TURK 10105

TURK 10107. Introduction to Old Turkic III. 100 Units.
An introduction to the language and inscriptions of the Old Turkic period.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): TURK 10106

TURK 15001. Elementary Turkish in Istanbul. 100 Units.
TURK 15002. Elementary Turkish in Istanbul. 100 Units.
TURK 15003. Intermediate Turkish in Istanbul. 100 Units.
TURK 15004. Intermediate Turkish in Istanbul. 100 Units.
TURK 15005. Advanced Turkish in Istanbul. 100 Units.
TURK 15006. Advanced Turkish in Istanbul. 100 Units.
TURK 15007. Elementary Turkish in Vienna. 100 Units.
TURK 15008. Elementary Turkish in Vienna. 100 Units.
TURK 15009. Intermediate Turkish in Vienna. 100 Units.
TURK 15010. Intermediate Turkish in Vienna. 100 Units.
TURK 15011. Advanced Turkish in Vienna. 100 Units.
TURK 15012. Advanced Turkish in Vienna. 100 Units.

TURK 20101-20102-20103. Intermediate Turkish I-II-III.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.

TURK 20101. Intermediate Turkish I. 100 Units.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.
Prerequisite(s): TURK 10103, or equivalent with intermediate level proficiency test.
Terms Offered: Autumn
Prerequisite(s): TURK 10103, or equivalent with intermediate level proficiency test.

TURK 20102. Intermediate Turkish II. 100 Units.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.
Terms Offered: Winter
Prerequisite(s): TURK 20101
TURK 20103. Intermediate Turkish III. 100 Units.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.
Terms Offered: Spring
Prerequisite(s): TURK 20102

TURK 20102. Intermediate Turkish II. 100 Units.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.
Terms Offered: Winter
Prerequisite(s): TURK 20101

TURK 20103. Intermediate Turkish III. 100 Units.
This sequence features proficiency-based instruction emphasizing speaking and writing skills as well as reading and listening comprehension at the intermediate to advanced levels in modern Turkish. Modern short stories, novel excerpts, academic and journalistic articles form the basis for an introduction to modern Turkish literature. Cultural units consisting of films and web-based materials are also used extensively in this course, which is designed to bring the intermediate speaker to an advanced level of proficiency.
Terms Offered: Spring
Prerequisite(s): TURK 20102

TURK 20123. Summer Intensive Intermediate Turkish. 300 Units.
Summer Intensive Intermediate Turkish enables students to develop strong intermediate speaking, listening, reading, and writing skills and further solidify their foundation in grammar and vocabulary. Students study Turkish as it is used in authentic media, literature, and film, and gain familiarity with Turkish culture and civilization. The course will also address the needs of those preparing to study Ottoman. The first half of the course emphasizes completing skills acquired in Beginning Turkish and improving competency, while the second half supplements this with an introductory sampling of excerpts from Turkish literature and texts, ranging from late Ottoman and early Republican period to the present time. Students will meet for 25 hours per week, including class time with the instructor and time spent with native language assistants. Several hours will be allocated each week to cultural activities such as films, presentations, and conversation tables organized around Turkish lunches and tea time. Intensive Intermediate Turkish is the equivalent of the 20100-20200-20300 sequence offered during the regular academic year at the University of Chicago. All students enrolled in Summer Intensive Intermediate Turkish will conclude the program by participating in an ACTFL Oral Proficiency Interview. Each student will then receive an independent, certified rating of speaking ability to document the student’s speaking abilities.
Instructor(s): Staff Terms Offered: Summer. Summer 2017 dates: 6/19/17-7/28/17
Prerequisite(s): Successful completion of TURK 10300 or equivalent placement.

UZBEK COURSES

UZBK 10101-10102-10103. Elementary Modern Literary Uzbek I-II-III.
This sequence enables students to reach an intermediate level of proficiency in speaking, reading, and writing modern literary Uzbek, the most widely spoken Turkic language after Turkish. Students learn both the recently implemented Latin script and the older Cyrillic script versions of the written language and view audio-video materials in Uzbek on a weekly basis. Subsequent semesters and Intermediate and Advanced Uzbek are offered based on interest.

UZBK 10101. Elementary Uzbek I. 100 Units.
The first quarter of Elementary Modern Literary Uzbek.
Instructor(s): K. Arik Terms Offered: Autumn
Note(s): This class meets five days a week.

UZBK 10102. Elementary Uzbek II. 100 Units.
The second quarter of Elementary Modern Literary Uzbek.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): UZBK 10101
Note(s): This class meets five days a week.

UZBK 10103. Elementary Uzbek-3. 100 Units.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): UZBK 10102
Note(s): This class meets five days a week.
UZBK 10102. Elementary Uzbek II. 100 Units.
The second quarter of Elementary Modern Literary Uzbek.
Instructor(s): K. Arik Terms Offered: Winter
Prerequisite(s): UZBK 10101
Note(s): This class meets five days a week.
NEUROSCIENCE

Department Website: http://neuroscience.uchicago.edu/undergraduate

PROGRAM OF STUDY

Neuroscience is the study of neurons and neural systems and their outputs: sensation, perception, homeostasis, and behavior. Neural function is investigated at the levels of molecules, cells, circuits, organisms, and species, making neuroscience inherently multidisciplinary. In addition to established neuroscience career paths in academia, medicine, and the pharmaceutical industry, new careers for students of neuroscience are emerging in economics, software development, and other fields requiring “big data” analysis or a mechanistic understanding of how humans think. The course of study in the undergraduate major in neuroscience provides students with the background and skills appropriate for these diverse careers.

The University of Chicago offers a bachelor of arts (BA) degree and a bachelor of science (BS) degree in Neuroscience. The Neuroscience major is designed to accommodate students with the range of scientific variety that one finds at the professional level of neuroscience, including physics, chemistry, computer science, engineering, mathematics, biology, psychology, and medicine. Neuroscience faculty at the University of Chicago have expertise in all of these areas and are distributed across the Biological Sciences, Social Sciences, and Physical Sciences Divisions. Majoring students have the opportunity to take a broad range of courses or to specialize in a particular area.

DECLARING THE MAJOR

Students who wish to major in Neuroscience should declare the major in their second year. (Because the Neuroscience major was introduced in the 2016–17 academic year, the Class of 2020 and subsequent classes can design a plan of study in Neuroscience from their first year. Students in the Class of 2019 may also be able to major in Neuroscience, depending on the courses they have already taken, although there is no way to guarantee this.)

GENERAL EDUCATION

Students majoring in Neuroscience typically begin their general education requirement in the biological sciences with BIOS 20186 Fundamentals of Cell and Molecular Biology. Attaining a proper grounding in cell biology is essential before delving into neuroscience as a discipline. To complete the requirement, students may choose to take one of the following: BIOS 20150 How Can We Understand the Biosphere?, BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic), BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced), BIOS 20187 Fundamentals of Genetics, BIOS 20188 Fundamentals of Physiology, or BIOS 20191 Integrative Physiology. (Note: The general education requirement for the Neuroscience major can be fulfilled by courses in the Biology Fundamentals Sequences [BIOS 20186 to 20190] without the Biological Sciences prerequisites [BIOS 20150-20151/20152]. Students who choose this path will be expected to possess the competency in mathematical modeling of biological phenomena covered in BIOS 20151 or BIOS 20152.)

Two alternative paths to fulfilling the general education requirement in the biological sciences exist. (1) Neuroscience majors may petition to take the Pre-Med Sequence for Non-Biology majors. In this case, BIOS 20170 Microbial and Human Cell Biology and BIOS 20171 Human Genetics and Developmental Biology will satisfy the general education requirement in the biological sciences. (Note that BIOS 20171 must be taken concurrently with BIOS 20172 Mathematical Modeling for Pre-Med Students.) (2) A score of 4 or 5 on the AP Biology exam allows students to enter the Advanced Biology sequence in the Autumn Quarter of their first year. This three-quarter, lab-intensive sequence is for students with a strong background in research. Upon completion of the sequence students are awarded two credits, which satisfy the general education requirement in the biological sciences.

THE MAJOR

The basic degree in Neuroscience is the BA. A BS is awarded to students who complete an additional three quarters of Neuroscience electives, which must include one to three quarters of faculty-supervised research (scholarly or experimental) resulting in a written thesis (see Requirements for the Bachelor of Science Degree in Neuroscience below).

The major curriculum includes nine required Neuroscience courses, which provide a comprehensive overview of the field. Students must also take another 700 units of elective courses, offering broad exposure to the many aspects of neuroscience or tailored for depth in a particular area, such as cognitive neuroscience or machine learning.

NEUROSCIENCE ELECTIVES (no fewer than five)

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>NSCI 20500</td>
<td>Neuroanatomy</td>
<td>100</td>
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<tr>
<td>NSCI 20510</td>
<td>Evolution and the Nervous System</td>
<td>100</td>
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<tr>
<td>NSCI 21000</td>
<td>Social Neuroscience</td>
<td>100</td>
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<tr>
<td>NSCI 21100</td>
<td>Photons to Consciousness: Cellular and Integrative Brain Functions</td>
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<tr>
<td>NSCI 21500</td>
<td>Epigenetics in Brain and Behavior</td>
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<td>Course Code</td>
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<tr>
<td>NSCI 21800</td>
<td>Perspectives in Drug Abuse</td>
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<td>NSCI 22000</td>
<td>Gazing into the Black Box: Neocortex</td>
<td>100</td>
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<tr>
<td>NSCI 22100</td>
<td>Molecular Neuroscience</td>
<td>100</td>
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<td>NSCI 22300</td>
<td>Molecular Principles of Nervous System Development</td>
<td>100</td>
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<td>NSCI 22400</td>
<td>Neuroscience of Seeing</td>
<td>100</td>
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<tr>
<td>NSCI 24000</td>
<td>Modeling and Signal Analysis for Neuroscientists</td>
<td>100</td>
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<tr>
<td>NSCI 29100</td>
<td>Neuroscience Thesis Research</td>
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<td>NSCI 29201</td>
<td>Neuroscience Honors Thesis Research</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 29202</td>
<td>Neuroscience Honors Thesis Research</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24208</td>
<td>Survey of Systems Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24217</td>
<td>Conquest of Pain</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24231</td>
<td>Methods in Computational Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24232</td>
<td>Computational Approaches to Cognitive Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 27721</td>
<td>Observing Proteins in Action: How to Design and Build Your Own</td>
<td>100</td>
</tr>
<tr>
<td>LING 27010</td>
<td>Psycholinguistics</td>
<td>100</td>
</tr>
<tr>
<td>NURB 32400</td>
<td>Synaptic Physiology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20300</td>
<td>Biological Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20400</td>
<td>Cognitive Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 23800</td>
<td>Introduction to Learning and Memory</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 25560</td>
<td>Body and Mind: How Our Bodies Reveal and Change Emotion and Thought (not offered 2018-19)</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 25750</td>
<td>The Psychology and Neurobiology of Stress</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 26660</td>
<td>Genes and Behavior (not offered 2018-19)</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 25025</td>
<td>Machine Learning and Large-Scale Data Analysis</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 25400</td>
<td>Machine Learning</td>
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</tr>
</tbody>
</table>

**RELATED ELECTIVES (no more than two)**

No more than two of the following BIOS courses: **300**

- BIOS 20172 Mathematical Modeling for Pre-Med Students
- BIOS 20173 Perspectives of Human Physiology
- BIOS 20175 Biochemistry and Metabolism
- BIOS 20187 Fundamentals of Genetics
- BIOS 20188 Fundamentals of Physiology or BIOS 20191 Integrative Physiology
- BIOS 20189 Fundamentals of Developmental Biology or BIOS 20190 Principles of Developmental Biology
- BIOS 20234 Molecular Biology of the Cell
- BIOS 20235 Biological Systems
- BIOS 20236 Biological Dynamics
- BIOS 20242 Principles of Physiology
- CMSC 12100-12200 Computer Science with Applications I-II
- CMSC 15100-15200 Introduction to Computer Science I-II
- CMSC 16100-16200 Honors Introduction to Computer Science I-II
- BIOS 20200 Introduction to Biochemistry
- BIOS 26210 Mathematical Methods for Biological Sciences I
- BIOS 26211 Mathematical Methods for Biological Sciences II
- CMSC 15400 Introduction to Computer Systems
- PHYS 12300 General Physics III
- PHYS 13300 Waves, Optics, and Heat
Requirements for the Bachelor of Science Degree in Neuroscience

Students can earn a BS in Neuroscience by completing three quarters of Neuroscience elective courses over and above the BA requirements, which must include one to three quarters of faculty-supervised research that results in a written thesis (NSCI 29100 Neuroscience Thesis Research, NSCI 29101 Neuroscience Thesis Research, NSCI 29102 Neuroscience Thesis Research). The additional courses and the thesis work require approval by the office of the director of undergraduate studies and the thesis advisor. The thesis may be either research-based or literature-based.

Grading

All courses used to satisfy prerequisites and requirements must be taken for quality grades. Students must pass all courses in the Fundamental Neuroscience Sequence (NSCI 20100-20140) with an average GPA of 2.0 or higher. Students are also required to pass general education courses with an average GPA of 2.0 or higher to continue in the program.

Summary of Requirements for the Major in Neuroscience

General Education

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 20186</td>
<td>200</td>
</tr>
<tr>
<td>BIOS 20150, BIOS 20151, BIOS 20152</td>
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<tr>
<td>BIOS 20187</td>
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<tr>
<td>BIOS 20188</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 20191</td>
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</tbody>
</table>

OR

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS 20170, BIOS 20171</td>
<td>100</td>
</tr>
</tbody>
</table>

One of the following two-course MATH sequences:

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 13100-13200</td>
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<tr>
<td>MATH 15100-15200</td>
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</tr>
<tr>
<td>MATH 16100-16200</td>
<td>200</td>
</tr>
</tbody>
</table>

One of the following two-course CHEM sequences:

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>CHEM 10100, CHEM 10200</td>
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</tr>
<tr>
<td>CHEM 11100-11200</td>
<td>200</td>
</tr>
<tr>
<td>CHEM 12100, CHEM 12200</td>
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</table>

Total Units: 600

Major: Bachelor of Arts

<table>
<thead>
<tr>
<th>Course Sequence</th>
<th>Units</th>
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<tbody>
<tr>
<td>CHEM 11300</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 12100-12200</td>
<td>200</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 20100</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 20110</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 20120</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 20130</td>
<td>100</td>
</tr>
<tr>
<td>NSCI 20140</td>
<td>100</td>
</tr>
<tr>
<td>At least five Neuroscience electives</td>
<td>500</td>
</tr>
<tr>
<td>No more than two related electives</td>
<td>200</td>
</tr>
</tbody>
</table>

Total Units: 1600

Major: Bachelor of Science

<table>
<thead>
<tr>
<th>Course Sequence</th>
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<tr>
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<tr>
<td>PHYS 12100-12200</td>
<td>200</td>
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</table>

Total Units: 1600
Neuroscience

STAT 22000  Statistical Methods and Applications  *  100
NSCI 20100  Neuroscience Laboratory  100
NSCI 20110  Fundamental Neuroscience  100
NSCI 20120  Cellular Neuroscience  100
NSCI 20130  Systems Neuroscience  100
NSCI 20140  Sensation and Perception  100
At least five Neuroscience electives  500
No more than two related electives  ^  200
Three additional electives  **  300
Total Units  1900

*  Credit may be granted by examination.
^  BIOS 20171 must be taken concurrently with BIOS 20172.
**  Must include one to three courses of NSCI 29100, 29101, 29102 Neuroscience Thesis Research or NSCI 29200, 29201, 29202 Neuroscience Honors Thesis Research
May also include additional Neuroscience electives

HONORS
To obtain honors in Neuroscience, students must have a minimum GPA of 3.5 in the major and a cumulative GPA of 3.25 at the point of entering the honors track, no later than the end of the third year. Only students who receive a B5 will be eligible for honors. Entry into the honors track must be approved by the director of undergraduate studies. Students must do full-time paid experimental research over the summer between their third and fourth years (students accepted into the honors program will receive funding from the department). Students continue with part-time research effort for three quarters throughout their fourth year (NSCI 29200 Neuroscience Honors Thesis Research, NSCI 29201 Neuroscience Honors Thesis Research, NSCI 29202 Neuroscience Honors Thesis Research). As part of the research course work, honors students participate in regular group meetings in which they share their research with each other and supervising faculty, and receive guidance on formulating testable hypotheses, experimental design, report writing, and oral presentations. They also receive training in the responsible conduct of research. Experimental research may not be credited toward honors in more than one major.

MINOR IN NEUROSCIENCE
The minor in Neuroscience is intended to provide neuroscientific literacy for students whose primary interest lies in other fields. Students must meet the general education requirements for the biological and physical sciences before entering the program. Two BIOS courses at the 10000-level or above plus MATH 13100-13200 Elementary Functions and Calculus I-II are the minimum general education requirements for the minor. Students interested in completing the minor are encouraged to take BIOS 20186 Fundamentals of Cell and Molecular Biology and BIOS 20188 Fundamentals of Physiology to complete their general education requirement in the biological sciences. (Note that students in these courses will be expected to be familiar with the concepts introduced in BIOS 20151 Introduction to Quantitative Modeling in Biology (Basic) or BIOS 20152 Introduction to Quantitative Modeling in Biology (Advanced).)

SUMMARY OF REQUIREMENTS FOR THE MINOR IN NEUROSCIENCE
NSCI 20110  Fundamental Neuroscience  100
NSCI 20120  Cellular Neuroscience  100
NSCI 20130  Systems Neuroscience  100
Four electives  400
Total Units  700

Students are strongly encouraged to take STAT 22000 Statistical Methods and Applications (or higher) and PSYC 20700 Sensation and Perception for two of the four electives, if these courses have not already been taken to fulfill major requirements. Each student's elective courses will need to be approved by the director of undergraduate studies. No course in the minor can be double counted with the student's major(s) or with other minors, nor can it be counted toward general education requirements.

NSCI 20500  Neuroanatomy  100
NSCI 20510  Evolution and the Nervous System  100
NSCI 21100  Photons to Consciousness: Cellular and Integrative Brain Functions  100
NSCI 22000  Gazing into the Black Box: Neocortex  100
NSCI 22100  Molecular Neuroscience  100
NSCI 22300  Molecular Principles of Nervous System Development  100
NSCI 22400  Neuroscience of Seeing  100
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSCI 24000</td>
<td>Modeling and Signal Analysis for Neuroscientists</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24208</td>
<td>Survey of Systems Neuroscience</td>
<td>100</td>
</tr>
<tr>
<td>BIOS 24217</td>
<td>Conquest of Pain</td>
<td>100</td>
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<td>BIOS 24231</td>
<td>Methods in Computational Neuroscience</td>
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<tr>
<td>CMSC 25025</td>
<td>Machine Learning and Large-Scale Data Analysis</td>
<td>100</td>
</tr>
<tr>
<td>CMSC 25050</td>
<td>Topics: Computer Vision</td>
<td>100</td>
</tr>
<tr>
<td>LING 27010</td>
<td>Psycholinguistics</td>
<td>100</td>
</tr>
<tr>
<td>NURB 32400</td>
<td>Synaptic Physiology</td>
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<td>PSYC 20300</td>
<td>Biological Psychology</td>
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<td>PSYC 20400</td>
<td>Cognitive Psychology</td>
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<td>PSYC 20700</td>
<td>Sensation and Perception</td>
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<td>PSYC 23800</td>
<td>Introduction to Learning and Memory</td>
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<td>PSYC 25560</td>
<td>Body and Mind: How Our Bodies Reveal and Change Emotion and Thought</td>
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<td>The Psychology and Neurobiology of Stress</td>
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<tr>
<td>PSYC 26660</td>
<td>Genes and Behavior</td>
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</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications</td>
<td>100</td>
</tr>
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</table>

**NEUROSCIENCE COURSES**

**NSCI 00292. Neuroscience Honors Thesis Research. 000 Units.**
Research Thesis and Seminar
Instructor(s): Elizabeth Grove
Terms Offered: Summer
Prerequisite(s): Acceptance into the Neuroscience Honors Program

**NSCI 20100. Neuroscience Laboratory. 100 Units.**
This course has three components in series, representing (1) molecular neuroscience, (2) cellular electrophysiology, and (3) computation and psychophysics. The course meets one afternoon each week for four hours of laboratory time, including a didactic introduction. Students will be graded on their laboratory reports.
Instructor(s): J. Maunsell; E. Heckscher; C. Hansel; M. McNulty
Terms Offered: Winter
Prerequisite(s): NSCI 20110. Must be a Neuroscience Major

**NSCI 20110. Fundamental Neuroscience. 100 Units.**
This course is a rigorous introduction to the study of neurons, nervous systems and brains. The systems anatomy and physiology of the vertebrate brain will be covered in depth. Common features of neural circuits, such as those subserving the stretch reflex, will be examined. The biology of brain evolution and development will be introduced. A highlight of this course will be student dissections of sheep brains and the laboratory presentation of human brain dissections by the instructors.
Instructor(s): C. Ragsdale, P. Mason
Terms Offered: Autumn
Prerequisite(s): At least two quarters of Biological Sciences instruction (including courses taken concurrently) or consent of instructor
Equivalent Course(s): BIOS 24110

**NSCI 20120. Cellular Neuroscience. 100 Units.**
This course describes the cellular and subcellular properties of neurons, including passive and active electrophysiological properties, and their synaptic interactions. Readings are assigned from a general neuroscience textbook.
Instructor(s): R.A. Eato, W. Wei
Terms Offered: Winter
Prerequisite(s): NSCI 20110, along with completion of MATH 13100, or MATH 15100, or MATH 16100, or consent of instructor
Equivalent Course(s): BIOS 24120

**NSCI 20130. Systems Neuroscience. 100 Units.**
This course covers vertebrate and invertebrate systems neuroscience with a focus on the anatomy, physiology, and development of sensory and motor control systems. The neural bases of form and motion perception, locomotion, memory, and other forms of neural plasticity are examined in detail. We also discuss clinical aspects of neurological disorders.
Instructor(s): D. Freedman
Terms Offered: Spring
Prerequisite(s): NSCI 20110, NSCI 20120 or consent of instructors
Equivalent Course(s): BIOS 24130
NSCI 20140. Sensation and Perception. 100 Units.
What we see and hear depends on energy that enters the eyes and ears, but what we actually experience—perception—follows from human neural responses. This course focuses on visual and auditory phenomena, including basic percepts (for example, acuity, brightness, color, loudness, pitch) and also more complex percepts such as movement and object recognition. Biological underpinnings of perception are an integral part of the course.
Instructor(s): S. Shevell Terms Offered: Winter
Equivalent Course(s): PSYC 20700

NSCI 20500. Neuroanatomy. 100 Units.
This course is part of the Study Abroad Neuroscience program in Paris, France. In this course, we will use an understanding of development in order to understand the neuroanatomy of the adult vertebrate nervous system. This understanding will be solidified by dissections of mammalian, fish and bird brains as well as a trip to see myriad brains at the Muséum national d’histoire naturelle. In the second half of the course, neuroanatomical adaptations specific to particular animals will be examined in the context of critical environmental and ecological factors. Examples include postural control in sloths, vision in marine animals and raptors, and the control of muscles of facial expression across mammalian species.
Instructor(s): P. Mason Terms Offered: TBD. Paris Study Abroad Neuroscience Program
Prerequisite(s): Enrollment into the Paris Study Abroad Program

NSCI 20510. Evolution and the Nervous System. 100 Units.
Evolutionary neuroscience has traditionally focused on the neural bases of animal behavior (neuroethology) and employed the methods of comparative anatomy, cellular neurophysiology and behavioral neuropsychology. This course will approach neuroethology from a modern evolutionary perspective, one that integrates findings from genomics, molecular developmental biology and paleontology with insights from neuroethology. Our exploration will include the controversies over the evolutionary origin of neurons and centralized brains, the independent solutions across taxa to processing ecologically important sensory information, and recent insights into the evolution of the neocortex.
Instructor(s): C. Ragsdale Terms Offered: TBD. Paris Study Abroad Neuroscience Program
Prerequisite(s): Enrollment into the Paris Study Abroad Program

NSCI 21000. Social Neuroscience. 100 Units.
Social species, by definition, create emergent organizations beyond the individual—structures ranging from dyads and families to groups and cultures. Social neuroscience is the interdisciplinary field devoted to the study of neural, hormonal, cellular, and genetic mechanisms, and to the study of the associations and influences between social and biological levels of organization. The course provides a valuable interdisciplinary framework for students in psychology, neuroscience, behavioral economics, and comparative human development. Many aspects of social cognition will be examined, including but not limited to attachment, attraction, altruism, contagion, cooperation, competition, dominance, empathy, isolation, morality, and social decision-making.
Instructor(s): J. Decety Terms Offered: Spring
Equivalent Course(s): ECON 21830, PSYC 22350, CHDV 22350, BIOS 24137

NSCI 21100. Photons to Consciousness: Cellular and Integrative Brain Functions. 100 Units.
This course uses the visual system as a model to explore how the brain works. We begin by considering the physical properties of light. We then proceed to consider the mechanism of sensory transduction, cellular mechanisms of neuron to neuron communication, the operation of small neural networks, strategies of signal detection in neuron networks, and the hierarchical organization of cortical function. We conclude with visually guided behavior and consciousness.
Instructor(s): E. Schwartz Terms Offered: Winter
Prerequisite(s): NSCI 20110
Equivalent Course(s): BIOS 24136

NSCI 21500. Epigenetics in Brain and Behavior. 100 Units.
Epigenetic mechanisms alter the function of the genome without altering the base sequence of genomic DNA (the As, Cs, Ts, and Gs we are familiar with), thus can be flexibly modified in response to the environment. Once considered a domain of cancer, we now recognize that epigenetic processes affect neurodevelopment, cognitive processes, mental disorders, and behavior. Through a combination of introductory lectures and student-led discussion of primary literature, we will explore a variety of epigenetic modifications, consider how they encode personal and transgenerational experiences, and examine how they influence brain function and behavior.
Instructor(s): S. London Terms Offered: Winter
Prerequisite(s): At least one course in cell, molecular, or systems biology is highly encouraged.
Equivalent Course(s): BIOS 24134, PSYC 26665, CHDV 26665

NSCI 21800. Perspectives in Drug Abuse. 100 Units.
It is a broad overview course about drug abuse, that is appropriate for graduate students as well as undergraduates. It includes lectures on epidemiology, genetics, neurobiology, experimental methods, policy and treatment, as well as lectures on several specific drug classes. Lectures are by Dr. de Wit and by other invited faculty members, and students are required to present and discuss recent published papers during classes.
Equivalent Course(s): BIOS 24135, NURB 32900
NSCI 22000. Gazing into the Black Box: Neocortex. 100 Units.
The neocortex is the multilayered outermost structure of the mammalian brain. It is the site of higher brain functions including reasoning and creativity. However, the complexity of the neocortex—it is comprised of ~20 billion neurons which have 0.15 quadrillion connections between them—seems to preclude any hope of achieving a fundamental understanding of the system. Recent technological innovations have opened novel avenues of investigation making realization of the neocortex an increasingly tractable problem. This course will place particular emphasis on how to critically read scientific papers as we evaluate and discuss current experimental approaches to the neocortex. Integral to this evaluation will be the detailed discussion of the latest technological approaches.
Instructor(s): J. MacLean Terms Offered: Autumn
Prerequisite(s): NSCI 20110, 20120, 20130 or consent of instructor. For Biology majors: Three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): BIOS 24226, CPNS 34200

NSCI 22100. Molecular Neuroscience. 100 Units.
This lecture/seminar course explores the application of modern cellular and molecular techniques to clarify basic questions in neurobiology. Topics include mechanisms of synaptic transmission, protein trafficking, exo- and endo-cytosis, and development and mechanisms of neurological diseases.
Instructor(s): S. Sisodia Terms Offered: Spring
Prerequisite(s): NSCI 20110, NSCI 20120 and BIOS 20200, or consent of instructor
Equivalent Course(s): BIOS 24131

NSCI 22300. Molecular Principles of Nervous System Development. 100 Units.
This elective course provides an overview of the fundamental questions in developmental neurobiology. It is based on primary research papers and highlights key discoveries in vertebrate and invertebrate animals that advanced our understanding of nervous system development. Topics covered, among others, will include neural stem cells, neuronal specification and terminal differentiation, and circuit assembly. Dogmas and current debates in developmental neurobiology will be discussed, aiming to promote critical thinking about the field. This advanced-level course is open to upper level undergraduate and graduate students and combines lectures, student presentations, and discussion sections.
Instructor(s): E. Grove, P. Kratsios Terms Offered: Winter
Prerequisite(s): For Neuroscience Majors: NSCI 20110, NSCI 20120, NSCI 20130, BIOS 20187 or consent of instructor
Equivalent Course(s): CPNS 32300, NURB 32300, DVBI 32300

NSCI 22400. Neuroscience of Seeing. 100 Units.
This course focuses on the neural basis of vision, in the context of the following two questions: 1. How does the brain transform visual stimuli into neuronal responses? 2. How does the brain use visual information to guide behavior? The course covers signal transformation throughout the visual pathway, from retina to thalamus to cortex, and includes biophysical, anatomical, and computational studies of the visual system, psychophysics, and quantitative models of visual processing. This course is designed as an advanced neuroscience course for undergraduate and graduate students. The students are expected to have a general background in neurophysiology and neuroanatomy.
Instructor(s): W. Wei, J. Maunsell, M. Sherman, S. Shevell Terms Offered: Winter
Prerequisite(s): NSCI 20110 or BIOS 24110 or consent of instructor
Equivalent Course(s): PSYC 24133, BIOS 24133

NSCI 24000. Modeling and Signal Analysis for Neuroscientists. 100 Units.
The course provides an introduction into signal analysis and modeling for neuroscientists. We cover linear and nonlinear techniques and model both single neurons and neuronal networks. The goal is to provide students with the mathematical background to understand the literature in this field, the principles of analysis and simulation software, and allow them to construct their own tools. Several of the 90-minute lectures include demonstrations and/or exercises in Matlab.
Instructor(s): W. van Drongelen Terms Offered: Spring, L.
Prerequisite(s): Undergraduates: Biology Major - BIOS 26210 and 26211, or consent of instructor. Neuroscience Major - NSCI 20130
Equivalent Course(s): BIOS 24408, CPNS 32111

NSCI 29100. Neuroscience Thesis Research. 100 Units.
Scholar or Research Thesis.
Instructor(s): Staff Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): By consent of instructor and approval of major director.

NSCI 29101. Neuroscience Thesis Research. 100 Units.
Scholar or Research Thesis.
Instructor(s): Staff Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): NSCI 29100, and consent of instructor, and approval of major director.
NSCI 29102. Neuroscience Thesis Research. 100 Units.
Scholar or Research Thesis.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): NSCI 29100, and consent of instructor, and approval of major director.

NSCI 29200. Neuroscience Honors Thesis Research. 100 Units.
Scholar or Research Thesis.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): By consent of instructor and approval of major director. Open to Neuroscience majors who are candidates for honors in Neuroscience.

NSCI 29201. Neuroscience Honors Thesis Research. 100 Units.
NSCI 29200, and consent of instructor, and approval of major director. Open to Neuroscience majors who are candidates for honors in Neuroscience.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): NSCI 29200, and consent of instructor, and approval of major director. Open to Neuroscience majors who are candidates for honors in Neuroscience.

NSCI 29202. Neuroscience Honors Thesis Research. 100 Units.
Research Thesis and Seminar.
Instructor(s): Staff
Terms Offered: Autumn, Spring, Summer, Winter
Prerequisite(s): NSCI 20201, and consent of instructor, and approval of major director. Open to Neuroscience majors who are candidates for honors in Neuroscience.
NEW COLLEGIATE DIVISION

The New Collegiate Division offers a variety of interdisciplinary courses in addition to those particularly related to specific programs of study. One of the purposes of the division is to provide a forum for new ideas in teaching; certainly only one such forum among many in the College and the University, but for some teachers, and for some subjects cutting across familiar academic lines, the most convenient one. These courses are as a rule open to all students. Indeed, they usually aspire to attract students with different interests and backgrounds.

NEW COLLEGIATE DIVISION COURSES

NCDV 29700. Reading Course. 100 Units.
This course is designed for New Collegiate Division students whose program requirements are best met by study under a faculty member’s individual supervision. The subject, course of study, and requirements are arranged with the instructor.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of faculty supervisor and program chairman. Students are required to submit the College Reading and Research Course Form.
Note(s): Must be taken for a quality grade.

NCDV 29800. Reading Course. 100 Units.
Students in divisions other than the New Collegiate Division may arrange a tutorial with a member of the New Collegiate Division faculty. Registration for this course and information about the tutorial arrangement must be reported to the office of the New Collegiate Division master.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of faculty supervisor and New Collegiate Division master. Students are required to submit the College Reading and Research Course Form.
Note(s): Available for either quality grades or for P/F grading.

NCDV 29900. Independent Study. 100 Units.
Open only to New Collegiate Division students with consent of faculty supervisor and program chairman.
Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Students are required to submit the College Reading and Research Course Form.
Note(s): Must be taken for P/F grading.
Program of Study

Philosophy covers a wide range of historical periods and fields. The BA program in philosophy is intended to acquaint students with some of the classic texts of the discipline and with the different areas of inquiry, as well as to train students in rigorous methods of argument. In addition to the standard major, the department offers two tracks. The intensive track option is for qualified students interested in small group discussions of major philosophical problems and texts. The option in philosophy and allied fields is designed for students who wish to pursue an interdisciplinary program involving philosophy and some other field. All three options are described in the next section.

The course offerings described include both 20000-level courses (normally restricted to College students) and 30000-level courses (open to graduate students and advanced College students). There is room for a good deal of flexibility in individual planning of programs. Most of the requirements allow some choice among options. Course prerequisites may be relaxed with the consent of the instructor, and College students may take 40000- and 50000-level courses (normally restricted to graduate students) under special circumstances. Students should work out their program under the guidance of the director of undergraduate studies.

Students in other fields of study may also complete a minor in Philosophy. Information follows the description of the major.

Program Requirements

All majors will be required to meet with the assistant to the director of undergraduate studies during Winter Quarter of their third year to review their program of study and discuss the possibility of writing the senior essay.

The Standard Major

The following basic requirements for the standard major in philosophy are intended to constitute a core philosophy curriculum and to provide some structure within an extremely varied collection of course offerings that changes from year to year.

The Department of Philosophy offers a three-quarter sequence in the history of philosophy (PHIL 25000 Ancient Philos/Hist Philos-1, PHIL 26000 History of Philosophy II: Medieval and Early Modern Philosophy, and PHIL 27000 History of Philosophy III: Kant and the 19th Century), which begins in the first quarter with ancient Greek philosophy and ends in the third quarter with nineteenth-century philosophy. Students are required to take two courses from this sequence (any two are acceptable) and are encouraged to take all three. Students are also encouraged to take these courses early in their program because they make an appropriate introduction to more advanced courses.

Students may bypass PHIL 20100 Elementary Logic for a more advanced course if they can demonstrate to the instructor that they are qualified to begin at a higher level.

Standard majors are welcome to apply to write senior essays. For more information, please see The Senior Essay (below).

Distribution

At least two courses in one of the following two fields and at least one course in the other field: (A) practical philosophy and (B) theoretical philosophy.

Courses that may be counted toward these requirements are indicated in the course descriptions by boldface letters in parentheses. Other courses may not be used to meet field distribution requirements.

Summary of Requirements: Standard Major

Two of the following:

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PHIL 25000</td>
<td>Ancient Philos/Hist Philos-1</td>
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<tr>
<td>PHIL 26000</td>
<td>History of Philosophy II: Medieval and Early Modern Philosophy</td>
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<tr>
<td>PHIL 27000</td>
<td>History of Philosophy III: Kant and the 19th Century</td>
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</table>
PHIL 20100  Elementary Logic (or approved alternative course in logic)  100
One of the following:

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<tr>
<td>One from field A and two from field B</td>
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<td>Two from field A and one from field B</td>
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Four additional courses in philosophy  400

Total Units  1000

*  These courses must be drawn from departmental offerings. Students should consult with the director of undergraduate studies regarding courses taken at other colleges. Only one of these courses may be satisfied by participation in the BA essay workshop.

**THE INTENSIVE TRACK**

Admission to the intensive track requires an application, which must be submitted by the middle of the Spring Quarter in the student’s second year. The application form is on the department wiki (https://coral.uchicago.edu:8443/display/phildr/Philosophy+Undergraduate+Wiki). The director of undergraduate studies and the assistant to the director of undergraduate studies will have "interview" meetings following the application deadline. (The departmental website lists the office hours of the director of undergraduate studies and the assistant to the director of undergraduate studies.)

The intensive track is designed to acquaint students with the problems and methods of philosophy in more depth than is possible for students in the standard major. It differs from the standard program mainly by offering the opportunity to meet in the following very small discussion groups: the intensive track seminar in the Autumn Quarter of the third or fourth year (PHIL 29601 Intensive Track Seminar), PHIL 29200 Junior Tutorial, and PHIL 29300 Senior Tutorial.

Note on the pacing and scheduling of the intensive track: Intensive track majors take PHIL 29601 Intensive Track Seminar in Autumn Quarter of their third year. Students fulfill the tutorial requirement by selecting one junior tutorial (PHIL 29200) in any quarter of their third year and one senior tutorial (PHIL 29300) in any quarter of their fourth year. Finally, intensive track students must write a senior essay. The essay process includes participation in the Senior Seminar over the three quarters of their fourth year; students must register for PHIL 29001 Senior Seminar I and PHIL 29002 BA Essay Preparation,Senior Seminar II in two of these three quarters.

**Summary of Requirements: Intensive Track**

Two of the following:  200

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<tr>
<td>PHIL 25000</td>
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<tr>
<td>PHIL 26000</td>
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<td>History of Philosophy III: Kant and the 19th Century</td>
</tr>
<tr>
<td>PHIL 20100</td>
<td>Elementary Logic (or approved alternative course in logic)</td>
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One of the following:  300

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<tr>
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<tr>
<td>Two from field A and one from field B</td>
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</table>

PHIL 29200  Junior Tutorial  100
PHIL 29300  Senior Tutorial  100
PHIL 29601  Intensive Track Seminar  100
PHIL 29901  Senior Seminar I  200
& PHIL 29902  Senior Seminar II  and BA Essay Preparation,Senior Seminar II  200

Two additional courses in philosophy  200

Total Units  1300

*  These courses must be drawn from departmental offerings. Students should consult with the director of undergraduate studies regarding courses taken at other colleges.

**PHILOSOPHY AND ALLIED FIELDS**

This variant of the major is a specialist option for students with a clear and detailed picture of a coherent interdisciplinary course of study, not available under the standard forms of major and minor. Examples of recent programs devised by students electing this track are philosophy and mathematics, philosophy and biology, and philosophy and economics. Students in this program must meet the first three of the basic requirements for the standard major (a total of six courses) and take six additional courses that together constitute a coherent program; at least one of these six additional courses must be in the Department of Philosophy. **Students must receive approval for the specific courses they choose to be used as the allied fields courses. Admission to philosophy and allied fields requires an application to the director of undergraduate studies, which should be made by the middle of Spring Quarter of their second year.** To apply, students must submit a sample program of courses as well as a statement explaining the nature of the interdisciplinary area of study and the purpose of the proposed allied
fields program. Applicants must also have the agreement of a member of the Department of Philosophy to serve as their sponsor in the program. Interested students should consult with the assistant to the director of undergraduate studies before applying; for office hours and the application form, visit the departmental wiki (https://coral.uchicago.edu:8443/display/phildr/Philosophy+Undergraduate+Wiki) or website.

Summary of Requirements: Philosophy and Allied Fields

Two of the following:

<table>
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<th>Course</th>
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<tr>
<td>PHIL 25000</td>
<td>Ancient Philos/Hist Philos-1</td>
</tr>
<tr>
<td>PHIL 26000</td>
<td>History of Philosophy II: Medieval and Early Modern Philosophy</td>
</tr>
<tr>
<td>PHIL 27000</td>
<td>History of Philosophy III: Kant and the 19th Century</td>
</tr>
</tbody>
</table>

PHIL 20100   Elementary Logic (or approved alternative course in logic)

One of the following:

- One from field A and two from field B
- Two from field A and one from field B

Six additional courses, at least one of which must be in the Department of Philosophy

Total Units 1200

* Only one of these courses may be satisfied by participation in the BA essay workshop.

The Senior Essay

Students who have been admitted to the intensive track are required to write a senior essay (also called the “BA essay”). Standard majors and philosophy and allied fields majors may also apply to write an essay. The proposal should be formulated in consultation with a faculty adviser who has expertise in the topic area. Potential advisers can be approached directly, but the assistant to the director of undergraduate studies can help pair students with suitable advisers as needed. BA essay applications are due middle of Spring Quarter. Applications are available from the shelves outside the Philosophy Department office (Stuart 202) as well as on the wiki (https://coral.uchicago.edu:8443/display/phildr/Philosophy+Undergraduate+Wiki).

Students writing a BA essay in philosophy are normally expected to have maintained a GPA of 3.25 in their philosophy courses. A 3.25 is also the minimum GPA for departmental honors in philosophy. Students should submit, along with their application to write a BA essay, a record of their grades in the College. If a student who wishes to write a BA essay in philosophy has a GPA in philosophy courses below 3.25, the student should also submit a petition in writing to the Director of Undergraduate Studies.

In their fourth year, students writing BA essays must participate in the senior seminar. The seminar runs all three quarters, and though attendance during all three is required, participants will only register for two of the three quarters. Students should register for PHIL 29901 Senior Seminar I in Autumn (or Winter) Quarter and for PHIL 29902 BA Essay Preparation,Senior Seminar II in Winter (or Spring) Quarter. These two courses are among the requirements for the intensive track. For essay writers who are in the standard track or the allied fields track, both courses must be taken; however, only PHIL 29902 will be counted toward the track’s total-units requirement.

Grading

All courses for all tracks must be taken for a quality grade. The one exception is for students in the Intensive Track: PHIL 29901 is graded on a Pass/Fail basis. Accordingly, students in other tracks taking PHIL 29901-29902 will only be able to count PHIL 29902 in the major.

Honors

The main requirement for honors is a senior essay of distinction. A GPA in the major of 3.25 or higher typically also is required.

Transfer Students

Requirements for students transferring to the University of Chicago are the same as for other students. Up to (but typically no more than) three courses from another institution may be counted toward major requirements. All such courses must be approved by the director of undergraduate studies.

Advising

Students should contact the director of undergraduate studies with questions concerning program plans, honors, and so forth.

Minor Program in Philosophy

The minor program in philosophy provides a basic introduction to some central figures and themes in both the history of philosophy and in current philosophical controversies. The minor requires six courses: students must take: either two courses from the history of philosophy sequence and one course from field A or field B,
along with three additional courses in philosophy; or one course from the history of philosophy sequence and one course from each of fields A and B, along with three additional courses in philosophy.

No courses in the minor can be double counted with the student's major(s) or with other minors; nor can they be counted toward general education requirements. They must be taken for quality grades.

Students who elect the minor program should meet with the director of undergraduate studies before the end of Spring Quarter of their third year to declare their intention to complete the program. The approval of the director of undergraduate studies for the minor should be submitted to the student's College adviser, on a form obtained from the College adviser, no later than the end of the student's third year.

Samples follow of two groups of courses that would comprise a minor:

**SAMPLE 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 25000</td>
<td>Ancient Philos/Hist Philos-I</td>
<td>200</td>
</tr>
<tr>
<td>PHIL 26000</td>
<td>History of Philosophy II: Medieval and Early Modern Philosophy</td>
<td>100</td>
</tr>
<tr>
<td>PHIL 27000</td>
<td>History of Philosophy III: Kant and the 19th Century</td>
<td>100</td>
</tr>
<tr>
<td>One from either field A or field B</td>
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<td>100</td>
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<tr>
<td>Three additional courses in philosophy</td>
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<td>300</td>
</tr>
</tbody>
</table>

**Total Units**: 600

**SAMPLE 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PHIL 25000</td>
<td>Ancient Philos/Hist Philos-I</td>
<td>100</td>
</tr>
<tr>
<td>PHIL 26000</td>
<td>History of Philosophy II: Medieval and Early Modern Philosophy</td>
<td>100</td>
</tr>
<tr>
<td>PHIL 27000</td>
<td>History of Philosophy III: Kant and the 19th Century</td>
<td>100</td>
</tr>
<tr>
<td>One from field A</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>One from field B</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Three additional courses in philosophy</td>
<td></td>
<td>300</td>
</tr>
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</table>

**Total Units**: 600

**PHILOSOPHY COURSES**

**PHIL 20000. Introduction to Philosophy of Science. 100 Units.**

An introductory exploration of some of the central questions in the philosophy of science. These will include: What is (the definition of) a science--such that the natural, formal, and social sciences all count as sciences, but (for example) philosophy and literary criticism do not? How, in the natural sciences, do theory-building and observation relate to each other? Can some of the sciences be reduced to other sciences? (What is reduction of this kind supposed to involve?) What is evidence? What are the old and new problems of induction? What is a scientific (or indeed any other form of) explanation? What is a law of nature? Do the sciences make real progress?

*B*

Instructor(s): B. Callard Terms Offered: Spring

**PHIL 20100. Elementary Logic. 100 Units.**

An introduction to the concepts and principles of symbolic logic. We learn the syntax and semantics of truth-functional and first-order quantificational logic, and apply the resultant conceptual framework to the analysis of valid and invalid arguments, the structure of formal languages, and logical relations among sentences of ordinary discourse. Occasionally we will venture into topics in philosophy of language and philosophical logic, but our primary focus is on acquiring a facility with symbolic logic as such.

Instructor(s): K. Davey Terms Offered: Autumn

Note(s): Course not for field credit.

Equivalent Course(s): CHSS 33500, HIPS 20700, PHIL 30000

**PHIL 20102. Changing, Resting, Living: Aristotle's Natural Philosophy. 100 Units.**

How can many things be one thing? Aristotle's answer to this question treats living things--plants and animals--as the paradigm cases of unified multiplicities. In this course, we will investigate how such things are held together and what makes it possible for them to change over time. Readings will be from Aristotle's Physics, Metaphysics, De Anima, Parts of Animals, On Generation and Corruption, and De Motu Animalium. (B)

Instructor(s): A. Callard Terms Offered: Winter

Prerequisite(s): Students who are not enrolled by the start of term but wish to enroll must (a) email the instructor before the course begins and (b) attend the first class.

Equivalent Course(s): CLCV 20118, CLAS 30118, PHIL 30102
PHIL 20210. Kant's Ethics. 100 Units.
In this course we will read, write, and think about Kant's ethics. After giving careful attention to the arguments in the Second Critique, portions of the Third Critique, the Groundwork of the Metaphysics of Morals, the Metaphysics of Morals, and several other primary texts, we will conclude by working through some contemporary neo-Kantian moral philosophy, paying close attention to work by Christine Korsgaard, David Velleman, Stephen Engstrom, and others. (A) (V)
Instructor(s): B. Laurence Terms Offered: Winter
Equivalent Course(s): PHIL 30210, FNDL 20210

PHIL 21000. Introduction To Ethics. 100 Units.
In this course, we will read, write, and think about philosophical work meant to provide a systematic and foundational account of ethics. We will focus on close reading of two books, Immanuel Kant's Groundwork of the Metaphysics of Morals and John Stuart Mill's Utilitarianism, along with a handful of more recent essays. Throughout, our aim will be to engage in serious thought about good and bad in our lives. (A)
Instructor(s): C. Vogler Terms Offered: Winter
Equivalent Course(s): FNDL 23107, HIPS 21000

PHIL 21002. Human Rights: Philosophical Foundations. 100 Units.
Human rights are claims of justice that hold merely in virtue of our shared humanity. In this course we will explore philosophical theories of this elementary and crucial form of justice. Among topics to be considered are the role that dignity and humanity play in grounding such rights, their relation to political and economic institutions, and the distinction between duties of justice and claims of charity or humanitarian aid. Finally we will consider the application of such theories to concrete, problematic and pressing problems, such as global poverty, torture and genocide. (A) (I)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): HMRT 31002, LLSo 21002, INRE 31602, HIST 39319, HMRT 21002, MAPH 42002, PHIL 31002, HIST 29319

PHIL 21600. Introduction to Political Philosophy. 100 Units.
In this course we will investigate what it is for a society to be just. In what sense are the members of a just society equal? What freedoms does a just society protect? Must a just society be a democracy? What economic arrangements are compatible with justice? In the second portion of the course we will consider one pressing injustice in our society in light of our previous philosophical conclusions. Possible candidates include, but are not limited to, racial inequality, economic inequality, and gender hierarchy. Here our goal will be to combine our philosophical theories with empirical evidence in order to identify, diagnose, and effectively respond to actual injustice. (A)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): PLSC 22600, GNSE 21601, LLSo 22612

PHIL 21620. The Problem of Evil. 100 Units.
Epicurus's old questions are yet unanswered. Is he [God] willing to prevent evil, but not able? then is he impotent. Is he able, but not willing? then is he malevolent. Is he both able and willing? whence then is evil?" (Hume, Dialogues Concerning Natural Religion) This course will consider the challenge posed by the existence of evil to the rationality of traditional theistic belief. Drawing on both classic and contemporary readings, we will analyze atheistic arguments from evil and attempts by theistic philosophers to construct "theodicies" and "defenses" in response to these arguments, including the "free-will defense," "soul-making theodicies," and "suffering God theodicies." We will also consider critiques of such theodicies as philosophically confused, morally depraved, or both, and we will discuss the problem of divinely commanded or enacted evil (for example, the doctrine of hell). (A)
Instructor(s): M. Kremer Terms Offered: Spring
Equivalent Course(s): RLST 23620

PHIL 21720. Aristotle's Nicomachean Ethics. 100 Units.
This course will offer a close reading of Aristotle's Nicomachean Ethics, one of the great works of ethics. Among the topics to be considered are: What is a good life? What is ethics? What is the relation between ethics and having a good life? What is it for reason to be practical? What is human excellence? What is the non-rational part of the human psyche like? How does it ever come to listen to reason? What is human happiness? What is the place of thought and of action in the happy life? (A)
Instructor(s): J. Lear; G. Richardson Lear Terms Offered: Autumn
Prerequisite(s): This course is intended for Philosophy majors and for Fundamentals majors. Otherwise please seek permission to enroll.
Equivalent Course(s): FNDL 21908
PHIL 21834. Self-Creation as a Literary and Philosophical Problem. 100 Units.
Can we choose who to be? We tend to feel that we have some ability to influence the kind of people we will become; but the phenomenon of ‘self-creation’ is fraught with paradox: creation ex nihilo, vicious circularity, infinite regress. In this course, we will read philosophical texts addressing these paradoxes against novels offering illustrations of self-creation.
Instructor(s): A. Callard Terms Offered: Spring
Prerequisite(s): Students who are not enrolled by the start of term but wish to enroll must (a) email the instructor before the course begins and (b) attend the first class.
Equivalent Course(s): SIGN 26001

PHIL 21901. Feminist Philosophy. 100 Units.
The course is an introduction to the major varieties of philosophical feminism. After studying some key historical texts in the Western tradition (Wollstonecraft, Rousseau, J. S. Mill), we examine four types of contemporary philosophical feminism: Liberal Feminism (Susan Moller Okin, Martha Nussbaum), Radical Feminism (Catharine MacKinnon, Andrea Dworkin), Difference Feminism (Carol Gilligan, Annette Baier, Nel Noddings), and Postmodern ‘Queer’ Gender Theory and trans feminism (Judith Butler, Michael Warner and others). After studying each of these approaches, we will focus on political and ethical problems of contemporary international feminism, asking how well each of the approaches addresses these problems. (A)
Instructor(s): M. Nussbaum Terms Offered: Spring
Prerequisite(s): Undergraduates may enroll only with the permission of the instructor.
Equivalent Course(s): PHIL 31900, GNSE 29600, PLSC 51900, HMRT 31900, RETH 41000

PHIL 22001. Teaching Precollegiate Philosophy. 100 Units.
This course will consider the practices of philosophy through a critical examination of different approaches to teaching precollegiate philosophy. Philosophy at the precollegiate level is common outside of the United States, and there is a growing movement in the U.S. to try to provide greater opportunities, in both public and private schools, for K-12 students to experience the joys of philosophizing. But what are the different options for teaching precollegiate philosophy and which are best? These are the main questions that this course will address. Students in this course will also have the opportunity to include an experiential learning component by participating in the UChicago Winning Words precollegiate philosophy program. (A)
Instructor(s): B. Schultz Terms Offered: Winter
Equivalent Course(s): MAPH 32001

PHIL 22209. Philosophies of Environmentalism and Sustainability. 100 Units.
Many of the toughest ethical and political challenges confronting the world today are related to environmental issues: for example, climate change, loss of biodiversity, the unsustainable use of natural resources, pollution, and other threats to the well-being of both present and future generations. Using both classic and contemporary works, this course will highlight some of the fundamental and unavoidable philosophical questions presented by such environmental issues. Can a plausible philosophical account of justice for future generations be developed? What counts as the ethical treatment of non-human animals? What do the terms ‘nature’ and ‘wilderness’ mean, and can natural environments as such have moral and/or legal standing? What fundamental ethical and political perspectives inform such positions as ecofeminism, the ‘Land Ethic,’ political ecology, ecojustice, and deep ecology? And does the environmental crisis confronting the world today demand new forms of ethical and political philosophizing and practice? Are we in the Anthropocene? Is ‘adaptation’ the best strategy at this historical juncture? Field trips, guest speakers, and special projects will help us philosophize about the fate of the earth by connecting the local and the global. (A)
Instructor(s): B. Schultz Terms Offered: Autumn
Equivalent Course(s): HMRT 22201, PLSC 22202, ENST 22209, GNSE 22204

PHIL 22709. Introduction to Quantum Mechanics, Introduction to Philosophy of Quantum Mechanics. 100 Units.
In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. (B)
Instructor(s): T. Fashby Terms Offered: Winter
Prerequisite(s): Prior knowledge of quantum mechanics is not required since we begin with an introduction to the formalism, but familiarity with matrices, freshman calculus and high school geometry will be presupposed.
Equivalent Course(s): HIPS 22709, KNOW 22709
PHIL 23000. Intro: Metaphysics/Epistemology. 100 Units.
In this course we will explore some of the central questions in epistemology and metaphysics. In epistemology, these questions will include: What is knowledge? What facts or states justify a belief? How can the threat of skepticism be adequately answered? How do we know what we (seem to) know about mathematics and morality? In metaphysics, these questions will include: What is time? What is the best account of personal identity across time? Do we have free will? We will also discuss how the construction of a theory of knowledge ought to relate to the construction of a metaphysical theory—roughly speaking, what comes first, epistemology or metaphysics? (B) Note(s): Students should register via discussion section.
Instructor(s): B. Callard Terms Offered: Autumn

PHIL 23205. Intro to Phenomenology. 100 Units.
The aim of this course is to introduce students to one of the most important and influential traditions in the European Philosophy of the 20th Century: Phenomenology. The main task of this course will be to present Phenomenology’s main concepts and the meaning of Phenomenology’s transformations from Husserl to Heidegger, Sartre, Levinas and Henry. The fundamental credo of Phenomenology consists in the emphasis laid upon phenomena given to consciousness. This emphasis coincides with the “return to things in themselves” as formulated by Husserl. What can this kind of return actually mean? And what does this claim suggest about philosophical practices prior to phenomenology, idealism or empiricism? In what way, for Husserl, was classical philosophy not able to give access to things such as they are truly given? And what is the meaning of such idea of “givenness”? Does Phenomenology fall into the so-called “myth of the Given”?
Note(s): Students should register via discussion section.
Instructor(s): R. Moati Terms Offered: Winter

PHIL 24599. Introduction to Frege. 100 Units.
Gottlob Frege is often called the father of analytic philosophy, but the real reason to study him is not his historical significance, but, rather, that in his work one encounters a philosophical intelligence of the very first order. This course is an introductory survey of his most important ideas, in philosophy of mathematics, logic, philosophy of language, and metaphysics. To help us in our project of understanding and assessing these ideas we will read discussions of Frege by Michael Dummett, Tyler Burge, Joan Weiner, Nathan Salmon, Michael Resnik, Danielle Macbeth, Hans Sluga, Patricia Blanchette, John Searle, Crispin Wright, and others. (B)
Instructor(s): B. Callard Terms Offered: Spring
Equivalent Course(s): FNDL 24599

PHIL 24800. Foucault and The History of Sexuality. 100 Units.
This course centers on a close reading of the first volume of Michel Foucault’s “The History of Sexuality”, with some attention to his writings on the history of ancient conceptualizations of sex. How should a history of sexuality take into account scientific theories, social relations of power, and different experiences of the self? We discuss the contrasting descriptions and conceptions of sexual behavior before and after the emergence of a science of sexuality. Other writers influenced by and critical of Foucault are also discussed.
Instructor(s): A. Davidson Terms Offered: Autumn
Prerequisite(s): One prior philosophy course is strongly recommended.
Equivalent Course(s): HIPS 24300, KNOW 27002, CMLT 25001, GNSE 23100, FNDL 22001

PHIL 25000. Ancient Philos/Hist Philos-1. 100 Units.
An examination of ancient Greek philosophical texts that are foundational for Western philosophy, especially the work of Plato and Aristotle. Topics will include: the nature and possibility of knowledge and its role in human life; the nature of the soul; virtue; happiness and the human good.
Instructor(s): G. Richardson Lear Terms Offered: Autumn
Prerequisite(s): Completion of the general education requirement in humanities.
Equivalent Course(s): CLCV 22700

PHIL 26000. History of Philosophy II: Medieval and Early Modern Philosophy. 100 Units.
A survey of the thought of some of the most important figures of this period, including Anselm, Aquinas, Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkeley, and Hume.
Instructor(s): B. Callard Terms Offered: Winter
Prerequisite(s): Completion of the general education requirement in humanities required; PHIL 25000 recommended.
Equivalent Course(s): HIPS 26000
PHIL 27000. History of Philosophy III: Kant and the 19th Century. 100 Units.
The philosophical ideas and methods of Immanuel Kant’s “critical” philosophy set off a revolution that reverberated through 19th-century philosophy. We will trace the effects of this revolution and the responses to it, focusing on the changing conception of what philosophical ethics might hope to achieve. We will begin with a consideration of Kant’s famous Groundwork of the Metaphysics of Morals, in which the project of grounding all ethical obligations in the very idea of rational freedom is announced. We will then consider Hegel’s radicalization of this project in his Philosophy of Right, which seeks to derive from the idea of rational freedom, not just formal constraints on right action, but a determinate, positive conception of what Hegel calls “ethical life”. We will conclude with an examination of three very different critics of the Kantian/Hegelian project in ethical theory: Karl Marx, John Stuart Mill, and Friedrich Nietzsche.
Instructor(s): M. Haase Terms Offered: Spring
Prerequisite(s): Completion of the general education requirement in humanities.

PHIL 29200. Junior Tutorial. 100 Units.
Junior/Senior Tutorial. For topic and other information, please visit http://philosophy.uchicago.edu/courses.
Instructor(s): R. Eichorn in Autumn 2017 J. Edwards; N. Lipshitz; R. O’Connell in Winter 2018 P. Brixel; T. Hash; C. Kirwin in Spring 2018 Terms Offered: Autumn,Spring,Winter
Prerequisite(s): Open only to Intensive-Track Majors.
Note(s): Junior and Senior sections meet together. No more than two Tutorials may be used to meet program requirements.

PHIL 29300. Senior Tutorial. 100 Units.
Junior/Senior Tutorial. For topic and other information, please visit http://philosophy.uchicago.edu/courses.
Instructor(s): Dallman, Lawrence (Winter 2019), Fox, Joshua (Winter 2019) & Dupree, Emily (Spring 2019) Terms Offered: Spring,Winter
Prerequisite(s): Open only to Intensive-Track Majors.
Note(s): Junior and Senior sections meet together. No more than two Tutorials may be used to meet program requirements.

PHIL 29411. Consequentialism from Bentham to Singer. 100 Units.
Are some acts wrong “whatever the consequences”? Do consequences matter when acting for the sake of duty, or virtue, or what is right? How do “consequentialist” ethical theories, such as utilitarianism, address such issues? This course will address these questions by critically examining some of the most provocative defenses of consequentialism in the history of philosophy, from the work of the classical utilitarians Bentham, Mill, and Sidgwick to that of Peter Singer, one of the world’s most influential living philosophers and the founder of the animal liberation and effective altruism movements. Does consequentialism lend itself to the Panoptical nightmares of the surveillance state, or can it be a force for a genuinely emancipatory ethics and politics?
Instructor(s): B. Schultz Terms Offered: Spring
Equivalent Course(s): PLSC 29411

PHIL 29601. Intensive Track Seminar. 100 Units.
This seminar will explore an advanced topic in philosophy. Its required as part of the intensive track of the Philosophy Major.
Instructor(s): J. Bridges Terms Offered: Autumn
Prerequisite(s): Open only to third-year students who have been admitted to the intensive track program.

PHIL 29700. Reading and Research. 100 Units.
Reading and Research.
Instructor(s): Staff Terms Offered: Autumn,Spring,Winter
Prerequisite(s): Consent of Instructor & Director of Undergraduate Studies. Students are required to submit the college reading and research course form.

PHIL 29901. Senior Seminar I. 100 Units.
Students writing senior essays register once for PHIL 29901, in either the Autumn or Winter Quarter, and once for PHIL 29902, in either the Winter or Spring Quarter. (Students may not register for both PHIL 29901 and 29902 in the same quarter.) The Senior Seminar meets all three quarters, and students writing essays are required to attend throughout.
Instructor(s): B. Laurence Terms Offered: Autumn,Winter
Prerequisite(s): Consent of Director of Undergraduate Studies.
Note(s): Required and only open to fourth-year students who have been accepted into the BA essay program.
PHIL 29902. BA Essay Preparation, Senior Seminar II. 100 Units.
Students writing senior essays register once for PHIL 29901, in either the Autumn or Winter Quarter, and once for PHIL 29902, in either the Winter or Spring Quarter. (Students may not register for both PHIL 29901 and 29902 in the same quarter). The Senior Seminar meets all three quarters, and students writing essays are required to attend throughout. Students writing senior essays register once for PHIL 29901, in either the Autumn or Winter Quarter, and once for PHIL 29902, in either the Winter or Spring Quarter. (Students may not register for both PHIL 29901 and 29902 in the same quarter.) The senior seminar meets all three quarters, and students writing essays are required to attend throughout.
Instructor(s): B. Laurence
Terms Offered: Spring, Winter
Prerequisite(s): Consent of Director of Undergraduate Studies.
Note(s): Required and only open to fourth-year students who have been accepted into the BA essay program.
PHYSICS

Department Website: http://physics.uchicago.edu

PROGRAM OF STUDY

Physics is concerned with the study of matter, energy, forces, and their interaction in the world and universe around us. The undergraduate curriculum in the Department of Physics leading to the BA in physics includes a strong emphasis on experiment and covers the broad fundamentals necessary for graduate study in theoretical physics, experimental physics, or astronomy and astrophysics, as well as some fields of engineering and many interdisciplinary specialties requiring a strong technical background (e.g., biophysics, medical physics, atmospheric and environmental sciences).

Students who are majoring in other fields of study may also complete a minor in physics. Information follows the description of the major.

PROGRAM REQUIREMENTS

Courses

The curriculum leading to the BA degree in physics is designed for maximum flexibility consistent with a thorough coverage of the essential principles of physics. Degree requirements include introductory and advanced physics and mathematics courses, as well as physics electives that allow students to pursue specific interests.

Students who plan to major in physics are encouraged to start course work in their first year. However, the program can be completed in three years, so one could start physics in the second year without delaying graduation. Two of the physics and two of the mathematics courses can be designated as general education courses, with sixteen courses remaining to fulfill the major.

In general, students should take the most advanced courses for which they have the appropriate prerequisites. Entering students will be given a placement for either PHYS 13100 Mechanics or PHYS 14100 Honors Mechanics based on their mathematics and physics background. Either course is appropriate for students planning to major (or minor) in physics.

Mathematics

The mathematics requirement is a calculus sequence (MATH 15100-MATH 15200-MATH 15300 or MATH 16100-MATH 16200-MATH 16300) followed by PHYS 22100. As an alternative to PHYS 22100, students taking an Analysis sequence (MATH 20300-MATH 20400-MATH 20500 or MATH 20700-MATH 20800-MATH 20900) may substitute MATH 20500 or MATH 20900 for PHYS 22100, though they will subsequently need to acquire certain math tools, as needed, on their own. However, students interested in pursuing further study in physics and mathematics should consider taking both PHYS 22100 and an Analysis sequence.

But please note that for students starting their program with the PHYS 13100-PHYS 13200-PHYS 13300 sequence, the MATH 15300/MATH 16300 requirement is replaced by PHYS 22000. This course in mathematical methods introduces tools typically used in the PHYS 14100-PHYS 14200-PHYS 14300 sequence, and ensures that a student taking PHYS 13100-PHYS 13200-PHYS 13300 will possess the mathematical background needed for subsequent physics course work.

Finally, entering students placing into MATH 13100 should consult the undergraduate program chair to plan a program of study.

SUMMARY OF REQUIREMENTS

GENERAL EDUCATION

<table>
<thead>
<tr>
<th>One of the following sequences:</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100-13200</td>
<td></td>
</tr>
<tr>
<td>PHYS 14100</td>
<td></td>
</tr>
<tr>
<td>&amp; PHYS 14200</td>
<td></td>
</tr>
<tr>
<td>Mechanics; Electricity and Magnetism</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>One of the following sequences:</th>
<th>200</th>
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</thead>
<tbody>
<tr>
<td>MATH 15100-15200</td>
<td></td>
</tr>
<tr>
<td>Calculus I-II</td>
<td></td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td></td>
</tr>
<tr>
<td>Honors Calculus I-II</td>
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</tr>
</tbody>
</table>

Total Units 400

MAJOR

<table>
<thead>
<tr>
<th>One of the following:</th>
<th>100</th>
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</thead>
<tbody>
<tr>
<td>PHYS 13300</td>
<td></td>
</tr>
<tr>
<td>Waves, Optics, and Heat</td>
<td></td>
</tr>
<tr>
<td>PHYS 14300</td>
<td></td>
</tr>
<tr>
<td>Honors Waves, Optics, and Heat</td>
<td></td>
</tr>
</tbody>
</table>

One of the following: 100
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
</tr>
</tbody>
</table>

Note: students in PHYS 13300 must take PHYS 22000.

One of the following: 100

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 22100</td>
<td>Mathematical Methods in Physics</td>
</tr>
<tr>
<td>MATH 20500</td>
<td>Analysis in Rn III</td>
</tr>
<tr>
<td>MATH 20900</td>
<td>Honors Analysis in Rn III</td>
</tr>
<tr>
<td>PHYS 15400</td>
<td>Modern Physics</td>
</tr>
<tr>
<td>PHYS 18500</td>
<td>Intermediate Mechanics</td>
</tr>
<tr>
<td>PHYS 23400-23500</td>
<td>Quantum Mechanics I-II</td>
</tr>
<tr>
<td>PHYS 21101-21102-21103</td>
<td>Experimental Physics I-II-III</td>
</tr>
<tr>
<td>PHYS 22500-22700</td>
<td>Intermediate Electricity and Magnetism I-II</td>
</tr>
<tr>
<td>PHYS 19700</td>
<td>Statistical and Thermal Physics</td>
</tr>
</tbody>
</table>

Three electives (to be selected from list of approved courses) 300

Total Units 1600

* Credit may be granted by examination.

Electives

In addition to specified course work, the physics major requires three electives. These electives may be selected from the following courses:

All 20000-level physics courses (except PHYS 29100-29200-29300, and PHYS 29700)

Any of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 24100</td>
<td>The Physics of Stars ‡</td>
</tr>
<tr>
<td>ASTR 23900</td>
<td>Physics of Galaxies ‡</td>
</tr>
<tr>
<td>or ASTR 24200</td>
<td>The Physics of Galaxies and the Universe</td>
</tr>
<tr>
<td>ASTR 24300</td>
<td>Cosmological Physics ‡</td>
</tr>
<tr>
<td>ASTR 25400</td>
<td>Radiation Processes in Astrophysics ‡</td>
</tr>
<tr>
<td>ASTR 25800</td>
<td>Astrophysics of Exoplanets</td>
</tr>
<tr>
<td>BIOS 29326</td>
<td>Introduction to Medical Physics and Medical Imaging</td>
</tr>
<tr>
<td>CHEM 26300</td>
<td>Chemical Kinetics and Dynamics</td>
</tr>
<tr>
<td>CHEM 26800</td>
<td>Computational Chemistry and Biology</td>
</tr>
<tr>
<td>CMSC 23710</td>
<td>Scientific Visualization</td>
</tr>
<tr>
<td>CMSC 28510</td>
<td>Introduction to Scientific Computing</td>
</tr>
<tr>
<td>GEOS 21200</td>
<td>Physics of the Earth</td>
</tr>
<tr>
<td>GEOS 23200</td>
<td>Climate Dynamics of the Earth and Other Planets</td>
</tr>
<tr>
<td>GEOS 24220</td>
<td>Climate Foundations</td>
</tr>
<tr>
<td>GEOS 24230</td>
<td>Geophysical Fluid Dynamics: Foundations</td>
</tr>
<tr>
<td>GEOS 24240</td>
<td>Geophysical Fluid Dynamics: Rotation and Stratification</td>
</tr>
<tr>
<td>GEOS 24250</td>
<td>Geophysical Fluid Dynamics: Understanding the Motions of the Atmosphere and Oceans</td>
</tr>
<tr>
<td>MATH 23500</td>
<td>Markov Chains, Martingales, and Brownian Motion</td>
</tr>
<tr>
<td>MATH 26200</td>
<td>Point-Set Topology</td>
</tr>
<tr>
<td>MATH 27000</td>
<td>Basic Complex Variables</td>
</tr>
<tr>
<td>MATH 27200</td>
<td>Basic Functional Analysis</td>
</tr>
<tr>
<td>MATH 27300</td>
<td>Basic Theory of Ordinary Differential Equations</td>
</tr>
<tr>
<td>MATH 27400</td>
<td>Introduction to Differentiable Manifolds and Integration on Manifolds</td>
</tr>
<tr>
<td>MATH 27500</td>
<td>Basic Theory of Partial Differential Equations</td>
</tr>
<tr>
<td>MENG 23700</td>
<td>Quantum Computation</td>
</tr>
<tr>
<td>MENG 26020</td>
<td>Engineering Electrodynamics</td>
</tr>
<tr>
<td>MENG 26101</td>
<td>Transport Phenomena I: Forces and Flows</td>
</tr>
<tr>
<td>MENG 26102</td>
<td>Transport Phenomena II</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods</td>
</tr>
</tbody>
</table>
Sample Programs

The sample programs below illustrate different paths for fulfilling requirements for the physics major.

In the first example, the Honors physics sequence PHYS 14100-14200-14300 is taken concurrently with calculus:

### First Year

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 14100</td>
<td>100 PHYS 14200</td>
<td>100 PHYS 14300</td>
<td>100</td>
</tr>
<tr>
<td>MATH 15100 or 16100</td>
<td>100 MATH 15200 or 16200</td>
<td>100 MATH 15300 or 16300</td>
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</tr>
<tr>
<td>200</td>
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<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 600

The next example shows a PHYS 13100-13200-13300 pathway. Here, the required PHYS 22000 course replaces the third quarter of calculus:

### First Year

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13100</td>
<td>100 PHYS 13200</td>
<td>100 PHYS 13300</td>
<td>100</td>
</tr>
<tr>
<td>MATH 15100 or 16100</td>
<td>100 MATH 15200 or 16200</td>
<td>100 PHYS 22000</td>
<td>100</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 600

The remaining required courses are typically distributed over the next three years, like so:

### Second Year

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 22100</td>
<td>100 PHYS 18500</td>
<td>100 PHYS 23400</td>
<td>100</td>
</tr>
<tr>
<td>200</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Winter Quarter</th>
<th>Spring Quarter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 23500</td>
<td>100 PHYS 22500</td>
<td>100 PHYS 22700</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 21103</td>
<td>100 PHYS 21102</td>
<td>100 PHYS 21103</td>
<td>100</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Autumn Quarter</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 19700</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Units: 1100

In addition, three electives (selected from a list of approved courses) must be taken. In deciding when to take electives, students should be mindful of any course prerequisites.

The required laboratory sequence PHYS 21101-21102-21103 is a year-long study of experimental physics. It is recommended, but not required, that Experimental Physics be taken in the third year, concurrent with PHYS 23500.

Progress through the physics program can be accelerated by "doubling up" on some of the required courses. For example, PHYS 23500 ([http://collegecatalog.uchicago.edu/search/?P=PHYS%2023500](http://collegecatalog.uchicago.edu/search/?P=PHYS%2023500)) and PHYS 19700 ([http://collegecatalog.uchicago.edu/search/?P=PHYS%2019700](http://collegecatalog.uchicago.edu/search/?P=PHYS%2019700)) may be taken concurrently in the third year, and PHYS 22500 ([http://collegecatalog.uchicago.edu/search/?P=PHYS%2022500](http://collegecatalog.uchicago.edu/search/?P=PHYS%2022500)) may be concurrent with PHYS 18500 ([http://collegecatalog.uchicago.edu/search/?P=PHYS%2018500](http://collegecatalog.uchicago.edu/search/?P=PHYS%2018500))/PHYS 23400 ([http://collegecatalog.uchicago.edu/search/?P=PHYS%2023400](http://collegecatalog.uchicago.edu/search/?P=PHYS%2023400)) in the second year. This provides more options in the third and fourth years for electives, as well as research or graduate course work. Note that it is possible to complete all program requirements in three years.
Finally, the sample programs shown here are only meant to be illustrative. Students are encouraged to speak with the departmental counselors in planning individual programs, especially regarding selection of mathematics courses and program electives.

Introductory Course

The introductory course for students in the physical sciences is divided into two variants—PHYS 13100-PHYS 13200-PHYS 13300 and PHYS 14100-PHYS 14200-PHYS 14300—so students may learn with others who have comparable physics and mathematics backgrounds. The co-requisite for both is a first-year calculus sequence: MATH 15100-MATH 15200-MATH 15300 or MATH 16100-MATH 16200-MATH 16300 (or completion of MATH 13100-MATH 13200-MATH 13300). The essential physics content of these two sequences is the same, but the 140s sequence covers material at a higher mathematical level. Both PHYS 130s and PHYS 140s prepare students for further courses in the physics major or minor.

First-year students are assigned to either PHYS 13100 or PHYS 14100 based on Advanced Placement test scores. In addition, physics placement may be adjusted by consulting the undergraduate program chair (KPTC 205) during Orientation week. Transfer students who have satisfactorily completed calculus-based introductory physics courses at another university may be granted appropriate transfer credit upon petition to, and approval by, the program chair.

Another introductory sequence, PHYS 12100-PHYS 12200-PHYS 12300, is intended for students pursuing studies in biology or medicine. The prerequisite is two quarters of calculus and completion of general chemistry. While topics are similar to the 130s and 140s sequences, PHYS 120s cannot serve as a prerequisite for further courses in physics, and thus cannot be used for the physics major or minor.

A student who completes PHYS 14100 or PHYS 14200 with a grade below C is normally required to move to PHYS 13200 or PHYS 13300 the following quarter. Petitions for a waiver of this requirement must be presented to the undergraduate program chair before the second day of the succeeding course. A student who receives an A or A- in PHYS 13100 may petition the undergraduate program chair to move to PHYS 14200.

Advanced Placement

Students who took both Physics C Advanced Placement examinations prior to matriculation in the College may receive credit for PHYS 12100 and/or PHYS 12200. Consult the section on Advanced Placement Credit in this catalog for more information.

Accreditation

Accreditation examinations are administered for the content of PHYS 12100-PHYS 12200-PHYS 12300 and PHYS 14100-PHYS 14200-PHYS 14300. The first examination may be taken by incoming students only at the time of matriculation in the College. Students who pass the first examination (for PHYS 12100 or PHYS 14100) will receive credit for the lecture part of the course only and will then be invited to try the next examination of the sequence. All students who receive advanced standing on the basis of a physics accreditation examination are interviewed by the undergraduate program chair to determine the extent of their lab experience. Additional laboratory work may be required.

GRADING

All regular (non-research) physics courses must be taken for quality grades. All courses used to satisfy prerequisites must be taken for quality grades. The Department of Physics requires students to pass PHYS 13100-PHYS 13200-PHYS 13300/PHYS 14100-PHYS 14200-PHYS 14300, PHYS 15400, PHYS 18500, and PHYS 23400 with an average of 2.0 or higher to continue in the program.

OPPORTUNITIES FOR PARTICIPATION IN RESEARCH

The physics program offers unique opportunities for College students to become actively involved in the research being conducted by faculty of the department. Interested students are welcome to consult with the departmental counselors. The focus of much of the undergraduate research is structured around the Bachelor’s Thesis (PHYS 29100-PHYS 29200-PHYS 29300). Alternatively, third- or fourth-year students majoring in physics may register for research for academic credit (PHYS 29700). In addition to these formal arrangements, students at any level may become involved in research by working in a faculty member’s lab or research group on an extracurricular basis.

HONORS

There are two routes to receiving a BA with honors. Both require a minimum GPA of 3.0 in the courses listed under Major in the preceding Summary of Requirements section. In the first route, the student must register for PHYS 29100-PHYS 29200-PHYS 29300 and earn a grade of B or higher based on a bachelor’s thesis describing an approved research project completed during the year. The second route to receiving a BA with honors is to pass an approved set of three graduate courses, with a grade of B or higher in each. One such set of courses is PHYS 34100-PHYS 34200 and PHYS 35200; however, other 30000-level courses may be used with approval from the program chair.
DEGREE PROGRAM IN PHYSICS WITH SPECIALIZATION IN ASTROPHYSICS

With the introduction of the major of Astronomy and Astrophysics in the 2018–19 academic year, the Physics Specialization in Astrophysics is being discontinued. Students who matriculated in Autumn Quarter 2017 or earlier may still complete the specialization with approval from the department. Students entering the College in Autumn Quarter 2018 or later and wish to pursue study in astrophysics should plan to major in Astronomy and Astrophysics.

The program leading to a BA in physics with a specialization in astrophysics is a variant of the BA in physics. The degree is in physics, with the designation "with specialization in astrophysics" included on the final transcript. Candidates are required to complete all requirements for the BA degree in physics, plus three courses in astrophysics (selected from ASTR 23900 Physics of Galaxies, ASTR 24100 The Physics of Stars, ASTR 24300 Cosmological Physics, ASTR 25400 Radiation Processes in Astrophysics, ASTR 28200 Current Topics in Astrophysics), or two courses in astrophysics plus a senior thesis project in physics (PHYS 29100-29200-29300 Bachelor’s Thesis I-II-III) on a topic in astrophysics. If the latter option is chosen, the thesis topic must be approved by the program chair. (This thesis may simultaneously fulfill part of the requirements for honors in physics.) A grade of at least C- must be obtained in each course.

MINOR PROGRAM IN PHYSICS

The minor in physics is designed to present a coherent program of study to students with a strong interest in physics but insufficient time to pursue the major. The courses required for the minor are:

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 13300</td>
<td>Waves, Optics, and Heat</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 14300</td>
<td>Honors Waves, Optics, and Heat</td>
<td></td>
</tr>
</tbody>
</table>

One of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH 15300</td>
<td>Calculus III</td>
<td>100</td>
</tr>
<tr>
<td>MATH 16300</td>
<td>Honors Calculus III</td>
<td></td>
</tr>
<tr>
<td>PHYS 22000</td>
<td>Introduction to Mathematical Methods in Physics</td>
<td></td>
</tr>
</tbody>
</table>

Note: students in PHYS 13300 must take PHYS 22000.

PHYS 15400  Modern Physics
PHYS 18500  Intermediate Mechanics
PHYS 22100  Mathematical Methods in Physics
PHYS 23400  Quantum Mechanics I

Two electives, at least one of which is:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 19700</td>
<td>Statistical and Thermal Physics</td>
<td>100</td>
</tr>
<tr>
<td>PHYS 22500</td>
<td>Intermediate Electricity and Magnetism I</td>
<td></td>
</tr>
<tr>
<td>PHYS 23500</td>
<td>Quantum Mechanics II</td>
<td></td>
</tr>
</tbody>
</table>

The second elective may be any course that is required by the major or can be used as an elective for the major.

Total Units: 800

The mathematics requirement for the minor is identical to the requirement for the major; please consult the description of the major for more information, particularly regarding PHYS 22000 and PHYS 22100. Note that PHYS 22000 and PHYS 22100 may be replaced by equivalent courses, as approved by the undergraduate program chair. Note also that the PHYS 13300/PHYS 14300, PHYS 22100, and MATH 15300/MATH 16300/PHYS 22000 requirements will be waived for those who must take these courses to satisfy the requirements of a major or another minor. Consequently, the number of courses needed for the minor will vary between five and eight.

Students who elect the minor program in physics must meet with the physics undergraduate program chair before the end of Spring Quarter of their third year to declare their intention to complete the minor. The approval of the program chair for the minor program should be submitted to a student's College adviser by the deadline above on a form obtained from the College adviser. Courses for the minor are chosen in consultation with the program chair.

Courses in the minor (1) may not be double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and students must have a GPA of 2.0 or higher in the minor. More than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

PHYSICS COURSES

PHYS 12100-12200-12300. General Physics I-II-III.
This is a one-year sequence in the fundamentals of physics for students in the biological sciences and pre-medical studies. Univariable calculus will be used as needed. Where appropriate, attention will be drawn to interdisciplinary applications. The first two courses meet the general education requirement in physical sciences. (L)
PHYS 12100. General Physics I. 100 Units.
This course covers Newtonian mechanics and fluid dynamics. (L)
Terms Offered: Autumn
Prerequisite(s): MATH 13200 or 15200 or 16200; CHEM 11300 or 12300.

PHYS 12200. General Physics II. 100 Units.
This course covers electric and magnetic fields. (L)
Terms Offered: Winter
Prerequisite(s): PHYS 12100

PHYS 12300. General Physics III. 100 Units.
This course covers waves, optics, and modern physics. (L)
Terms Offered: Spring
Prerequisite(s): PHYS 12200

PHYS 13100-13200-13300. Mechanics; Electricity and Magnetism; Waves, Optics, and Heat.
This is a one-year introductory sequence in physics for students in the physical sciences. Univariable calculus will be used extensively. The first two courses meet the general education requirement in physical sciences. (L)

PHYS 13100. Mechanics. 100 Units.
Topics include particle motion, Newton's Laws, work and energy, systems of particles, rigid-body motion, gravitation, oscillations, and special relativity. (L)
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): MATH 13100-13200-13300 or 15100-15200-15300 or 16100-16200-16300. (MATH 15100-15200-15300 or 16100-16200-16300 may be taken concurrently.)

PHYS 13200. Electricity and Magnetism. 100 Units.
Topics include electric fields, Gauss' law, electric potential, capacitors, DC circuits, magnetic fields, Ampere's law, induction, Faraday's law, AC circuits, Maxwell's equations, and electromagnetic waves. (L)
Terms Offered: Winter
Prerequisite(s): PHYS 13100 or 14100

PHYS 13300. Waves, Optics, and Heat. 100 Units.
Topics include mechanical waves, sound, light, polarization, reflection and refraction, interference, diffraction, geometrical optics, heat, kinetic theory, and thermodynamics. (L)
Instructor(s): Staff
Terms Offered: Spring
Prerequisite(s): PHYS 13200 or 14200

This is a one-year introductory sequence in physics for students in the physical sciences. A strong background in univariable calculus is assumed. Multivariable and vector calculus will be introduced and used extensively. The first two courses meet the general education requirement in physical sciences. (L)

PHYS 14100. Honors Mechanics. 100 Units.
Topics include particle motion, Newton's Laws, work and energy, systems of particles, rigid-body motion, gravitation, oscillations, and special relativity. (L)
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): Placement required.
PHYS 14200. Honors Electricity and Magnetism. 100 Units.
Topics include electric fields, Gauss’ law, electric potential, capacitors, DC circuits, magnetic fields, Ampere’s law, induction, Faraday’s law, AC circuits, Maxwell’s equations, and electromagnetic waves. (L)
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): PHYS 14100

PHYS 14300. Honors Waves, Optics, and Heat. 100 Units.
Topics include mechanical waves, sound, light, polarization, reflection and refraction, interference, diffraction, geometrical optics, heat, kinetic theory, and thermodynamics. (L)
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): PHYS 14200

PHYS 14200. Honors Electricity and Magnetism. 100 Units.
Topics include electric fields, Gauss’ law, electric potential, capacitors, DC circuits, magnetic fields, Ampere’s law, induction, Faraday’s law, AC circuits, Maxwell’s equations, and electromagnetic waves. (L)
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): PHYS 14100

PHYS 14300. Honors Waves, Optics, and Heat. 100 Units.
Topics include mechanical waves, sound, light, polarization, reflection and refraction, interference, diffraction, geometrical optics, heat, kinetic theory, and thermodynamics. (L)
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): PHYS 14200

PHYS 15400. Modern Physics. 100 Units.
This course is an introduction to quantum physics. Topics include Einstein’s quantum theory of light, the wave nature of particles, atomic structure, the Schrödinger equation, quantum mechanics in one and three dimensions, angular momentum and spin, and the hydrogen atom. Applications to nuclear and solid-state physics are presented. (L)
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): PHYS 13300 or (PHYS 13300 and PHYS 22000)

PHYS 18500. Intermediate Mechanics. 100 Units.
Topics include a review of Newtonian mechanics, the calculus of variations, Lagrangian and Hamiltonian mechanics, generalized coordinates, canonical momenta, phase space, constrained systems, central-force motion, non-inertial reference frames, and rigid-body motion.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): PHYS 13100 or 14100; PHYS 22100 or MATH 20700 or MATH 20250 (MATH 20250 may be concurrent)

PHYS 19700. Statistical and Thermal Physics. 100 Units.
This course develops a statistical description of physical systems. Topics include elements of probability theory, equilibrium and fluctuations, thermodynamics, canonical ensembles, the equipartition theorem, quantum statistics of ideal gases, and kinetic theory. Prerequisite(s): PHYS 23400, and PHYS 22100 or MATH 20500
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): PHYS 23400; PHYS 22100 or MATH 20400 or MATH 20800

PHYS 20900. Fundamentals of Accelerator Physics and Technology. 100 Units.
The course begins with the historical development of accelerators and their applications. Following a brief review of special relativity, the bulk of the course will focus on acceleration methods and phase stability, basic concepts of magnet design, and transverse linear particle motion. Basic accelerator components such as bending and focusing magnets, electrostatic deflectors, beam diagnostics and radio frequency accelerating structures will be described. The basic concepts of magnet design will be introduced, along with a discussion of particle beam optics. An introduction to resonances, linear coupling, space charge, magnet errors, and synchrotron radiation will also be given. Topics in longitudinal and transverse beam dynamics will be explored, including synchrotron and betatron particle motion. Lastly, a number of additional topics will be reviewed, including synchrotron radiation sources, free electron lasers, high energy colliders, and accelerators for radiation therapy. Several laboratory sessions will provide hands-on experience with hardware and measurement instrumentation.
Terms Offered: Autumn
Prerequisite(s): PHYS 18500 and 22700

PHYS 21101-21102-21103. Experimental Physics I-II-III.
This is a year-long laboratory sequence, offering experiments in atomic, molecular, solid-state, nuclear, and particle physics. Additional material, as needed, is presented in supplemental lectures. Content varies from quarter to quarter. (L)
Note(s): Open only to students who are majoring in Physics.
PHYS 21101. Experimental Physics I. 100 Units.
This is a year-long laboratory sequence, offering experiments in atomic, molecular, solid-state, nuclear, and particle physics. Additional material, as needed, is presented in supplemental lectures. Content varies from quarter to quarter.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): PHYS 23400

PHYS 21102. Experimental Physics II. 100 Units.
A continuation of the year-long laboratory sequence.
Terms Offered: Winter
Prerequisite(s): PHYS 21101

PHYS 21103. Experimental Physics III. 100 Units.
A continuation of the year-long laboratory sequence.
Terms Offered: Spring
Prerequisite(s): PHYS 21102

PHYS 21102. Experimental Physics II. 100 Units.
A continuation of the year-long laboratory sequence.
Terms Offered: Winter
Prerequisite(s): PHYS 21101

PHYS 21103. Experimental Physics III. 100 Units.
A continuation of the year-long laboratory sequence.
Terms Offered: Spring
Prerequisite(s): PHYS 21102

PHYS 22000. Introduction to Mathematical Methods in Physics. 100 Units.
This course, with concurrent enrollment in PHYS 13300, is required of students who plan to major in physics. Topics include infinite series and power series, complex numbers, linear equations and matrices, partial differentiation, multiple integrals, vector analysis, and Fourier series. These methods are used to study Maxwell’s equations, wave packets, and coupled oscillators.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): PHYS 13200; MATH 15200 or 16200

PHYS 22100. Mathematical Methods in Physics. 100 Units.
Topics include linear algebra and vector spaces, ordinary and partial differential equations, calculus of variations, special functions, series solutions of differential equations, and integral transforms.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): PHYS 14300 or (PHYS 13300 and PHYS 22000)

PHYS 22300. Topics in Mathematical Physics. 100 Units.
This course will cover topics in mathematical physics selected from the following areas of study: linear algebra; dynamical systems; probability and statistics.
Terms Offered: Winter
Prerequisite(s): PHYS 22100 or MATH 20500 or MATH 20900

PHYS 22500-22700. Intermediate Electricity and Magnetism I-II.
This is a two-quarter sequence on static and time-varying electric and magnetic fields.

PHYS 22500. Intermediate Electricity and Magnetism I. 100 Units.
Topics include electrostatics and magnetostatics, boundary-value problems, and electric and magnetic fields in matter.
Terms Offered: Winter
Prerequisite(s): PHYS 13200 or 14200; PHYS 22100 or MATH 20700 or MATH 20250 (MATH 20250 may be concurrent)

PHYS 22700. Intermediate Electricity and Magnetism II. 100 Units.
Topics include electromagnetic induction, electromagnetic waves, and radiation.
Terms Offered: Spring
Prerequisite(s): PHYS 22500

PHYS 22600. Electronics. 100 Units.
This hands-on experimental course is intended to develop confidence, understanding, and design ability in modern electronics. It is not a course in the physics of semiconductors. In two lab sessions a week, we explore the properties of diodes, transistors, amplifiers, operational amplifiers, oscillators, field effect transistors, logic gates, digital circuits, analog-to-digital and digital-to-analog converters, phase-locked loops, and more. Lectures supplement the lab. (L)
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): PHYS 12200 or 13200 or 14200
PHYS 22700. Intermediate Electricity and Magnetism II. 100 Units.
Topics include electromagnetic induction, electromagnetic waves, and radiation.
Terms Offered: Spring
Prerequisite(s): PHYS 22500

PHYS 23400-23500. Quantum Mechanics I-II.
This is a two-quarter sequence that, starting from basic postulates, develops the formalism of quantum mechanics and uses it to study atomic phenomena.

PHYS 23400. Quantum Mechanics I. 100 Units.
A study of wave-particle duality leading to the basic postulates of quantum mechanics is presented. Topics include the uncertainty principle, applications of the Schrödinger equation in one and three dimensions, the quantum harmonic oscillator, rotational invariance and angular momentum, the hydrogen atom, and spin.
Terms Offered: Spring
Prerequisite(s): PHYS 15400; PHYS 22100 or MATH 20250 or MATH 20800

PHYS 23500. Quantum Mechanics II. 100 Units.
A review of quantum mechanics is presented, with emphasis on Hilbert space, observables, and eigenstates. Topics include spin and angular momentum, time-independent perturbation theory, fine and hyperfine structure of hydrogen, the Zeeman and Stark effects, many-electron atoms, molecules, the Pauli exclusion principle, and radiative transitions.
Terms Offered: Autumn
Prerequisite(s): PHYS 23400

PHYS 23600. Solid State Physics. 100 Units.
Topics include a review of quantum statistics, crystal structure and crystal binding, lattice vibrations and phonons, liquid helium, the free-electron model of metals, the nearly-free-electron model, semi-conductors, and optical properties of solids.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): PHYS 23500 and 19700

PHYS 23700. Nuclei and Elementary Particles. 100 Units.
This course covers topics such as nuclear structure, processes of transformation, observables of the nucleus, passage of nuclear radiation through matter, accelerators and detectors, photons, leptons, mesons, and baryons, hadronic interactions, and the weak interaction.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): PHYS 23500

PHYS 23800. Modern Atomic Physics. 100 Units.
This course is an introduction to modern atomic physics. Topics to be covered include atomic structure, fundamental symmetries in atoms, interactions of atoms with radiation, laser spectroscopy, trapping and cooling, Bose-Einstein condensates, and quantum information.
Terms Offered: Autumn
Prerequisite(s): PHYS 23500

PHYS 24300. Advanced Quantum Mechanics. 100 Units.
This course will include topics not normally covered in PHYS 23400-23500. Topics may include the following: symmetry in quantum mechanics; quantum mechanics and electromagnetism; adiabatic approximation and Berry phase; path integral formulation; scattering.
Terms Offered: Winter
Prerequisite(s): A grade of B or higher in PHYS 23500 or permission of the instructor
Note(s): PHYS 24300-44300-44400 can be used as a graduate course sequence for Honors.

PHYS 24500. Relativistic Quantum Mechanics and Introduction to String Theory. 100 Units.
This course begins with a review of some aspects of classical electrodynamics and non-relativistic quantum mechanics. It will then discuss the new elements that arise when one combines the two, leading to quantum electrodynamics. It will then discuss the incorporation of the other (strong and weak) interactions into the standard model, and describe some of the more recent ideas, such as supersymmetry and string theory.
Terms Offered: Spring
Prerequisite(s): PHYS 22700 and 23500
PHYS 25000. Computational Physics. 100 Units.
This course introduces the use of computers in the physical sciences. After an introduction to programming basics, we cover numerical solutions to fundamental types of problems, including cellular automata, artificial neural networks, computer simulations of complex systems, and finite element analysis. Additional topics may include an introduction to graphical programming, with applications to data acquisition and device control. (L)
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): PHYS 13300 or 14300 required; knowledge of computer programming not required

PHYS 26400. Spacetime and Black Holes. 100 Units.
This course is an introduction to general relativity, focusing on metrics and geodesics, and treating gravity as the curvature of four-dimensional spacetime. It will begin by fully exploring special relativity, and will then introduce the basic tools of physics in curved spacetime. It will also study black holes, including aspects of the event horizon and singularity, and the properties of orbits in black hole spacetimes.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): PHYS 18500 or consent of instructor

PHYS 29100-29200-29300. Bachelor's Thesis I-II-III.
This year-long sequence of courses is designed to involve the student in current research. Over the course of the year, the student works on a research project in physics or a closely related field, leading to the writing of a bachelor's thesis. A student who submits a satisfactory thesis, earns a grade of B or higher based on the project, and achieves a GPA of 3.0 or higher in courses required for the major is eligible to receive a BA with honors. The project may be one suggested by the instructor or one proposed by the student and approved by the instructor. In either case, all phases of the project (including the literature search, design and construction of the experiments, and analysis) must be done by the student. The instructor and faculty adviser, as well as members of the adviser's research group, are available for consultation. Note: Students are required to submit the College Reading and Research Course Form in Autumn Quarter. Students receive a grade in each quarter of registration: P/F grading in Autumn and Winter Quarters, and a quality grade in Spring Quarter.

PHYS 29100. Bachelor's Thesis I. 100 Units.
Students are required to submit the College Reading and Research Course Form. P/F grading.
Terms Offered: Autumn
Prerequisite(s): Open to students who are majoring in Physics with fourth-year standing and consent of instructor.

PHYS 29200. Bachelor's Thesis II. 100 Units.
P/F grading.
Terms Offered: Winter
Prerequisite(s): PHYS 29100

PHYS 29300. Bachelor's Thesis III. 100 Units.
Quality grading.
Terms Offered: Spring
Prerequisite(s): PHYS 29200

PHYS 29700. Participation in Research. 100 Units.
By mutual agreement, students work in a faculty member's research group. Participation in research may take the form of independent work (with some guidance) on a small project, or of assistance in research to an advanced graduate student or research associate. A written report must be submitted at the end of the quarter. Students may register for PHYS 29700 for as many quarters as they wish; students need not remain with the same faculty member each quarter. (L)
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): Consent of instructor and departmental counselor. Open to students who are majoring in Physics with third- or fourth-year standing.
Note(s): Students are required to submit the College Reading and Research Course Form. May be taken for P/F grading with consent of instructor.
**Political Science**

Department Website: http://political-science.uchicago.edu

**PROGRAM OF STUDY**

Political science is the study of governments, public policies, political processes, political behavior, and ideas about government and politics. Political scientists use both humanistic and scientific perspectives and a variety of methodological approaches to examine the political dynamics of all countries and regions of the world, both ancient and modern. Political science contributes to a liberal education by introducing students to concepts, methods, and knowledge that help them understand and judge politics within and among nations. A BA degree in political science can lead to a career in business, government, journalism, education, or nonprofit organizations; or it can lead to a PhD program in the social sciences or to professional school in law, business, public policy, or international relations. Our graduates have gone into all those areas in recent years.

**PROGRAM REQUIREMENTS**

Starting in the 2016–17 academic year, the Department of Political Science has abolished the list of "pre-approved" petition courses. No course outside of Political Science taken in Summer 2016 or later will be automatically counted for the major; all must be petitioned to the department. Inclusion on the now-defunct pre-approved list does not guarantee future approval.

**Course Requirements**

The Political Science major requires twelve political science courses and a substantial paper. All students must take three out of the four courses that introduce the fields of political science. All students must also take the required research methods course. Students may meet the writing requirement by completing a BA Thesis or by writing a Long Paper. The BA Thesis and Long Paper options are explained below.

**Introductory Course Requirement**

To gain a broad understanding of political science, the department’s faculty thinks students should take a wide range of courses. To ensure that breadth, students are required to take at least three of the following four courses:

- PLSC 28701 Introduction to Political Theory
- PLSC 28801 Introduction to American Politics
- PLSC 28901 Introduction to Comparative Politics
- PLSC 29000 Introduction to International Relations

Each course will be offered every year, introducing students to the four principal areas of study in political science. The introductory courses must be taken for quality grades.

**Research Methods Requirement**

To prepare students to evaluate the materials in their classes and to write research papers, students are also required to take the department’s research methods course, which will be offered every quarter:

- PLSC 22913 The Practice of Social Science Research

The department also strongly recommends, but does not require, a course in statistics.

**Political Science Course Requirement**

In addition to the above requirements, students are required to take six to eight Political Science courses of their choosing in order to develop their interests in and knowledge of the field. Those following the Long Paper path, described below, must complete eight courses while those on the BA Thesis path must complete at least six. It may be appropriate for advanced students to pursue an independent study credit (see below). Courses outside Political Science may be considered for the major only by petition. (Please submit the General Petition form (http://college.uchicago.edu/advising/forms-and-petitions) (college.uchicago.edu/advising/forms-and-petitions) along with a copy of the course syllabus to Pick 406.)

**Writing Requirement: Two Options**

Students who are majoring in political science must write at least one substantial paper. There are two ways to meet this requirement, by writing a BA Thesis or by submitting a Long Paper.

**OPTION 1: LONG PAPER**

The Long Paper is typically a course paper. It may be written for either a professor in Political Science or a professor in another department whose course is accepted for Political Science credit. Students who write a Long Paper are not required to write a BA Thesis. Students submitting a Long Paper must bring an approval form to the departmental office signed by an instructor who verifies that the paper meets two requirements: (a) the
paper is twenty pages or longer, double-spaced (that is, approximately 5,000 words or longer); and (b) the paper received a grade of B or better (that is, a grade of B- or below does not meet the requirement).

The Long Paper might be:

- A class paper for any course used to meet the major’s requirements.
- An extended version of a shorter paper written for a course. If a course requires a shorter paper, students may ask the instructor for permission to write a twenty-page paper instead.
- Written for a course that did not require any papers. Students may ask the instructor for permission to write a twenty-page paper, either in place of another assignment, as an extra assignment, or as an ungraded assignment.
- Written for a Political Science instructor after a course is completed. The student could either produce an entirely new paper or, with the instructor’s permission, take a shorter assignment and turn it into a longer paper.

If the paper is not a graded assignment for class, it still meets the department’s requirement if the instructor attests that it merits a grade of B or better. Unless the paper is written for a graded class assignment, students must ask the instructor’s permission to submit any such paper.

Students are responsible for obtaining an approval form (political-science.uchicago.edu/sites/political-science.uchicago.edu/files/uploads/Long%20Paper%20Form.pdf) to verify the successful completion of the Long Paper from the department office and giving it to the relevant instructor. Please ask the instructor to sign the approval form and return it to the departmental office. The deadline for submitting the approval form (http://political-science.uchicago.edu/files/uploads/Long%20Paper%20Form.pdf) and the paper is 4 p.m. on Friday of the second week of the quarter in which the student expects to graduate. Students should complete their paper before their final quarter; the approval form should be submitted to the departmental office as soon as the writing requirement is completed.

**OPTION 2: BA THESIS**

Writing a BA Thesis will meet the writing requirement in Political Science and may also qualify a student for consideration for honors; see sections below for more information. In either case, the paper is typically from thirty-five to fifty pages in length (the length of most scholarly articles in professional journals). It must receive a grade of B or higher. Students choose a suitable faculty member to supervise the research and writing. The deadline for submitting two copies of a BA Thesis to the departmental office is 4 p.m. on Friday of the fourth week of the quarter in which the student expects to graduate.

**BA Colloquium.** Students who choose to write a BA Thesis are required to enroll in PLSC 29800 BA Colloquium in the Spring Quarter of the third year and continue to attend the BA Colloquium in the Autumn Quarter of their fourth year. The colloquium is designed to help students carry out their BA Thesis research and to offer feedback on their progress. Although the course meets over two quarters, it counts as a single course and has a single grade. The final grade for the colloquium is based on the student’s contribution to the colloquium during both quarters. Students who write a BA Thesis must also enroll in PLSC 29900 BA Thesis Supervision for one quarter, normally Winter Quarter of fourth year (although enrollment may be in any quarter).

A few students each year study abroad in the Spring Quarter of third year or in the Autumn Quarter of the fourth year and also intend to complete the Political Science major by writing a BA Thesis. Students who study abroad in the Spring Quarter are not required to enroll in the BA Colloquium in the Spring Quarter, but are expected to enroll and participate in the BA Colloquium in the Autumn Quarter. Students who study abroad in the Autumn Quarter must enroll in the BA Colloquium in the previous Spring Quarter, but are not required to participate in the Autumn Quarter.

All students who intend to write a BA thesis must submit a proposal for the thesis by the end of Spring Quarter, regardless of residency. Students who are away from campus in the Spring Quarter should line up an adviser and discuss ideas about a thesis topic while they are abroad or even during the Winter Quarter before departure. The department has arranged the BA Thesis process so that students arrive back on campus for fourth year ready to execute the research for the thesis in the Autumn Quarter, rather than compressing research and writing both into the Winter Quarter. Students who will be abroad in Spring Quarter and unable to participate in the Spring BA Colloquium should contact the department’s Undergraduate Studies office during the Winter Quarter to receive instructions about the preparations they should expect to make while they are away.

**BA Thesis Supervision.** During their fourth year, students who choose to write a BA Thesis must register with their BA Thesis faculty adviser for one quarter of PLSC 29900 BA Thesis Supervision. Students may also elect to take a second quarter of PLSC 29900 BA Thesis Supervision, which will count toward the twelve required courses. To enroll, students are required to submit the College Reading and Research Course Form, which is available from the College advisers. The final grade for the course will be based on the grade given the BA Thesis by the faculty adviser. Although most BA Theses are supervised by Political Science professors, the adviser need not be a member of the Department of Political Science.
SUMMARY OF REQUIREMENTS FOR STUDENTS MEETING THE WRITING REQUIREMENT WITH A LONG PAPER

Three of the following Political Science courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>PLSC 28701</td>
<td>Introduction to Political Theory</td>
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<td>PLSC 29000</td>
<td>Introduction to International Relations</td>
</tr>
<tr>
<td>PLSC 22913</td>
<td>The Practice of Social Science Research</td>
</tr>
</tbody>
</table>

Total Units: 300

Eight additional Political Science courses *

Fulfillment of the writing requirement

Total Units: 1200

* At least five must be courses in Political Science.

SUMMARY OF REQUIREMENTS FOR STUDENTS MEETING THE WRITING REQUIREMENT WITH A BA THESIS

Three of the following Political Science courses:

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</tbody>
</table>

Six additional Political Science courses *

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<tr>
<td>PLSC 29800</td>
<td>BA Colloquium</td>
</tr>
<tr>
<td>PLSC 29900</td>
<td>BA Thesis Supervision</td>
</tr>
</tbody>
</table>

Total Units: 1200

* At least three must be courses in Political Science.

Pass/Fail Courses

Courses that meet requirements for the major are normally taken for quality grades. The three required introductory courses must be taken for quality grades. However, students may take up to two courses in the major on a P/F basis.

Independent Study

Students with extensive course work in Political Science who wish to pursue more specialized topics that are not covered by regular courses have the option of registering for PLSC 29700 Independent Study, to be taken individually and supervised by a member of the Political Science faculty. Students must obtain the prior consent of the program director and the instructor, as well as submit the College Reading and Research Course Form that is available from their College adviser. The substance of the independent study may not be related to the BA Thesis or BA research, which is covered by PLSC 29900 BA Thesis Supervision. Only one PLSC 29700 Independent Study course may count toward requirements for the major.

Honors in the Major

Students who do exceptionally well in their course work and who write an outstanding BA Thesis are recommended for honors in the major. A student is eligible for honors if the GPA in the major is 3.6 or higher and the overall GPA is 3.0 or higher at the beginning of the quarter in which the student intends to graduate. Students who wish to be considered for honors are required to register for PLSC 29800 BA Colloquium and PLSC 29900 BA Thesis Supervision and to submit a BA Thesis. To graduate with department honors, then, a student must have both honors-level grades and a BA Thesis that receives honors.

Double Majors

Students who plan to double major may complete the Political Science requirements by either the BA Thesis option or the Long Paper option. Students who write the BA Thesis must attend the Political Science BA Colloquium even if the other major also requires attendance at its colloquium. A request to use a single BA Thesis for two majors requires the approval of both program directors on a form available from the student’s College adviser or here (http://college.uchicago.edu/advising/forms-and-petitions) (college.uchicago.edu/advising/forms-and-petitions).

Courses Taken at Other Universities by Students Who Transfer to the University of Chicago

Student who transfer into the University of Chicago and wish to transfer courses into the major should see the Director of Undergraduate Studies soon after matriculation. The introductory course requirement and the research methods requirement cannot be satisfied by courses taken elsewhere, but courses may be counted
toward the major by petition (http://college.uchicago.edu/advising/forms-and-petitions) (college.uchicago.edu/advising/forms-and-petitions).

Becoming a Political Science Major

Most students declare a major at the end of the second year or beginning of the third. The department encourages students to try out the major even before declaring. To receive announcements about the program in the major and other information about the Department of Political Science, students should sign up for the undergraduate email list either in the departmental office or at https://lists.uchicago.edu/web/info/ugpolsall.

POLITICAL SCIENCE COURSES FOR 2018-19

PLSC 20235. Computing for Social Sciences. 100 Units.
Equivalent Course(s): PBPL 20235, SOCI 20235, SOCI 30235

PLSC 20280. The Politics of Popular Sovereignty: Participation and Protest. 100 Units.
If government is of, by and for the people, what kinds of politics are possible? Certainly, politics will operate through established institutions such as elections and legislatures. But popular politics may also take other forms: petitions, social movements, protest in the streets, and cultural critique. These efforts often fail, sometimes dramatically, but they have also contributed to major social change including the abolition of slavery, the expansion of rights, and demands for new understandings of justice. This course will explore the history of popular politics within democratizing societies, the development of new forms of collective mobilization and technologies of political influence, and the changing relation of popular politics to formal political institutions.
Instructor(s): E. Clemens Terms Offered: Autumn
Equivalent Course(s): SOCI 20280

PLSC 21390. Philosophy of Poverty. 100 Units.
Global poverty is a human tragedy on a massive scale, and it poses one of the most daunting challenges to achieving a just global order. In recent decades, a significant number of philosophers have addressed this issue in new and profoundly important ways, overcoming the disciplinary limitations of narrowly economic or public policy oriented approaches. Recent theories of justice have provided both crucial conceptual clarifications of the very notion of ‘poverty’ including new measures that are more informed by the voices of the global poor and better able to cover the full impact of poverty on human capabilities and welfare—and vital new theoretical frameworks for considering freedom from poverty as a basic human right and/or a demand of justice, both nationally and internationally. Moreover, these philosophers have pointed to concrete, practical steps, at both the level of institutional design and the level of individual ethical/political action, for effectively combating poverty and moving the world closer to justice. The readings covered in this course, from such philosophers as Peter Singer, Thomas Pogge, David Graeber, and Martha Nussbaum, will reveal, not only the injustice of global poverty, but also what is to be done about it.
Instructor(s): B. Schultz Terms Offered: Autumn, Spring
Equivalent Course(s): PHIL 21390, HMRT 21390, PBPL 21390

PLSC 21410. Advanced Theories of Gender and Sexuality. 100 Units.
Zerilli: This course examines contemporary theories of sexuality, culture, and society. We then situate these theories in global and historical perspectives. Topics and issues are explored through theoretical, ethnographic, and popular film and video texts. Simon: Our itinerary in this course will be interdisciplinary, ranging from political theory to science studies. Topics for discussion will likely include: the gendering of reason and passion in the history of philosophy; the power, persistence, and flexibility of norms; the relationship between eros and other forms of desire; the division of labor and other economic tributaries to gendered experience; openings for and challenges to the political aspirations of sexual (and other) minorities; and the pressures exerted by technology on erotic life. Students will engage key concepts in the field, and will be encouraged to experiment with new ones.
Instructor(s): L. Zerilli Terms Offered: Autumn
Prerequisite(s): Completion of GNSE 10100-10200 and GNSE 28505 or 28605 or permission of instructor.
Equivalent Course(s): ENGL 30201, ENGL 21401, MAPH 36500, GNSE 31400, PLSC 31410, GNSE 21400

PLSC 21505. Sex, Gender and War. 100 Units.
This course explores the sexed, gendered, and oftentimes racialized dimensions of war. With the rise of civil wars and the decrease of interstate or world wars, the nature of warfare has changed: wars are no longer being fought in battlefields, but neighborhoods; and combatants and civilians are no longer distinguishable. Additionally, over the last century, women’s formal participation in armed groups and militaries has increased, challenging the traditional segregation of men and women into different roles during war. As such, this undergraduate seminar explores various dimensions of contemporary war, in order to understand how war is not only made possible, but is perpetuated and reinforced by sexed, gendered, and racialized inequalities. It draws from literature in armed conflict studies and gender studies, as well as from contemporary representations of gender and war in films and novels. The goals of the course are two-fold: to engage with the five themes of the course in order to understand, analyze, and interrogate the sexed, gendered, and racialized dimensions of war, and to develop critical writing skills for the social sciences.
Instructor(s): A. Blair Terms Offered: Spring
Equivalent Course(s): GNSE 21505
PLSC 21820. Global Justice and the Ethics of Immigration. 100 Units.
This course examines different theories of global justice and justice in migration that have been developed by political theorists since the 1980s. It explores urgent ethical questions in international affairs, with a particular focus on global poverty, global inequality and the ethics of immigration. Addressed questions will include the following: what does justice require at the global level? Does the very idea of global justice make sense? Are economic inequalities between countries morally objectionable and, if so, why? What do affluent countries (and their citizens) owe to less affluent countries (and their citizens)? Should states have a right to control their territorial borders? To what extent do they have a right to exclude immigrants? What are the obligations of states towards newly arrived immigrants? We will address these normative questions by reading and critically assessing important texts written by leading scholars within the field of political theory and applied ethics, including John Rawls, Charles Beitz, Peter Singer, Thomas Pogge, Joseph Carens and many others.
Instructor(s): C. Cordelli Terms Offered: Autumn

PLSC 22150. Contemporary African American Politics. 100 Units.
This course explores the issues, actions, and arguments that comprise black politics today. Our specific task is to explore the question of how do African Americans currently engage in politics and political struggles in the United States. This analysis is rooted in a discussion of contemporary issues, including the election of the first African American president, Barack Obama, the emergence of the Movement for Black Lives, the exponential incarceration of black people, and the intersection of identities and the role black feminism in shaping the radical freedom tradition in black politics. Throughout the course we attempt to situate the politics of African Americans into the larger design we call American politics. Is there such a thing as black politics? If there is, what does it tell us more generally about American politics?
Instructor(s): C. Cohen Terms Offered: Winter
Equivalent Course(s): CRES 22150, LLSO 25902

PLSC 22202. Philosophies of Environmentalism and Sustainability. 100 Units.
Many of the toughest ethical and political challenges confronting the world today are related to environmental issues: for example, climate change, loss of biodiversity, the unsustainable use of natural resources, pollution, and other threats to the well-being of both present and future generations. Using both classic and contemporary works, this course will highlight some of the fundamental and unavoidable philosophical questions presented by such environmental issues. Can a plausible philosophical account of justice for future generations be developed? What counts as the ethical treatment of non-human animals? What do the terms "nature" and "wilderness" mean, and can natural environments as such have moral and/or legal standing? What fundamental ethical and political perspectives inform such positions as ecofeminism, the "Land Ethic," political ecology, ecojustice, and deep ecology? And does the environmental crisis confronting the world today demand new forms of ethical and political philosophizing and practice? Are we in the Anthropocene? Is "adaptation" the best strategy at this historical juncture? Field trips, guest speakers, and special projects will help us philosophize about the fate of the earth by connecting the local and the global. (A)
Instructor(s): B. Schultz Terms Offered: Autumn
Equivalent Course(s): HMRT 22201, ENST 22209, PHIL 22209, GNSE 22204

PLSC 22300. American Law and the Rhetoric of Race. 100 Units.
This course presents an episodic study of the ways in which American law has treated legal issues involving race. Two episodes are studied in detail: the criminal law of slavery during the antebellum period and the constitutional attack on state-imposed segregation in the twentieth century. The case method is used, although close attention is paid to litigation strategy as well as to judicial opinions. Undergraduate students registering in the LLSO, PLSC, HIST, AMER cross-listed offerings must go through the undergraduate pre-registration process. Law students do NOT need consent.
Note(s): Not Offered in 2018-2019
Equivalent Course(s): HIST 27116, AMER 49801, LLSO 24300

PLSC 22400. Public Opinion. 100 Units.
What is the relationship between the mass citizenry and government in the U.S.? Does the public meet the conditions for a functioning democratic polity? This course considers the origins of mass opinion about politics and public policy, including the role of core values and beliefs, information, expectations about political actors, the mass media, economic self-interest, and racial attitudes. This course also examines problems of political representation, from the level of political elites communicating with constituents, and from the possibility of aggregate representation.
Instructor(s): J. Brehm Terms Offered: Spring
Equivalent Course(s): CRES 22400, LLSO 26802.
PLSC 22600. Introduction to Political Philosophy. 100 Units.
In this course we will investigate what it is for a society to be just. In what sense are the members of a just society equal? What freedoms does a just society protect? Must a just society be a democracy? What economic arrangements are compatible with justice? In the second portion of the course we will consider one pressing injustice in our society in light of our previous philosophical conclusions. Possible candidates include, but are not limited to, racial inequality, economic inequality, and gender hierarchy. Here our goal will be to combine our philosophical theories with empirical evidence in order to identify, diagnose, and effectively respond to actual injustice. (A)
Instructor(s): B. Laurence Terms Offered: Spring
Equivalent Course(s): PHIL 21600, GNSE 21601, LLSO 22612

PLSC 22700. Happiness. 100 Units.
From Plato to the present, notions of happiness have been at the core of heated debate in ethics and politics. Is happiness the ultimate good for human beings, the essence of the good life, or is morality somehow prior to it? Can it be achieved by all, or only by a fortunate few? These are some of the questions that this course engages, with the help of both classic and contemporary texts from philosophy, literature, and the social sciences. This course includes various video presentations and other materials stressing visual culture. (A)
Instructor(s): B. Schultz Terms Offered: Winter
Equivalent Course(s): PHIL 21400, GNSE 25200, HUMA 24900

PLSC 22819. Philosophy of Education. 100 Units.
What are the aims of education? Are they what they should be, for purposes of cultivating flourishing citizens of a liberal democracy? What are the biggest challenges—philosophical, political, cultural, and ethical—confronting educators today, in the U.S. and across the globe? How can philosophy help address these? In dealing with such questions, this course will provide an introductory overview of both the philosophy of education and various educational programs in philosophy, critically surveying a few of the leading ways in which philosophers past and present have framed the aims of education and the educational significance of philosophy. From Plato to the present, philosophers have contributed to articulating the aims of education and developing curricula to be used in various educational contexts, for diverse groups and educational levels. This course will draw on both classic and contemporary works, but considerable attention will be devoted to the work and legacy of philosopher/educator John Dewey, a founding figure at the University of Chicago and a crucial resource for educators concerned with cultivating critical thinking, creativity, character, and ethical reflection. The course will also feature field trips, distinguished guest speakers, and opportunities for experiential learning. (A) (B)
Equivalent Course(s): PHIL 22819, MAPH 32819, CHDV 22819

PLSC 22913. The Practice of Social Science Research. 100 Units.
This is a first course in empirical research as it is practiced across a broad range of the social sciences, including political science. It is meant to enable critical evaluation of statements of fact and cause in discussions of the polity, economy, and society. One aim is to improve students’ ability to produce original research, perhaps in course papers or a senior thesis. A second objective is to improve students’ ability to evaluate claims made by others in scholarship, commentary, or public discourse. The specific research tools that the course develops are statistical, but the approach is more general. It will be useful as a guide to critical thinking whether the research to be evaluated, or to be done, is quantitative or not. Above all, the course seeks to demonstrate the use of empirical research in the service of an argument.
Instructor(s): P. Conley Terms Offered: Autumn, Spring, Winter

PLSC 23100. Democracy and the Information Technology Revolution. 100 Units.
The revolution in information technologies has serious implications for democratic societies. We concentrate, though not exclusively, on the United States. We look at which populations have the most access to technology-based information sources (the digital divide), and how individual and group identities are being forged online. We ask how is the responsiveness of government being affected, and how representative is the online community. Severe conflict over the tension between national security and individual privacy rights in the U.S., United Kingdom, and Ireland will be explored as well. We analyze both modern works (such as those by Turkle and Gilder) and the work of modern democratic theorists (such as Habermas).
Instructor(s): M. Dawson Terms Offered: Spring
Equivalent Course(s): LLSO 27101

PLSC 23113. Black Feminism in a Transnational Perspective. 100 Units.
This course surveys Black women’s experiences living with and confronting state oppression around the across the Americas and the Caribbean. From the United States to Brazil, Black women experience similar patterns of political, social and economic inequality. Transnationally, racism, sexism, patriarchy, homophobia, transphobia, misogyny, and classism affect the quality of life of Black women, particularly within nation-states with legacies of slavery and colonialism. This course takes a historical, social and theoretical look at the roots of this inequality and how Black women have chosen to respond to it locally and globally. This is not an introductory course on Feminist Theory. Some prior knowledge of first, second, and/or third wave feminism is expected.
Instructor(s): Jennifer Jackson; Alysia Mann Carey Terms Offered: Autumn
Equivalent Course(s): HMRT 23113, GNSE 23113
PLSC 23313. Democracy and Equality. 100 Units.
Democracy has often been celebrated (and often criticized) for expressing some kind of equality among citizens. This course will investigate a series of questions prompted by this supposed relationship between democracy and equality. Is democracy an important part of a just society? What institutions and practices does democracy require? Is equality a meaningful or important political ideal? If so, what kind of equality? Does democracy require some kind of equality, or vice-versa? The course will begin by studying classical arguments for democracy by Jean-Jacques Rousseau and John Stuart Mill, and then focus on contemporary approaches to these questions. The course will conclude with some treatment of current democratic controversies, potentially including issues of race and representation; the fair design of elections; the role of wealth in political processes; and the role of judicial review. The course aims to deepen participants’ understanding of these and related issues, and to develop our abilities to engage in argument about moral and political life. This course is part of the College Course Cluster program, Inequality.
Instructor(s): J. Wilson Terms Offered: Autumn
Equivalent Course(s): LLSO 23313, PLSC 43301

PLSC 23900. Thucydides. 100 Units.
This course offers an introductory reading of Thucydides’s History of the Peloponnesian War, on the classic guides to politics, both domestic and international. Themes may include: progress and decline; justice, necessity, and expediency; fear, honor, and gain as motives of political action; the strengths and weaknesses of democracies and oligarchies in domestic and foreign policy; stability and revolution; strategy, statesmanship, ad prudence; the causes and effects of war; relations between stronger and weaker powers; imperialism, isolationism, and alliances; and piety, chance, and the limits of rationality. We will conclude by reading the first books of Xenophon’s Hellenica to see how the war ended.
Instructor(s): Nathan Tarcov Terms Offered: Winter. Course will be taught winter quarter 2019
Note(s): It is a grad and undergrad course, open to undergrads
Equivalent Course(s): SCTH 31780, FNDL 21780, PLSC 53900

PLSC 23901. The Federalist Papers and Anti-Federalist Writings. 100 Units.
This course examines the debate over the ratification of the Constitution through a reading of The Federalist Papers and selected Anti-Federalist writings as works of continuing relevance to current practical and theoretical debates. Issues include war and peace, interests and the problem of faction, commerce, justice and the common good as ends of government, human nature, federalism, republican government, representation, separation of powers, executive power, the need for energy and stability, the need for a bill of rights, and constitutionalism.
Instructor(s): Nathan Tarcov Terms Offered: Winter. Course will be taught Winter 2019
Prerequisite(s): Open to undergrads
Equivalent Course(s): PLSC 33930, FNDL 21719, LLSO 23901, SCTH 31715

PLSC 24201. Liberalism. 100 Units.
The post-war consensus on liberal democratic government can today seem under siege in Europe and the United States. Has liberalism run its course, its once revolutionary promise now dimmed by rising inequality, populist ideology, and perceived threats to national cultures? What newer, more persuasive liberalism might replace the managerial, economistic, instrumental model that we’ve inherited? This seminar explores a variety of answers to that question, arguing that the canonical replies may be stranger, the forgotten alternatives more compelling, and liberal thought far more variegated than liberalism’s critics or defenders have recognized. Our eclectic respondents include F.A. Hayek, Judith Shklar, Bernard Williams, Susan Okin, Richard Rorty, and Nancy Rosenblum. We will also explore some surprisingly topical interventions by John Locke, Voltaire, Diderot, Condorcet, Mary Wollstonecraft, John Dewey, and José Ortega y Gasset.
Equivalent Course(s): MAPS 44200, PLSC 44201

PLSC 24807. Positive Political Theory. 100 Units.
This course will cover the basics of positive political theory, including social choice theory, noncooperative game theory, power indices, and the spatial model of politics. Students will be introduced to the central theoretical concepts of the study of politics and write an original research paper on a topic of their choosing.
Instructor(s): J. Patty Terms Offered: Autumn

PLSC 24810. Politics of the U.S. Congress. 100 Units.
This course examines Congress from the perspective of the 535 senators and representatives who constitute it. It examines congressional elections, legislators’ relationships with their constituents, lawmakers’ dealings in and with committees, and representatives’ give-and-take with congressional leadership, the executive, and pressure groups.
Instructor(s): M. Hansen Terms Offered: Autumn
Equivalent Course(s): LLSO 24810
PLSC 24905. Legitimacy, Representation, and Identity. 100 Units.
Legitimate democratic governance is based on representing both collective and individual interests, but these interests are intertwined with both individual and group identities. This course will engage the dynamics of governance, consent, and dissent with an eye toward the strategic and social psychological determinants of individual behaviors. A special focus will be paid to the role and impact of political institutions in leveraging and ameliorating the role of collective and individual identities in governance.
Instructor(s): J. Patty Terms Offered: Autumn
Equivalent Course(s): PLSC 34905

PLSC 25101. Three Erotic Dialogues: Plato, Xenophon, Plutarch. 100 Units.
An exploration of the moral, political, psychological, theological, and philosophical significance of erotic phenomena through reading three classical dialogues on eros: Plato’s Symposium, Xenophon’s Symposium, and Plutarch’s Erotikus. (A)
Instructor(s): N. Tarlov Terms Offered: Winter
Equivalent Course(s): SCTH 34801, GNSE 36103, GNSE 26103, PLSC 35101, FNDL 21207

PLSC 25110. Empire and International Justice. 100 Units.
How did European thinkers from 1492 onward understand and evaluate the extraordinary developments by which some European countries came to rule over much of the non-European world? This seminar examines theories of international justice and global relations from the early sixteenth through the nineteenth centuries. Philosophers, theologians, and political actors in this period responded to the key issues of global politics in the modern age, including the seizure of non-European lands; the establishment of slavery and the slave trade; the religious and cultural conversion of colonized peoples; the emerging institutions and practices of global commerce; and the impact of these developments upon both European and non-European societies. Indeed, many dilemmas that confront citizens and states today about humanitarian intervention, national sovereignty, conquest and occupation, empire, and human rights in a global context have an intriguing and complex intellectual history. The readings are primary texts by influential thinkers from the period of the initial Spanish conquests of the Americas through the mid-nineteenth century, including Montesquieu, Diderot, Burke, Bentham, Adam Smith, Cugoano, Kant, Herder, Constant, Tocqueville, John Stuart Mill, and Karl Marx.
Instructor(s): S. Muthu Terms Offered: Spring
Equivalent Course(s): LLSO 25110

PLSC 25205. Racial Justice and Injustice. 100 Units.
The course will explore moral and political problems of racial justice and injustice. Topics may include antidiscrimination theory, the fair political representation of racial minorities, reparations for racial injustice, racial segregation, the use of racial preferences in various practices of selection, and the evaluation of practices of law enforcement and punishment. We will use reflections on particular problems such as these to inquire about the uses of racial concepts in political theory; the connections between racial justice and ostensibly more general conceptions of justice; and the connections between racial equality and other egalitarian ideals.
Instructor(s): J. Wilson Terms Offered: Autumn
Equivalent Course(s): LLSO 25205, PLSC 35205

PLSC 25215. The American Presidency. 100 Units.
This course examines the institution of the American presidency. It surveys the foundations of presidential power, both as the Founders conceived it, and as it is practiced in the modern era. This course also traces the historical development of the institutional presidency, the president’s relationships with Congress and the courts, the influence presidents wield in domestic and foreign policymaking, and the ways in which presidents make decisions in a system of separated powers.
Instructor(s): W. Howell Terms Offered: Winter
Equivalent Course(s): LLSO 25215, AMER 25215, PBPL 25216, PLSC 35215

PLSC 25501. Race and Imperialism in the 20th Century. 100 Units.
The turn of the 20th C. marked the legal sanctioning of Jim Crow segregation in the 1896 Plessy v. Ferguson decision while the Scramble for Africa only a decade earlier had inaugurated a new era of imperial expansion. For W.E.B. Du Bois and others, these confluences indicated a singularity about the global experience of race in the 20th C. Focusing on the period prior to WWII, this course is an effort at understanding this specificity through an engagement with the politicians, statesmen, activists, and intellectuals writing in the midst of “the problem of the color line.” The course exposes students to thinkers on both sides of the color line as we read Sir Frederick Lugard, the colonial administrator of Nigeria and a member of the League of Nations’ Permanent Mandates Commission, alongside George Padmore, the anticolonialist of Trinidadian descent who played a central role in Ghana’s independence movement. To further our insights, we engage recent commentary by scholars who have sought to understand the racial formations of the 20th C. The course aims are 1) to trace the processes-ideological, political, and economic-through which the Jim Crow color line became international and consider the reverberations of this internationalism, 2) to reexamine the crisis of WWII and the creation of the League of Nations in light of the “problem of the color line,” and 3) to trace the intellectual roots of a global anticolonial movement concerned with securing racial equality.
Instructor(s): A. Getachew Terms Offered: Winter
Equivalent Course(s): CRES 25501
PLSC 25818. Stoic Ethics Through Roman Eyes. 100 Units.
The major ideas of the Stoic school about virtue, appropriate action, emotion, and how to live in harmony with the rational structure of the universe are preserved in Greek only in fragmentary texts and incomplete summaries. But the Roman philosophers give us much more, and we will study closely a group of key texts from Cicero and Seneca, including Cicero’s De Finibus book III, his Tusculan Disputations book IV, a group of Seneca’s letters, and, finally, a short extract from Cicero’s De Officiis, to get a sense of Stoic political thought. For fun we will also read a few letters of Cicero’s where he makes it clear that he is unable to follow the Stoics in the crises of his own life. We will try to understand why Stoicism had such deep and wide influence at Rome, influencing statesmen, poets, and many others, and becoming so to speak the religion of the Roman world. (A)
Instructor(s): M. Nussbaum
Terms Offered: Winter
Prerequisite(s): Ability to read the material in Latin at a sufficiently high level, usually about two-three years at the college level. Assignment will usually be about 8 Oxford Classical Text pages per week, and in-class translation will be the norm.
Equivalent Course(s): PHIL 25818, RETH 35818, PHIL 35818, CLCV 25818, PLSC 35818, CLAS 35818

PLSC 26005. International Relations of South Asia. 100 Units.
South Asia is one of the most complex, dynamic, and dangerous foreign policy environments in the world, encompassing decades of warfare in Afghanistan, the rise of India as a major power, instability in and around a nuclear-armed Pakistan, and Myanmar’s tenuous opening to the world. This course will systematically explore the foreign policies of the region’s states, extra-regional involvement and intervention by China, the United States, and Russia/Soviet Union, and the domestic politics and internal conflicts that have shaped international politics. It will combine international relations theory, detailed research on individual countries, and thematic topics (such as alliances, nuclear weapons, the domestic politics of security policy, international implications of insurgencies and coups, economic globalization, and the causes and prevention of interstate war), using a blend of lecture and discussion. Though the primary focus will be on India, Pakistan, and Afghanistan, the course will also cover Bangladesh, Nepal, Sri Lanka, and Myanmar.
Instructor(s): P. Staniland
Terms Offered: Spring
Note(s): There is a substantial reading load. Students are strongly encouraged, though not required, to have taken PLSC 29000: Introduction to International Relations or some other prior IR course.
Equivalent Course(s): PLSC 36005

PLSC 26152. A Right to Belong. 100 Units.
In this course we will seek to identify commonalities and disparities in the formal and informal ways in which we belong to political societies today, seeking to articulate how the formal and informal structures of inclusion mimic or contradict one another. Doing so should provide analytical opportunities to recognize the virtues and shortcomings of the institutional tools designed to guarantee the many pieces necessary to make belonging possible. Part of what this course seeks to accomplish is to support students in thinking about the commonalities between the many ways in which we belong, while avoiding the temptation of silver bullets and all-encompassing explanations. The end-goal is a more refined and informed approach to the topic, as well as the ability to articulate a cogent response to whether belonging should be understood as a human right or not. If belonging ought to be considered a human right, what kind of policies and international instruments are better suited to guarantee it?
Instructor(s): Yuna Blajer de la Garza, Graduate Lecturer in Human Rights
Terms Offered: Spring
Equivalent Course(s): HMRT 26152, CRES 26152

PLSC 26300. Comparative Politics of the Middle East and North Africa. 100 Units.
This course examines major theoretical concerns in comparative politics using cases from the Middle East. It investigates the relationships between political and economic change in the processes of state-building, economic development, and national integration. The course begins by comparing the experience of early and late developing countries, which will provide students with a broad historical overview of market formation and state-building in Europe and will cover the legacies of the Ottoman empire, European colonialism, and the Mandate period in the Middle East. The course then explores topics such as: the failure of constitutional regimes and the role of the military, class formation and inequality, the conflict between Pan-Arabism and state-centered nationalisms, the role of political parties, revolutionary and Islamicist movements, labor migration and remittances, and political and economic liberalization in the 1990s.
Instructor(s): L. Wedeen
Terms Offered: Winter
Equivalent Course(s): PLSC 39300

PLSC 26615. Democracy’s Life and Death. 100 Units.
How are democracies founded and maintained? What are their advantages and disadvantages with respect to stability, security, liberty, equality, and justice? Why do democracies decline and die? This course addresses these questions by examining democracies, republics, and popular governments in both the ancient and modern worlds. We will read and discuss primary texts from and social scientific analyses of Athenian democracy, the Roman Republic, the United States, and modern representative governments throughout the globe.
Instructor(s): J. McCormick
Terms Offered: Winter
Equivalent Course(s): LLSO 26615
PLSC 26703. Political Parties in the United States. 100 Units.
Political parties are a central feature of American government. In this course we will explore their role in contemporary politics and learn about their development over the course of American history. We will start by asking the following questions: What is a political party? Why do we have a two-party system, and how did that system develop? We will then proceed to study shifts in party coalitions, parties’ evolving structures, their role in policymaking, and trends in popular attitudes about parties. Although our primary empirical focus will be on parties in the United States, we will spend some time on comparative approaches to political parties.
Instructor(s): R. Bloch Rubin Terms Offered: Spring
Equivalent Course(s): LLSO 26703

PLSC 26920. Freedom, Justice and Legitimacy. 100 Units.
In this course we will explore two main questions, which are central to both contemporary political theory and political discourse: (1) how different concepts and conceptions of freedom ground different theories of social justice and political legitimacy and (2) how to understand the relationship between justice and legitimacy. To what extent are justice and legitimacy separate ideas? Does legitimacy require justice? Are just states necessarily legitimate? We will critically analyze and normatively assess how different contemporary theories have answered, whether explicitly or implicitly, such questions. The course will focus on five major contemporary theories: liberal-egalitarianism as represented by the work of John Rawls; libertarianism, as represented by the work of Robert Nozick, neo-Lockean theories as represented by the work of John Simmons, neo-republicanism as represented by the work of Philip Pettit, and neo-Kantian theories as represented by the work of Arthur Ripstein.
Instructor(s): C. Cordelli Terms Offered: Winter
Equivalent Course(s): PLSC 36920

PLSC 27216. Machiavelli’s Political Thought. 100 Units.
This course is devoted to the idea of “political theology” that developed during the interwar period in twentieth-century Central Europe, specifically Germany’s Weimar Republic. The course’s agenda is set by Carl Schmitt, who claimed that both serious intellectual endeavors and political authority require extra-rational and transcendent foundations. Along with Schmitt’s works from the period, such as Political Theology and the Concept of the Political, we read and discuss the related writings of perhaps his greatest interlocutor, Leo Strauss.
Instructor(s): J. McCormick Terms Offered: Spring
Equivalent Course(s): PLSC 52316, LLSO 28233, FNDL 28102

PLSC 27301. Weimar Political Theology: Schmitt and Strauss. 100 Units.
This course is devoted to the idea of “political theology” that developed during the interwar period in twentieth-century Central Europe, specifically Germany’s Weimar Republic. The course’s agenda is set by Carl Schmitt, who claimed that both serious intellectual endeavors and political authority require extra-rational and transcendent foundations. Along with Schmitt’s works from the period, such as Political Theology and the Concept of the Political, we read and discuss the related writings of perhaps his greatest interlocutor, Leo Strauss.
Instructor(s): J. McCormick Terms Offered: Winter
Prerequisite(s): Consent of instructor.
Equivalent Course(s): PLSC 37301, FNDL 27301

PLSC 27500. Organizational Decision Making. 100 Units.
This course examines the process of decision making in modern, complex organizations (e.g., universities, schools, hospitals, business firms, public bureaucracies). We also consider the impact of information, power, resources, organizational structure, and the environment, as well as alternative models of choice.
Instructor(s): J. Padgett Terms Offered: Winter
Equivalent Course(s): PLSC 37500, SOCI 30301

PLSC 27510. Latino Politics. 100 Units.
This course will examine the role of Latino communities in shaping state and national politics in the US. After we review their contemporary modes of political organization we will examine the political history and political organizational strategies of Latinos; analyze public policy issues surrounding citizenship and membership; evaluate the successes and failures of Latino empowerment strategies; and critique the electoral impact of Latino votes. Through this careful examination of Latinos in U.S. politics, we will develop a richer understanding of contemporary US politics and will be able to develop some hypotheses about its trajectory in the 21st Century.
Equivalent Course(s): LACS 27510, CRES 27510

PLSC 28006. Intro to Social Choice and Electoral Systems. 100 Units.
Voting procedures play an integral role in our lives as citizens by translating the preferences of people into collective outcomes. This course will evaluate these procedures mathematically, by considering the various properties that electoral systems may or may not satisfy. A classic example is Arrow’s Impossibility Theorem, which tells us that every electoral system must fail to satisfy one or more criteria of fairness or sensibility. We will examine this result and other legislative paradoxes, and learn why the choice of procedure is critical to our understanding of how “good” and “bad” decisions can be made-and how we can distinguish a bad decision from a good one.
Instructor(s): E. Penn Terms Offered: Autumn
PLSC 28300. Seminar on Realism. 100 Units.
The aim of this course is to read the key works dealing with the international relations theory called "realism."
Instructor(s): J. Mearsheimer Terms Offered: Spring
Prerequisite(s): Consent of instructor required.
Note(s): Students must attend the first class.

PLSC 28400. American Grand Strategy. 100 Units.
This course examines the evolution of American grand strategy since 1900, when the United States first emerged
on the world stage as a great power. The focus is on assessing how its leaders have thought over time about
which areas of the world are worth fighting and dying for, when it is necessary to fight in those strategically
important areas, and what kinds of military forces are needed for deterrence and war-fighting in those regions.
Instructor(s): J. Mearsheimer Terms Offered: Winter
Equivalent Course(s): PLSC 49500

PLSC 28620. The Intelligible Self. 100 Units.
The Delphic maxim "know thyself" is one of the cornerstones of Western philosophy. But how, exactly, do we
figure ourselves out? This course examines three approaches to self-knowledge: Buddhism, Psychoanalytic
Theory, and Social Neuroscience. We will learn both the theories behind each approach and how they can
foster deeper perspectives on our own condition. We will explore the nature of love, guilt, anxiety, and other
emotions, the origins of morality, and the many biases in our cognition. Readings include Sigmund Freud,
Patricia Churchland, Daniel Kahneman, Pema Chodron, and Walpola Sri Rahula.
Instructor(s): E. Oliver Terms Offered: Winter

PLSC 28701. Introduction to Political Theory. 100 Units.
This course provides an introduction to political theory that focuses upon the interrelated themes of inhumanity,
justice, and inequality in the history of political thought and contemporary political theory.
Instructor(s): S. Muthu Terms Offered: Winter

PLSC 28801. Introduction to American Politics. 100 Units.
This survey course canvasses the basic behavioral, institutional, and historical factors that comprise the study
of American politics. We will evaluate various modes of survey opinion formation and political participation
both inside and outside of elections. In addition to studying the primary branches of U.S. government, we will
consider the role of interest groups, the media, and political action committees in American politics. We also will
evaluate the persistent roles of race, class, and money in historical and contemporary political life.
Instructor(s): J. Mark Hansen Terms Offered: Autumn

PLSC 28850. Chinese Foreign and Global Policy. 100 Units.
China’s rapid development in recent decades is as transformative within China as it has been momentous for
the rest of the world. Some see reformist China becoming a global citizen and responsible stakeholder while
others view China’s growth with alarm and believe a rising China will challenge the existing global order. This
course describes and analyzes elements of China’s Chinese foreign and global policy. We consider historical,
organizational, cultural, ideological, and organizational and other factors that influence the making of Chinese
foreign policy, examine China’s relations with major countries and regions, and look at China’s approaches to
international organizations and key global issues. We also pay attention to how other countries/regions have
responded to China’s rise.
Instructor(s): D. Yang Terms Offered: Winter

PLSC 28900. Strategy. 100 Units.
This course covers American national security policy in the post-cold war world, especially the principal issues of
military strategy that are likely to face the United States in the next decade. This course is structured in five parts:
(1) examining the key changes in strategic environment since 1990, (2) looking at the effects of multipolarity on
American grand strategy and basic national goals, (3) focusing on nuclear strategy, (4) examining conventional
strategy, and (5) discussing the future of war and peace in the Pacific Rim.
Instructor(s): R. Pape Terms Offered: Spring
Equivalent Course(s): PLSC 39900
PLSC 28901. Introduction to Comparative Politics. 100 Units.
Why are some nations rich and others poor? Why is inequality skyrocketing across the developed world? Why are some countries democratic and others are dictatorships, and what determines switching between regimes? Does democracy matter for health, wealth, and happiness? Why are some countries beset by civil violence and revolution whereas others are politically stable? Why do political parties organize themselves politically around ethnicity, language, religion, or ideology? This course explores these and other similar questions that lie at the core of comparative politics. Drawing on political science, economics, sociology, and anthropology, while utilizing a wealth of data and case studies of major countries, we will examine how power is exercised to shape and control political, cultural, and economic institutions and, in turn, how these institutions generate policies that affect what we learn, what we earn, how long we live, and even who we are.
Instructor(s): B. Lessing Terms Offered: Spring

PLSC 29000. Introduction to International Relations. 100 Units.
Humans face many challenges today. These range from wars and nuclear proliferation, to economic crises and the collapse of global order. International Relations—the study of global anarchy and the commitment problems it creates between sovereign governments—offers analytical tools for understanding the causes and consequences of these challenges. This course introduces students to the scientific study of world politics, focusing on the areas of security, economic cooperation, and international law.
Instructor(s): P. Poast Terms Offered: Autumn

PLSC 29102. Game Theory I. 100 Units.
This is a course for graduate students in Political Science. It introduces students to games of complete information through solving problem sets. We will cover the concepts of equilibrium in dominant strategies, weak dominance, iterated elimination of weakly dominated strategies, Nash equilibrium, subgame perfection, backward induction, and imperfect information. The course will be centered around several applications of game theory to politics: electoral competition, agenda control, lobbying, voting in legislatures and coalition games.
Instructor(s): M. Nalepa Terms Offered: Winter
Equivalent Course(s): PLSC 30901

PLSC 29411. Consequentialism from Bentham to Singer. 100 Units.
Are some acts wrong “whatever the consequences”? Do consequences matter when acting for the sake of duty, or virtue, or what is right? How do “consequentialist” ethical theories, such as utilitarianism, address such issues? This course will address these questions by critically examining some of the most provocative defenses of consequentialism in the history of philosophy, from the work of the classical utilitarians Bentham, Mill, and Sidgwick to that of Peter Singer, one of the world’s most influential living philosophers and the founder of the animal liberation and effective altruism movements. Does consequentialism lend itself to the Panoptical nightmares of the surveillance state, or can it be a force for a genuinely emancipatory ethics and politics?
Instructor(s): B. Schultz Terms Offered: Spring
Equivalent Course(s): PHIL 29411

PLSC 29700. Independent Study. 100 Units.
This is a general reading and research course for independent study not related to the BA thesis or BA research.
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): Consent of faculty supervisor and program chair.
Note(s): Students are required to submit the College Reading and Research Course Form.

PLSC 29800. BA Colloquium. 100 Units.
The colloquium is designed to help students carry out their BA thesis research and offer feedback on their progress.
Terms Offered: Autumn Spring
Note(s): Required of students who are majoring in political science and plan to write a BA thesis. Students participate in both Spring and Autumn Quarters but register only in the Spring Quarter of the third year. PLSC 29800 counts as a single course and a single grade is reported in Autumn Quarter.

PLSC 29900. BA Thesis Supervision. 100 Units.
This is a reading and research course for independent study related to BA research and BA thesis preparation.
Terms Offered: Summer,Autumn,Winter,Spring
Note(s): Required of fourth-year students who are majoring in political science and plan to write a BA thesis. Students are required to submit the College Reading and Research Course Form.
Psychology

Department Website: http://psychology.uchicago.edu

PROGRAM OF STUDY

Psychology is the study of the mental states and processes that give rise to behavior. It seeks to understand
the basic mechanisms and functions of perception, cognition, emotion, and attitudes in guiding behavior.
Although it focuses on the level of the individual, individual behavior depends on the social relationships
and structures in which people are embedded and the biological systems of which we are comprised. Thus,
psychological study encompasses a broad set of topics that overlap with a number of disciplines across the
social and biological sciences. The requirements of the major are designed to acquaint students with the
research methods psychologists use and to provide a foundation of core knowledge covering the major areas
of psychology. This broad foundation allows students to pursue a more advanced understanding of subfields
related to their own particular interests and goals for the major. The program may serve as preparation for
graduate work in psychology or related fields (e.g., neuroscience, education), as well as for students interested
in careers in social work, public policy, business, or medicine. Students are encouraged to become actively
engaged in research in the department and should consult with the director of undergraduate research about
their interests as early as possible.

PROGRAM REQUIREMENTS

Although no special application is required for admission to the major, majors are required to:

1. Inform the Department of Psychology by completing an enrollment form available from the department
   student affairs administrator in Beecher 109 and inform their College adviser.
2. Subscribe to the Psychology Majors Listhost at https://lists.uchicago.edu/web/info/psychology-majors.
   The listhost is the primary means of communication between the program and its majors or students
   interested in being majors. We use it to notify students of events relevant to psychology majors, such as
   research opportunities, job postings, fellowship announcements, and any changes in the course schedule, or
   curriculum updates.

NOTE: The following revised requirements are in effect for students who matriculated September 2014 and
after. Students who matriculated prior to September 2014 should consult the College Catalog archives for the
requirements that pertain to them.

NOTE: When planning your course schedule, please consult Class Search at registrar.uchicago.edu/classes
and the Courses section (http://psychology.uchicago.edu/content/courses-2017-18) of the Psychology Department
Undergraduate Program website for any changes in the course offerings.

Statistics/Methodology Sequence

Psychology majors are required to complete PSYC 20100 Psychological Statistics and PSYC 20200
Psychological Research Methods by the end of their third year. However, it is strongly recommended that these
courses be taken as early as possible as they provide foundational concepts that facilitate understanding of
subject area courses. These two courses cover the conceptual and methodological issues (Psy Rech Meth) and the
statistical methods (Psych Stats) used in psychological science and are typically taught in Autumn and Winter
Quarters. These two courses may be taken in any order.

Beginning with the Class of 2019, students with AP examination credit for STAT 22000 Statistical Methods
and Applications may not count that credit toward the major and should instead replace that requirement with
a higher-level statistics course or an additional psychology elective. Students interested in graduate programs in
Psychology or other empirical sciences are strongly encouraged to take a higher level statistics course.

Breadth Requirement

Students are required to take four of the following five courses, each of which will be offered every year:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 20300</td>
<td>Biological Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20400</td>
<td>Cognitive Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20500</td>
<td>Developmental Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20600</td>
<td>Social Psychology</td>
<td>100</td>
</tr>
<tr>
<td>PSYC 20700</td>
<td>Sensation and Perception</td>
<td>100</td>
</tr>
</tbody>
</table>

Additional Courses

At least six additional courses (for a total of twelve in the major) must be chosen from among the courses
offered by the Department of Psychology. Courses without a psychology number must be approved by the
Curriculum Committee; petitions must be submitted to the undergraduate program chair. Only one independent
study course can count toward the twelve courses required of students who are majoring in psychology (PSYC
29200 Undergrad Rds: Psychology or PSYC 29700 Undergraduate Research in Psychology). In addition to
the six electives, students pursuing honors in psychology must also take the PSYC 29800 Honors Seminar:
Psychology. Independent study courses can be taken for P/F grading, but all other courses must be taken for
a quality grade. NOTE: Before registering for an elective, students should confirm that they have met any prerequisites for the course.

Research

Students are required to take PSYC 20200 Psychological Research Methods. Students are encouraged to gain additional experience by working on a research project under the guidance of a faculty member.

Calculus

Students are required to take two quarters of calculus as part of the College general education requirements.

NOTE: For psychology students, a maximum of three courses can be transferred into the major from outside the University of Chicago.

SUMMARY OF REQUIREMENTS

GENERAL EDUCATION

MATH 13100-13200 Elementary Functions and Calculus I-II (or higher) † 200

Total Units 200

MAJOR

One of the following: 200

<table>
<thead>
<tr>
<th>PSYC 20100 &amp; PSYC 20200 Psychological Statistics and Psychological Research Methods *</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 22000 &amp; PSYC 20200 Statistical Methods and Applications and Psychological Research Methods</td>
</tr>
</tbody>
</table>

Four of the following: 400

| PSYC 20300 Biological Psychology |
| PSYC 20400 Cognitive Psychology |
| PSYC 20500 Developmental Psychology |
| PSYC 20600 Social Psychology |
| PSYC 20700 Sensation and Perception |

Six electives + 600

Total Units 1200

† Credit may be granted by examination.

* Examination Credit for PSYC 20100 Psychological Statistics or STAT 22000 Statistical Methods and Applications will not count toward the requirements for the major. Students with credit for PSYC 20100 or STAT 22000 should replace that requirement with a higher level Statistics course or an additional psychology elective.

+ Courses without a psychology number must be approved by the Curriculum Committee; petitions must be submitted to the undergraduate program chair.

GRADING

All courses in the major must be taken for quality grades except for the independent study course, which is available for either a quality grade or for P/F grading.

HONORS

To qualify for honors, students must meet the following requirements:

1. Students must have a GPA of at least 3.0 overall, and a GPA of at least 3.5 in the major by the beginning of the quarter in which they intend to graduate.

2. Students should arrange to write an honors paper with a faculty advisor from the Department of Psychology. Papers must represent a more substantial research project than the average term paper. After the paper has been approved by the faculty sponsor, the paper must then be read and approved by a second faculty member.

3. Students are required to take an PSYC 29800 Honors Seminar: Psychology in Winter Quarter of their third or fourth year. This is in addition to the twelve required courses for the major. It is expected that students will be actively working on the thesis project during the quarter they are taking the honors research seminar.

4. Students are required to present their findings in Spring Quarter of their fourth year at an honors day celebration. For details, visit psychology.uchicago.edu.

Specialized Courses of Study

Faculty members (or the undergraduate program chair) are available to help individual students design a specialized course of study within psychology. For example, particular course sequences within and outside of
psychology may be designed for students who wish to pursue specializations in particular areas. These areas include, but are not limited to, cognitive neuroscience, language and communication, computational psychology, behavioral neuroscience and endocrinology, sensation and perception, and cultural psychology.

Double Majors

Students pursuing honors in more than one major should note that:

1. The student’s thesis adviser for psychology cannot be the same person as his or her thesis adviser for the second major.
2. The student must meet all the requirements listed in the preceding Honors section, including taking the Honors Seminar and presenting at an honors day celebration.

Earl R. Franklin Research Fellowship

The Earl R. Franklin Research Fellowship is awarded to a third-year student who is majoring in psychology. It provides financial support during the summer before his or her fourth year to carry out psychological research that will be continued as a senior honors project. Applications, which are submitted at the beginning of Spring Quarter, include a research proposal, personal statement, transcript, and letter of recommendation.

PSYCHOLOGY COURSES

PSYC 20000. Fundamentals of Psychology. 100 Units.
This course introduces basic concepts and research in the study of behavior. Principal topics are sensation, perception, cognition, learning, motivation, and personality theories.
Instructor(s): K. O’Doherty Terms Offered: Spring

PSYC 20100. Psychological Statistics. 100 Units.
Psychological research typically involves the use of quantitative (statistical) methods. This course introduces the methods of quantitative inquiry that are most commonly used in psychology and related social sciences. PSYC 20100 and 20200 form a two-quarter sequence that is intended to be an integrated introduction to psychological research methods. PSYC 20100 introduces explanatory data analysis, models in quantitative psychology, concept of probability, elementary statistical methods for estimation and hypothesis testing, and sampling theory. PSYC 20200 builds on the foundation of PSYC 20100 and considers the logic of psychological inquiry and the analysis and criticism of psychological research. It is recommended that students complete MATH 13100 and MATH 13200 (or higher) before taking this course.
Instructor(s): D. Yurovsky Terms Offered: Autumn

PSYC 20200. Psychological Research Methods. 100 Units.
This course introduces concepts and methods used in behavioral research. Topics include the nature of behavioral research, testing of research ideas, quantitative and qualitative techniques of data collection, artifacts in behavioral research, analyzing and interpreting research data, and ethical considerations in research.
Instructor(s): A. Henly Terms Offered: Winter

PSYC 20209. Adolescent Development. 100 Units.
Adolescence represents a period of unusually rapid growth and development. At the same time, under the best of social circumstances and contextual conditions, the teenage years represent a challenging period. The period also affords unparalleled opportunities with appropriate levels of support. Thus, the approach taken acknowledges the challenges and untoward outcomes, while also speculates about the predictors of resiliency and the sources of positive youth development.
Instructor(s): M. Spencer Terms Offered: Winter
Prerequisite(s): Students will have previously taken one other course in CHDV
Note(s): CHDV Distribution: B, D
Equivalent Course(s): CHDV 20209

PSYC 20300. Biological Psychology. 100 Units.
What are the relations between mind and brain? How do brains regulate mental, behavioral, and hormonal processes; and how do these influence brain organization and activity? This course introduces the anatomy, physiology, and chemistry of the brain; their changes in response to the experiential and sociocultural environment; and their relation to perception, attention, behavioral action, motivation, and emotion.
Instructor(s): L. Kay, B. Prendergast Terms Offered: Winter
Prerequisite(s): Some background in biology and psychology.
Note(s): This course does not meet requirements for the Biological Sciences Major.
Equivalent Course(s): BIOS 29300, CHDV 20300

PSYC 20400. Cognitive Psychology. 100 Units.
Viewing the brain globally as an information processing or computational system has revolutionized the study and understanding of intelligence. This course introduces the theory, methods, and empirical results that underlie this approach to psychology. Topics include categorization, attention, memory, knowledge, language, and thought.
Instructor(s): M. Berman Terms Offered: Spring
PSYC 20500. Developmental Psychology. 100 Units.
This is an introductory course in developmental psychology, with a focus on cognitive and social development in infancy through early childhood. Example topics include children’s early thinking about number, morality, and social relationships, as well as how early environments inform children’s social and cognitive development. Where appropriate, we make links to both philosophical inquiries into the nature of the human mind, and to practical inquiries concerning education and public policy.
Instructor(s): K. O’Doherty Terms Offered: Spring
Note(s): CHDV Distribution, B
Equivalent Course(s): CHDV 25900

PSYC 20600. Social Psychology. 100 Units.
This course examines social psychological theory and research that is based on both classic and contemporary contributions. Topics include conformity and deviance, the attitude-change process, social role and personality, social cognition, and political psychology.
Instructor(s): W. Goldstein Terms Offered: Autumn
Equivalent Course(s): CHDV 26000

PSYC 20700. Sensation and Perception. 100 Units.
What we see and hear depends on energy that enters the eyes and ears, but what we actually experience—perception—follows from human neural responses. This course focuses on visual and auditory phenomena, including basic percepts (for example, acuity, brightness, color, loudness, pitch) and also more complex percepts such as movement and object recognition. Biological underpinnings of perception are an integral part of the course.
Instructor(s): S. Shevell Terms Offered: Winter
Equivalent Course(s): NSCI 20140

PSYC 20850. Introduction to Human Development. 100 Units.
This course introduces the study of lives in context. The nature of human development from infancy through old age is explored through theory and empirical findings from various disciplines. Readings and discussions emphasize the interrelations of biological, psychological, and sociocultural forces at different points of the life cycle.
Instructor(s): E. Raikhel Terms Offered: Autumn
Prerequisite(s): CHDV majors or intended majors.
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): CHDV 20000

PSYC 21100. Human Development Research Designs in Social Sciences. 100 Units.
This course aims to expose students to a variety of examples of well-designed social research addressing questions of great interest and importance. One goal is clarify what it means to do “interesting” research. A second goal is to appreciate the features of good research design. A third goal is to examine the variety of research methodologies in the social sciences, including ethnography, clinical case interviewing, survey research, experimental studies of cognition and social behavior, behavior observations, longitudinal research, and model building. The general emphasis is on what might be called the aesthetics of well-designed research.
Instructor(s): Mueller, Anna Terms Offered: Winter
Note(s): Required Course for Comparative Human Development Majors
Equivalent Course(s): CHDV 20100

PSYC 21135. Zero to Infinity: The Psychology of Numbers. 100 Units.
Can monkeys do math? Are babies statistical experts? Will I ever be good at calculus? What are we born with and what do we learn? Before children are ever taught formal mathematics in a classroom, they are confronted with situations where they must use their intuitive understanding of numbers, geometry, and space to successfully navigate their environments. In this course we read and discuss both foundational and cutting-edge articles from neuroscience, cognitive science, education and psychology to understand how humans bridge this gap between the informal and formal mathematical worlds. In doing so, we will try to understand where numbers come from, a question that bridges several areas of psychology, including how humans build theories about the world and how language affects our thinking. We will also tackle questions such as: How do culture and varying social contexts affect numerical understanding? What do we know about gender differences in math achievement? How do stereotypes, prejudice, and math anxiety affect math performance?
Instructor(s): D. Gibson Terms Offered: Spring
Prerequisite(s): PSYC 20000 or Mind recommended.

PSYC 21510. Neuroscience of Communication. 100 Units.
We will read and discuss communication and how various kinds of communication are mediated by neural systems. The course will cover theories, methods, and empirical findings in communication neuroscience. Topics will include speech and language, emotional information, face perception, gesture, and music.
Instructor(s): H. Nusbaum Terms Offered: Winter
PSYC 21750. Biological Clocks and Behavior. 100 Units.
This course will address physiological and molecular biological aspects of circadian and seasonal rhythms in biology and behavior. The course will primarily emphasize biological and molecular mechanisms of CNS function, and will be taught at a molecular level of analysis from the beginning of the quarter. Those students without a strong biology background are unlikely to resonate with the course material.
Instructor(s): B. Prendergast Terms Offered: Spring
Prerequisite(s): A quality grade in PSYC 20300 Introduction to Biological Psychology. Additional biology courses are desirable. Completion of Core biology will not suffice as a prerequisite.
Equivalent Course(s): BIOS 24248

PSYC 21950. Language, Culture, and Thought. 100 Units.
Survey of research on the interrelation of language, culture, and thought from the evolutionary, developmental, historical, and culture-comparative perspectives with special emphasis on the mediating methodological implications for the social sciences.
Instructor(s): J. Lucy Terms Offered: Spring
Note(s): CHDV Distribution, B, C
Equivalent Course(s): ANTH 37605, PSYC 31900, CHDV 21901, ANTH 27605, LING 27605, LING 37605, CHDV 31901

PSYC 22350. Social Neuroscience. 100 Units.
Social species, by definition, create emergent organizations beyond the individual - structures ranging from dyads and families to groups and cultures. Social neuroscience is the interdisciplinary field devoted to the study of neural, hormonal, cellular, and genetic mechanisms, and to the study of the associations and influences between social and biological levels of organization. The course provides a valuable interdisciplinary framework for students in psychology, neuroscience, behavioral economics, and comparative human development. Many aspects of social cognition will be examined, including but not limited to attachment, attraction, altruism, contagion, cooperation, competition, dominance, empathy, isolation, morality, and social decision-making.
Instructor(s): J. Decety Terms Offered: Spring
Equivalent Course(s): NSCI 21000, ECON 21830, CHDV 22350, BIOS 24137

PSYC 22580. Child Development in the Classroom. 100 Units.
This discussion-based, advanced seminar is designed to investigate how preschool and elementary students think, act, and learn, as well as examine developmentally appropriate practices and culturally responsive teaching in the classroom. This course emphasizes the application of theory and research from the field of psychology to the realm of teaching and learning in contemporary classrooms. Course concepts will be grounded in empirical research and activities geared towards understanding the nuances and complexities of topics such as cognitive development (memory, attention, language), early assessment systems, standardized testing, "mindset", "grit", exercise/nutrition, emotion regulation, and more.
Instructor(s): Kate O'Doherty Terms Offered: Autumn

PSYC 23000. Cultural Psychology. 100 Units.
There is a substantial portion of the psychological nature of human beings that is neither homogeneous nor fixed across time and space. At the heart of the discipline of cultural psychology is the tenet of psychological pluralism, which states that the study of "normal" psychology is the study of multiple psychologies and not just the study of a single or uniform fundamental psychology for all peoples of the world. Research findings in cultural psychology thus raise provocative questions about the integrity and value of alternative forms of subjectivity across cultural groups. In this course we analyze the concept of "culture" and examine ethnic and cross-cultural variations in mental functioning with special attention to the cultural psychology of emotions, self, moral judgment, categorization, and reasoning.
Instructor(s): R. Shweder Terms Offered: Autumn
Prerequisite(s): Undergraduates must be in third or fourth year.
Note(s): CHDV Distribution: B, C
Equivalent Course(s): GNSE 21001, AMER 33000, CHDV 31000, ANTH 35110, GNSE 31000, ANTH 24320, PSYC 33000, CHDV 21000

PSYC 23200. Introduction to Language Development. 100 Units.
This course addresses the major issues involved in first-language acquisition. We deal with the child's production and perception of speech sounds (phonology), the acquisition of the lexicon (semantics), the comprehension and production of structured word combinations (syntax), and the ability to use language to communicate (pragmatics).
Instructor(s): S. Goldin-Meadow Terms Offered: Winter
Equivalent Course(s): CHDV 31600, LING 31600, PSYC 33200, CHDV 23900, LING 21600
PSYC 23800. Introduction to Learning and Memory. 100 Units.
This course examines basic questions in learning and memory. We discuss the historical separation and division of these two areas as well as the paradigmatic differences in studying learning and memory. We also discuss basic research methods for investigating learning and memory and survey established and recent research findings, as well as consider several different kinds of models and theories of learning and memory. Topics include skill acquisition, perceptual learning, statistical learning, working memory, implicit memory, semantic vs. episodic memory, and memory disorders.
Instructor(s): D. Gallo Terms Offered: Spring

PSYC 23820. Attention and Working Memory in the Mind and Brain. 100 Units.
This course will provide a broad overview of current work in psychology and neuroscience related to attention and working memory. We will discuss evidence for sharp capacity limits in an individual's ability to actively monitor and maintain information in an "online" mental state. Readings will be primarily based on original source articles from peer-reviewed journals, with a focus on behavioral and neural approaches for measuring and understanding these basic cognitive processes.
Instructor(s): E. Awh, E. Vogel Terms Offered: Winter

PSYC 23860. Beyond Good and Evil: The Psychology of Morality. 100 Units.
Morality is a mysterious and possibly uniquely human capacity that influences how we make decisions in a number of domains. In this course we will explore how and why human beings have the moral intuitions that they do and also where these intuitions come from-what about our moral intuitions are built in and how are these intuitions shaped by experience? To achieve these goals, we will discuss literature from developmental, social, and evolutionary psychology, as well as some literature from behavioral economics and experimental philosophy. We will briefly review the history of moral psychology, but spend the bulk of our time discussing contemporary debates and findings from research on moral psychology.
Instructor(s): A. Shaw Terms Offered: Autumn

PSYC 24055. The Psychological Foundations of Wisdom. 100 Units.
Thinking about the nature of wisdom goes back to the Greek philosophers and the classical religious sages, but the concept of wisdom has changed in many ways over the history of thought. While wisdom has received less scholarly attention in modern times, it has recently re-emerged in popular discourse with a growing recognition of its potential importance for addressing complex issues in many domains. But what is wisdom? It's often used with a meaning more akin to "smart" or "clever". Is it just vast knowledge? This course will examine the nature of wisdom-how it has been defined, how its meaning has changed, and what its essential components might be. We will examine how current psychological theories conceptualize wisdom and consider whether, and how, wisdom can be studied scientifically; that is, can wisdom be measured and experimentally manipulated to illuminate its underlying mechanisms and understand its functions? Finally, we will explore how concepts of wisdom can be applied in business, education, medicine, the law, and in the course of our everyday lives. Readings will be drawn from a wide array of disciplines including philosophy, classics, history, psychology, behavioral economics, medicine, and public policy.
Instructor(s): A.Henly, H. Nusbaum Terms Offered: Spring
Prerequisite(s): Third- or fourth-year standing.

PSYC 24133. Neuroscience of Seeing. 100 Units.
This course focuses on the neural basis of vision, in the context of the following two questions: 1. How does the brain transform visual stimuli into neuronal responses? 2. How does the brain use visual information to guide behavior? The course covers signal transformation throughout the visual pathway, from retina to thalamus to cortex, and includes biophysical, anatomical, and computational studies of the visual system, psychophysics, and quantitative models of visual processing. This course is designed as an advanced neuroscience course for undergraduate and graduate students. The students are expected to have a general background in neurophysiology and neuroanatomy.
Instructor(s): W. Wei, J. Maunsell, M. Sherman, S. Shevell Terms Offered: Winter
Prerequisite(s): NSCI 20110 or BIOS 24110 or consent of instructor
Equivalent Course(s): NSCI 22400, BIOS 24133

PSYC 24231. Methods in Computational Neuroscience. 100 Units.
Topics include (but are not limited to): Hodgkin-Huxley equations, Cable theory, Single neuron models, Information theory, Signal Detection theory, Reverse correlation, Relating neural responses to behavior, and Rate vs. temporal codes.
Instructor(s): S. Bensmaia Terms Offered: Winter, L.
Prerequisite(s): BIOS 26210 and BIOS 26211 which must be taken concurrently, or consent of instructor.
Equivalent Course(s): BIOS 24231, CPNS 34231
PSYC 24280. The Psychology and Neurobiology of Emotion. 100 Units.
What is emotion? How can we measure it? In this course we will trace this universal yet abstract concept through its evolutionary origins, biological underpinnings, and associations with other subjects in psychology. Topics include autonomic and neural correlates of emotions, features of negative and positive emotions, variation across methods of measurement, and the relationships to cognition, social behavior, culture, and health. This course emphasizes the study of interdisciplinary research and multilevel analysis, as well as critical evaluation of empirical research articles. Background experience in psychology and/or biology is encouraged but not required.
Instructor(s): K. Faig
Terms Offered: Autumn

PSYC 25101. The Psychology of Decision Making. 100 Units.
We constantly make decisions, determine our preferences, and choose among alternatives. The importance of our decisions range from ordering a meal at a restaurant to choosing what college to attend. How do we make such decisions? What are the rules that guide us and the biases that shape our decisions? What determines our preferences? What impacts our willingness to take risks? In this course we consider how the way we go about gathering information affects our judgment, and how the way we frame problems affects our perceptions and shapes the solutions to problems. We learn what governs choice and the systematic way it deviates from normative rules. We consider how we think about the future and how we learn from the past. The course focuses on the psychology behind making decisions with implications for a wide range of areas such as public policy, law, and medicine.
Instructor(s): B. Keysar
Terms Offered: Autumn
Prerequisite(s): Third- or fourth-year students only
Note(s): It is recommended that students take this course before PSYC 25700 The Psychology of Negotiation.

PSYC 25120. Child Development and Public Policy. 100 Units.
The goal of this course is to introduce students to the literature on early child development and explore how an understanding of core developmental concepts can inform social policies. This goal will be addressed through an integrated, multidisciplinary approach. The course will emphasize research on the science of early child development from the prenatal period through school entry. The central debate about the role of early experience in development will provide a unifying strand for the course. Students will be introduced to research in neuroscience, psychology, economics, sociology, and public policy as it bears on questions about “what develops?”, critical periods in development, the nature vs. nurture debate, and the ways in which environmental contexts (e.g., parents, families, peers, schools, institutions, communities) affect early development and developmental trajectories. The first part of the course will introduce students to the major disciplinary streams in the developmental sciences and the enduring and new debates and perspectives within the field. The second part will examine the multiple contexts of early development to understand which aspects of young children’s environments affect their development and how those impacts arise. Throughout the course, we will explore how the principles of early childhood development can guide the design of policies and practices that enhance the healthy development of young children, particularly for those living in adverse circumstances, and thereby build a strong foundation for promoting equality of opportunity, reducing social class disparities in life outcomes, building human capital, fostering economic prosperity, and generating positive social change. In doing so, we will critically examine the evidence on whether the contexts of children’s development are amenable to public policy intervention and the costs and benefits of different policy approaches.
Instructor(s): A. Kalil
Terms Offered: Winter
Prerequisite(s): Attendance on the first day of class is required or registration will be dropped.
Equivalent Course(s): PBPL 25120, CHDV 25120

PSYC 25280. The Psychology of Close Relationships. 100 Units.
This course is an exploration of the psychology of close relationships. We will first examine various methodological issues in the study of close relationships before examining numerous different approaches to relational research. We will learn about a variety of close relationships- from intimate relationships to friendships to familial bonds. We will examine the development of interpersonal attraction, theories of love and relationship development, and common problems in relationships (jealousy, loneliness, conflict). In addition to discussing central topics in the study of close relationships, we will review empirical articles to understand how interpersonal relationships impact aspects such as our self-concept, health, and interactions with technology.
Instructor(s): A. Barakzai
Terms Offered: Winter

PSYC 25300. Social Context, Biology, and Health. 100 Units.
We take for granted our relationships with other people as fundamental. Yet when these connections are absent or disrupted, our minds and biology are likewise disrupted. Epidemiological studies have now clearly established a relationship between social isolation and both mental and physical health. This course adopts an integrative interdisciplinary approach that spans the biological to sociological levels of analysis to explore the interactions involved and possible mechanisms by which the social world gets under the skin to affect the mind, brain, biology, and health.
Instructor(s): J. Cacioppo, M. McClintock, L. Waite
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): BPRO 23600
PSYC 25700. The Psychology of Negotiation. 100 Units.
Negotiation is ubiquitous in interpersonal interactions, from making plans for a trip with friends or family, to determining working conditions with an employer, to managing international conflicts. In this course we examine the structure of different negotiations and the psychology that governs the processes and outcomes of a negotiation. For instance, we consider the role of perceptions, expectations, intuitions, and biases. We evaluate the role of information processing, modes of communication, and power in influencing a negotiated outcome. We see how the psychology of trust, reciprocity, fairness, cooperation, and competition can affect our ability to benefit from an exchange or contribute to the escalation of conflict. To better understand the dynamics of the negotiation process, we learn both through engaging in a variety of negotiation role-plays and relating these experiences to research findings.
Instructor(s): B. Keysar Terms Offered: Winter. Third- or fourth-year students only
Note(s): It is recommended that students take PSYC 25101 The Psychology of Decision Making before this course, as it provides the conceptual foundations.

PSYC 25750. The Psychology and Neurobiology of Stress. 100 Units.
This course explores the topic of stress and its influence on behavior and neurobiology. Specifically, the course will discuss how factors such as age, gender, and social context interact to influence how we respond to stressors both physiologically and behaviorally. The course will also explore how stress influences mental and physical health.
Instructor(s): G. Norman Terms Offered: Autumn
Note(s): This course does not meet the requirements for the Biological Sciences Major.
Equivalent Course(s): BIOS 29271

PSYC 25901. Psychology for Citizens. 100 Units.
This course will examine aspects of the psychology of judgment and decision making that are relevant to public life and citizenship. Judgment and decision making are involved when people evaluate information about electoral candidates or policy options, when they vote, and when they choose to behave in ways that affect the collective good. Topics considered in the course will include the following. (1) What is good for people? What do we know about happiness? Can/should happiness be a goal of public policy? (2) How do people evaluate information and make decisions? Why does public opinion remain so divided on so many issues? (3) How can people influence others and be influenced (e.g., by policy makers)? Beyond persuasion and coercion, what are more subtle means of influence? (4) How do individuals’ behaviors affect the collective good? What do we know about pro-social behavior (e.g., altruism/charitable giving) and anti-social behavior (e.g., cheating)? (5) How do people perceive and get along with each other? What affects tolerance and intolerance?
Instructor(s): W. Goldstein Terms Offered: Winter
Equivalent Course(s): CHDV 26901

PSYC 26350. Clinical Cognitive Neuroscience: Function and Dysfunction. 100 Units.
In this course we will examine the relationships between brain, behavior, and cognitive function/dysfunction. Initial lectures will consist of a general introduction to neuroanatomy, cortical organization and methods used by cognitive neuroscientists. These introductory lectures will be followed by lectures focusing on specific cognitive functions and dysfunctions (e.g., attention and neglect, memory and amnesia, language and aphasia etc). Emphasis will be placed on the consequences of specific forms of brain injuries. Classes will consist of lecture, discussions (within lecture), case studies and videos demonstrating impairment in the cognitive abilities outlined in lecture.
Instructor(s): K. Krpan Terms Offered: Spring
Prerequisite(s): 3rd and 4th year students only.

PSYC 26665. Epigenetics in Brain and Behavior. 100 Units.
Epigenetic mechanisms alter the function of the genome without altering the base sequence of genomic DNA (the As, Cs, Ts, and Gs we are familiar with), thus can be flexibly modified in response to the environment. Once considered a domain of cancer, we now recognize that epigenetic processes affect neurodevelopment, cognitive processes, mental disorders, and behavior. Through a combination of introductory lectures and student-led discussion of primary literature, we will explore a variety of epigenetic modifications, consider how they encode personal and transgenerational experiences, and examine how they influence brain function and behavior.
Instructor(s): S. London Terms Offered: Winter
Prerequisite(s): At least one course in cell, molecular, or systems biology is highly encouraged.
Equivalent Course(s): BIOS 24134, NSCI 21500, CHDV 26665

PSYC 27010. Psycholinguistics. 100 Units.
This is a survey course in the psychology of language. We will focus on issues related to language comprehension, language production, and language acquisition. The course will also train students on how to read primary literature and conduct original research studies.
Instructor(s): Staff Terms Offered: Autumn
Equivalent Course(s): LING 27010
PSYC 27950. Evolution and Economics of Human Behavior. 100 Units.
This course explores how evolutionary biology and behavioral economics explain many different aspects of human behavior. Specific topics include evolutionary theory, natural and sexual selection, game theory, cost-benefit analyses of behavior from an evolutionary and a behavioral economics perspective, aggression, power and dominance, cooperation and competition, biological markets, parental investment, life history and risk-taking, love and mating, physical attractiveness and the market, emotion and motivation, sex and consumer behavior, cognitive biases in decision-making, and personality and psychopathology. Note(s): CHDV Distribution, A*; 1* Equivalent Course(s): CHDV 37950,PSYC 27950,PSYC 37950,BIOS 29265,ECON 14810 Instructor(s): D. Maestripieri Terms Offered: Winter
Note(s): CHDV Distribution, A
Equivalent Course(s): CHDV 27950, PSYC 37950, CHDV 37950, ECON 14810, BIOS 29265

PSYC 28810. From Fossils to Fermi’s Paradox: Origin and Evolution of Intelligent Life. 100 Units.
The course approaches Fermi’s question, “Are we alone in the universe?,” in the light of recent evidence primarily from three fields: the history and evolution of life on Earth (paleontology), the meaning and evolution of complex signaling and intelligence (cognitive science), and the distribution, composition and conditions on planets and exoplanets (astronomy). We also review the history and parameters governing extrasolar detection and signaling. The aim of the course is to assess the interplay between convergence and contingency in evolution, the selective advantage of intelligence, and the existence and nature of life elsewhere in the universe - in order to better understand the meaning of human existence.
Instructor(s): P. Sereno; L. Rogers; S. London Terms Offered: Winter
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ASTR 18700, BPRO 28800

PSYC 28850. The Biological Nature of Psychological Problems. 100 Units.
This course is based on the strong assumption that psychology is a biological science, albeit with elements of the social sciences. The course uses a combination of lectures and classroom discussion of primary and secondary source readings assigned for each class meeting. It presents a strong biological science perspective on individual differences in emotions, motivations, and cognitions that cause distress or interfere with adaptive life functioning, but does so in a non-stigmatizing manner. The course begins with a description and discussion of the nature of psychological problems. The course will survey what is known about the genetic, environmental, and epigenetic bases of such problems and the methods used to study genetic influences and gene-environment interactions. Next, students will review what is currently known about the neural and other biological mechanisms involved in maladaptive individual difference in emotion, motivation, and cognitive processes, with discussion of the methods of studying such mechanisms in humans and nonhumans. The pros and cons of the medical model of ‘mental illness’ will be discussed as the major contrast with the natural science view advocated by the instructor.
Instructor(s): B. Lahey Terms Offered: Spring
Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-MAJOR PRE-MED STUDENTS, except by petition.
Equivalent Course(s): BIOS 16120

PSYC 28910. Animal Models in the Study of Cognition. 100 Units.
This course will be a combination of lecture and seminar. In the first half of the course we will read and discuss seminal literature in the study of cognitive questions using animal models (primarily rodents). In the second half of the course we will learn about study design and design two different types of studies in smaller groups. Evaluation will be through short weekly papers, class discussion and a final paper.
Instructor(s): L. Kay Terms Offered: Spring
Prerequisite(s): Completion of PSYC 20300 Biological Psychology or equivalent background in neuroscience and/ or biological psychology.

PSYC 29200. Undergrad Rdgs: Psychology. 100 Units.
Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading. Only one independent study course may count toward the twelve courses required of students majoring in psychology.
Terms Offered: Autumn, Spring, Winter

PSYC 29700. Undergraduate Research in Psychology. 100 Units.
Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading. Only one independent study course may count toward the twelve courses required of students majoring in psychology.
Terms Offered: Autumn, Spring, Winter
PSYC 29800. Honors Seminar: Psychology. 100 Units.
This course is a reading and discussion of general papers on writing and research, and individual students present their own projects to the group. A literature review, data from ongoing or completed empirical projects, or portions of the thesis paper itself can be presented. Students are expected to give thoughtful feedback to others on their presentations and written work.
Instructor(s): B. Prendergast Terms Offered: Winter
Note(s): Open to third- or fourth-year students who are majoring in psychology and have begun their thesis project. Available for either quality grades or for P/F grading.
PUBLIC POLICY STUDIES

Department Website: http://pbpl.uchicago.edu

PROGRAM OF STUDY

Public Policy Studies is a multidisciplinary major grounded in the social sciences, with substantial inputs from economics, sociology, political science, and law, among other disciplines. The major recognizes that public issues are not neatly contained within traditional disciplinary boundaries and that analysts possessing a broad range of social scientific understanding, quantitative expertise, and communication skills are well placed to contribute to improved public policies. Public Policy involves direct contact with policy problems, ensuring that academic speculations are well-informed and connected to real-world conditions.

The Public Policy Studies major strives to put analysis before advocacy, stressing that compelling policy analysis is a central component of effective advocacy. We aim to be open and helpful to students of all political persuasions and challenge students to rethink clichéd responses to policy problems. The program of study for the BA degree in Public Policy Studies is designed to introduce students to policy analysis and implementation, equip them to use quantitative and economic techniques and methods, train them in policy research, and give them a thorough grounding in one or more specific policy areas.

The program also encourages students to undertake an internship experience either during the academic year or during the summer: the course PBPL 29600 Internship: Public Policy offers academic credit for students completing an approved, policy-oriented internship.

Students with questions about meeting the requirements for the Public Policy Studies degree should contact the program administrator.

PROGRAM REQUIREMENTS

The suggested sequence described below is typical, but many other variations are possible. There is flexibility within the program regarding when required courses can be taken.

First and Second Years

During their first or second year, students should take two quarters of calculus plus STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods.

Many students take the following required three-quarter sequence in their second year, although sometimes students defer one or more of these courses until later years. Taking the courses in the same year is not required and the courses may be taken in any order.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PBPL 22100</td>
<td>Politics and Policy</td>
<td>100</td>
</tr>
<tr>
<td>PBPL 22200</td>
<td>Public Policy Analysis</td>
<td>100</td>
</tr>
<tr>
<td>PBPL 22300</td>
<td>Policy Implementation</td>
<td>100</td>
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Students are required to take either PBPL 20000 Economics for Public Policy or ECON 20000 The Elements of Economic Analysis I; completion of one of these two courses is a prerequisite for the sequence course PBPL 22200 Public Policy Analysis. PBPL 20000 Economics for Public Policy assumes no prior economics training, whereas ECON 20000 The Elements of Economic Analysis I requires ECON 19800 Introduction to Microeconomics or other prior training in microeconomics.

Third Year

Students typically complete the courses that follow in their third year.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>PBPL 26400</td>
<td>Quantitative Methods in Public Policy</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Three courses in an Area of Specialization</td>
<td>300</td>
</tr>
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<td></td>
<td>One of the following two-course combinations:</td>
<td>200</td>
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<tr>
<td>PBPL 26200-26300</td>
<td>Field Research Project in Public Policy I-II</td>
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<tr>
<td>OR</td>
<td>One course from the list of approved METHODS courses</td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td>One course from the list of approved WINDOWS courses</td>
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Total Units: 600

Quantitative Methods

Students are required to take PBPL 26400 Quantitative Methods in Public Policy.

Courses in an Area of Specialization
Students should identify their area of specialization and submit a proposal for their program of study to the program administrator by the end of Winter Quarter in their third year. Students are required to complete three substantive policy courses that make up a specialization in a public policy field. Students may meet the specialization requirement in one of two ways: (1) by taking three courses that thematically connect (e.g., courses in urban politics, urban economics, and urban society would count as an urban specialization; or courses in international relations, international finance, and history of the European Union might be an international specialty); or (2) by taking three courses beyond the introductory course in one discipline other than public policy (e.g., economics, political science, sociology, statistics). Courses that satisfy the area of specialization requirement do not have to be listed or cross-listed as public policy courses; however, these courses should involve a substantial policy component. Please see the Public Policy Studies website for examples of some specialization courses and to submit your own proposed specialization: pbpl.uchicago.edu/page/areas-specialization.

Research Practicum

Students must fulfill a two-quarter research program. One of the quarters must be drawn from a “Methods” course, and the other quarter must be drawn from a “Windows” course. Most students will fulfill this requirement through the two-quarter “practicum” sequence PBPL 26200-26300 Field Research Project in Public Policy I-II. The traditional practicum is designed to teach research methods (e.g., focus groups, community surveys, GIS mapping) in a hands-on way and provide a “window” from the ivory tower into the “real world.” Many of the practica in the past have involved collective work on a real-world policy problem with a community organization or government entity; see, for example, some final reports at https://pbpl.uchicago.edu/cprt.

Alternatives to the traditional two-quarter practicum PBPL 26200-26300 Field Research Project in Public Policy I-II can be drawn from the Methods and Windows courses listed below. A common option is the one-quarter practicum PBPL 26301 Field Research Project in Public Policy, which can count as a Methods or Windows course (or both, if taken twice). Students may petition the program director for permission to fulfill either their Methods or Windows requirement (or both) with courses that are not listed.

The Methods courses include:

PBPL 26301 Field Research Project in Public Policy
PBPL 27040 Public Finance and Public Policy
ENST 26433 Practicum in Environmental Management
ENST 26444 Practicum in Campus Athletics and Environment
ENST 27150 Urban Design with Nature
ENST 27221 Sustainable Urbanism
ENST 27325 Urban Ecology in the Calumet Region
GEOG 28201 Intro to Geographic Information Systems
PLSC 22913 The Practice of Social Science Research
PPHA 34600 Program Evaluation
PPHA 34810 Mixed Methods Approaches to Policy Research
SOCI 20001 Sociological Methods
SOCI 20112 Applications of Hierarchical Linear Models
ENST 20500 Introduction to Population

The Windows courses include:

PBPL 26301 Field Research Project in Public Policy
PBPL 24751 The Business of Non-Profits: The Evolving Social Sector
PBPL 29404 Inequality, Household Finance, and Tax Policy
CHDV 20305 Inequality in Urban Spaces
ENST 26433 Practicum in Environmental Management
ENST 26444 Practicum in Campus Athletics and Environment
ENST 27150 Urban Design with Nature
ENST 27221 Sustainable Urbanism
ENST 27325 Urban Ecology in the Calumet Region
GEOG 26800 Geography Issues in Housing and Community Development
SOCI 20140 Qualitative Field Methods

The research practicum is generally taken by students in their third year. Students who plan to study abroad in Winter or Spring Quarter of their third year may opt to complete the research practicum in their second or fourth year. One of the goals of the practicum requirement is to prepare students to write excellent BA papers, so generally it is best if the practicum can be completed before the fourth year.

Fourth Year

All students must write a BA paper in their fourth year. The process runs from Autumn through early Spring quarter. The composition of the project is supported by two required seminars taken with the same preceptor: PBPL 29800 BA Seminar: Public Policy I (credit) and PBPL 29801 BA Seminar: Public Policy II (no credit). PBPL 29800 BA Seminar: Public Policy I (credit) is a 100-unit course offered in Autumn and Winter. Students all participate in the same thesis process throughout the year, but only register for this course in one of those two quarters. In the other quarter, students will register for PBPL 29801. PBPL 29801 BA Seminar: Public Policy II (no credit) is a zero-unit course, meaning it has no impact on students’ course load for that quarter. Students may register for either seminar first and follow it with the other seminar in Winter quarter.

The instructor of the courses, the Public Policy Preceptor, serves as the first reader for student BA papers. Students are encouraged (though not required) to choose a faculty adviser as a second reader for the project. Outstanding BA papers can earn an honors designation, and a select few will be nominated for the Richard P. Taub BA Thesis Prize in Public Policy. In early April, fourth-year students present their BA papers at a Public Policy undergraduate research symposium.

In addition to the BA Seminar sequence students may take up to two quarters of PBPL 29900 BA Paper Preparation: Public Policy for elective credit. For most students, PBPL 29800 BA Seminar: Public Policy I (credit) and PBPL 29801 BA Seminar: Public Policy II (no credit) will prove sufficient for producing a satisfactory BA paper.

Public Policy Studies may accept a BA paper that also is being used to satisfy the requirements of a second major. Approval from both program chairs is required to submit one BA paper for two majors. The Dual Major/One BA Petition Form (https://college.uchicago.edu/sites/college.uchicago.edu/files/BA_Double_Major.pdf), to be signed by both program chairs, is required to be completed and returned to the College adviser at the start of Autumn Quarter of the student’s year of graduation.

Courses outside Public Policy

Many courses in related disciplines (e.g., Anthropology; Economics; History; Law, Letters, and Society; Political Science; Sociology; Biological Sciences) count toward the major when used as “specialization” courses.

SUMMARY OF REQUIREMENTS

GENERAL EDUCATION
MATH 13100-13200 Elementary Functions and Calculus I-II (or higher) * 200

Total Units 200

MAJOR
PBPL 26400 Quantitative Methods in Public Policy 100
PBPL 22100 Politics and Policy 300
& PBPL 22200 and Public Policy Analysis
& PBPL 22300 and Policy Implementation
STAT 22000 Statistical Methods and Applications * 100
or STAT 23400 Statistical Models and Methods
PBPL 20000 Economics for Public Policy 100
or ECON 20000 The Elements of Economic Analysis I

Three courses in an area of specialization * 300
PBPL 26200-26300 Field Research Project in Public Policy I-II (or equivalent) 200
PBPL 29800 BA Seminar: Public Policy I (credit) 100
PBPL 29801 BA Seminar: Public Policy II (no credit) 000

BA paper

Total Units 1200

* Credit may be granted by examination. It is recommended that students take an additional course in statistics.
+ Specialization must be approved by the department. Specialization proposals should be submitted via the department website (https://pbpl.uchicago.edu/page/areas-specialization).

**GRADING**

All courses counting toward the public policy major must be taken for quality grades.

**HONORS**

Fourth-year students are eligible for honors if their overall GPA is 3.4 or higher. Those students are recommended for honors if their BA papers are judged to be of superior quality. For additional information about qualifying for honors, visit the Public Policy Studies website (pbpl.uchicago.edu).

**STUDY ABROAD**

The University of Chicago’s Spring quarter Barcelona Public Policy program provides University of Chicago students with an opportunity to study comparative public policy in the exciting cultural and political capital of Catalonia in northeastern Spain. The program is designed to expose students to policymaking in a non-U.S. setting through a combination of courses and excursions that will allow students to learn how the political and policymaking system operates in other nations. The three-course Public Policy sequence will meet the requirement for three courses in an area of specialization within the Public Policy major (though students need not be Public Policy majors to participate in the program). In addition to the Public Policy sequence, participants take a fourth course in Spanish language. Students with sufficient knowledge of Catalan may substitute a Catalan language course in place of the Spanish language course. For more information, or to apply, visit the Study Abroad website (http://study-abroad.uchicago.edu/programs/barcelona-public-policy).

**PUBLIC POLICY STUDIES (PBPL) COURSES**

**PBPL 20000. Economics for Public Policy. 100 Units.**

This course develops the microeconomic theories of consumer and producer choices, as well as demonstrates the application of these theoretical tools to policy problems. Supply, demand, and competitive markets are examined, along with the conditions under which government policy can increase efficiency.

Instructor(s): S. Shaikh, Staff Terms Offered: Autumn, Spring

Prerequisite(s): Completion of two quarters of calculus required; prior knowledge of economics not required. For ECON majors and students who have taken ECON 20000: consent of instructor required.

Note(s): PBPL 20000 or ECON 20000 is required of all students who are majoring in public policy. PBPL 20000 satisfies the ECON 20000 prerequisite for PBPL 22200. Students who have taken ECON 20000 require the instructor’s consent to enroll in PBPL 20000.

**PBPL 20235. Computing for Social Sciences. 100 Units.**

Equivalent Course(s): SOCI 20235, SOCI 30235, PLSC 20235

**PBPL 20305. Inequality in Urban Spaces. 100 Units.**

The problems confronting urban schools are bound to the social, economic, and political conditions of the urban environments in which schools reside. Thus, this course will explore social, economic, and political issues, with an emphasis on issues of race and class as they have affected the distribution of equal educational opportunities in urban schools. We will focus on the ways in which family, school, and neighborhood characteristics intersect to shape the divergent outcomes of low- and middle-income children residing with any given neighborhood. Students will tackle an important issue affecting the residents and schools in one Chicago neighborhood. This course is part of the College Course Cluster: Urban Design.

Instructor(s): M. Keels Terms Offered: Autumn

Note(s): CHDV Distribution: B, 2*

Equivalent Course(s): CHDV 20305, CRES 20305, CHDV 40315

**PBPL 21390. Philosophy of Poverty. 100 Units.**

Global poverty is a human tragedy on a massive scale, and it poses one of the most daunting challenges to achieving a just global order. In recent decades, a significant number of philosophers have addressed this issue in new and profoundly important ways, overcoming the disciplinary limitations of narrowly economic or public policy oriented approaches. Recent theories of justice have provided both crucial conceptual clarifications of the very notion of ‘poverty’—including new measures that are more informed by the voices of the global poor and better able to cover the full impact of poverty on human capabilities and welfare—and vital new theoretical frameworks for considering freedom from poverty as a basic human right and/or a demand of justice, both nationally and internationally. Moreover, these philosophers have pointed to concrete, practical steps, at both the level of institutional design and the level of individual ethical/political action, for effectively combating poverty and moving the world closer to justice. The readings covered in this course, from such philosophers as Peter Singer, Thomas Pogge, David Graeber, and Martha Nussbaum, will reveal, not only the injustice of global poverty, but also what is to be done about it.

Instructor(s): B. Schultz Terms Offered: Autumn, Spring

Equivalent Course(s): PHIL 21390, HMRT 21390, PLSC 21390
PBPL 21425. Health in a Changing America: Social Context and Human Rights. 100 Units.
In this interdisciplinary course, students will consider the social context of health and the social and political commitments necessary to protect health as a human right. We will analyze recent trends in population health, such as the obesity epidemic, the opioid crisis, and the large gaps in life expectancy between neighborhoods in urban centers. Using case studies, students will envision a human rights-based response to these and other health challenges. We will examine the ways that framing health as personal versus public responsibility is consequential for social policy.
Instructor(s): Alicia Riley, Graduate Lecturer in Human Rights Terms Offered: Spring
Equivalent Course(s): HMRT 21403

PBPL 21501. Environmental Justice. 100 Units.
The effects of environmental pollution are not evenly distributed and are more likely to be experienced by low-income and minority communities. The location of toxic waste sites (both manufacturing plants and dump sites), the persistence of brownfields locations, and a lack of parks and open space are some of the conditions that have led to an ongoing effort to expand the focus of environmental advocacy to the pursuit of equitable and just outcomes in disadvantaged neighborhoods. This course will examine the history of the environmental justice, the efforts to pursue more equitable outcomes, and the prospect for such efforts in the face of global challenges such as climate change. The course will include class visits to sites in Chicago where environmental justice efforts are being undertaken as well as speakers from environmental justice organizations.
Instructor(s): Raymond Lodato
Equivalent Course(s): ENST 21500

PBPL 22100. Politics and Policy. 100 Units.
This course has two fundamental aims. The first is to introduce students to a set of analytical tools and concepts for understanding how political institutions generate public policy. The second is to apply these tools in examining the major institutions of democracy in the United States. Note(s): Public Policy 22100-22200-22300 may be taken in any order.
Instructor(s): C. Berry Terms Offered: Autumn
Note(s): Public Policy 22100-22200-22300 may be taken in any order.

PBPL 22200. Public Policy Analysis. 100 Units.
This course reviews and augments the basic tools of microeconomics developed in ECON 20000 and applies these tools to policy problems. We examine situations in which private markets are likely to produce unsatisfactory results, suggesting a potential rationale for government intervention. Our goal is to allow students to comprehend, develop, and respond to economics arguments when formulating or evaluating public policy.
Instructor(s): J. Leitzel Terms Offered: Winter
Prerequisite(s): PBPL 20000 or ECON 20000
Note(s): PBPL 22100-22200-22300 may be taken in any order. PBPL 22200 is not intended for students majoring in public policy who are planning to specialize in economics or to take advanced economics courses; those students should meet with the program director or administrator to arrange an alternative.

PBPL 22300. Policy Implementation. 100 Units.
Good public policy has the potential to advance justice in society. However, once a policy or program is put in place, policymakers often face challenges in getting it carried out in the ways it was intended. This course explores some of the structural and cultural challenges that government and organizations face as they attempt to put policies into effect. Focusing on the United States, we will draw on organizational theory as well as case studies from education, policing, healthcare, and the corporate world in order to investigate the broader context of policy implementation.
Instructor(s): S. Brophy Terms Offered: Autumn Spring Winter
Prerequisite(s): Second-year standing is recommended; attendance on the first day of class is required or registration is dropped.
Note(s): PBPL 22100-22200-22300 may be taken in any order.

PBPL 23000. Organizational Analysis. 100 Units.
This course is a systematic introduction to theoretical and empirical work on organizations broadly conceived (e.g., public and private economic organizations, governmental organizations, prisons, professional and voluntary associations, health-care organizations). Topics include intraorganizational questions about organizational goals and effectiveness, communication, authority, and decision making. Using recent developments in market, political economy, and neoinstitutional theories, we explore organizational change and interorganizational relationships for their implications in understanding social change in modern societies. Social network analysis will inform much of the discussion.
Instructor(s): E. Laumann Terms Offered: Autumn
Equivalent Course(s): SOCI 30101, SOCI 20101
PBPL 23100. Environmental Law. 100 Units.
This lecture/discussion course examines the development of laws and legal institutions that address environmental problems and advance environmental policies. Topics include the common law background to traditional environmental regulation, the explosive growth and impact of federal environmental laws in the second half of the twentieth century, regulations and the urban environment, and the evolution of local and national legal structures in response to environmental challenges.
Instructor(s): R. Lodato Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): ENST 23100, LLSO 23100

PBPL 23200. The Economics of Crime. 100 Units.
This course uses theoretical and empirical economic tools to analyze a wide range of issues related to criminal behavior. Topics include the police, prisons, gang behavior, guns, drugs, capital punishment, labor markets and the macroeconomy, and income inequality. We emphasize the analysis of the optimal role for public policy.
Instructor(s): S. Levitt Terms Offered: Winter
Prerequisite(s): ECON 20100 required; ECON 21020, STAT 23400 or ECON 21010 strongly recommended
Equivalent Course(s): ECON 28700

PBPL 23550. Urban Ecology and the Nature of Cities. 100 Units.
Urban ecology is an interdisciplinary field derived from the academic discipline of ecology. How well does classical ecological theory, typically formed from reductionist views of nature without humans, describe and predict patterns in human-dominated landscapes? Students will learn fundamental concepts in ecological theory, examine how these concepts apply to urban systems, and explore the paradigms of ecology in, of, and for cities.
Readings and discussions will focus on classical research papers from the ecological literature, history of modern ecology, and contemporary approaches to studying biotic systems in cities.
Instructor(s): Alison Anastasio Terms Offered: Winter
Equivalent Course(s): ENST 23550

PBPL 23606. Political Culture, Social Capital, and The Arts. 100 Units.
Many analysts like Robert Putnam hold that bowling alone signals a decline in social capital, with major consequences for trust and legitimacy of the political system. But new work finds that certain arts and cultural activities are rising, especially among the young, in many countries. This course reviews core related concepts—political culture, social capital, legitimacy—and how they change with these new developments. We lay out new concepts and related methods, such as a grammar of scenes, measured for 40,000+ U.S. zip codes. Scenes, nightlife, design, the internet, and entertainment emerge as critical drivers of the post-industrial/knowledge society. Older primordial conflicts over class, race, and gender are transformed with these new issues, which spark new social movements and political tensions. The course has two halves: first to read and discuss major works and complete a mid-term exam, second to continue as a seminar where the main requirement is writing a paper.
Equivalent Course(s): SOCI 30184, SOCI 20184

PBPL 23610. Eating a Global Environment: Critical Perspectives of Agrofood Systems. 100 Units.
This topics course looks at questions about the human dimensions of the globalization and localization of food production. Drawing sociological theories of labor and consumption, class, and capitalism into popular notions of taste, nutrition, and the "good farmer," this course aims to answer questions of agrofood systems in a globalizing world. We will bring social scientific theory to bear on a series of case studies centering on the United States and its relationships with other places. Our driving questions and interdisciplinary readings will be animated by four themes: 1) ideological roots of food and farming, 2) causes and consequences of agricultural globalization, 3) challenges facing urban and rural food access, and 4) power dynamics of sustainable land use.
Equivalent Course(s): ENST 23610

PBPL 23650. Revolutionizing Agriculture: Early Modern Technologies for the New Millennium. 100 Units.
Based on a wave of sustainable and organic farming technologies that have reinvented early modern growing practices, this course integrates USDA reports and modern field and lab studies into the historiography of The British Agricultural Revolution. Not all historical technologies were sustainable, and this course relies upon modern agronomy to evaluate the environmental costs and benefits of the farming improvements that defined the British Agricultural Revolution. We similarly explore primary historical sources and historiography to better understand the environmental limits of the technologies used by organic and sustainable farmers today. By bringing the science and history into discourse, we will take a critical look at the British Agricultural Revolution, which is thought to have facilitated the Industrial Revolution by accumulating capital for investment and by allowing England to feed a growing urban population and manufacturing sector without a significant increase in arable acres. We know that yields per acre per worker did increase, but this is the only aspect of the story that remains unquestioned. Some agricultural improvement technologies, like light plowing and enclosure, caused catastrophic environmental harms that ultimately lowered yields over time. Other technologies like The Norfolk Rotation may have had small and gradual impacts over time and cannot be easily correlated with increases in yields on a site-by-site basis in the historical literature or in modern field trials. Other early modern technologies have proven to be more beneficial than previously thought. How can a better understanding of this history inform farming practices today?
Equivalent Course(s): HIST 25015, ENST 23650
PBPL 23700. Geographical Issues in Housing and Community Development. 100 Units.
This course is part of the College Course Cluster, Urban Design. 
Instructor(s): M. Conzen Terms Offered: Spring. This course offered in even years.
Prerequisite(s): Open to Chicago Studies Program students. 
Equivalent Course(s): GEOG 23700, GEOG 33700

PBPL 24102. Environmental Politics. 100 Units.
This course examines the different theoretical underpinnings of environmental activism and elucidates the manner in which they lead to different ends. We explore several contrasting views of environmentalism, including the land ethic, social ecology, and deep ecology. Discussions are based on questions posed about the readings and the implications they suggest. Class participation is required. 
Instructor(s): R. Lodato Terms Offered: Spring 
Equivalent Course(s): LLSO 24102, ENST 24102

PBPL 24105. Urban Design: The Chicago Experience. 100 Units.
This course examines the theory and practice of urban design at the scale of block, street, and building--the pedestrian realm. Topics include walkability, the design of streets, architectural style and its effect on pedestrian experience, safety and security in relation to accessibility and social connection, concepts of urban fabric, repair and placemaking, the regulation of urban form, and the social implications of civic spaces. Students will analyze normative principles and the debates that surround them through readings and discussion, as well as firsthand interaction with the urbanism of Chicago.
Equivalent Course(s): GEOG 34100, SOSC 26001, GEOG 24100, SOSC 36001

PBPL 24308. Reproductive Worlds. 100 Units.
This course explores how human reproduction and the reproductive body is compelled, constrained, enabled, and narrated across the globe. The "natural" aspects of reproduction intersect in increasingly fraught and often surprising ways with its technological/scientific, institutional/professional, religious/spiritual, and political/ideological aspects. The starting point for the course is that the reproduction of bodies is differently understood and politically contested among and for various groups of people. We will pay particular attention to the ways bodies, ideas, and technologies flow throughout global contexts, while exploring how inequalities at various levels (race, class, geographic region, nationality, gender, sexuality, practices of family making) impact the "nature" of the reproductive body, and how reproductive practices "reproduce" such inequalities. We will also explore how knowledge of the reproductive body is contested through biomedicine, law, and media, with particular attention to naturalizing discourse about gender and intuition. Finally, we will look at how ecology and reproduction are intertwined via concern about environmental toxicities and the impact of non-human actors.
Instructor(s): A. Ford Terms Offered: Spring 
Equivalent Course(s): GNSE 24308, ANTH 24309

PBPL 24600. Economic Development in the Inner City. 100 Units.
This course will explore conceptually what the issues are around the economic position of cities in the early 21st century, and how to think creatively about strategies to generate economic growth that would have positive consequences for low-income residents. Community Development Corporations, empowerment zones, housing projects, and business development plans through credit and technical assistance will all be considered. 
Instructor(s): R. Taub Terms Offered: Winter 
Note(s): Not offered 2014-5
Equivalent Course(s): SOCI 20129, SOCI 30129, CHDV 30129

PBPL 24605. Introduction to Urban Sciences. 100 Units.
This course is a grand tour of conceptual frameworks, general phenomena, emerging data and policy applications that define a growing scientific integrated understanding of cities and urbanization. It starts with a general outlook of current worldwide explosive urbanization and associated changes in social, economic and environmental indicators. It then introduces a number of historical models, from sociology, economics and geography that have been proposed to understand how cities operate. We will discuss how these and other facets of cities can be integrated as dynamical complex systems and derive their general characteristics as social networks embedded in structured physical spaces. Resulting general properties of cities will be illustrated in different geographic and historical contexts, including an understanding of urban resource flows, emergent institutions and the division of labor and knowledge as drivers of innovation and economic growth. The second part of the course will deal with issues of inequality, heterogeneity and (sustainable) growth in cities. We will explore how these features of cities present different realities and opportunities to different individuals and how these appear as spatially concentrated (dis)advantage that shape people's life courses. We will show how issues of inequality also have consequences at more macroscopic levels and derive the general features of population and economic growth for systems of cities and nations.
Instructor(s): Luis Bettencourt Terms Offered: Autumn 
Prerequisite(s): STAT 22000 
Equivalent Course(s): GEOG 24600, SOCI 20285, ENST 24600
PBPL 24701. U.S. Environmental Policy. 100 Units.
Making environmental policy is a diverse and complex process. Environmental advocacy engages different governmental agencies, congressional committees, and courts, depending on the issue. This course examines how such differentiation has affected policy making over the last several decades.
Instructor(s): R. Lodato Terms Offered: Autumn
Equivalent Course(s): ENST 24701, LLSO 24901

PBPL 24751. The Business of Non-Profits: The Evolving Social Sector. 100 Units.
Led by an experienced practitioner, this course aims to provide both an intellectual and experiential understanding of the contemporary nonprofit sector. In addition to a seminar component examining the rapidly evolving social sector, students engage in a hands-on consulting project for an area nonprofit involving analysis, reporting, and presentation.
Instructor(s): C. Velasquez Terms Offered: Autumn Spring Winter
Prerequisite(s): Instructor consent required. During 6th and 7th week, students must submit an application to CampusCATALYST, a nonprofit that assists in the coordination of consulting projects. Please see the quarterly time schedules for the CampusCATALYST application link.

PBPL 24756. Exploring the Resilient City. 100 Units.
In recent years, sub-national units of government have enacted meaningful policy plans in the wake of the ongoing failure of the international community to address global climate change. Cities in particular have shaped their plans to address the now-inevitable effects of climate change by adopting policies that emphasize resilience and environmental protection, without sacrificing economic growth, and with attention to the ongoing challenges of poverty and inequality. This course will take a comparative look at the policies adopted by cities on an international basis, while defining what it means to be a resilient city and how much the built environment can be adjusted to limit the environmental impact of densely populated metropolises. It will also consider what impact citizen activism and input had upon the shape of each plan and the direction that its policies took. Students will also be asked to consider what might be missing from each plan and how each plan could be improved to foster greater resiliency.
Instructor(s): R. Lodato Terms Offered: Winter
Equivalent Course(s): ENST 24756

PBPL 24901. Trade, Development and Poverty in Mexico. 100 Units.
With a focus on the past two decades, this interdisciplinary course explores the impact of economic integration, urbanization, and migration on Mexico and, to a lesser extent, on the United States-in particular, working class communities of the Midwestern Rust Belt. The course will examine work and life in the borderland production centers; agriculture, poverty, and indigenous populations in rural Mexico; evolving trade and transnational ties (especially in people, food products and labor, and drugs) between the U.S. and Mexico; and trade, trade adjustment, and immigration policy.
Instructor(s): C. Broughton Terms Offered: Winter
Note(s): This course is offered in alternate years.
Equivalent Course(s): SOCI 20251, LACS 24901

PBPL 25003. Immigration, Law and Society. 100 Units.
Law is everywhere within the social world. It shapes our everyday lives in countless ways by permitting, prohibiting, protecting, and prosecuting native-born citizens and immigrants alike. This course reviews the major theoretical perspectives and social science research on the relationship between law and society, with an empirical focus on Latin American migration to the United States. We explore the permeation of law in everyday life, legal consciousness, and gap between "law on the books" and "law on the ground," as well as types of immigrants, motivations behind migration, and national, state, and local immigration laws. The social impact of law is examined through the topics of liminal legality; children and families; policing, profiling, and raids; detention and deportation; and the mobilization for immigrants' rights. This course focuses on the social, political, economic, and cultural contexts of law as it relates to immigration issues. It is designed to give students the theoretical and analytical skills to critically examine the relationship between law, society, and immigration. This course is part of the College Course Cluster program, Inequality.
Instructor(s): Angela Garcia Terms Offered: Winter
Equivalent Course(s): CRES 25003, SOSC 25003, SOCI 28079, LACS 25003, HMRT 25003
PBPL 25004. Punishment and Social Theory. 100 Units.
In this course, students examine the rise of the penal state, tracing its roots from the birth of the prison to the ascendance of mass imprisonment. The course is organized around four lines of inquiry—(1) How is the power to punish derived? (2) In what ways has the role of punishment in society been conceived? (3) What do the practices of punishment produce and tell us about ourselves? (4) Are there alternatives? Taking up these questions, students will outline the major theories of punishment advanced by classical political philosophers and penologists (Locke, Hume, Beccaria, Bentham, etc.), and trace the trajectory of our modern impulse to punish through the works of the “masters of suspicion,” (Freud, Marx, and Nietzsche). We will interrogate the political economy, culture, and consequences of punishment through readings on the carceral state (i.e. Alexander, Allen, Dubois, Garland, Gilmore, Gottschalk, Foucault, Harcourt, Muhammad, Melossi and Pavarini, Rusche and Kirchheimer, Wacquant, Western, etc.), and conclude by raising new questions about the role, force, consequence and alternatives to punishment in an age of mass imprisonment.
Instructor(s): Reuben Miller Terms Offered: Winter
Equivalent Course(s): INRE 30600, CHDV 25220, HMRT 25220

PBPL 25120. Child Development and Public Policy. 100 Units.
The goal of this course is to introduce students to the literature on early child development and explore how an understanding of core developmental concepts can inform social policies. This goal will be addressed through an integrated, multidisciplinary approach. The course will emphasize research on the science of early child development from the prenatal period through school entry. The central debate about the role of early experience in development will provide a unifying strand for the course. Students will be introduced to research in neuroscience, psychology, economics, sociology, and public policy as it bears on questions about “what develops?”, critical periods in development, the nature vs. nurture debate, and the ways in which environmental contexts (e.g., parents, families, peers, schools, institutions, communities) affect early development and developmental trajectories. The first part of the course will introduce students to the major disciplinary streams in the developmental sciences and the enduring new debates and perspectives within the field. The second part will examine the multiple contexts of early development to understand which aspects of young children’s environments affect their development and how those impacts arise. Throughout the course, we will explore how the principles of early childhood development can guide the design of policies and practices that enhance the healthy development of young children, particularly for those living in adverse circumstances, and thereby build a strong foundation for promoting equality of opportunity, reducing social class disparities in life outcomes, building human capital, fostering economic prosperity, and generating positive social change. In doing so, we will critically examine the evidence on whether the contexts of children’s development are amenable to public policy intervention and the costs and benefits of different policy approaches.
Instructor(s): A. Kalil Terms Offered: Winter
Prerequisite(s): Attendance on the first day of class is required or registration will be dropped.
Equivalent Course(s): CHDV 25120, PSYC 25120

PBPL 25216. The American Presidency. 100 Units.
This course examines the institution of the American presidency. It surveys the foundations of presidential power, both as the Founders conceived it, and as it is practiced in the modern era. This course also traces the historical development of the institutional presidency, the president’s relationships with Congress and the courts, the influence presidents wield in domestic and foreign policymaking, and the ways in which presidents make decisions in a system of separated powers.
Instructor(s): W. Howell Terms Offered: Winter
Equivalent Course(s): LLSO 25215, AMER 25215, PLSC 25215, PLSC 35215

PBPL 25220. Constructing a Society of Human Rights: A Psychological Framework. 100 Units.
This course is designed to discuss the ways that cultural and social psychology contribute to understandings about human rights conceptually, and how human rights issues emerge from social dynamics. Over the course of the quarter, students will learn about theories on intergroup conflict and prejudice, how an individual’s beliefs emerge from social contexts and shape their relationships with others, how obedience to authority is created and abused, and how social positioning and narratives influence conceptions of self and other. We will also discuss the relevance and impact of psychological study and data on human rights issues.
Equivalent Course(s): INRE 30600, CHDV 25220, HMRT 25220

PBPL 25370. Social Justice and Social Policy. 100 Units.
What is a fair policy? Policy makers often appeal to justice, fairness or rights to justify policy. Yet it is often unclear what exactly these concepts mean. This course will examine contemporary theories of justice and teach students how these theories can be applied to public policy issues. We will start with three general theories of justice: utilitarianism, liberal equality and libertarianism. We will then discuss more specific issues pertaining to marginalized groups such as immigrants or the disabled. Finally, we will examine empirical evidence about peoples’ fairness beliefs in the US and abroad. This course will allow students to form a more coherent notion of what they think is fair, while understanding that rational people can legitimately disagree with each other about what is fair.
Instructor(s): I. Marinescu Terms Offered: TBD
PBPL 25405. Child Poverty and Chicago Schools. 100 Units.
This discussion- and debate-based course begins with a sociological and historical examination of child poverty, focusing on its origin, experience, and perpetuation in disadvantaged Chicago communities. Class meetings will involve debating school reform efforts, such as "turnaround" schools, charter schools, Promise Neighborhoods, and stepped-up teacher evaluations. Further, the barriers that have contributed to the failure of previous reform initiatives—barriers that include social isolation, violence, and the educational system itself—will be identified and analyzed in-depth.
Instructor(s): C. Broughton Terms Offered: Spring
Prerequisite(s): 2nd year standing required; attendance on the first day of class is required or registration will be dropped.
Equivalent Course(s): CRES 25405

PBPL 25630. Poverty, Work, and Family Policy. 100 Units.
This course examines contemporary policy questions of concern to families, especially low-income working families. The course will consider demographic, labor market, and policy trends affecting family economic well-being and child outcomes; conceptual frameworks and policy debates concerning the responsibility of government, corporate, and informal sectors to address family needs; and specific policy and program responses directed at (1) improving employment and economic outcomes and (2) reconciling the competing demands of employment and parenting. Throughout the course, we will consider the ideological, conceptual, and empirical bases for the issues we study. Although our primary focus will be on issues affecting low-income families in the United States, relevant comparisons will be made throughout the course-cross-nationally, across race/ethnicity, and across income.
Instructor(s): J. Henly Terms Offered: Spring
Prerequisite(s): Third- or fourth-year standing; second-year students require instructor consent.

PBPL 25663. Urban Studies: Placemaking. 100 Units.
This course considers the values that drive neighborhood transformation, how policy is shaped and implemented, and the role that arts and culture can play in mindful city-building. Classroom hours will be spent with Theaster Gates, professor, Department of Visual Art, in addition to other UChicago faculty, discussing key principles in guiding city redevelopment in mindful and equitable ways. Students will gain field experience working with Place Lab, Gates’s multidisciplinary team that documents and demonstrates urban ethical redevelopment strategies initiated through arts and culture. Working across a variety of projects, students will be exposed to programming, data collection, development, community building, strategy, and documentation. Weekly site visits will give students the opportunity to see analogous projects and meet practitioners throughout Chicago.
Equivalent Course(s): ARTV 20663

PBPL 25730. Social Justice and Social Policy. 100 Units.
What is a fair policy? Policy makers often appeal to justice, fairness, or rights to justify policy. Yet it is often unclear what exactly these concepts mean. This course will examine contemporary theories of justice and teach students how these theories can be applied to public policy issues. We will start with three general theories of justice: utilitarianism, liberal equality, and libertarianism. We will then discuss more specific issues pertaining to marginalized groups such as immigrants or the disabled. Finally, we will examine empirical evidence about peoples’ fairness beliefs in the US and abroad. The course will allow students to form a more coherent notion of what they think is fair, while understanding that rational people can legitimately disagree with each other about what is fair.
Instructor(s): I. Marinescu Terms Offered: TBD

PBPL 25820. Pursuing Social Justice in the City. 100 Units.
This community-based learning course examines the challenges of working on urban health, development, planning, and justice in cities like Chicago. The course has two major facets: seminar sessions addressing key concepts from the social sciences, and the community internship. As the course begins, each student will be placed in an internship within a Chicago-based service organization, coordinated by the University’s Chicago Careers in Public and Social Service program. Students will work as interns for 4-6 hours a week, gaining firsthand knowledge and experience of urban policymaking and programming while also advancing the work of their host organizations.

PBPL 25831. Comparative Politics and Policy. 100 Units.
We will study the political economy of our host city and nation. The first module of the course introduces students to the political behavior and institutions of the location, set within the broader context of the European Union. Subsequent modules explore the politics of policymaking process in three specific areas: physical, social, and fiscal policy. The course complements PBPL 221, Politics and Policy, which is focused on the United States.
Instructor(s): A. Fournaies Terms Offered: Spring
PBPL 25832. Early Human Capital Development. 100 Units.
We will study the social and policy contexts aimed at promoting the development, health, and well-being of young children, with an emphasis on our host nation and the European Union. Topics to be covered include family policies such as fertility and related family planning policies; marriage and family formation; policies targeting working parents (i.e. parental leave); income support policies for lone or low-income parents; as well as child care and early education programs targeted directly to children.
Instructor(s): A. Kalil Terms Offered: Spring
Prerequisite(s): Acceptance into the Barcelona Public Policy Program

PBPL 25833. Comparative Social Policy Analysis. 100 Units.
This course will teach students the tools for understanding inequality and redistribution in comparative perspective. The course does not require deep knowledge of econometrics. Topics to be covered include defining and measuring social welfare, tools of the social policy maker including redistribution, incentives, universal vs. targeted policies, conditionality in social policies and potentially important trade-offs (like economic growth and equality).
Instructor(s): S. Mayer
Prerequisite(s): Acceptance into the Barcelona Public Policy Program

PBPL 25840. Odyssey Engaged Nonprofit Practicum. 100 Units.
The Odyssey Engaged nonprofit practicum is a unique partnership between the Office of Civic Engagement, the Public Policy department of the College, Career Advancement, the campusCATALYST (cC) RSO and local nonprofit organizations. The Odyssey Engaged program integrates career development, public service, and innovation with academic work. This course presents a broad overview of the nonprofit sector and offers an opportunity to study the theory that underlies the hands-on work students are doing at local nonprofit organizations. Each student is required to complete a capstone project, which allows them to apply the knowledge that they will be receiving from the academic component of the program to their work at their host organization.
Instructor(s): C. Velasquez Terms Offered: Summer
Prerequisite(s): Acceptance into the Odyssey Engaged Program

PBPL 25860. Crime, Justice, and Inequality in the American City. 100 Units.
This course explores perspectives on street gangs and criminal activity; policing and the criminal justice system; and obstacles to securing housing, employment, and services for reentry after incarceration. Students will examine advances in the social science of adolescence and innovations in government policy and community-based programs aimed at encouraging public safety and youth development, improving policing and prisons, and promoting criminal desistance and decarceration. In addition, we will delve into the lived experience of adolescence and beyond in the context of racially-segregated, high-poverty neighborhoods, with a focus on Chicago. Our approaches will include discussion and lecture; ethnographic, autobiographical, and policy-oriented readings; panels and guest speakers; and documentary films and other media.
Instructor(s): Broughton, C. Terms Offered: Not offered 2018-2019
Equivalent Course(s): SOCI 20255

PBPL 26075. Police and Citizen. 100 Units.
This course explores perspectives on street gangs and criminal activity; the street-level practice of policing and efforts at police reform; the youth experience of policing; advances in the social science of adolescence, trauma, and victimization; community-based anti-violence action and “community policing,” and efforts to promote criminal desistance at the individual level and decarceration at the structural level. Complementing excursions and internships, students will engage with in-class informants with wide-ranging vantage points on these topics including police officers, community organization leaders, former gang members, scholars, and policy-makers and administrators. Our approaches will include discussion and lecture; ethnographic, journalistic, and policy-oriented readings; and documentary films and other media, with much of our focus trained on Chicago. The course was designed by, and will be co-taught by, two sociologists in the Public Policy Studies program at the University of Chicago, Sorcha Brophy and Chad Broughton, who will each offer one class per week over the six-week summer session. (This is the 2018 course for the Urban Studies program.)
Instructor(s): Broughton, C. Terms Offered: Summer Equivalent Course(s): PPHA 37104

PBPL 26200-26300. Field Research Project in Public Policy I-II.
This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies. We will organize ourselves as a policy think tank working with various city agencies, non-profit organizations, and other corporations to design a research project, collect data, conduct analysis, and present findings. In the first quarter, we will follow a robust methodological training program in collaboration with University partners to advance the foundations laid elsewhere in the Public Policy Studies program. In the second quarter, this expertise in a full range of research methodologies will be put into practice to tackle public policy problems in the city and neighborhoods that surround the University.
PBPL 26200. Field Research Project: Public Policy. 100 Units.
See sequence description.
Instructor(s): Staff Terms Offered: TBD
Prerequisite(s): Open only to public policy studies majors. Third year standing recommended. PBPL 26200-26300 must be taken in sequence.

PBPL 26300. Field Research Project in Public Policy II. 100 Units.
This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies. We will organize ourselves as a policy think tank working with various city agencies, non-profit organizations, and other corporations to design a research project, collect data, conduct analysis, and present findings. In the first quarter, we will follow a robust methodological training program in collaboration with University partners to advance the foundations laid elsewhere in the Public Policy Studies program. In the second quarter, this expertise in a full range of research methodologies will be put into practice to tackle public policy problems in the city and neighborhoods that surround the University.
Instructor(s): Staff Terms Offered: TBD
Prerequisite(s): PBPL 26200; open only to public policy studies majors. Third year standing recommended. PBPL 26200-26300 must be taken in sequence.

PBPL 26205. Big Art - Little Art. 100 Units.
Over the last 5 decades, art movements and people and policies that shape them have undergone considerable change. From performance practices, to the advent of place making initiatives, to large public works designed by architects and artists teams, the role artists play within the cultural/sculptural sphere continues to expand. This seminar/workshop will look closely at archival documents, artist writings and theory that have helped to shape our understanding of public art, public artists and public policy. Field trips required.
Instructor(s): T. Gates Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 36205, PPHA 39712, ARTV 26205

PBPL 26300. Field Research Project in Public Policy II. 100 Units.
This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies. We will organize ourselves as a policy think tank working with various city agencies, non-profit organizations, and other corporations to design a research project, collect data, conduct analysis, and present findings. In the first quarter, we will follow a robust methodological training program in collaboration with University partners to advance the foundations laid elsewhere in the Public Policy Studies program. In the second quarter, this expertise in a full range of research methodologies will be put into practice to tackle public policy problems in the city and neighborhoods that surround the University.
Instructor(s): Staff Terms Offered: TBD
Prerequisite(s): PBPL 26200; open only to public policy studies majors. Third year standing recommended. PBPL 26200-26300 must be taken in sequence.

PBPL 26301. Field Research Project in Public Policy. 100 Units.
This one-quarter, project-based research course introduces students to hands-on social and policy research in the service of a client. Students will engage in a variety of field research methods, both quantitative and qualitative, in order to gather data on sociological and policy-based questions related to the needs of our community-based, not-for-profit clients. Students will use the data they gather to practice their write-up and presentation skills, culminating in a final research-based client presentation and extended memo.
Instructor(s): C. Broughton, Staff Terms Offered: Autumn, Spring, Winter
Prerequisite(s): Open only to public policy studies majors. Third-year standing recommended.
Note(s): This course satisfies the Public Policy windows and methods practicum requirement and is intended only for that purpose.

PBPL 26400. Quantitative Methods in Public Policy. 100 Units.
Policy designers and policy analysts should understand the quantitative methods whereby social and economic reality can be described and policy outcomes evaluated; this course will introduce the basic methodologies used in quantitative social description. The underlying discipline is statistics, and this course will focus on statistical thinking and applications with real data sets. Students will be introduced to sampling, hypothesis testing, and regression, as well as other components of the basic toolkit of quantitative policy analysis.
Instructor(s): A. Fowler Terms Offered: Spring
PBPL 26416. Latin American Extractivisms. 100 Units.
This course will survey the historical antecedents and contemporary politics of Latin American extractivisms. While resource extraction in Latin America is far from new, the scale and transnational scope of current “neoextractivisms” have unearthed unprecedented rates of profit as well as social conflict. Today’s oil wells, open-pit mines, and vast fields of industrial agriculture have generated previously unthinkable transformations to local ecologies and social life, while repeating histories of indigenous land dispossession in the present. Yet parallel to neo-extractive regimes, emergent Latin American social movements have unleashed impassioned and often unexpected forms of local and transnational resistance. Readings in the course will contrast cross-regional trends of extractive economic development and governance with fine-grained accounts of how individuals, families, and communities experience and respond to land dispossession, local and transregional conflict, and the ecological and health impacts of Latin American extractivisms.
Equivalent Course(s): LACS 26416, ANTH 23093

PBPL 26433. Practicum in Environmental Management. 100 Units.
Students in this course will explore and evaluate aspects of environmental sustainability on campus, through scholarly research, interviews, surveys and data collection and analysis. Students will apply concepts and tools from environmental studies, public policy and economics to evaluate and make recommendations for enhancing the environmental performance of campus athletics operations and events. The research will be conducted in collaboration with the Office of Sustainability and Department of Physical Education and Athletics. Prerequisite: PBPL 200 or ECON 198 or equivalent
Instructor(s): S. Sabina Terms Offered: Autumn
Equivalent Course(s): ENST 26433

PBPL 26444. Practicum in Campus Athletics and Environment. 100 Units.
The practicum course will engage students in economic and environmental research related to designing a system for waste diversion on campus. Students will develop hands-on experience by designing, implementing, measuring and reporting the impacts of a “zero-waste” campus athletics event. Students will explore different technologies and behavioral interventions for waste management, with a focus on reducing food waste at campus events. Students are expected to attend the zero-waste event on April 23-24th, 2017.
Equivalent Course(s): ENST 26444

PBPL 26501. Social Demography. 100 Units.
This course seeks to introduce important topics in social demography to master and upper-level undergraduate students. Social demography studies the social aspects influencing the population processes. Specifically, this course focuses on basic demographic concepts, fertility transition, extreme fertility regimes, epidemiological transition, differential health and mortality, health behaviors, population aging, migration, household formation, second demographic transition, and population and environment. Students are evaluated by their participation, leading discussions, reflection memos, and a final project.
Equivalent Course(s): MAPS 36500

PBPL 26530. Environment, Agriculture, and Food: Economic and Policy Analysis. 100 Units.
The connections between environment, agriculture, and food are inherent in our social, cultural, and economic networks. Land use, natural resource management, energy balances, and environmental impacts are all important components in the evolution of agricultural systems. Therefore it is important to develop ways in which to understand the effective connections in order to design effective agricultural programs and policies. This course is designed to provide students with guidance on the models and tools needed to conduct an economic research study on the intersecting topics of environment, agriculture, and food. Students learn how to develop original research ideas using a quantitative and applied economic policy analysis for professional and scholarly audiences. Students collect, synthesize, and analyze data using economic and statistical tools. Students provide outcomes and recommendations based on scholarly, objective, and policy relevant research rather than on advocacy or opinions, and produce a final professional-quality report for a workshop presentation and publication. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Winter
Equivalent Course(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): ENST 26530, ECON 26530, PPHA 32510

PBPL 26531. Environment, Agriculture, and Food: Advanced Economic and Policy Analysis. 100 Units.
This course is an extension of ENST 26530 but also stands alone as a complete course itself. Students don’t need to take ENST 26530 to enroll in this course. This small seminar course is open by instructor consent to undergraduate and graduate students who meet the prerequisites. For consideration, please submit a one-page proposal of research to pge@uchicago.edu.
Instructor(s): S. Shaikh Terms Offered: Spring
Equivalent Course(s): ECON 20000 or ECON 20100 or PBPL 20000 or PBPL 22200 (or equivalent), STAT 22000 or STAT 23400 or PBPL 26400 (or equivalent); for ECON Enrollment: ECON 20000 and ECON 20100, STAT 23400
Equivalent Course(s): PPHA 32520, ENST 26531, ECON 26540
PBPL 26690. The Politics of Health Care. 100 Units.
In this course we will tackle some of the complexity of healthcare head-on, considering how cultural, legal and structural factors shape the delivery of care. Our goal will be to address foundational questions about how we as a society imagine healthcare, the professionals who work within the field, and the patients. We will draw on evidence from the United States to ask: How have shifts in the institutional context in which medical professionals work altered their task? How do we imagine patients and their choices? How do external and internal pressures shape what issues are prioritized and who receives care?
Instructor(s): S. Brophy Terms Offered: Autumn Spring

PBPL 26705. Economics of Education. 100 Units.
This course explores economic models of the demand for and supply of different forms of schooling. The course examines the markets for primary, secondary, and post-secondary schooling. The course examines numerous public policy questions, such as the role of government in funding or subsidizing education, the design of public accountability systems, the design of systems that deliver publicly funded (and possibly provided) education, and the relationship between education markets and housing markets.
Instructor(s): D. Neal Terms Offered: TBD
Prerequisite(s): ECON 21020 or ECON 21030
Equivalent Course(s): ECON 26700

PBPL 26836. Labor Economics for Public Policy. 100 Units.
An analysis of labor demand, labor supply, and the structure of wages. This course focuses on topics in labor economics with particularly high salience to public policy such as unionization, the minimum wage, labor force participation, and wage inequality.
Instructor(s): Sloane, C Terms Offered: Spring
Equivalent Course(s): PPHA 44301

PBPL 26885. Women in the Labor Market. 100 Units.
Workers differ on many dimensions. In this course, we will focus on one: gender. This course is designed to provide students with a microeconomist's toolbox to think about major themes related to women's labor such as the gender wage gap, occupational segregation by gender, and trends in schooling completion by gender.
Instructor(s): Sloane, C Terms Offered: Spring
Equivalent Course(s): PPHA 41750

PBPL 26988. The Politics of Organizational Ethics. 100 Units.
In this seminar, we will investigate the often-contentious process of creating ethics policy. How do policymakers decide what is right or wrong for their organization or profession? We will draw on case studies from medicine, policing, technology, law, and the corporate world, investigating why organizations are motivated to create ethics, and what challenges they face when they do. We will consider the different political battles policymakers must engage in and investigate how ethics policies are actually used once they are put in place.
Instructor(s): S. Brophy Terms Offered: Winter

PBPL 27000. International Economics. 100 Units.
This course covers international economics with an emphasis on international trade. The basic theories of international trade are introduced and used to analyze welfare and distributional effects of international trade, government policies, and technology diffusion. In addition, this course also discusses the main empirical patterns of international trade and international investment.
Instructor(s): F. Tintelnot Terms Offered: Winter
Prerequisite(s): ECON 20100
Equivalent Course(s): ECON 27000

PBPL 27040. Public Finance and Public Policy. 100 Units.
This course analyzes the rationales for government intervention in the economy, the form that intervention takes, and the effects of government policy. We will review the economic tools of analysis used in public finance, including cost-benefit analysis, and apply them to government policies, largely at the federal level. The course will focus on policies to remedy externalities, the provision of public goods, social insurance, and the effects of taxes. Within social insurance, we will cover social security and health reform. We will also explore the role taxation plays in government policy. Tax topics include the effect of taxes on consumers and firms, savings and corporate decisions, and fundamental tax reform.
Instructor(s): A. Jones Terms Offered: Winter
Prerequisite(s): PBPL 20000 or ECON 20000

Under what conditions do philanthropy and other forms of private action come to be significant elements of the provision of public goods? What are the consequences of organizing society in this way? In this course, we will address the social role of philanthropy, its historical development as a significant economic and political institution, and the place of philanthropy in contemporary public policy and civic projects.
Instructor(s): E. Clemens Terms Offered: Winter
Prerequisite(s): Completion of at least 2 quarters of SOSC
Equivalent Course(s): SOCI 20222
PBPL 27150. China’s Economic Development & Transition. 100 Units.
Equivalent Course(s): ECON 25710

PBPL 27156. Urban Design with Nature. 100 Units.
This course will use the Chicago region as a laboratory for evaluating the social, environmental, and economic effects of alternative forms of human settlement. Students will be introduced to the basics of geographic information systems (GIS) and use GIS to map Chicago’s “place types” - human habitats that vary along an urban-to-rural transect, as well as the ecosystem services provided by the types. They will then evaluate these place types using a range of social, economic and environmental criteria. In this way, students will evaluate the region’s potential to simultaneously realize economic potential, protect environmental health, and provide social connectivity. This course is part of the College Course Cluster program: Urban Design.
Instructor(s): Sabina Shaikh and Emily Talen Terms Offered: Autumn
Note(s): Students who have taken ENST 27150: Urban Design with Nature: Assessing Social and Natural Realms in the Calumet Region in the Spring of 2018 may not enroll in this course.
Equivalent Course(s): GEOG 27155, ENST 27155

PBPL 27325. Urban Ecology in the Calumet Region. 100 Units.
This course will give students a strong foundation in the local ecology of the Calumet. Students will use local research and habitats to understand fundamental concepts in ecology and the scientific method. Students will explore some of these habitats during field trips with scientists and practitioners. The course focus will be on urban ecology in the region, whether these fundamental ecological concepts are applicable, what other factors need to be considered in the urban ecosystem, and the role humans have in restoring natural and managing novel ecosystems, among other topics.
Terms Offered: TBD
Equivalent Course(s): ENST 27325, GEOG 27325

PBPL 27809. Violence in the Early Years. 100 Units.
This course will address issues related to children’s exposure to violence. Classes will cover topics including, but not limited to, the history of violence against children (infanticide, etc), children’s literature, parental violence towards children, school-related violence, practices such as female genital mutilation, and other policy-relevant issues related to violence in children’s lives. We will analyze policies and reforms, review relevant research on each topic, and examine implications of the findings to policy and practice.
Instructor(s): A. Adukia Terms Offered: Not offered 2018-2019.

PBPL 27818. Philosophical Foundations of Public Policy. 100 Units.
Evidence-based policy making’ sounds like a slogan everyone can get behind. But its central components, cost-benefit analysis and program evaluation, have each been subject to severe philosophical questioning. Does cost-benefit analysis ignore important ethical concerns? Does program evaluation ignore valuable kinds of knowledge? We will introduce each of these debates, and then take up the question of how evidence-based policy might be reconciled with democratic theory. Class discussion and assignments will consider these topics in the context of specific policy areas, including climate change, discrimination, and education.
Instructor(s): S. Ashworth Terms Offered: Autumn
Prerequisite(s): ECON 20000, PBPL 20000, ECON 20100, or PBPL 22200.

PBPL 27821. Urban Schools and Communities. 100 Units.
This course focuses on urban communities and the contextual factors influencing the organization of schools. It emphasizes historical, anthropological, and sociological perspectives as we explore questions about the purpose and history of public schools, the influences on the character of their structure and organization (especially in urban areas), and the surrounding context, such as housing, policy, race and class. The topics detailed below provide essential intellectual perspectives on the history, work, and complexities of urban schools.
Instructor(s): S. Stoelinga Terms Offered: Autumn
Equivalent Course(s): SOCI 20226, CHDV 27821

PBPL 27822. Critical Issues in Urban Education. 100 Units.
This course explores a set of critical issues in urban education. The areas of inquiry will explore both inside and outside of the school house, with a focus on topics that are critical to consider to promote effective schooling, particularly in urban schools that serve low income, students of color. In this respect, the course aims to push and deepen thinking on the levers we have at our disposal to influence student outcomes including the ways schools are organized, noncognitive factors in academic success, effective literacy practices, college access, successful approaches for diverse learners and dual language learners, trauma-informed practices, intersections with parents and the community, the role of technology and innovation, and partnerships and philanthropy. Multiple disciplinary lenses will be used to analyze and understand these topics including sociological, anthropological, historical, learning sciences, policy, and sociocultural.
Instructor(s): S. Stoelinga Terms Offered: Winter
Equivalent Course(s): CHDV 27822, SOCI 20270
PBPL 27823. Urban School Reform: History and Policy. 100 Units.
This course explores the goals, logic, and contradictions of the American education and school improvement efforts. We will consider the history of school reform and the processes that influence education policy implementation and enactment. Current school reform debates and policies will be analyzed from historical, contemporary, and divergent perspectives, considering theories of organizational change. The strengths and shortcomings of current school reform policies will be considered with a stress on understanding the wide range of goals for education, the process of policy-making, and the complexity of organizational and systemic change implied in reform policy.
Instructor(s): S. Stoelinga Terms Offered: Not offered 2017-2018

PBPL 27905. Global Health Metrics. 100 Units.
This course provides an overview of the causes of illness and injury in populations across the world and the most important risk factors. We will discuss how population health is measured using summary indicators that combine mortality and non-fatal health outcomes. We will use these indicators to compare and contrast the health of populations across global regions and in time. Sound measurement of the global burden of disease is essential for prioritizing prevention strategies. Therefore, there will be a strong emphasis on understanding how data sources in information-poor settings are used to generate estimates of population health.
Equivalent Course(s): PBHS 31900, PBHS 27900

PBPL 28050. Remaking Chicago: The City That Works on Social Change. 100 Units.
In this sociological and policy-oriented course, students interface with change-agents in Chicago-community residents, religious leaders, and social activists; not-for-profit and governmental actors; and educators and researchers. The course explores how these change-agents advance innovative and also tried-and-true approaches to social problems, especially those of low-income areas characterized by troubled schools and high rates of crime (and with a particular focus on South Side neighborhoods). Students are asked to think critically about how meaningful social change occurs, and why it so often does not. The central components of the course are Chicago-oriented readings, guest speakers and panels, Friday excursions, and independent field research.
Instructor(s): Broughton, C. Terms Offered: Spring
Prerequisite(s): Open to Study Chicago Quarter students.

PBPL 28139. Society, Politics and Security in Israel. 100 Units.
This graduate course examines Israel's unique DNA through a thorough examination of its history, society, politics and security challenges. We shall explore these traits as manifested in the defining chapters of Israel's history, since the early stages of the Zionist driven immigration of Jews to the Holy Land, through the establishment of the Jewish State in 1948, until present time. Students will work with primary sources, diverse theoretical perspectives, and rich historiographical material to better understand the Israeli experience, through a domestic, regional and international perspectives. Particular attention will be given to the emergence of the Israeli vibrant society and functioning democracy in the background of continuous conflict and wars. The course will explore topics such as: How Israel reconciles between the imperatives and narratives of democracy and Jewishness, between collective ethos and heterogeneous tribalism, and between protracted security challenges and resilience. We will also discuss the multifaceted aspects of the changing Israeli security doctrine and practice, in light of regional threats and international involvement.
Instructor(s): M. Elran Terms Offered: Autumn
Equivalent Course(s): INRE 36001, JWSC 28139

PBPL 28150. U.S. Foreign Policy: Inst & Decision making 21st Century. 100 Units.
This course explores contemporary relations between the United States and the world. The primary goal is to give students conceptual and critical tools to understand and analyze how international relations theory, U.S. foreign policy decision-making processes, and current events fit together, especially in the post 9/11 world. It is designed to develop students' capacity both to explain the foreign policy-making process in the United States, and to better understand the underlying patterns, logic, and implications of American foreign policy in the world at large. The course is divided into three main topics. First, we will discuss International Relations theory that grounds U.S. foreign policy focusing on American international power and the goals for which this power is employed. The second part of the class will examine the institutions and processes that guide foreign policy formation and implementation. Questions will revolve around who are the important people setting the foreign policy agenda and what are the important institutions attempting to implement this agenda. Finally, the last third of the course will review some of the more salient foreign policy challenges facing the U.S. in the 21st century, including particular focus on geographic regions. Some of these issues include how the recent global economic crises may influence foreign policy, how terrorism and democracy promotion continue to shape U.S. foreign policy, and whether U.S. foreign policy towards Africa is undergoing significant change.
Instructor(s): F. Vabulas Terms Offered: TBD
PBPL 28300. Health Economics and Public Policy. 100 Units.
This course analyzes the economics of health and medical care in the United States with particular attention to the role of government. The first part of the course examines the demand for health and medical care and the supply of medical care, including professional training, specialization and compensation, hospital competition, and finance and the determinants and consequences of technological change in medicine. The course concludes with an examination of recent proposals and initiatives for health care reform.
Instructor(s): Meltzer, D Terms Offered: TBD
Prerequisite(s): PBPL 20000 or ECON 20000 and one undergraduate course in quantitative research methods (Statistics or Econometrics) or the equivalent or consent of the instructor
Equivalent Course(s): ECON 27700, CCTS 38300, PBHS 38300, PPHA 38300

PBPL 28310. Healthcare and Healthcare Reform. 100 Units.
This course analyzes the economics of health and medical care in the United States with particular attention to the role of government and the rationale and effects of recent health care reforms. These reforms will be evaluated in how they relate to the basic workings of the US health care sector. The course will examine these underpinnings in terms of the demand and supply for health care. This includes both the structure and the consequences of public and private insurance as well as market structures in professional training, specialization and compensation, among providers, as well as the determinants and consequences of technological change in medicine. The course then examines the recent proposals and initiatives for health care reform in light of these more basic features affecting the US health care market place.
Instructor(s): STAFF Terms Offered: Winter
Equivalent Course(s): PPHA 38310

PBPL 28350. Education and Development: Policy and Research. 100 Units.
This course covers policy issues related to education in developing contexts. We will analyze education policies and reforms, review relevant research on each topic, and examine implications of the findings to policy and practice. Topics include understanding factors that influence educational decisions, provision of basic needs in schools, teacher pay and incentives, school choice, discrimination and inclusion in education, early childhood education, and education in emergency settings. We will often have guest speakers who are working in policy and practice share their on-the-ground experiences followed by a class-led discussion about related academic papers.
Instructor(s): A. Adukia Terms Offered: TBD
Prerequisite(s): A microeconomics course and a statistics course. This course is intended for third- and fourth-year students; first-year students not admitted; second-year students require instructor consent.

PBPL 28375. Political Economy of Development. 100 Units.
This course covers policy issues related to education in developing contexts. We will analyze education policies and reforms, review relevant research on each topic, and examine implications of the findings to policy and practice. Topics include understanding factors that influence educational decisions, provision of basic needs in schools, teacher pay and incentives, school choice, discrimination and inclusion in education, early childhood education, and education in emergency settings. We will often have guest speakers who are working in policy and practice share their on-the-ground experiences followed by a class-led discussion about related academic papers.
Instructor(s): A. Adukia Terms Offered: TBD
Prerequisite(s): A microeconomics course and a statistics course. This course is intended for third- and fourth-year students; first-year students not admitted; second-year students require instructor consent.

PBPL 28425. Strategic Behavior and Regulation of Firms. 100 Units.
This course will examine the role of public policy in oligopoly markets, where competition is imperfect. We will examine the strategies that firms use to increase profits, the effects of those strategies on consumers, and the cases for and against regulatory intervention in markets. Topics will include issues such as mergers, predation, price discrimination, collusion, and network economics. Class discussions will frequently focus on the economics of recent business and regulatory case studies, such as the California electricity crisis, Google’s use of its search engine, and net neutrality regulation. An important component of the course will be the Competitive Strategy Game, in which students will form firms that compete against one another in several simulated markets, allowing students to gain first-hand experience with some of the strategic decisions firms regularly face.
Instructor(s): R. Kellogg Terms Offered: Autumn
Prerequisite(s): PBPL 20000 or ECON 20000
PBPL 28488. Politics and Public Policy in Latin America. 100 Units.
This course will cover the politics of policy making in Latin America. The first part will focus on understanding the problems of economic development in the region. It will address how and why Latin America is different by looking at its economic outcomes, economic and social policies and political institutions. It will also look at different examples of how political institutions shape policy outcomes. The second part will ground the distinctiveness of Latin America in its history, and show why understanding this is critical for comprehending why it is so different from the United States. It will explore how these historical factors persist, for example, how the legacy of authoritarianism shapes redistributive policies and how these historical foundations have created the weak Latin American states we see today. The third part of the course will look at how groups such as civil society or violent actors can also shape policymaking and welfare in this region. Finally, it will discuss some perspectives on whether some countries in the region have managed to find ways to change their political institutions and subsequently their social and economic policies with the prospect of creating a more prosperous society. The aim of this course is for students to gain empirical knowledge on the region's politics and policies as well as a practical understanding of political factors that shape policy outcomes.
Instructor(s): Maria Bautista Terms Offered: Spring
Prerequisite(s): PBPL 20000 or ECON 20000
Equivalent Course(s): LACS 28488

PBPL 28501. Process and Policy in State and City Government. 100 Units.
This course consists of three interrelated sub-sections: (1) process and policy in city and state government; (2) the role played by influential, key officials in determining policy outcomes; and (3) policymaking during and after a political crisis. Issues covered include isolating the core principles driving policy at city and state levels; understanding how high level elected officials can shape the course of policy; and determining how a political crisis affects policy processes and outcomes. Most of the specific cases are drawn from Chicago and the State of Illinois.
Instructor(s): C. Harris III Terms Offered: Autumn Spring Winter

PBPL 28510. Bombay/Mumbai: Urban Life/Urban Politics. 100 Units.
The Indian city of Bombay and the Mumbai it has now become has been referred to as the "imagined" city, the "kinetic" city, the "cosmopolitan city," and "the city of slums." What do these labels mean to the practice of sociality and politics in Bombay/Mumbai; how does the urban experience in South Asia differ from that in other parts of the world; and how do gender, religion and class influence the different experiences of the city? Bombay/Mumbai: Urban Life/Urban Politics is an interdisciplinary course that will address these and several related issues. Using the city of Mumbai as its lens it introduces students to the ways in which urban subjects and urban life are constituted in a globalizing South Asia. The course explores the city of Mumbai through an urban-culturalist perspective and problematizes the ways in which the built environment of the city: its transportation, streets, slums, neighborhoods, tenements, markets, malls and businesses animate and are animated by the everyday life and politics in the metropolis. It encourages students to think about the ways in which Mumbai’s past and present patterns of urban informality, capitalism, consumption, criminality and urban dislocations mediate very particular experiences of politics, sociality, class, gender and globalization. The course uses a range of historical, theoretical, literary, and ethnographic readings as well as films, photography, and music to highlight the connections between place, space and everyday life in Mumbai.
Instructor(s): T. Bedi Terms Offered: Spring
Equivalent Course(s): GNSE 23303, SALC 28510, INST 28550

PBPL 28525. Missing Markets: The Economics of the Environment. 100 Units.
This course presents a broad-based treatment of the theory and application of environmental economics. Topics are introduced in the context of real-world environmental policy questions (with special emphasis on energy policy), then translated into microeconomic theory to highlight the salient constraints and fundamental trade-offs faced by policymakers. Topics include property rights, externalities, Pigouvian taxes, command-and-control regulation, cap-and-trade, valuation of environmental quality, cost-benefit analysis, policymaking under uncertainty, and inter-regional competition.
Instructor(s): Cicala, S. Terms Offered: Winter
Prerequisite(s): PBPL 22200 or ECON 20100

PBPL 28538. Political Economy of Natural Resources. 100 Units.
The aim of this course is to provide students with an understanding of the political and economic consequences of natural resource wealth. The course will combine theoretical models and empirical evidence on the relationship between natural resources and outcomes such as low economic growth, authoritarianism, corruption and conflict. We will look at the very different experiences of different resource-rich countries (e.g. Norway versus Venezuela) and will also explore the differences across resources (e.g. oil vs minerals). The course will provide a setting for the discussion of the merits and potential pitfalls of various policies for the management of natural resource wealth.
Instructor(s): Luis Martinez Terms Offered: TBD
Prerequisite(s): PBPL 20000 or ECON 20000 and PBPL 26400
PBPL 28550. Social Experiments: Design and Experimentation. 100 Units.
The pressure in many fields (notably medicine, health research, and education) for evidence-based results has increased the importance of the design and analysis of social investigations. This class will address two broad topics: (i) the design of experiments, quasi-experiments, and surveys; and (ii) the use of these social investigations for generalization in policy areas. The class will explore how the relationship between surveys and experiments can inform generalization from experiments. Randomized clinical trials in medicine, field experiments in economics and psychology, and the use of scientific evidence in policy formulation will be among the examples.
Instructor(s): C. O’Muircheartaigh Terms Offered: TBD

PBPL 28605. Economic Analysis of Law. 100 Units.
This course involves the application of the choice theory of economics to the opportunities obtainable within different legal environments. The likelihood that a person will choose to return a lost wallet, keep a promise, drive more carefully, or heed the terms in a will is partly a function of the applicable laws and regulations. Alternative rules, under the standard Law and Economics approach, are compared in terms of the economic efficiency of their subsequent outcomes. This efficiency lens of Law and Economics is applied to rules concerning property, torts, contracts, and criminal behavior.
Instructor(s): J. Leitzel Terms Offered: Winter
Prerequisite(s): ECON 20100
Equivalent Course(s): ECON 28600

PBPL 28640. Mixed Methods Approaches to Policy Research. 100 Units.
Course Description: This course will introduce students to a diverse range of mixed methods approaches to policy research. Students will learn about multiple disciplinary perspectives and methodological approaches to policy research. The course will expose students to different styles of mixed methods research, including a small project on qualitative data analysis. Students in this course will become critical consumers of both qualitative and quantitative research, specifically, what types of questions best lend themselves to quantitative, qualitative, and mixed methods studies.
Instructor(s): A. Claessens Terms Offered: TBD

PBPL 28702. Electoral Politics. 100 Units.
This course involves the scientific study of elections in advanced democracies with a primary focus on the modern United States. We will address empirical and theoretical questions about voters, candidates, parties, and the electoral system as a whole. For example, who runs for political office? How do they choose their policy platforms? How do citizens form their vote choices? Who turns out to vote and why? Who is informed and why? Does it matter that many citizens abstain from politics and are uninformed? What roles do race, ethnicity, and prejudice play in elections? What role does the media play? What laws and policies could improve political participation and political representation? We will address these questions through the applications of game theory, microeconomic theory, and most importantly quantitative/statistical analysis.
Instructor(s): A. Fowler Terms Offered: TBD
Prerequisite(s): Basic familiarity with American politics and statistics is required.

PBPL 28730. Insurgency in South and Southeast Asia. 100 Units.
This course will trace the emergence, spread, and decline of insurgencies across South and Southeast Asia. We will use cutting-edge theoretical and quantitative research to examine the causes of each conflict—from the Naxal Insurgency in India to the varied separatist movements in Indonesia—and draw on in-depth case studies of various counterinsurgency strategies to assess how these conflicts were or might be resolved through cooperation between local and international actors. Students will engage with ongoing field data collection efforts in Thailand and the Philippines, and will use original microdata as a core feature of their final research paper.
Instructor(s): Wright, A. Terms Offered: TBD

PBPL 28747. The Modern Welfare State. 100 Units.
In 2016, Denmark was the happiest country in the world according to a United Nations happiness report. Denmark, along with Sweden and Finland have shared 20 years of relative prosperity and now are among the wealthiest countries in the world in terms of GDP per capita. They are also "welfare states" with very high levels of taxation and redistribution—policies at odds with traditional views on the power of incentives to encourage prosperity. The influence of the Nordic Model is evident is policy discussion in the US on issues ranging from educational subsidies to family-friendly workplaces. What can policy makers in other countries learn from the successes and failures of the Nordic Model? This class has three goals: 1. to familiarize you with Nordic taxes and subsidies, 2. to help you understand why these policies are successful (or appear to be successful), and 3. to give you the tools to critically evaluate suggestions for similar policy implementation in the US.
Instructor(s): Yana Gallen Terms Offered: TBD
Prerequisite(s): PBPL 26400 or equivalent
PBPL 28750. Conflict: Root Causes, Consequences, and Solutions for the Future. 100 Units.
This course will focus on understanding the causes and consequences of conflict, drawing on literatures from economics, political science and psychology. We will study why people join armed groups; and examine the role of ethnicity, religion and poverty in terrorism and civil war. We will also study whether conflict has lasting consequences on social cohesion and prospects for economic development. Finally, we will examine how individuals reconcile and rebuild in the aftermath of conflict.
Instructor(s): Dube, O Terms Offered: TBD

PBPL 28775. Poverty and Economic Development. 100 Units.
This course focuses mainly on the microeconomic fundamentals of economic development. We will study causes of poverty and underdevelopment, poverty measurement issues, and policies to improve well-being. We will concentrate on topics such as fertility, nutrition and health, education, labor markets, intra-household allocation of resources and foreign aid. Empirical evidence from developing economies will be used extensively.
Instructor(s): A. Menendez Terms Offered: TBD
Prerequisite(s): A microeconomics course and a statistics/econometrics course is required. This course is recommended for third and fourth-year students.

PBPL 28780. The Art and Science of Negotiations and Persuasion. 100 Units.
The ability to influence other people and convince them to go along with your beliefs about what they should do is perhaps one of the most sought after, but misunderstood, professional skills. Those who appear to be successful at negotiation and persuasion are routinely built up as having unique traits like charisma, excellent leadership skills, and innate talent. However, this course will explain how success in influencing others depends not on innate or unique traits, but rather on knowledge and practice of basic psychological principles that govern interpersonal behavior. This course will increase your understanding of negotiations and persuasion in several ways. First, you will experience varied negotiation situations firsthand in the classroom on a weekly basis. Second, you will learn how to analyze your work using insights collected from decades of research in social psychology, decision-making, and behavioral science. Third, and unlike most real-life situations, you will be able to receive feedback on your performance. Life, unfortunately, does not often offer the opportunity to compare your outcomes to other people’s outcomes. This course does, thereby enabling you to identify what you did right, what you did wrong, and improve your performance by evaluating your work compared to the rest of the class. This course aims to provide you with negotiation experience, tools for persuading others to go along with your beliefs, and general knowledge of human psychology.
Instructor(s): Nadav Klein Terms Offered: TBD

PBPL 28805. Behavioral Economics and Policy. 100 Units.
The standard theory of rational choice exhibits explanatory power in a vast range of circumstances, including such disparate decision making environments as whether to commit a crime, have children, or seek to emigrate. Nonetheless, shortfalls from full rationality seem not to be uncommon, and are themselves, to some extent, systematic. Behavioral economics documents and tries to account for these departures from full rationality. This course looks at areas in which some modification of the traditional rational choice apparatus might most be warranted; these include decisions that unfold over time, involve low probability events, or implicate willpower. To what extent should public policy respond to shortfalls from rationality or concern itself with promoting happiness?
Instructor(s): J. Leitzel Terms Offered: Winter
Equivalent Course(s): ECON 26920

PBPL 28820. Machine Learning and Policy. 100 Units.
The goal of this course is to make students better producers and consumers of machine learning tools designed to help solve public policy problems. One thing this goal requires is some understanding of the basics of machine learning: how it works, what makes it different from the usual sort of statistical and econometric tools that we tend to use in social science studies of public policy problems, and how to implement these prediction models (which we will be doing in R, a free statistical program that now includes many machine learning packages). But this goal also requires some understanding of issues that are outside the usual machine learning toolkit, such as: what sorts of public policy problems are right for these tools, and which are not; how do we know whether a new prediction tool is capable of actually improving policy decisions, not just predicting outcomes accurately within some hold-out set; what additional considerations around fairness and other normative values may arise in using machine learning tools for public policy applications; and what challenges are associated with getting policymakers, front-line practitioners or individual citizens to make use of prediction tools and resulting decision aids.
Instructor(s): J. Ludwig Terms Offered: TBD
Equivalent Course(s): PPHA 38820
PBPL 28871. Constitutional Law. 100 Units.
This course is an introduction to American constitutional law. Topics include: the role of the judiciary and other institutions in interpreting and applying the Constitution of the United States; theories of constitutional interpretation; the practice and meaning of judicial review in a political democracy; structural and individual rights approaches to constitutional limitations on government authority; and the public-private distinction in constitutional law.
Instructor(s): D. Spencer Terms Offered: Spring
Prerequisite(s): Third or fourth year standing required

PBPL 28891. The Supreme Court and Public Policy. 100 Units.
Learning how courts interpret policy has become an important component of the policymaker’s toolkit. This course aims to introduce students to how Constitutional interpretation touches upon pressing policy questions of today. Students will engage with what courts expect to see from policymakers, while also learning how to read cases from a lawyer’s perspective. Topics covered include federalism, LGBT rights, race and ethnicity, criminal justice issues, voting rights, emoluments, and political questions and official immunity.
Instructor(s): D. Spencer Terms Offered: Spring
Prerequisite(s): Third or Fourth year standing required

PBPL 28900. Environmental and Science Policy. 100 Units.
With a strong emphasis on the fundamental physics and chemistry of the environment, this course is aimed at students interested in assessing the scientific repercussions of various policies on the environment. The primary goal of the class is to assess how scientific information, the economics of scientific research, and the politics of science interact with and influence public policy development and implementation.
Equivalent Course(s): ENST 28900

PBPL 28920. Inequality: Origins, Dimensions, and Policy. 100 Units.
For the last four decades, incomes in the United States and across the globe have grown more unequal. That fact has attracted worldwide attention from scholars, governments, religious figures, and public intellectuals. In this interdisciplinary course, participating faculty members drawn from across the University and invited guest speakers will trace and examine the sources and challenges of inequality and mobility in many of its dimensions, from economic, political, legal, biological, philosophical, public policy, and other perspectives. This course is part of the College Course Cluster program: Inequality.
Instructor(s): A. Sanderson and Staff Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing
Note(s): ECON 24720 or ECON 22410 may be used as an Economics elective, but only one of the two may be used toward Economics major requirements.
Equivalent Course(s): BPRO 28900, ECON 24720

PBPL 28923. Health Impacts of Transportation Systems. 100 Units.
Transportation systems affect human health through complex pathways. Governments invest in transport infrastructure because it encourages economic growth and mobility of people and goods, which have direct and indirect benefits to health. Yet, an excessive reliance on motorized modes of transport harms population health, the environment and social wellbeing. The impact on population health is substantial: Globally, road traffic crashes kill over 1.3 million annually. Air pollution, to which transport is an important contributor, kills another 3.2 million people. Motorized modes of transport are also an important contributor to sedentary lifestyles. Physical inactivity is estimated to cause 3.2 million deaths every year, globally. This course will introduce students to thinking about transportation as a technological system that affects human health and wellbeing through intended and unintended mechanisms. The course will examine the complex relationship between transportation, land use, urban form, and geography, and explore how decisions in other sectors affect transportation systems, and how these in turn affect human health. Students will learn to recognize how the system level properties of a range of transportation systems (such as limited-access highways, urban mass transit, inter-city rail) affect human health. The course reviews the pathways through which road transport impacts population health and focuses on how to measure these impacts, and how to compare them with other leading causes of health loss.
Instructor(s): Kavi Bhalla Terms Offered: TBD
PBPL 28957. The Social Psychology of Behavior in Organizations. 100 Units.
Understanding others’ thoughts and behaviors is essential for professional and personal success. Most of us try to understand others by putting on the cap of an “intuitive scientist,” relying on our intuitions to identify others’ thoughts and motivations and to predict others’ behavior. However, decades of psychological research suggest that our intuitions about other people are often misguided in systematic ways. This course will enable you to have a more accurate understanding of others’ motivations, feelings, thoughts, and behaviors by teaching you to think like a “psychological scientist” rather than an intuitive scientist. Relying on research in social psychology, judgment and decision-making, and behavioral science, this course will help you understand when your intuitions are likely to be reliable and when they are unlikely to be so, giving you important knowledge and tools to succeed professionally and interpersonally. Managing other people—be they co-workers, customers, constituents, or competitors—is critical for professional and personal success. At the very start of your professional career, your success will likely depend on having the necessary technical expertise to produce excellent work product for your organization. As you progress in your career, however, success will increasingly require you to manage groups of people, to align their skills, solve interpersonal problems, and create well-functioning teams. This course is intended to provide the scientific knowledge of human thought and behavior that is critical for successfully managing others, and also for successfully managing yourself.
Instructor(s): Nadav Klein Terms Offered: Spring

PBPL 29000. Energy and Energy Policy. 100 Units.
This course shows how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, how we may address them through both policy and scientific study, and how the policy and scientific aspects can and should interact. We address specific technologies, both those now in use and those under development, and the policy questions associated with each, as well as with more overarching aspects of energy policy that may affect several, perhaps many, technologies.
Instructor(s): S. Berry, G. Tolley Terms Offered: TBD. May be offered 2018-2019
Prerequisite(s): PQ: Third- or fourth-year standing. For ECON majors who want ECON credit for this course (ECON 26800): PQ is ECON 20100.
Equivalent Course(s): CHSS 37502, PPHA 39201, ENST 29000, ECON 26800, PSMS 39000, BPRO 29000

This course explores how legal institutions protect and punish children in the United States. We will spend the first part of the course exploring the child welfare system, which purports to protect children from abuse and neglect through various mechanisms including foster care and the termination of parental rights. We will spend the second part of the course exploring the juvenile justice system, which purports to prosecute and rehabilitate children for their criminal acts in a separate system from the criminal justice system. In the final part of the course, we will consider special topics in this area of law and policy including “cross-over youth” (i.e. children involved in both systems), unaccompanied immigrant children, homeless and runaway youth, and the so-called “school-to-prison-pipeline.” This course will place special emphasis on the judges, lawyers, law enforcement officers, and social workers that comprise these legal institutions.
Terms Offered: Autumn
Prerequisite(s): Course limited to 3rd and 4th year students only.
Equivalent Course(s): HMRT 29050, LLSO 29050

PBPL 29120. Poverty Law and Policy Reform. 100 Units.
This seminar seeks to give students a comprehensive understanding of the major anti-poverty programs in the United States with an emphasis on current challenges and reform proposals. We will spend the first half of the course exploring the implementation and evaluation of the programs that make up the traditional safety net for poor Americans: income supports, health insurance, and housing assistance. We will spend the rest of the quarter exploring topics that complicate the traditional social policy regime, including how the safety net is more robust for some groups, such as the elderly and veterans, than others. We will explore how the legal systems of immigration and incarceration hamper anti-poverty policy and how safety net programs address the needs of rural and Native Americans. Finally, we will investigate two recent developments in the field: social entrepreneurship and the critique of procedural rights.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): No first year students; attendance on the first day of class is required.
Note(s): Not Offered in 2018-2019
Equivalent Course(s): LLSO 29120, HMRT 29120
PBPL 29355. Leading Complex Organizations. 100 Units.
In virtually any field of endeavor, individuals will find themselves operating within organizations - many of them quite complex. By studying leadership of such organizations at the outset of a career, individuals will learn how to better succeed within any organization and will attain a level of preparation for assuming leadership positions if they ultimately become available. The seminar will cover a number of critical subjects: the difference between leadership and management; the development of the organization's sense of mission and the strategy to achieve it; organizational culture; building and leading a team; entrepreneurial leadership; organizational transformation; leading an organization through crisis; how a leader relates to an organization's governing body and external constituencies; how leaders are held accountable.
Instructor(s): Thomas Cole Terms Offered: Spring
Prerequisite(s): Consent of the Program Director is required. Students must obtain consent before beginning the internship.
Note(s): The College Reading and Research Course Form is required. Must be taken for P/F grading.
Equivalent Course(s): PPHS 39404

PBPL 29356. Leading Complex Organizations. 100 Units.
In virtually any field of endeavor, individuals will find themselves operating within organizations - many of them quite complex. By studying leadership of such organizations at the outset of a career, individuals will learn how to better succeed within any organization and will attain a level of preparation for assuming leadership positions if they ultimately become available. The seminar will cover a number of critical subjects: the difference between leadership and management; the development of the organization's sense of mission and the strategy to achieve it; organizational culture; building and leading a team; entrepreneurial leadership; organizational transformation; leading an organization through crisis; how a leader relates to an organization's governing body and external constituencies; how leaders are held accountable.
Instructor(s): Thomas Cole Terms Offered: Spring
Prerequisite(s): Consent of the Program Director is required. Students must obtain consent before beginning the internship.
Note(s): The College Reading and Research Course Form is required. Must be taken for P/F grading.
Equivalent Course(s): PPHS 39404

PBPL 29404. Mediation, Moderation, and Spillover Effects. 100 Units.
This course is designed for graduate students and advanced undergraduate students from social sciences, statistics, health studies, public policy, and social services administration who will be or are currently involved in quantitative research. Research questions about why an intervention works, for whom, under what conditions, and whether one individual's treatment could affect other individuals' outcomes are often key to the advancement of scientific knowledge yet pose major analytic challenges. This course introduces cutting-edge theoretical concepts and methodological approaches with regard to mediation of intervention effects, moderated intervention effects, and spillover effects in a variety of settings. The course content is organized around six case studies. In each case, students will be involved in critical examinations of a working paper currently undergoing review. Background readings will reflect the latest developments and controversies. Weekly labs will provide supplementary tutorials and hands-on experiences with mediation and moderation analyses. All students are expected to contribute to the knowledge building in class through participation in discussions. Students are encouraged to form study groups, while the two written assignments are to be finished and graded on an individual basis.
Instructor(s): G. Hong Terms Offered: Spring
Note(s): This course satisfies the Public Policy windows practicum requirement.
Equivalent Course(s): CHDV 32411, SOCI 30318, CCTS 32411, PSYC 32411, STAT 33211

PBPL 29411. Mediation, Moderation, and Spillover Effects. 100 Units.
This course is designed for graduate students and advanced undergraduate students from social sciences, statistics, health studies, public policy, and social services administration who will be or are currently involved in quantitative research. Research questions about why an intervention works, for whom, under what conditions, and whether one individual's treatment could affect other individuals' outcomes are often key to the advancement of scientific knowledge yet pose major analytic challenges. This course introduces cutting-edge theoretical concepts and methodological approaches with regard to mediation of intervention effects, moderated intervention effects, and spillover effects in a variety of settings. The course content is organized around six case studies. In each case, students will be involved in critical examinations of a working paper currently undergoing review. Background readings will reflect the latest developments and controversies. Weekly labs will provide supplementary tutorials and hands-on experiences with mediation and moderation analyses. All students are expected to contribute to the knowledge building in class through participation in discussions. Students are encouraged to form study groups, while the two written assignments are to be finished and graded on an individual basis.
Instructor(s): G. Hong Terms Offered: Spring
Note(s): This course satisfies the Public Policy windows practicum requirement.
Equivalent Course(s): CHDV 32411, SOCI 30318, CCTS 32411, PSYC 32411, STAT 33211

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Instructor(s): G. Hong Terms Offered: Spring
Note(s): This course satisfies the Public Policy windows practicum requirement.
Equivalent Course(s): CHDV 32411, SOCI 30318, CCTS 32411, PSYC 32411, STAT 33211

PBPL 29600. Internship: Public Policy. 100 Units.
Students write a paper about their experience working for a government agency or nonprofit organization.
Instructor(s): J. Leitzel Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of the Program Director is required. Students must obtain consent before beginning the internship.
Note(s): The College Reading and Research Course Form is required. Must be taken for P/F grading.

PBPL 29700. Reading and Research: Public Policy. 100 Units.
This is a reading and research course for independent study not related to BA research or BA thesis preparation.
Instructor(s): STAFF Terms Offered: Autumn Spring Winter
Prerequisite(s): Open only to Public Policy majors. Must be taken for a letter grade.
Note(s): The College Reading and Research Course Form is required.

PBPL 29701. Readings and Research: Working Group in Environment, Agriculture, and Food (EAF) 100 Units.
This course consists of participation in the Environment, Agriculture, and Food Group in a role assigned by the instructor.
Instructor(s): S. Shaikh Terms Offered: Winter
Prerequisite(s): Registration by instructor consent only
Note(s): Please email Sabina Shaikh at sabina@uchicago.edu.
Equivalent Course(s): ENST 29701
PBPL 29702. Readings and Research: Working Group in Environment, Agriculture, and Food (EAF) II. 100 Units.

PBPL 29800. BA Seminar: Public Policy I (credit) 100 Units.
This course is designed to assist students in developing and writing the required BA paper. The Autumn Quarter class informs students about sources, methods of research, and treatment of evidence.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Open only to fourth-year Public Policy majors.
Note(s): Must be taken for a letter grade.

PBPL 29801. BA Seminar: Public Policy II (no credit) 000 Units.
This seminar course focuses on the writing phase of the BA paper.
Instructor(s): STAFF Terms Offered: Autumn Winter
Prerequisite(s): PBPL 29800 or consent.
Note(s): Must be taken for a letter grade.

PBPL 29900. BA Paper Preparation: Public Policy. 100 Units.
This is a reading and research course for independent study related to BA research and BA thesis preparation.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Prerequisite(s): Open only to 4th year Public Policy majors. Must be taken for a letter grade.
Note(s): The College Reading and Research Course Form is required.
Department Website: https://divinity.uchicago.edu/undergraduate-program-religious-studies-0

**PROGRAM OF STUDY**

The program in Religious Studies introduces students to the academic study of religion. Students in Religious Studies learn how to think, talk, and write about religion in a way that is well-informed, rigorously critical, and responsibly engaged. The study of religion investigates the way human societies construct practices, seek meanings, and pose questions about their world. These investigations may be constructive, cultural, and/or historical. Since it touches all facets of human experience, the study of religion is a crucial conversation partner with other fields of study and draws on the entire range of humanistic and social scientific disciplines. Students in the program are able to explore numerous religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism, and are exposed to the sources, problems, methods, and methodologies of our diverse areas of study, including Biblical and Historical Studies; Ethics, Theology, and the Philosophy of Religions; as well as History of Religions, Anthropology, Sociology, and Religion and Literature. The interests of our students may be descriptive, explanatory, and/or normative.

**PROGRAM REQUIREMENTS**

A major in Religious Studies consists of twelve courses, including one introductory course and a two-quarter senior seminar. It is preferable that students consult the Director of Undergraduate Studies and declare their major in Religious Studies before the end of their second year. Students and the Director of Undergraduate Studies will work together to create a program of study. The goal is to develop depth in one area so that a satisfactory BA paper will be written in the fourth year. Students are encouraged to explore more than one religious tradition in their courses.

Students with permission to enroll in graduate Divinity courses may count these toward the major. Students who wish to receive credit in the major for non-departmental courses must submit a petition to the Director of Undergraduate Studies. Such requests are decided on a case-by-case basis. NOTE: The Office of the Dean of Students in the College must also approve the transfer of all courses taken at institutions other than those in which students are enrolled as part of a study abroad program that is sponsored by the University of Chicago. For more information, visit Transfer Credit.

**Introductory Course**

Students in Religious Studies are required to take RLST 10100 Introduction to Religious Studies. It need not precede other course work in the major, but students are advised to have completed it by the end of their second year. It will typically be offered every year during Autumn Quarter. This course will introduce students to some of the central themes in Religious Studies; its particular focus will vary according to the interests of the individual instructor.

**Course Distribution**

Religion is expressed in many forms throughout the world’s cultures, and the academic study of religion therefore requires multiple perspectives on its subject. Students of religion should have some knowledge of the historical development of specific religious traditions, understand and critically engage the ethical and intellectual teachings of various religions, and begin to make some comparative appraisals of the roles that religions play in different cultures and historical periods. To introduce students to these multiple perspectives on religion and to provide a sense of the field as a whole, students are required to take at least one course in each of the following areas. To identify the areas, refer to the RLST number range (see below).

A. Historical Studies in Religious Traditions: courses that explore the development of particular religious traditions, including their social practices, rituals, scriptures, and beliefs in historical context (RLST 11000 through 15000, 20000 through 22900).

B. Constructive Studies in Religion: courses that investigate constructive or normative questions about the nature and conduct of human life that are raised by religious traditions, including work in philosophy of religion, ethics, and theology (RLST 23000 through 25900).

C. Cultural Studies in Religion: courses that introduce issues in the social and cultural contingencies of religious thought and practice by emphasizing sociological, anthropological, and literary-critical perspectives on religion, and by raising comparative questions about differing religious and cultural traditions (RLST 26000 through 28900).

**Senior Seminar and BA Paper**

The two-quarter senior sequence (RLST 29800 BA Paper Seminar I and RLST 29900 BA Paper II) will assist students with the preparation of the required BA paper. During May of their third year, students will work with the preceptor to choose a faculty adviser and a topic for research, and to plan a course of study for the following year. These must be approved by the Director of Undergraduate Studies. Students will take part in the BA Paper Seminar convened by a preceptor during Autumn and Winter Quarters. This seminar will allow students to prepare their bibliographies, hone their writing, and present their research. Students will register for RLST 29800 BA Paper Seminar I in the Autumn Quarter and for RLST 29900 BA Paper II in the Winter Quarter. The BA paper
Religious Studies

Religious Studies majors must receive quality grades in all courses in the major. With consent of instructor, nonmajors may take Religious Studies courses for P/F grading. Faculty will determine the criteria that constitute a Pass.

Honors

Honors are awarded by the Divinity School’s Committee on Undergraduate Studies. Students who write senior papers deemed exceptional by their faculty advisers will be eligible for consideration for graduation with honors. To be considered for honors, students must also have a 3.5 GPA or higher in the major and a 3.25 GPA or higher overall.

Summary of Requirements

RLST 10100 Introduction to Religious Studies 100
One course in historical studies in religious traditions 100
One course in constructive studies in religion 100
One course in cultural studies in religion 100
Six additional courses in Religious Studies 600
RLST 29800 BA Paper Seminar I 100
RLST 29900 BA Paper II 100
Total Units 1200

Minor Program in Religious Studies

The minor in Religious Studies requires a total of seven courses. RLST 10100 Introduction to Religious Studies is required of all minors. The remaining six courses should be chosen to reflect a broad understanding of the academic study of religion. Of these six, students must take at least one course in each of our three areas of study [Historical Studies (A), Constructive Studies (B), and Cultural Studies (C)]. Courses in the minor may not be double-counted with the student’s major(s) or with other minors, and may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

The student must complete a substantial (at least 10–15 pages) paper or project. This work should engage critically with primary source materials and exemplify methodological sophistication in the study of religion, and should earn a grade no lower than B-. It is expected that this paper will normally be written as part of the student’s course work for the minor. The Director of Undergraduate Studies will approve the paper for fulfillment of this requirement.

Students who elect the minor program in Religious Studies must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Consent to complete a minor forms are available from the student’s College adviser or online at https://college.uchicago.edu/sites/college.uchicago.edu/files/attachments/consent_minor_program.pdf.

Sample Program

The following group of courses would satisfy a minor in Religious Studies:

RLST 10100 Introduction to Religious Studies 100
RLST 11004 Introduction to the Hebrew Bible 100
RLST 21801 Religion and Society in the Middle Ages 100
RLST 23603 Cosmos and Conscience: Looking for Ourselves Elsewhere 100
RLST 23900 Buddhist Thought in India and Tibet 100
RLST 22505 Histories of Japanese Religion 100
RLST 26800 The Mahabharata in English Translation 100

Total Units 700
RELIGIOUS STUDIES COURSES

RLST 10100. Introduction to Religious Studies. 100 Units.
What are we talking about when we talk about religion? There are a multitude of answers to that question, and this course provides students with an entry way into a longstanding conversation-involving insiders, outsiders, and those in between-around the meanings of a word that indexes ideas of god and the gods, of origins and ends, and of the proper places of humans (and everything else, including animals) above, in, and below the globe.
Talk about religion today is, in fact, cheap: this course will aim to promote a grammatical currency (morphology, vocabulary, syntax) to enhance the value of such talk.
Instructor(s): Sarah Hammerschlag Terms Offered: Autumn
Note(s): Required of students who are majoring in Religious Studies.

RLST 11004. Introduction to the Hebrew Bible. 100 Units.
The Hebrew Bible (Old Testament) is a complex anthology of disparate texts and reflects a diversity of religious, political, and historical perspectives from ancient Israel, Judah, and Yehud. Because this collection of texts continues to play an important role in modern religions, new meanings are often imposed upon it. In this course, we will attempt to read biblical texts apart from modern preconceptions about them. We will also contextualize their ideas and goals through comparison with texts from ancient Mesopotamia, Syro-Palestine, and Egypt.
Such comparisons will demonstrate that the Hebrew Bible is fully part of the cultural milieu of the Ancient Near East. To accomplish these goals, we will read a significant portion of the Hebrew Bible in English, along with representative selections from secondary literature. We will also spend some time thinking about the nature of biblical interpretation.
Instructor(s): J. Stackert Terms Offered: Autumn
Equivalent Course(s): BIBL 31000, NEHC 30504, JWSC 20120, NEHC 20504

RLST 11030. Introduction to the Qur'an. 100 Units.
This course introduces the historical context, thematic and literary features, major biblical figures, and exegetical literature on the Qur'an, with a focus on the early (8th-10th century CE) and medieval periods (11th - 15th century CE). We will read select English translations from the Qur'an and its commentators, accompanied by academic secondary literature that emphasize the Qur'an's literary structure, theological underpinnings, historical, geographical, social, political and cultural contexts in early and medieval Islamic civilization, and the role of the Qur'an as both a fixed and a living and dynamic text in Muslim devotional life.
Instructor(s): Yousef Casewit Terms Offered: Autumn
Prerequisite(s): Knowledge of Arabic is not a prerequisite, but general knowledge about Islam or an 'Introduction to Islam' course is highly recommended.
Equivalent Course(s): ISLM 30030, NEHC 30030

RLST 12000. Introduction to the New Testament: Texts and Contexts. 100 Units.
An immersion in the texts of the New Testament with the following goals: 1. through careful reading to come to know well some representative pieces of this literature; 2. to gain useful knowledge of the historical, geographical, social, religious, cultural and political contexts of these texts and the events they relate; 3. to learn the major literary genres represented in the canon ("gospels," "acts," "letters," and "apocalypses") and strategies for reading them; 4. to comprehend the various theological visions and cultural worldviews to which these texts give expression; 5. to situate oneself and one’s prevailing questions about this material in the history of research, and to reflect on the goals and methods of interpretation; 6. to raise questions for further study.
Instructor(s): M. Mitchell Terms Offered: Winter
Prerequisite(s): Interest in this literature, and willingness to enter into conversation with like- and non-like-minded others on the texts and the issues involved in their interpretation.
Equivalent Course(s): FNDL 28202, BIBL 32500

RLST 20111. History of Death. 100 Units.
From the treatment of mortal remains to the built environment of cemeteries, tombs, and memorials, the dead have always played a role in the lives of the living. This course examines how beliefs and practices surrounding death have been a source of meaning making for individuals, institutions, religious communities, and modern nations. It will ask students to consider how examining death makes it possible to better understand the values and concerns of societies across time and space. This course will consider case studies from Africa, the Middle East, the Caribbean, North America, Europe, and Asia, from the Middle Ages to the Vietnam War. It introduces students to the methods and debates that animate the historical study of death-coming from histories of the body, social history, and the study of slavery-and ends by asking the question: 'Is it possible to have a global history of death?'
Instructor(s): K. Hickerson Terms Offered: Spring
Equivalent Course(s): HIST 20111, CRES 20111, GNSE 20111

RLST 20401-20402-20403. Islamic Thought and Literature I-II-III.
This sequence meets the general education requirement in civilization studies. Taking these courses in sequence is recommended but not required.
RLST 20401. Islamic Thought and Literature I. 100 Units.
This course covers the period from ca. 600 to 950, concentrating on the career of the Prophet Muhammad; Qur'an and Hadith; the Caliphate; the development of Islamic legal, theological, philosophical, and mystical discourses; sectarian movements; and Arabic literature.
Instructor(s): T. Qutbuddin Terms Offered: Autumn
Equivalent Course(s): NEHC 20601, NEHC 30601, CMES 30601, HIST 25610, SOSC 22000, ISLM 30601, HIST 35610

RLST 20402. Islamic Thought and Literature II. 100 Units.
This course covers the period from ca. 950 to 1700, surveying works of literature, theology, philosophy, sufism, politics, history, etc., written in Arabic, Persian and Turkish, as well as the art, architecture and music of the Islamicate traditions. Through primary texts, secondary sources and lectures, we will trace the cultural, social, religious, political and institutional evolution through the period of the Fatimids, the Crusades, the Mongol invasions, and the "gunpowder empires" (Ottomans, Safavids, Mughals).
Instructor(s): A. El Shamsy Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required. This sequence meets the general education requirement in civilization studies.
Equivalent Course(s): NEHC 20602, HIST 35615, SOSC 22100, CMES 30602, HIST 25615, NEHC 30602, ISLM 30602

RLST 20403. Islamic Thought and Literature III. 100 Units.
This course covers the period from ca. 1700 to the present, exploring works of Arab intellectuals who interpreted various aspects of Islamic philosophy, political theory, and law in the modern age. We look at diverse interpretations concerning the role of religion in a modern society, at secularized and historicized approaches to religion, and at the critique of both religious establishments and nation-states as articulated by Arab intellectuals. Generally, we discuss secondary literature first and the primary sources later.
Instructor(s): A. El Shamsy Terms Offered: Spring
Equivalent Course(s): NEHC 20603, HIST 35616, SOSC 22200, CMES 30603, HIST 25616, NEHC 30603, NEHC 20603, HIST 35616

RLST 20501. Islamic History and Society I: The Rise of Islam and the Caliphate. 100 Units.
This course covers the period from ca. 600 to 1100, including the rise and spread of Islam, the Islamic empire under the Umayyad and Abbasid caliphs, and the emergence of regional Islamic states from Afghanistan and eastern Iran to North Africa and Spain.
Instructor(s): Orit Bashkin Terms Offered: Autumn
Equivalent Course(s): HIST 35704, ISLM 30500, NEHC 30501, CMES 30501, NEHC 20501, HIST 25704

RLST 20505. Pagans and Christians: Greek Backgrounds to Early Christianity. 100 Units.
This course will examine some of the Greco-Roman roots of early Christianity. We will focus on affinities between Christianity and the classical tradition as well as ways in which the Christian faith may be considered radically different. Some of the more important issues that we will analyze are: 1. "The spell of Homer." How the Homeric poems exerted immeasurable influence on the religious attitudes and practices of the Greeks. 2. The theme of creation in Greek and Roman authors such as Hesiod and Ovid. The Orphic account of human origins. The Early Christian theme of Christ as creator/savior. 3. Greek and Roman conceptions of the afterlife. The response to the Homeric orientation in the form of the great mystery cults of Demeter, Dionysus, and Orpheus. The views of the philosophers (esp. Plato). The New Testament conception of resurrection. 4. Greek and Roman conceptions of sacrifice, the crucifixion of Christ as archetypal sacrifice and early Christian reflection upon it. 5. The world of ancient magic and the Christian response.
Instructor(s): David Martinez Terms Offered: Spring
Equivalent Course(s): CLCV 26216

RLST 21107. Rdg: Maimonides’ Guide of the Perplexed. 100 Units.
A careful study of select passages in Maimonides’ Guide of the Perplexed, focusing on the method of the work and its major philosophical-theological themes, including: divine attributes, creation vs. eternity, prophecy, the problem of evil and divine providence, law and ethics, the final aim of human existence.
Instructor(s): James Robinson Terms Offered: Winter
Equivalent Course(s): JWSC 21107, HIJD 45400, FNLD 24106, ISLM 45400, HREL 45401, RLVC 45400, NEHC 40470

RLST 21303. Christianity and Slavery in America, 1619-1865. 100 Units.
This course examines the history of Christian thought and practice regarding slavery in the United States. Particular attention is paid to Christian missions to slaves, debates about the abolition of slavery, the pro-slavery Christian defense, and the practice and evolution of slave religion.
Instructor(s): Curtis Evans Terms Offered: Autumn
Equivalent Course(s): HCHR 42901, RAME 42901
RLST 21450. Coptic Bible. 100 Units.
The Coptic versions of the Bible present one of the earliest translations of Christian scripture as the new religion spread. Understanding how the Bible (canonical and non-canonical) was read and used in Egypt at this early stage implies studying the development of Christian communities in those agitated times, as well as paying attention to questions of literacy and linguistic environment, book production, Bible (both Greek and Coptic) on papyrus, and translation and interpretation in Antiquity. The course will draw on materials assembled from my work on the critical edition of the Gospel of Mark, but will also look into other materials like the Coptic Old Testament, and non-canonical scriptures such as Nag Hammadi and the Gnostic scriptures. No previous knowledge of Coptic is required. A brief introduction to the Coptic language will be part of the class, and parallel sessions of additional language instruction will be planned for those who are interested in learning more.
Instructor(s): S. Torallas Terms Offered: Autumn
Equivalent Course(s): CLCV 24118, BIBL 31418, NEHC 24118, CLAS 34118, NEHC 34118

RLST 22010. Jewish Civilization I: Ancient Beginnings to Early Medieval Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Autumn course will deal with antiquity to the early medieval periods. Its readings will include works from the Bible, the Dead Sea Scrolls, Philo, Josephus, the Rabbis, Yehudah Halevy, and Maimonides. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Chavel Terms Offered: Autumn
Equivalent Course(s): JWSC 12000, NEHC 22010

RLST 21600. Early Monasticism. 100 Units.
This course examines early monasticism from its origins among the desert fathers of the Greek and Syriac East to its development in the Latin West, especially in Italy and Spain, concluding with the Carolingian reformation of monasticism in the ninth century. We will examine such themes as monastic rules, monastic hagiography, women in monasticism, ideas of virginity, and the economics of monasticism. (A)
Instructor(s): L. Pick Terms Offered: Spring
Equivalent Course(s): HIST 11900

RLST 22011. Jewish Civilization II: Late Medieval to Modern Period. 100 Units.
Jewish Civilization is a two-quarter sequence that explores the development of Jewish culture and tradition from its ancient beginnings through its rabbinic and medieval transformations to its modern manifestations. Through investigation of primary texts-biblical, Talmudic, philosophical, mystical, historical, documentary, and literary-students will acquire a broad overview of Jews, Judaism, and Jewishness while reflecting in greater depth on major themes, ideas, and events in Jewish history. The Winter quarter will begin with the late medieval period and continue to the present. It will include discussions of mysticism, the works of Spinoza and Mendelssohn, the nineteenth-century reform, the Holocaust and its reflection in writers such as Primo Levi and Paul Celan, and literary pieces from postwar American Jewish and Israeli authors. All sections of each course will share a common core of readings; individual instructors will supplement with other materials. It is recommended, though not required, that students take these two courses in sequence. Students who register for the Autumn Quarter course will automatically be pre-registered for the winter segment.
Instructor(s): Rokem Terms Offered: Winter
Equivalent Course(s): JWSC 12001, NEHC 22011

RLST 23026. Suffering, Tragedy, and the Human Condition. 100 Units.
This course examines the various ways in which various authors have understood the nature of suffering and its role in human wisdom and human tragedy. In so doing we will gather various understandings of how the Western past and present have conceived of the human condition, especially in its relation to fate, the gods, and the Christian God and salvation.
Instructor(s): Susan Schreiner Terms Offered: Winter

RLST 22800. African American Religion: Themes and Issues. 100 Units.
This course explores themes and topics that have marked the study of African American religion including but not limited to enslavement and Christianization, resistance and adjustment to slavery and Jim Crow segregation, urbanization and diversification of religious communities, and the lived experience of religious believers and practitioners. This class is a broad survey of religious beliefs and practices from the 17th century to the late 20th century.
Instructor(s): Curtis Evans Terms Offered: Winter
Equivalent Course(s): CRES 22800, HIST 20003
RLST 23100. Introduction to Christian Thought. 100 Units.
This course is designed to give an introduction to Christian thought by means of a historical overview. It will focus on what it is that establishes thinkers as Christian thinkers, what that does to the profile of their thought, and how we can best assess their overall contribution in evaluative terms (academic, ecclesial, social, foundational). The course will deliberately reach across confessional and cultural divides. The thinkers on whom we focus are Augustine, Maximus the Confessor, Thomas Aquinas, John Calvin, Kierkegaard, John Henry Newman, William James, Dietrich Bonhoeffer.
Instructor(s): W. Otten Terms Offered: Winter

RLST 23905. Is Buddhism a Religion? 100 Units.
One often hears it said that “Buddhism is not a religion, it’s […]” - with the ellipsis variously filled in as (e.g.) "a philosophy," "a kind of mind science," "a spiritual practice," etc. This course will explore the origins and function of this meme, as well as the question of what, if anything, distinguishes a tradition as “religious.” It is hoped that we will, along the way, learn a bit about Buddhism, and/or about various Asian encounters with colonialism, empire, and modernity. And also maybe about being human in today’s world.
Instructor(s): Daniel A. Arnold Terms Offered: Spring
Equivalent Course(s): SALC 23905

RLST 23505. Environmental Ethics. 100 Units.
This course examines foundational issues of environmental ethics. What kind of values (economic, aesthetic, existence) are important? What kind of value do individual biota, humans, other species, ecosystems, humans, or inorganic entities have? What is the relationship of humans to the rest of the world? What should it be? Do religious and philosophical traditions contribute to or help address environmental degradation?
Instructor(s): S. Fredericks Terms Offered: Winter
Equivalent Course(s): ENST 23505

RLST 24110. The Ethics of War: Reading Just and Unjust Wars: A Moral Argument with Historical Illustrations. 100 Units.
This course will involve a close reading of Michael Walzer’s classic text on the ethics of war and his constructive account of the just-war tradition. Among the topics to be addressed are: moral relativism, human rights, and the ethics of various cases, e.g., terrorism, interventions, war crimes, blockades, assassinations, guerrilla warfare, reprisals, pre-emptive warfare, and nuclear deterrence. Relevant now no less than when it was first published in 1977, Walzer’s work raises basic questions about the rights of nations and their moral obligations to their citizens and to others during times of war.
Instructor(s): Richard B. Miller Terms Offered: Autumn
Equivalent Course(s): FNDL 24500

RLST 24201. Indian Philosophy I: Origins and Orientations. 100 Units.
A survey of the origins of Indian philosophical thought, emphasizing the Vedas, Upanisads, and early Buddhist literature. Topics include concepts of causality and freedom, the nature of the self and ultimate reality, and the relationship between philosophical thought and ritual or ascetic religious practice.
Instructor(s): D. Arnold Terms Offered: Winter
Equivalent Course(s): HREL 30200, DVPR 30201, SALC 30901, SALC 20901

RLST 24202. Indian Philosophy II: The Classical Traditions. 100 Units.
Following on the Indian Philosophy I course, this course will survey major developments in the mature period of scholastic philosophy in India - a period, beginning a little before the middle of the first millennium C.E., that is characterized by extensive and sophisticated debate (made possible by the emergence of shared philosophical vocabulary and methods) among Buddhist, Brahmanical, and Jain philosophers. Students are encouraged (but not required) to take Indian Philosophy I before taking this course.
Instructor(s): M. Kapstein Terms Offered: Spring
Equivalent Course(s): SALC 30902, SALC 20902, DVPR 30302, HREL 30300

RLST 25105. Readings in Ibn Tufayl’s Hayy b. Yaqzan. 100 Units.
A study of Ibn Tufayl’s twelfth-century philosophical/mystical romance about a boy spontaneously generated on a desert island who achieves knowledge of God through empirical study of nature. The many themes in Hayy ibn Yaqzan will be studied in relation to the philosophical literature that formed it and in light of recent modern scholarship about it.
Instructor(s): James T. Robinson Terms Offered: Winter
Equivalent Course(s): FNDL 25105, ISLM 35004, NEHC 35004, HIJD 35004
RLST 26002. Literature and Hunger. 100 Units.
This course pursues themes of hunger the consumption of food, the formation of community, and relation to
the sacred, through a sequence of readings in the Western tradition. By reading classic works (The Odyssey,
selections from the Hebrew Bible and Christian Scriptures, selections from The Divine Comedy, the Letters of St.
Catherine of Siena, Paradise Lost), and modern works by Kafka, Simone Weil, and Louise Gluck, we will examine
how different philosophies have imagined the acceptance or rejection of love, life, and the sacred in terms of
the symbolism of food. Class work will involve close analysis of literary works, even those in translation; intensive
critical writing; and secondary readings in literary criticism, anthropology, theology, and psychology.
Instructor(s): Rosanna Warren Terms Offered: Autumn. Course will be taught Autumn 2018
Note(s): Open to grads
Equivalent Course(s): SCTH 26002, ENGL 26002

RLST 27250. Religious Trials. 100 Units.
The rhetoric and practice of "trial" — as testing and as adjudication — is central to religious thought and religious
practice. This course will examine the idea and the act of "trial" comparatively, via the classics of the religious
literatures of Judaism and of Christianity (Genesis 22, Job, the Gospel of Mark, "The Pilgrim's Progress," Kafka),
and also cinema (Dreyer's "Joan of Arc," R. & S. Elkabetz's "Gett").
Instructor(s): R. Rosengarten Terms Offered: Winter
Equivalent Course(s): LLSO 27250

RLST 27614. Problems in the Study of Gender and Sexuality: Gender and Religion. 100 Units.
In what ways are notions of ideas about religion and the sacred gendered and what are the consequences of this
for how we live our lives? This class will be an introduction to the study of the relationships between religion and
gender and the way these relationships play out in specific historical situations. Attention will also be paid to the
relationships between religions and sexualities. Examples will be drawn from medieval to modern periods, and
our attention will primarily be on Judaism, Christianity and Islam.
Instructor(s): Lucy Pick Terms Offered: Autumn
Equivalent Course(s): GNSE 11008

RLST 27650. Anthropology of Religion. 100 Units.
This course explores classic theories and methods in the anthropology of religion. We will cover core themes that
have defined the field such as ethics, epistemology, language and political economy.
Instructor(s): A. Heo Terms Offered: Winter
Equivalent Course(s): ANTH 23911

RLST 28206. Dostoevsky's Brothers Karamazov. 100 Units.
We will read and interpret The Brothers Karamazov by Dostoevsky. Among major themes are the relation to
God and religion to the larger society and state; the problem of evil; and the nature of sin and how it enters into
religious beliefs; human “freedom,” and what the word might have meant to Dostoevsky; and love.
Instructor(s): S. Meredith Terms Offered: Autumn
Prerequisite(s): Required of new Fundamentals majors; open to others with consent of instructor.
Note(s): Fundamentals majors get first priority
Equivalent Course(s): FNDL 20200

RLST 28511. Star Wars and Religion. 100 Units.
This course is an introduction to comparative religious ethics, using the Star Wars film franchise as a point of
reference to discuss different conceptions of heroism. The course focuses on the role of myth-both religious and
secular-and the unique power of stories to bestow meaning on human life and express that which transcends
ordinary existence. Screenwriter George Lucas said that he combined elements of many religious traditions to
create the world of Star Wars. This course analyzes these elements to ask what the Force and the Jedi have in
common with Taoism, Buddhism, Christianity, and other religions.
Instructor(s): R. Johnson Terms Offered: Spring
Equivalent Course(s): KNOW 28900, ANTH 23906

RLST 29700. Reading/Research: Rlst. 100 Units.
No description available. Prerequisite(s): Consent of faculty supervisor and Director of Undergraduate Studies.
Note(s): Students are required to submit the College Reading and Research Course Form.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Consent of faculty supervisor and Director of Undergraduate Studies.
Note(s): Students are required to submit the College Reading and Research Course Form.
RLST 29800. BA Paper Seminar I. 100 Units.
This class meets weekly to provide guidance for planning, researching, and writing the BA paper.
Terms Offered: Autumn
Prerequisite(s): Consent of faculty supervisor and Director of Undergraduate Studies.
Note(s): RLST 29800 and 29900 form a two-quarter sequence that is required of fourth-year students who are majoring in Religious Studies. Students are required to submit the College Reading and Research Course Form.

RLST 29900. BA Paper II. 100 Units.
This class meets weekly to assist students in the preparation of drafts of their BA paper, which are formally presented and critiqued.
Terms Offered: Winter
Note(s): RLST 29800 and 29900 form a two-quarter sequence that is required of fourth-year students who are majoring in Religious Studies. Students are required to submit the College Reading and Research Course Form.
The minor in Renaissance studies offers students an interdisciplinary examination of the networks of trade, culture, and power that, in the formative centuries between the Black Death and the Enlightenment, profoundly changed the culture and society of Europe and the Mediterranean and brought the region into contact with the broader globe. This era birthed empires, economies, literatures, languages, conflicts, technologies, and ideas whose influence, both within the European continent and well beyond, powerfully shaped the advent and structures of modernity. A list of University of Chicago faculty working in Renaissance studies can be found on the Renaissance Studies website (https://voices.uchicago.edu/renaissancestudies/facultybydept).

The minor unites the humanities and social sciences, teaching students to use the tools of multiple disciplines to examine the society, art, literature, music, and the political, economic, and historical experiences of the Renaissance world. A student might choose to minor in Renaissance studies in order to reach beyond the lens of one discipline to see how major figures (Machiavelli, Luther, Montaigne, Cervantes, Shakespeare) or major events (the Reformation, European contact with the Americas) yield different insights when examined with the diverse methods and tools of inquiry used in different departments.

The minor could represent an interest distinct from the student’s major, or it could complement a major in the social sciences or humanities for a student working on materials from the period. It could equally complement a major in the sciences, for students who want to understand the era (of Galileo and Vesalius) that so powerfully shaped the way their disciplines are understood and studied today.

MINOR IN RENAISSANCE STUDIES

Students must complete six courses for the minor. Because of the interdisciplinary nature of the minor, courses eligible for the minor will come from a variety of departments and will be cross-listed with a RENS (Renaissance Studies) subject code.

The Renaissance can be approached through many disciplines, including:

- Art History, Classics, Comparative Literature, English Language and Literature, Fundamentals: Issues and Texts, Germanic Studies, History, History, Philosophy, and Social Studies of Science and Medicine, Music, Near Eastern Languages and Civilizations, Philosophy, Political Science, Religious Studies, Romance Languages and Literatures (e.g., Catalan, French, Italian), Russian and East European Studies (e.g., Bosnian/Croatian/Serbian, Czech, Polish), and Theater and Performance Studies.

At least three (3) of the above disciplines must be represented among the six (6) approved courses that students take to complete the minor. An updated list of eligible courses with descriptions specifying which discipline each course represents will be maintained on the Renaissance Studies website (https://voices.uchicago.edu/renaissancestudies/courses). Any uncertainty about which courses represent which disciplines can be resolved by consulting the Renaissance Studies website or the program director.

Students may petition to count courses not cross-listed as RENS if they can demonstrate that the courses have substantial content related to Renaissance questions. A student may also petition to count up to two language courses if the student can demonstrate that the language is being studied for the purpose of pursuing Renaissance studies. A successful petition requires students to obtain approval from the program director, who will contact College Advising on the student’s behalf.

Courses in the minor may not be double counted with the student’s major(s) or with other minors.

### SUMMARY OF REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three RENS courses representing three distribution areas</td>
<td>300</td>
</tr>
<tr>
<td>Three RENS electives</td>
<td>300</td>
</tr>
<tr>
<td>Total Units</td>
<td>600</td>
</tr>
</tbody>
</table>

* Students must take approved RENS courses in at least three distinct disciplines (History, Philosophy, Religious Studies, etc.). Consult the Renaissance Studies website (http://voices.uchicago.edu/renaissancestudies/courses) for lists of courses and the disciplines they represent.

### GRADING

Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

### ADVISING

Prospective minors must meet with the Renaissance Studies program director to discuss their interests and course plans and to obtain advice and approval. This meeting could happen whenever the student is ready to declare. Together the student and the program director will fill out the Minor Program Application Form listing...
the proposed courses, which the program director signs. Students should submit completed, signed forms to
their College adviser by the end of Spring Quarter of their third year.

RENAISSANCE STUDIES COURSES

Full, updated lists of eligible courses along with the distribution areas they fulfill can be found on the
Renaissance Studies website (https://voices.uchicago.edu/renai

sestudies/courses), but contact the program
director if you have questions about whether a course may be counted toward the Renaissance Studies minor.
ROMANCE LANGUAGES AND LITERATURES

Department Website: http://rll.uchicago.edu

PROGRAMS OF STUDY

The Department of Romance Languages and Literatures (RLLT) offers several programs of study leading to the BA degree in French, Italian, or Spanish literature and culture; or in some combination, which may include Catalan or Portuguese. Catalan and Portuguese offerings include a two-year language sequence, minor programs in Catalan and Portuguese, and selected literature and culture courses. The BA programs are designed to give students knowledge of the literature and culture of their area of concentration, as well as to develop their linguistic competence in one or more of the Romance languages.

Students in other fields of study may also complete a minor in RLLT. Information follows the description of the major.

Courses in the major may not be counted toward general education requirements. For courses that are not taken as part of a University of Chicago study abroad program, students must petition for elective credit from the College before requesting departmental credit. Advanced language students should consider taking special topic courses at the 20000 and 30000 levels. Some of these courses require consent of the instructor.

DEGREE PROGRAM IN FRENCH AND FRANCOPHONE LITERATURE, CULTURE, AND SOCIETY

Program Requirements

Students who elect the major program must meet with the French undergraduate adviser before the end of Spring Quarter of their third year to declare their intention to complete the major and to complete the required paperwork. Students choose their track and appropriate courses in consultation with the French undergraduate adviser. Students must submit to the departmental office an approval form for the major program signed by the French undergraduate adviser by the end of Spring Quarter of their third year. Students must then submit a copy of the signed approval form to their College adviser.

The major program in French consists of ten courses beyond FREN 20300 Language, History, and Culture III. One course must be either FREN 20500 Ecrire en français or FREN 20503 Modes De Raisonnement Francais (taught in Paris). The remaining courses should be upper-level courses in or related to French, and determined according to the student’s major track.

All students must take at least one departmental course at the introductory level. Introductory-level courses (as designated in the course title or description) are designed as “gateway” courses that provide foundations for the major and are suitable for students who have just completed the advanced language requirement. All students must also take at least three courses that include pre-nineteenth-century material.

Two tracks, with different emphases, are offered as paths to the French major. These areas of special emphasis are broadly defined, and the chosen track need not determine all the courses a student can take within the department. The tracks are intended to give students the flexibility to explore their own interests while developing in-depth knowledge of the language, literature, and culture of the Francophone world.

1. French and Francophone Language and Literature: This track focuses on developing advanced proficiency in speaking, reading, and writing French, as well as broad knowledge of the field of French and Francophone literary studies. Through the close study of major works, students learn critical techniques appropriate to their interpretation. Students must complete most of their course work (e.g., readings, writing) in French in order to receive credit. Advanced students may petition to take RLLT 38800 Foreign Language Acquisition, Research and Teaching as one of their courses.

2. French and Francophone Society and Culture: This track is intended for students who have a special interest in understanding the historical, social, and cultural complexity of France and the Francophone world, or in the visual arts, cinema, music, or theater. Students must take a majority of their courses in the department, but are also encouraged to explore appropriate course offerings in History, Political Science, Sociology, Art History, Cinema and Media Studies, Music, and Theater and Performance Studies.

Study Abroad

Students are encouraged to participate in the College’s study abroad programs in France. Many of these programs confer major or minor credit, including the courses in the summer Advanced French program. The three civilization courses in the French-language European Civilization in Paris program can be used for credit in any track of the French major or minor, assuming a student is not using these courses to fulfill the general education civilization studies requirement. For the French and Francophone Society and Culture major track, the three courses from the Autumn African Civilizations in Paris program or the three courses from the Winter Cinema and Media Studies program in Paris can be used for credit (if they are not being used to meet the general education requirements in civilization studies or the arts). Further information is available from the Study Abroad office or at study-abroad.uchicago.edu.
Students may also petition for credit for other courses taken at the University of Chicago Center in Paris, depending on the course content, or for courses taken at other institutions (for instance, at French universities as part of the year-long study abroad program), subject to College procedures and departmental approval.

Grading

French majors must receive quality grades in all required courses. Nonmajors may take departmental courses for P/F grading with consent of instructor. However, all language courses must be taken for a quality grade.

Honors

To qualify for honors, students must have an overall GPA of 3.0 or higher and an average GPA of 3.5 or higher in the major. They must also submit a completed BA paper to their adviser no later than Friday of fifth week of Spring Quarter of their fourth year. Students with papers judged superior by the BA paper adviser and another faculty reader will be recommended to the Master of the Humanities Collegiate Division for honors. Only students who wish to be considered for honors are required to write a BA paper.

Students should select a faculty supervisor for the paper in early Autumn Quarter of their fourth year. During Autumn or Winter Quarter, they may register for FREN 29900 BA Paper Preparation: French. Students seeking honors may count this course towards their course requirements; it must be taken for a quality grade. The BA paper typically is a research paper with a minimum of 15–20 pages, as agreed upon with the BA advisor, and a bibliography written in the language of specialization.

Students must seek permission from their BA paper adviser to use a single paper or project to meet both the major requirements of Romance Languages and Literatures and those of another department or program. Students must also obtain the approval of both program chairs on a form available from the College adviser, to be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Summary of Requirements: Track in French and Francophone Language and Literature

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td></td>
</tr>
</tbody>
</table>

Nine courses in advanced language, literature, or culture (FREN 20601 or above)

Note: This must include at least one introductory-level course and at least three courses which include pre-nineteenth-century material. Courses must include a French language component.

BA paper (if the student wishes to qualify for honors) *

Total units 1000

* Students writing a BA honors paper may include FREN 29900 BA Paper Preparation: French as one of their literature and culture courses.

Summary of Requirements: Track in French and Francophone Society and Culture

One of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td></td>
</tr>
</tbody>
</table>

Nine courses in advanced French language (FREN 20601 or above), and French and Francophone culture, society, history, or arts.

Note: This must include at least one introductory-level course and at least three courses which include pre-nineteenth-century material. Up to three courses may be taken outside the department with approval from the French undergraduate adviser.

BA paper (if the student wishes to qualify for honors) *

Total Units 1000

* Students writing a BA honors paper may include FREN 29900 BA Paper Preparation: French as one of their literature and culture courses.

Sample Program 1: Track in French and Francophone Language and Literature

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 20601</td>
<td>Expression orale et phonétique</td>
<td>100</td>
</tr>
<tr>
<td>FREN 21820</td>
<td>Blinding Enlightenment (introductory-level course)</td>
<td>100</td>
</tr>
<tr>
<td>FREN 22203</td>
<td>The Literary Avant-Garde</td>
<td>100</td>
</tr>
<tr>
<td>FREN 24410</td>
<td>Montaigne dans l'histoire littéraire: inventions et récupérations</td>
<td>100</td>
</tr>
<tr>
<td>FREN 25301</td>
<td>Beautiful Souls, Adventurers, and Rogues. The European 18th Century Novel</td>
<td>100</td>
</tr>
</tbody>
</table>
### Sample Program 2: Track in French and Francophone Society and Culture (with a focus on the social sciences)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td>100</td>
</tr>
<tr>
<td>FREN 23600</td>
<td>L'écriture de l'histoire à la Renaissance</td>
<td>100</td>
</tr>
<tr>
<td>FREN 23610</td>
<td>Litterature et societe: Flaubert et Marx</td>
<td>100</td>
</tr>
<tr>
<td>FREN 26700</td>
<td>Jeanne d'Arc: histoire et legende. Cours introductorie</td>
<td>100</td>
</tr>
<tr>
<td>FREN 28500</td>
<td>Les Revenants: histoire, fiction et société au 19e siècle</td>
<td>100</td>
</tr>
<tr>
<td>FREN 29100</td>
<td>Pascal and Simone Weil</td>
<td>100</td>
</tr>
<tr>
<td>PLSC 27101</td>
<td>Liberalism Confronts Democracy: Tocqueville and Mill</td>
<td>100</td>
</tr>
<tr>
<td>SOSC 27501</td>
<td>Civilisation Européenne I (if not used to fulfill the general education civilization studies requirement)</td>
<td>100</td>
</tr>
<tr>
<td>SOSC 27601</td>
<td>Civilisation Europeenne-2 (if not used to fulfill the general education civilization studies requirement)</td>
<td>100</td>
</tr>
<tr>
<td>SOSC 27701</td>
<td>Civilisation Europeenne-3 (if not used to fulfill the general education civilization studies requirement)</td>
<td>100</td>
</tr>
</tbody>
</table>

### Sample Program 3: Track in French and Francophone Society and Culture (with a focus on theater, cinema, and the arts)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 23404</td>
<td>French Cinema of the 20's and 30's</td>
<td>100</td>
</tr>
<tr>
<td>FREN 23405</td>
<td>A Topography of Modernity: Cinema in Paris, 1890-1925</td>
<td>100</td>
</tr>
<tr>
<td>FREN 23406</td>
<td>Contemporary French Cinema</td>
<td>100</td>
</tr>
<tr>
<td>FREN 24610</td>
<td>Introduction au théâtre français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 25910</td>
<td>Racine</td>
<td>100</td>
</tr>
<tr>
<td>ARTH 24812</td>
<td>Museums and Art</td>
<td>100</td>
</tr>
<tr>
<td>CMLT 24408</td>
<td>Before and After Beckett: Theater and Theory</td>
<td>100</td>
</tr>
<tr>
<td>CMST 27220</td>
<td>Classical Film Theory</td>
<td>100</td>
</tr>
</tbody>
</table>

### Degree Program in Italian Literature

The program in Italian consists of ten courses beyond ITAL 20300 Language, History, and Culture III, and is aimed at developing a broad knowledge of the field through the close study of major works and the critical techniques appropriate to their interpretation. These courses must include ITAL 20400 Corso di perfezionamento and ITAL 23410 Reading and Practice of the Short Story (or an equivalent introductory gateway course designed to facilitate the transition between language courses and upper-level electives). As such, students are strongly encouraged to take this gateway course before beginning upper-level course work. The eight remaining courses should be upper-level courses in or related to Italian. Most will be Italian literature and culture courses, but up to four can be Italian studies courses, which are largely interdisciplinary courses taught by affiliated faculty. A list of eligible Italian studies courses will be maintained on the department website. Students must complete a substantial part of the course work (e.g., readings, writing) in Italian in order to receive credit.

### Study Abroad

Students are encouraged to participate in the College’s study abroad program in Italy. Further information is available from the Study Abroad office or at study-abroad.uchicago.edu.

### Grading

Italian majors must receive quality grades in all required courses. Nonmajors may take departmental courses for P/F grading with consent of instructor. However, all language courses must be taken for a quality grade.
Honors

To qualify for honors, students must have an overall GPA of 3.0 or higher and an average GPA of 3.5 or higher in the major. They must also submit a completed BA paper to their adviser no later than Friday of fifth week of Spring Quarter of their fourth year. Students with papers judged superior by the BA paper adviser and another faculty reader will be recommended to the Master of the Humanities Collegiate Division for honors. Only students who wish to be considered for honors are required to write a BA paper.

Students should select a faculty supervisor for the paper in early Autumn Quarter of their fourth year. During Autumn or Winter Quarter, they may register for ITAL 29900 BA Paper Preparation: Italian. Students seeking honors may count this course towards their course requirements; it must be taken for a quality grade. The BA paper typically is a research paper with a minimum of 15–20 pages, as agreed upon with the BA adviser, and a bibliography written in the language of specialization.

Students must seek permission from their BA paper adviser to use a single paper or project to meet both the major requirements of Romance Languages and Literatures and those of another department or program. Students must also obtain the approval of both program chairs on a form available from the College adviser, to be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

By the beginning of their fourth year, students may be asked to submit a writing sample in Italian. If the department deems language proficiency inadequate, there may be additional requirements to ensure that the BA paper can be successfully written in the language of study.

Summary of Requirements: Italian Literature

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 20400</td>
<td>Corso di perfezionamento</td>
<td>100</td>
</tr>
<tr>
<td>ITAL 23410</td>
<td>Reading and Practice of the Short Story (or equivalent gateway course)</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Eight upper-level Italian courses</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Note: Up to four of the eight may be interdisciplinary Italian studies courses; see department website for list of eligible courses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA paper (if the student wishes to qualify for honors) *</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 1000

* Students writing a BA honors paper may include ITAL 29900 BA Paper Preparation: Italian as one of their literature and culture courses.

Degree Program in Spanish Literature

The program in Spanish consists of ten courses beyond SPAN 20300 Language, History, and Culture III, and is aimed at developing a broad knowledge of the field through the close study of major works and the critical techniques appropriate to their interpretation. These courses must include an advanced language course and SPAN 21500 Introducción al análisis literario, which stresses different approaches to literature and culture. Students must also take three courses from the introductory sequence in the history of the literature, plus an additional five courses in literature and culture. Students must complete a substantial part of the course work (e.g., readings, writing) in Spanish in order to receive credit.

Study Abroad

Students are encouraged to participate in the College’s study abroad programs in Mexico or Spain. The three civilization courses in the Spanish-language Civilization in the Western Mediterranean program in Barcelona can be used for credit in the Spanish major or minor, if these courses are not used to fulfill the general education civilization studies requirement. Further information is available from the Study Abroad office or at study-abroad.uchicago.edu.

Grading

Spanish majors must receive quality grades in all required courses. Nonmajors may take departmental courses for P/F grading with consent of instructor. However, all language courses must be taken for a quality grade.

Honors

To qualify for honors, students must have an overall GPA of 3.0 or higher and an average GPA of 3.5 or higher in the major. They must also submit a completed BA paper to their adviser no later than Friday of fifth week of Spring Quarter of their fourth year. Students with papers judged superior by the BA paper adviser and another faculty reader will be recommended to the Master of the Humanities Collegiate Division for honors. Only students who wish to be considered for honors are required to write a BA paper.

Students should select a faculty supervisor for the paper early in Autumn Quarter of their fourth year. During Autumn or Winter Quarter they may register for SPAN 29900 BA Paper Preparation: Spanish with the faculty member chosen to direct the writing of the BA paper. Students seeking honors may count this course
Towards their course requirements; it must be taken for a quality grade. The BA paper typically is a research paper with a minimum of twenty pages and a bibliography written in the language of specialization.

Students must seek permission from their BA paper adviser to use a single paper or project to meet both the major requirements of Romance Languages and Literatures and those of another department or program. A significant and logical section of the BA paper must be written in the appropriate Romance language in consultation with the student’s BA paper adviser. Students must also obtain the approval of both program chairs on a form available from the College adviser. The form must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

By the beginning of their fourth year, students may be asked to submit a writing sample in Spanish. If the department deems language proficiency inadequate, there may be additional requirements to ensure that the BA paper can be successfully written in the language of study.

Summary of Requirements: Spanish Literature

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 20400</td>
<td>Composición y conversación avanzada I</td>
</tr>
<tr>
<td>SPAN 20404</td>
<td>Redacción y discurso académico I para hablantes nativos</td>
</tr>
<tr>
<td>SPAN 20500</td>
<td>Composición y conversación avanzada II</td>
</tr>
<tr>
<td>SPAN 20504</td>
<td>Redacción y discurso académico II para hablantes nativos</td>
</tr>
<tr>
<td>SPAN 20602</td>
<td>Discurso académico para hablantes nativos</td>
</tr>
<tr>
<td>SPAN 21500</td>
<td>Introducción al análisis literario</td>
</tr>
</tbody>
</table>

Three of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 21703</td>
<td>Introducción a las literaturas hispánicas: textos españoles clásicos</td>
</tr>
<tr>
<td>SPAN 21803</td>
<td>Introducción a las literaturas hispánicas: textos españoles contemporáneos</td>
</tr>
<tr>
<td>SPAN 21903</td>
<td>Intro. a las lit. hispánicas: textos hispanoamericanos desde la colonia a la independencia</td>
</tr>
<tr>
<td>SPAN 22003</td>
<td>Introducción a las literaturas hispánicas: del Modernismo al presente</td>
</tr>
</tbody>
</table>

Five additional courses in Spanish literature and culture

BA paper (if the student wishes to qualify for honors)

Total Units: 1000

* Students writing a BA honors paper may include SPAN 29900 BA Paper Preparation: Spanish as one of their literature and culture courses.

Degree Program in More than One Literature

The programs in more than one Romance literature consist of twelve courses beyond the second-year language sequences. They are designed to accommodate the needs and interests of students who would like to broaden their literary experience. Linguistic competence in at least two Romance languages is assumed. There are two options: a program with equal emphasis on two literatures, and a program with greater emphasis on one literature. Students who wish to include Catalan or Portuguese in their program must choose the second option, with Portuguese or Catalan as a secondary literature.

Students who elect this major program must meet with the undergraduate adviser in each relevant literature before the end of Spring Quarter of their third year to declare their intention to complete the major and to complete the required paperwork. Students choose courses in consultation with both RLLT undergraduate advisers. Students must submit to the departmental office an approval form for the major program signed by both RLLT undergraduate advisers by the end of Spring Quarter of their third year. Students must then submit a copy of the signed approval form to their College adviser.

Grading

RLLT majors must receive quality grades in all required courses. Nonmajors may take departmental courses for P/F grading with consent of instructor. However, all language courses must be taken for a quality grade.

Honors

To qualify for honors, students must have an overall GPA of 3.0 or higher and an average GPA of 3.5 or higher in the major. They must also submit a completed BA paper to their adviser no later than Friday of fifth week of Spring Quarter of their fourth year. Students with papers judged superior by the BA paper adviser and another faculty reader will be recommended to the Master of the Humanities Collegiate Division for honors. Only RLLT students who wish to be considered for honors are required to write a BA paper.

Students should select a faculty supervisor for the paper early in Autumn Quarter of their fourth year. During Autumn or Winter Quarter they may register for FREN 29900 BA Paper Preparation: French, ITAL 29900 BA Paper Preparation: Italian, or SPAN 29900 BA Paper Preparation: Spanish with the faculty member chosen to direct the writing of the BA paper. Students seeking honors may count this course towards their course
requirements; it must be taken for a quality grade. The BA paper typically is a research paper with a minimum of twenty pages and a bibliography written in the language of specialization.

Students must seek permission from their BA paper adviser to use a single paper or project to meet both the major requirements of Romance Languages and Literatures and those of another department or program. A significant and logical section of the BA paper must be written in the appropriate Romance language in consultation with the student's BA paper adviser. Students must also obtain the approval of both program chairs on a form available from the College adviser. The form must be completed and returned to the College adviser by the end of Autumn Quarter of the student's year of graduation.

By the beginning of their fourth year, students may be asked to submit a writing sample in the language of emphasis (or, in the case of equal emphasis on two literatures, in both). If the department deems language proficiency inadequate, there may be additional requirements to ensure that the BA paper can be successfully written in the language of study.

Summary of Requirements
Program with Equal Emphasis on Two Literatures

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td></td>
</tr>
<tr>
<td>ITAL 20400</td>
<td>Corso di perfezionamento</td>
<td></td>
</tr>
<tr>
<td>SPAN 20400</td>
<td>Composición y conversación avanzada I</td>
<td></td>
</tr>
<tr>
<td>SPAN 20402</td>
<td>Curso de redacción académica para hablantes nativos</td>
<td></td>
</tr>
<tr>
<td>SPAN 20500</td>
<td>Composición y conversación avanzada II</td>
<td></td>
</tr>
<tr>
<td>SPAN 20602</td>
<td>Discurso académico para hablantes nativos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Six courses in one Romance literature *</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>Five courses in a second Romance literature *</td>
<td>500</td>
</tr>
<tr>
<td>BA paper (if the student wishes to qualify for honors) *</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Units 1200

* For students studying Spanish as one of their two languages, these courses must include SPAN 21500 Introducción al análisis literario and three introductory Spanish literature courses (chosen from SPAN 21703, SPAN 21803, SPAN 21903, or SPAN 22003).

* Students writing a BA honors paper may include FREN 29900 BA Paper Preparation: French, ITAL 29900 BA Paper Preparation: Italian, or SPAN 29900 BA Paper Preparation: Spanish as one of their literature courses.

Summary of Requirements
Program with Greater Emphasis on One Literature

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>100</td>
</tr>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td></td>
</tr>
<tr>
<td>ITAL 20400</td>
<td>Corso di perfezionamento</td>
<td></td>
</tr>
<tr>
<td>PORT 21500</td>
<td>Curso de Aperfeiçoamento</td>
<td></td>
</tr>
<tr>
<td>SPAN 20400</td>
<td>Composición y conversación avanzada I</td>
<td></td>
</tr>
<tr>
<td>SPAN 20402</td>
<td>Curso de redacción académica para hablantes nativos</td>
<td></td>
</tr>
<tr>
<td>SPAN 20500</td>
<td>Composición y conversación avanzada II</td>
<td></td>
</tr>
<tr>
<td>SPAN 20602</td>
<td>Discurso académico para hablantes nativos</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eight courses in the primary Romance literature (French, Italian, or Spanish).</td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>Note: For students with an emphasis in Spanish, this must include SPAN 21500 and three introductory Spanish literature courses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three courses in a second Romance literature (Catalan, French, Italian, Portuguese, or Spanish)</td>
<td>300</td>
</tr>
<tr>
<td>BA paper (if the student wishes to qualify for honors) *</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Units 1200

* Students writing a BA honors paper may include FREN 29900 BA Paper Preparation: French, ITAL 29900 BA Paper Preparation: Italian, or SPAN 29900 BA Paper Preparation: Spanish as one of their literature courses.
MINOR PROGRAM IN ROMANCE LANGUAGES AND LITERATURES

Students who elect the minor program must meet with the appropriate RLLT undergraduate adviser before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the undergraduate adviser of their language program. Students must submit to the departmental office an approval form for the minor program signed by the appropriate RLLT undergraduate adviser. Students must then submit a copy of the signed approval form to their College adviser by the deadline on the form.

Courses in the minor (1) may not be double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for a quality grade. Students must complete a substantial part of the course work (e.g., readings, writing) in the appropriate Romance language in order to receive credit.

The following groups of courses would comprise a minor in the areas indicated. Other programs may be designed in consultation with the appropriate undergraduate adviser. Minor program requirements are subject to revision.

Minor in Catalan

The RLLT minor in Catalan requires a total of six courses beyond the first-year language sequence (CATA 11100 Accelerated Catalan I or CATA 12200 Catalan for Speakers of Romance Languages I). One course must be an intermediate-advanced language course (CATA 11200 Accelerated Catalan II or equivalent). The balance must consist of five literature and culture courses, including at least one introductory-level course (CATA 21600 Catalan Culture and Society: Art, Music, and Cinema or CATA 21900 Contemporary Catalan Literature).

Summary of Requirements: Minor in Catalan

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATA 11100</td>
<td>Accelerated Catalan I</td>
<td>500</td>
</tr>
<tr>
<td>CATA 12200</td>
<td>Catalan for Speakers of Romance Languages I</td>
<td>500</td>
</tr>
<tr>
<td>CATA 11200</td>
<td>Accelerated Catalan II</td>
<td>500</td>
</tr>
<tr>
<td>CATA 21600</td>
<td>Catalan Culture and Society: Art, Music, and Cinema</td>
<td>500</td>
</tr>
<tr>
<td>CATA 21900</td>
<td>Contemporary Catalan Literature</td>
<td>500</td>
</tr>
<tr>
<td>ITAL 23410</td>
<td>Reading and Practice of the Short Story (or equivalent)</td>
<td>500</td>
</tr>
</tbody>
</table>

Minor in French and Francophone Studies

The RLLT minor program in French and Francophone Studies requires a total of six courses beyond the second-year language sequence (20100-20300). One course must be FREN 20500 Ecrire en français or FREN 20503 Modes De Raisonnement Francais. The remaining courses must consist of five courses in advanced language (20601 and above), literature, society, and culture, including at least one introductory-level course in French. At least one of the courses (at any level) must include pre-nineteenth-century material. With approval from the French undergraduate adviser, one course may be taken outside the department.

Summary of Requirements: Minor in French

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 20500</td>
<td>Ecrire en français</td>
<td>500</td>
</tr>
<tr>
<td>FREN 20503</td>
<td>Modes De Raisonnement Francais</td>
<td>500</td>
</tr>
<tr>
<td>ITAL 23410</td>
<td>Reading and Practice of the Short Story (or equivalent)</td>
<td>500</td>
</tr>
</tbody>
</table>

Minor in Italian

The RLLT minor in Italian requires a total of six courses beyond the second-year language sequence (20100-20300). One of the six courses must be ITAL 23410 Reading and Practice of the Short Story or an equivalent introductory gateway course. Students are strongly encouraged to take this gateway course before beginning upper-level course work. The four remaining courses in the minor will be upper-level courses in or related to Italian. Most will be Italian literature and culture courses, but up to two may be Italian studies courses, which are largely interdisciplinary courses taught by affiliated faculty. A list of eligible Italian studies courses will be maintained on the department website.

Summary of Requirements: Minor in Italian

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITAL 20400</td>
<td>Corso di perfezionamento</td>
<td>500</td>
</tr>
<tr>
<td>ITAL 23410</td>
<td>Reading and Practice of the Short Story (or equivalent)</td>
<td>500</td>
</tr>
</tbody>
</table>
Four courses in Italian literature and culture (up to two may be interdisciplinary Italian studies courses; see department website for list of eligible courses) 400
Total Units 600

Minor in Portuguese
The RLLT minor in Portuguese requires a total of six courses beyond the second-year language sequence (20100-20200). One course must be an advanced language course (above 20200). The balance must consist of five literature and culture courses.

Summary of Requirements: Minor in Portuguese
PORT 21500 Curso de Aperfeiçoamento 100
Five courses in Luso-Brazilian literature and culture (i.e., with PORT numbers above 20200) 500
Total Units 600

Minor in Spanish
The RLLT minor in Spanish requires a total of six courses beyond the second-year language sequence (20100-20300). One course must be an advanced language course (above 20300). The balance must consist of five literature and culture courses, including at least two in the survey sequence.

Summary of Requirements: Minor in Spanish
One of the following: 100
SPAN 20400 Composición y conversación avanzada I
SPAN 20402 Curso de redacción académica para hablantes nativos
SPAN 20404 Redacción y discurso académico I para hablantes nativos
SPAN 20500 Composición y conversación avanzada II
SPAN 20504 Redacción y discurso académico II para hablantes nativos
SPAN 20602 Discurso académico para hablantes nativos
A total of five courses from the following: 500
Two or three of the following survey courses:
SPAN 21703 Introducción a las literaturas hispánicas: textos españoles clásicos
SPAN 21803 Introducción a las literaturas hispánicas: textos españoles contemporáneos
SPAN 21903 Intro. a las lit. hispánicas: textos hispanoamericanos desde la colonia a la independencia
SPAN 22003 Introducción a las literaturas hispánicas: del Modernismo al presente
Two or three additional Spanish literature and culture courses
Total Units 600

A Note on Courses: Some 30000- and 40000-level courses in Catalan (CATA), French (FREN), Italian (ITAL), Portuguese (PORT), and Spanish (SPAN) are open to advanced RLLT undergraduates with consent of instructor. For further information, consult the department.

CATALAN COURSES

Language
CATA 12200-12300. Catalan for Speakers of Romance Languages I-II. 100 Units.
Catalan for Speakers of Romance Languages

CATA 12200. Catalan for Speakers of Romance Languages I. 100 Units.
This course is intended for speakers of other Romance languages to quickly develop competence in spoken and written Catalan. In this introductory course, students learn ways to apply their skills in another Romance language to mastering Catalan by concentrating on the similarities and differences between the two languages.
Instructor(s): A. Girons Masot
Terms Offered: Autumn Spring
Prerequisite(s): Familiarity with a Romance language.
Note(s): Must be taken for a quality grade.
CATA 12300. Catalan for Speakers of Romance Languages II. 100 Units.
This course is intended for speakers of other Romance languages to quickly develop competence in spoken and written Catalan. In this intermediate-level course, students learn ways to apply their skills in another Romance language to mastering Catalan by concentrating on the similarities and differences between the two languages. This course offers a rapid review of the basic patterns of the language and expands on the material presented in CATA 12200.
Instructor(s): A. Girons Masot Terms Offered: Winter
Prerequisite(s): CATA 11100, CATA 12200 or consent of instructor.
Note(s): Must be taken for a quality grade.

CATA 12300. Catalan for Speakers of Romance Languages II. 100 Units.
This course is intended for speakers of other Romance languages to quickly develop competence in spoken and written Catalan. In this intermediate-level course, students learn ways to apply their skills in another Romance language to mastering Catalan by concentrating on the similarities and differences between the two languages. This course offers a rapid review of the basic patterns of the language and expands on the material presented in CATA 12200.
Instructor(s): A. Girons Masot Terms Offered: Winter
Prerequisite(s): CATA 11100, CATA 12200 or consent of instructor.
Note(s): Must be taken for a quality grade.

CATA 21100. Llengua, societat i cultura I. 100 Units.
This advanced-level course will focus on speaking and writing skills through the study of a wide variety of contemporary texts and audiovisual materials. It will provide students with a better understanding of contemporary Catalan society. Students will review problematic grammatical structures, write a number of essays, and participate in multiple class debates.
Instructor(s): A. Girons Masot Terms Offered: Autumn
Prerequisite(s): CATA 11200, CATA 12300 or consent of instructor.

CATA 21200. Llengua, Societat i Cultura II. 100 Units.
This advanced-level course will focus on speaking and writing skills through a wide variety of texts and audiovisual materials. We will study a wide range of Catalan cultural manifestations (e.g., visual arts, music, gastronomy). Students will also review advanced grammatical structures, write a number of essays, and participate in multiple class debates.
Instructor(s): A. Girons Masot Terms Offered: Spring
Prerequisite(s): CATA 21100 or consent of instructor.

Literature and Culture
CATA 21600. Catalan Culture and Society: Art, Music, and Cinema. 100 Units.
This course provides an interdisciplinary survey of contemporary Catalonia. We study a wide range of its cultural manifestations (architecture, paintings, music, arts of the body, literature, cinema, gastronomy). Attention is also paid to some sociolinguistic issues, such as the coexistence of Catalan and Spanish, and the standardization of Catalan.
Instructor(s): A. Girons Masot Terms Offered: Winter
Note(s): The course will be conducted in English.
Equivalent Course(s): SPAN 21610

CATA 21900. Contemporary Catalan Literature. 100 Units.
This course provides a survey of major authors, works, and trends in Catalan literature from the beginning of the twentieth century to the present. We study works representing various literary genres (novel, poetry, short story) and analyze the most important cultural debates of the period.
Instructor(s): A. Girons Masot Terms Offered: Winter
Note(s): Taught in English.
Equivalent Course(s): SPAN 21910, SPAN 31910, CATA 31900

CATA 24019. The Translation Zone: Languages in Catalan-Speaking Territories. 100 Units.
This course will be focusing on Catalan culture and translation in order to address different aspects of translation history, ethics and practice in relation to minority and minoritized languages, identities and communities. The classes would seek to explore and analyze what happens to Catalan literature, film, theatre and performance in translation into other languages (in particular in the Anglophone world), as well as reflect on changing approaches to and affordances of translation within, between and beyond the Catalan-speaking territories in diverse situations of language contact and intercultural encounter involving Catalan-speaking individuals and communities. The course will be structured in four parts: Catalonia in-translation; invisible landscapes; traumatic translations; and cartographies of desire.
Instructor(s): H. Buffery Terms Offered: Spring
Equivalent Course(s): SPAN 24019, SPAN 34019, CATA 34019
CATA 29700. Readings in Special Topics. 100 Units.
This course involves directed readings in special topics not covered by courses offered as part of the program in Catalan. Subjects treated and work to be completed for this course must be chosen in consultation with the instructor no later than the end of the preceding quarter.
Terms Offered: Autumn Spring Winter
Prerequisite(s): CATA 10300 or 20200, depending upon the requirements of the program for which credit is sought
Note(s): Students are required to submit the College Reading and Research Course Form.

FREN COURSES
Language
Must be taken for a quality grade. No auditors are permitted.

FREN 10100-10200-10300. Beginning Elementary French I-II-III.
This three-quarter sequence is intended for beginning and beginning/intermediate students in French. It provides students with a solid foundation in the basic patterns of spoken and written French (e.g., grammar, vocabulary, phonetics, sociocultural norms) to develop their speaking, listening, writing, and reading skills. Although the three classes constitute a sequence, there is enough review and recycling at every level for students to enter the sequence whenever it is appropriate for them based on placement exam results.

FREN 10100. Beginning Elementary French I. 100 Units.
This course is intended for students who have no previous knowledge of French and for those who need an in-depth review of the very basic patterns of the language.
Terms Offered: Autumn Spring Winter
Note(s): Must be taken for a quality grade

FREN 10200. Beginning Elementary French II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in FREN 10100.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10100 or placement.

FREN 10300. Beginning Elementary French III. 100 Units.
This course expands on the material presented in FREN 10200, reviewing and elaborating the basic patterns of the language.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10200 or placement.

FREN 10200. Beginning Elementary French II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in FREN 10100.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10100 or placement.

FREN 10300. Beginning Elementary French III. 100 Units.
This course expands on the material presented in FREN 10200, reviewing and elaborating the basic patterns of the language.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10200 or placement.

FREN 10123. Summer Intensive Elementary French. 300 Units.
Summer Elementary French is an eight-week course which helps students build a solid foundation in the basic patterns of written and spoken French and their use in everyday communication. Attention will be given to all four language skills (listening, speaking, reading, and writing). Completing this sequence is the equivalent of FREN 10100-10200-10300 during the regular academic year, and it will fulfill the College language competency requirement for UChicago students.
Instructor(s): Staff Terms Offered: Summer. Summer 2018 dates: 6/18/18-8/9/18
Note(s): Successfully completing this course will fulfill the College language competency requirement.

FREN 14100. French for Romance Language Speakers. 100 Units.
This course helps students quickly gain skills in spoken and written French by building on their prior working knowledge of another Romance language (Catalan, Italian, Portuguese or Spanish). By relying on the many similarities with other Romance languages, students can focus on mastering the different aspects of French. This class covers content from FREN 10100 and 10200.
Instructor(s): A. McLean Terms Offered: Autumn
Prerequisite(s): 20100 in another Romance language or consent of instructor
FREN 20100-20200-20300. Language, History, and Culture I-II-III.
Courses in this sequence must be taken for a quality grade. In this intermediate-level sequence, students review and extend their knowledge of all basic patterns (e.g., grammar, vocabulary, phonetics, sociocultural norms) of the language. They develop their oral and written skills by describing, narrating, and presenting arguments. They are exposed to texts and audio-visual materials that provide them with a deeper understanding of French literature, culture, and contemporary society.

FREN 20100. Language, History, and Culture I. 100 Units.
This course is intended as a general review and extension of all basic patterns of the language for intermediate students. Students explore selected aspects of contemporary French society through a variety of texts and audio-visual materials.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10300 or placement

FREN 20200. Language, History, and Culture II. 100 Units.
This course helps students develop their descriptive and narrative skills through a variety of texts, audio-visual materials, and activities.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 20100 or placement.

FREN 20300. Language, History, and Culture III. 100 Units.
This course helps students develop their skills in understanding and producing written and spoken arguments in French through readings and debates on various issues relevant to contemporary French society.
Terms Offered: Autumn Spring Winter
Prerequisite(s): PQ: FREN 20200 or placement

FREN 20500. Ecrire en français. 100 Units.
The main goal of this course is to help students acquire advanced grammatical knowledge of the French language and develop their writing skills. This course is strongly recommended for all students who intend to take courses in which writing essays in French are required: French literature classes on campus, the Autumn Paris Civilization program, or the academic yearlong program in Paris. It is also strongly recommended for students who wish to take the advanced proficiency exam in French.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 20300 or placement

FREN 20601. Expression orale et phonétique. 100 Units.
This course focuses on developing the tools necessary for advanced oral proficiency in an academic context. Through active class participation involving a number of class presentations, students practice a variety of discourse styles (e.g., debates, lectures, seminars, interviews). Special emphasis is placed on correct pronunciation.
Terms Offered: Spring
Prerequisite(s): FREN 20300 or placement

FREN 20602. Expression orale : Décrire l’art contemporain en français. 100 Units.
This course explores major contemporary French and francophone artists, art forms and art works. Students will acquire basic linguistic and analytical skills to apprehend visual arts, graphic novels, movies and theatrical performance in French. They will work on individual and group art and academic assignments.
Instructor(s): S. Goutas Terms Offered: Autumn
Prerequisite(s): FREN 20300 or placement
FREN 23333. Reading French for Research Purposes. 100 Units.
This intensive course is designed to take students with a basic knowledge of French to the level of reading proficiency needed for research. To that end, students will work on grammar, vocabulary, and reading strategies. Students will read a range of scholarly texts, a number of which will be directly drawn from their respective areas of research.
Terms Offered: Autumn Spring Summer Winter
Prerequisite(s): FREN 10200 or placement in FREN 10300 for undergraduates. No prerequisite for graduate students, though some prior experience with French is highly recommended.
Equivalent Course(s): FREN 33333

Literature and Culture
All literature classes are conducted in French unless otherwise indicated. Students who are taking a course for credit toward the French major or minor do all work in French. With prior consent of instructor, nonmajors may write in English.

FREN 21719. Histoire, Superstitions et Croyances dans le roman francophone des XXe et XXIe siècles. 100 Units.
Instructor(s): M. Kenfack Terms Offered: Spring
Prerequisite(s): FREN 20500 or 20503

FREN 21903. Introduction à la littérature française III: Littérature à l’Age des Révolutions. 100 Units.
An introduction to some major nineteenth-century French literary works, this course emphasizes the main cultural debates of the period through some close readings and discussions. We study various literary genres from early Romanticism to the rise of Symbolism. Authors may include Chateaubriand, Mme de Staël, Benjamin Constant, Balzac, George Sand, Hugo, Musset, Zola, Lamartine, Baudelaire, Rimbaud, Verlaine, and Mallarmé.
Instructor(s): D. Desormeaux Terms Offered: Autumn
Prerequisite(s): FREN 20500 or 20503, or consent of instructor

FREN 22619. Paris and the French Revolution. 100 Units.
The French Revolution is one of the defining moments of modern world history. This course will explore the mix of social, political, and cultural factors which caused its outbreak in 1789 and go on to consider the overthrow of the Bourbon monarchy in 1792, the drift towards state-driven Terror in 1793-94, and the ensuing failure to achieve political stability down to the advent of Napoleon Bonaparte in 1799. We will view these epochal changes through the prism of France’s capital city. Paris shaped the revolution in many ways, but the revolution also reshaped Paris. The urbane city of European enlightenment acquired new identities as democratic hub from 1789 and as site of popular democracy after 1793-94. In addition, the revolution generated new ways of thinking about urban living and remodelling the city for the modern age. A wide range of primary sources will be used, including visual sources (notably paintings, political cartoons and caricatures, and maps).
Instructor(s): C. Jones Terms Offered: Spring
Prerequisite(s): Students taking FREN 22619/32619 must read French texts in French.
Equivalent Course(s): HIST 32610, HIST 22610, FREN 32619
FREN 22818. Figures du poète au XXème siècle (1900-1950) 100 Units.
En quoi consiste la crise du moi poétique théorisée par Mallarmé à la fin du XIXe siècle ? Quelles sont les formes du lyrisme « neuf et humaniste à la fois » envisagé par Apollinaire au début du XXe ? Est-ce qu’il est encore possible de dire « je » en poésie ? Face à ces changements, le poète doit reconfigurer son rapport à une histoire à la fois bouleversée et bouleversante, et retrouver sa place au milieu d’un renouvellement littéraire désormais nécessaire. Ce cours analysera la façon dont la recherche poétique, dans son contenu comme dans sa forme, fait front au défi de la modernité sans renoncer à sa nature d’expérience de « vie intégrale » (Saint-John Perse). Par le moyen d’une variété expressive extraordinaire, le poète devient une figure souple, en mesure d’adapter son langage et son rôle aux sollicitations de la réalité. Les textes du corpus (Breton, Aragon, Char, Cocteau, Claudel, Éluard, Ponge, etc.) seront accompagnés de références critiques qui serviront de guide pour l’étudiant. À travers ces lectures on essaiera d’explorer comment le poète rend compte des expériences qui l’entourent à l’aube du XXe siècle : la guerre, le cosmopolitisme, l’appel à un engagement politique et culturel, la confluence des arts - autrement dit, tous les champs d’application d’une nouvelle forme de lyrisme. Ainsi le poète se fait-il soldat, voyageur, peintre, musicien, artiste engagé, dans un processus de métamorphose incessante et pourtant indispensable.
Instructor(s): C. Nifosi Terms Offered: Autumn
Prerequisite(s): FREN 20500 or 20503

FREN 22910. Medieval Beasts. 100 Units.
From fables to bestiaries, in the margins of medieval manuscripts and at the center of animal narratives, animals abound in medieval literature. Transformations from human to animal form (or vice versa), friendships between animals and humans, the anthropomorphization of animals, invite us to interrogate the relationship between animals and humans, and to put into question the boundary (if indeed one can be defined) between the two. In this course we will read a variety of medieval texts as well as modern critical theory in order to gain a better understanding of the textual, narrative, hermeneutic, and ethical roles that animals play in medieval literature, and in our contemporary critical posture vis à vis the natural world.
Prerequisite(s): Reading knowledge of French for all; FREN 20500 or 20503 for those seeking credit for the French major/minor.
Note(s): Taught in English, with required discussion section in French for those seeking French credit.
Equivalent Course(s): FREN 32910

FREN 23219. The Medieval Mediterranean. 100 Units.
In this course we will be looking at the medieval Mediterranean world from the perspective of French literature of the 12th and 13th centuries. In direct contrast to an understanding of the Middle Ages as a time of cultural isolation and homogeneity, we will be considering some of the many points of contact between medieval France and other Mediterranean geographies, cultures, and peoples. Our readings will take us to such places as Greece and Rome, Constantinople, Cairo, Syria, Jerusalem, and Spain. The emphasis will be on texts that present these trans-Mediterranean relationships in complex and varied ways. Texts will be selected from a variety of genres, including poetry, epic, and romance, and we will also look at medieval art and art objects.
Instructor(s): J. Victor Terms Offered: Winter
Note(s): All of the Old French texts will be available in modern French translations.

FREN 23404. French Cinema of the 20’s and 30’s. 100 Units.
In our study of two decades in the history of French cinema, we will track the rise of the poetic realist style from the culture of experimentation that was alive in both the French film industry and its surrounding artistic and literary landscape. As an exercise in the excavation of a history of film style, we will consider the salient features of the socio-political, cultural, theoretical, and critical landscape that define the emergence and the apex of poetic realism, and that reveal it as a complicated nexus in the history of film aesthetics. Main texts by Dudley Andrew and Richard Abel will accompany a wide range of primary texts. Films by Epstein, L’Herbier, Buñuel, Dulluc, Dulac, Gance, Clair, Vigo, Feyder, Renoir, Duviivier, Allégret, Carne, Grémillon.
Instructor(s): J. Wild Terms Offered: Autumn
Prerequisite(s): CMST 10100, ARTH 20000, ENGL 10800, ARTV 25300, or consent of instructor.
Note(s): This class is cross-listed with the Department of Romance Languages and Literatures and may be accompanied by a French language section.
Equivalent Course(s): CMST 33404, CMST 23404, FREN 33404

FREN 23500. Caribbean Fiction: Self-Understanding and Exoticism. 100 Units.
The Caribbean is often described as enigmatic, uncommon, and supernatural. While foreigners assume that the Caribbean is exotic, this course will explore this assumption from a Caribbean perspective. We will examine the links between Caribbean and Old World imagination, the relationship between exoticism and Caribbean notions of superstition, and the way in which the Caribbean fictional universe derives from a variety of cultural myths.
Instructor(s): D. Desormeaux Terms Offered: Winter
Prerequisite(s): FREN 20500 or 20503
Note(s): Taught in English. A weekly session in French will be held for majors/minors and graduate students in French and Comparative Literature.
Equivalent Course(s): CMLT 31801, LACS 23500, CMLT 21801, FREN 33500, LACS 33500
FREN 23660. Baudelaire et Flaubert: la vie littéraire en l’an 1857. 100 Units.
Charles Baudelaire (1821-1867) and Gustave Flaubert (1821-1880): two young men from wealthy families, two opponents of bourgeois education, two aborted social callings, two terminal illnesses, two resounding failures before literary institutions, two adventures in love, two satanic fascinations, two notorious literary trials, two conceptions of the craft of writing, two approaches to realism, two criticisms of romantic art, two models of poetic inspiration, two aesthetics of language, two cults of Beauty, all for one and a unique literature. This seminar will be devoted to the literary life of two writers whose canon for more than a century has occupied a central place of importance in contemporary literary criticism. It will be our task to place their work in perspective within the context of the rise of modernism, which is to say, the new status of literature as of the year 1857. We shall endeavor, thus, to discern the authenticity of the creative relationship of each artist with himself and subsequently with others. The point will be to foreground three fundamental principles that will aid in grasping the evolution of the literary world under the Second Empire and under the Third Republic: literary history, writing and the elevation of the writer (Bénichou). Our work will be based on three or four texts by Baudelaire and Flaubert, it being understood that additional works of criticism will illuminate the discussion of these texts.
Instructor(s): D. Desormeaux Terms Offered: Autumn
Prerequisite(s): FREN 20500 or 20503
Note(s): Taught in French. Discussions in both French and English.
Equivalent Course(s): FNDL 23660, FREN 33660

FREN 23810. Memory and Identity in French Literature: Proust to the Present. 100 Units.
This introductory-level course takes as its point of departure Marcel Proust’s conceptualization of memory as the foundation both for the self and for literature. For Proust, literary style conveys the singularity of an individual vision while rescuing experience from the contingencies of time. Literature, identity, and memory are inseparable. Later writers will follow Proust’s lead in defining literature as an art of memory; but they develop this art in different ways, whether by inventing new forms of life-writing or attempting to revive, via fiction, a lived connection to history. How does memory serve as the foundation of individual or collective identities? How does fiction imagine and give form to memory, and how does literature serve as a medium for cultural memory? How do literary works register the intermittence of memory, its failings and distortions, its fragility as well as its attachment to bodies and places? We will tackle these questions through close analysis of a range of texts. In addition to Proust, authors studied may include Yourcenar, Perec, Modiano, Roubaud, and Ernaux.
Instructor(s): A. James Terms Offered: Spring
Note(s): Taught in English. French reading knowledge desirable but not required. The course may be counted toward the French major or minor; students taking the course for French credit will do appropriate readings in French and participate in a weekly French discussion section.
Equivalent Course(s): SIGN 26047, FNDL 23810

FREN 24110. L’écriture du quotidien au XXe siècle. 100 Units.
Si les avant-gardes de la première moitié du siècle prétendent “changer la vie” (selon l’expression de Rimbaud), c’est surtout après la Seconde Guerre mondiale que s’élaborent des théories du quotidien (Lefebvre, de Certeau). Ce cours se propose de confronter les théories du quotidien aux différentes pratiques d’écriture du quotidien et au quotidien (des surréalistes à Annie Ernaux, en passant par Michel Leiris, Roland Barthes, et Georges Perec), afin de mieux cerner la spécificité des approches littéraires du réel.
Instructor(s): A. James Terms Offered: Winter
Prerequisite(s): FREN 20500 or 20503, or consent of instructor
Equivalent Course(s): FREN 34110

FREN 25000. Molière. 100 Units.
Molière crafted a new form of satirical comedy that revolutionized European theater, though it encountered strong opposition from powerful institutions. We will read the plays in the context of the literary and dramatic traditions that Molière reworked (farce, commedia dell’arte, Latin comedy, Spanish Golden Age theater, satiric poetry, the novel), while considering the relationship of laughter to social norms, as well as the performance practices and life of theater in Molière’s day.
Instructor(s): L. Norman Terms Offered: Winter
Prerequisite(s): FREN 20500 or 20503, and one introductory-level literature course taught in French
Equivalent Course(s): TAPS 28470, FREN 35000, REMS 35000
FREN 25220. Pour une sociologie de Rabelais. 100 Units.
Instructor(s): P. Desan
Terms Offered: Spring
Prerequisite(s): FREN 20300
Note(s): Taught in French.
Equivalent Course(s): FREN 35220, FNDL 25220

FREN 26043. Versailles: Art, Power, Resistance and the Sun King’s Palace. 100 Units.
Louis XIV’s Palace of Versailles helped shape European culture and history from the Baroque era through the French Revolution, and it continues to animate contemporary international culture. How does this astounding assemblage of architecture, visual arts, landscaping, performance spaces and political arenas reveal transformations in cultural tastes and power arrangements over the centuries? How do literature and art alternately support and subvert absolutist power and state propaganda? To respond we will range across media, from the bitingly satiric comedies and provocative tragedies of the 17th century (Molière, Racine), through royal edicts regulating colonial slavery and first-hand accounts of the 1789 Women’s March on Versailles that upended the monarchy, and finally to cinematic depictions (from Jean Renoir to Sophia Coppola) and experimental palace installations by the world’s leading contemporary artists (Jeff Koons, Anish Kapoor, etc.). While this course will broadly introduce major themes of French and European culture and history of the early-modern and modern periods, students are also encouraged to pursue in-depth projects in their own areas of interest, from history and political philosophy to the visual arts, theater and performance, and literature.
Equivalent Course(s): SIGN 26043

FREN 27400. Autobiographies Maghrébines: de l’Écriture de Soi à l’Écriture de l’Histoire. 100 Units.
Dès sa naissance, la littérature maghrébine d’expression française s’est distinguée par son ancrage dans le contexte historique, politique et socio-culturel des trois pays du Maghreb que sont le Maroc, l’Algérie et la Tunisie. Souvent, l’écriture de soi a donné lieu à une (ré)écriture de l’Histoire, mettant l’individuel et le collectif en dialogue permanent. L’autobiographie, par exemple, devient le champ d’une exploration simultanée des identités individuelle et collective, le lieu d’un témoignage littéraire autour de l’expérience coloniale et de ses conséquences, ou encore de la confrontation entre le poids persistant de la tradition et le désir de liberté et de changement. En se racontant, l’écrivain maghrébin reste les tensions qui hantent l’espace et la mémoire partagés tout en proposant des voies de reconstruction à travers la révolte, le désir, et le travail de la langue. En s’appuyant sur un corpus d’œuvres marquantes de la littérature maghrébine d’expression française (Albert Memmi, Driss Chraïbi, Kateb Yacine, Assia Djebar, Fatima Mernissi, Abdellatif Laâbi), ce séminaire sera consacré essentiellement à la question du rapport entre écriture personnelle et écriture de l’Histoire dans un contexte maghrébin. On s’interrogera en particulier sur les stratégies narratives et les outils esthétiques mis en œuvre par les auteurs maghrébins pour représenter, affronter ou déconstruire une réalité d’ordre historique, politique ou socio-culturel.
Instructor(s): K. Lyamlahy
Terms Offered: Winter
Prerequisite(s): FREN 20500 or 20503
Note(s): Taught in French.

FREN 29100. Pascal and Simone Weil. 100 Units.
Blaise Pascal in the seventeenth century and Simone Weil in the twentieth formulated a compelling vision of the human condition, torn between greatness and misery. They showed how human imperfection coexists with the noblest callings, how attention struggles with distraction and how individuals can be rescued from their usual reliance on public opinion and customary beliefs. Both thinkers point to the religious dimension of human experience and suggest unorthodox ways of approaching it. We will also study an important text by Gabriel Marcel emphasizing human coexistence and cooperation.
Instructor(s): T. Pavel
Terms Offered: Spring
Prerequisite(s): Undergraduates must be in their third or fourth year.
Note(s): The course will be taught in English. For French undergraduates and graduates, we will hold a bi-weekly one-hour meeting to study the original French texts.
Equivalent Course(s): RLST 24910, FNDL 21812, CMLT 29101, SCTH 38201, FREN 39100
FREN 29322. Europe’s Intellectual Transformations, Renaissance through Enlightenment. 100 Units.
This course will consider the foundational transformations of Western thought from the end of the Middle Ages to the threshold of modernity. It will provide an overview of the three self-conscious and interlinked intellectual revolutions which reshaped early modern Europe: the Renaissance revival of antiquity, the “new philosophy” of the seventeenth century, and the light and dark faces of the Enlightenment. It will treat scholasticism, humanism, the scientific revolution, Bacon, Descartes, Hobbes, Locke, Voltaire, Diderot, and Sade.
Instructor(s): A. Palmer Terms Offered: Winter
Prerequisite(s): Students taking FREN 29322/39322 must read French texts in French.
Note(s): First-year students and non-History majors welcome.
Equivalent Course(s): HIST 29522, SIGN 26036, HIST 39522, RLST 22605, FREN 39322, HCHR 39522

FREN 29700. Readings in Special Topics. 100 Units.
This course is a study of directed readings in special topics not covered by courses offered as part of the program in French. Subjects treated and work completed for the course must be chosen in consultation with the instructor no later than the end of the preceding quarter.
Terms Offered: Autumn Spring Winter
Prerequisite(s): FREN 10300 or 20300, depending upon the requirements of the program for which credit is sought
Note(s): Students are required to submit the College Reading and Research Course Form.

FREN 29900. BA Paper Preparation: French. 100 Units.
In consultation with a faculty member, students devote the equivalent of a one-quarter course to the preparation of a BA project.
Terms Offered: Winter
Prerequisite(s): Consent of undergraduate adviser
Note(s): Students are required to submit the College Reading and Research Course Form. Must be taken for a quality grade. Counts towards course requirements for French majors seeking honors.

Other Courses of Interest

RLLT 38800. Foreign Language Acquisition, Research and Teaching. 100 Units.
This course provides students with a foundation in foreign language acquisition and sociolinguistic research pertinent to foreign language teaching and introduces current teaching methodologies and technologies and their usefulness in the classroom.
Instructor(s): A. Lima Terms Offered: Autumn
Prerequisite(s): Open only to RLL students

SOSC 27501-27601-27701. Civilisation Européenne I-II-III.
Enrollment in Paris study abroad program. This sequence meets the general education requirement in civilization studies. Cette série de cours est un hybride: à la fois une introduction à l’histoire de la civilisation européenne depuis le Moyen Age et une vue d’ensemble de l’histoire de France durant cette période. Notre objectif sera double: d’une part, intégrer étude de textes et découverte de Paris et de sa région; de l’autre, pratiquer le métier d’historiens de la culture. Pour ce faire, nous analyserons de nombreux documents historiques et oeuvres littéraires, philosophiques, artistiques, et musicales. Nous en discuterons lors de nos trois réunions hebdomadaires. De plus, nous étudierons la civilisation française à travers les villages, monastères, et châteaux de la région parisienne et ailleurs. Classes conducted in French. This sequence meets in Paris.

SOSC 27501. Civilisation Européenne I. 100 Units.
No description available.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Advanced knowledge of French

SOSC 27601. Civilisation Europeenne-2. 100 Units.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Advanced Knowledge of French

SOSC 27701. Civilisation Europeenne-3. 100 Units.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Advanced Knowledge of French

SOSC 27601. Civilisation Europeenne-2. 100 Units.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Advanced Knowledge of French

SOSC 27701. Civilisation Europeenne-3. 100 Units.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): Advanced Knowledge of French

ITALIAN COURSES

Language
Must be taken for a quality grade. No auditors are permitted.
ITAL 10100-10200-10300. Beginning Elementary Italian I-II-III.
This three-quarter sequence is intended for beginning and beginning/intermediate students in Italian. It provides students with a solid foundation in the basic patterns of spoken and written Italian (e.g., grammar, vocabulary, sociocultural norms) to develop their speaking, listening, writing, and reading skills. Although the three classes constitute a sequence, there is enough review and recycling at every level for students to enter the sequence at whatever level is appropriate for them. Cultural awareness is enhanced through the use of authentic audio-visual materials and literary texts.

ITAL 10100. Beginning Elementary Italian I. 100 Units.
This course is intended for students who have no previous knowledge of Italian and for those who need an in-depth review of the basic patterns of the language.
Terms Offered: Autumn
Prerequisite(s): ITAL 10100 or placement

ITAL 10200. Beginning Elementary Italian II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in ITAL 10100.
Terms Offered: Winter
Prerequisite(s): ITAL 10100 or placement

ITAL 10300. Beginning Elementary Italian III. 100 Units.
This course expands on the material presented in ITAL 10200, reviewing and elaborating the basic patterns of the language. Successful completion of ITAL 10300 meets the language competence requirement.
Terms Offered: Spring
Prerequisite(s): ITAL 10200 or placement

ITAL 10200. Beginning Elementary Italian II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in ITAL 10100.
Terms Offered: Winter
Prerequisite(s): ITAL 10100 or placement

ITAL 10300. Beginning Elementary Italian III. 100 Units.
This course expands on the material presented in ITAL 10200, reviewing and elaborating the basic patterns of the language. Successful completion of ITAL 10300 meets the language competence requirement.
Terms Offered: Spring
Prerequisite(s): ITAL 10200 or placement

ITAL 12200. Italian for Speakers of Romance Languages. 100 Units.
This course is intended for speakers of other Romance languages to quickly develop competence in spoken and written Italian. Students learn ways to apply their skills in another Romance language to Italian by concentrating on the similarities and differences between languages.
Terms Offered: Spring Winter
Prerequisite(s): 20100 in another Romance language or consent of instructor

ITAL 20100-20200-20300. Language, History, and Culture I-II-III.
In this intermediate-level sequence, students review and extend their knowledge of all basic patterns (e.g., grammar, vocabulary, sociocultural norms) of the language. They develop their oral and written skills in describing, narrating, and presenting arguments. They are exposed to literary and nonliterary texts and audio-visual materials that provide them with a deeper understanding of the Italian-speaking world.

ITAL 20100. Language, History, and Culture I. 100 Units.
This course is a general review and extension of all basic patterns of the language for intermediate students. Students explore the diversity of the Italian-speaking world through the reading of excerpts from contemporary Italian literature.
Terms Offered: Autumn
Prerequisite(s): ITAL 10300 or placement

ITAL 20200. Language, History, and Culture II. 100 Units.
This course develops the use of persuasive and argumentative language. Our focus is on analyzing and debating current issues pertaining to the Italian-speaking world, and articulating sound personal perspectives on these issues. A variety of written, oral, listening, and reading activities allow students to explore different genres, while reviewing grammatical and lexical items. Cultural awareness is enhanced through close study of contemporary Italian film and literature, as well as through in-class discussion.
Terms Offered: Winter
Prerequisite(s): ITAL 20100 or placement
ITAL 20300. Language, History, and Culture III. 100 Units.
This course completes the study of the common grammatical functions and syntactical structures of the oral and written language and introduces students to description and analysis of a variety of texts through written, oral, listening, and reading activities. Students read a contemporary Italian novel and a selection of Italian poetry.
Terms Offered: Spring
Prerequisite(s): ITAL 20200 or placement

ITAL 20200. Language, History, and Culture II. 100 Units.
This course develops the use of persuasive and argumentative language. Our focus is on analyzing and debating current issues pertaining to the Italian-speaking world, and articulating sound personal perspectives on these issues. A variety of written, oral, listening, and reading activities allow students to explore different genres, while reviewing grammatical and lexical items. Cultural awareness is enhanced through close study of contemporary Italian film and literature, as well as through in-class discussion.
Terms Offered: Winter
Prerequisite(s): ITAL 20100 or placement

ITAL 20300. Language, History, and Culture III. 100 Units.
This course completes the study of the common grammatical functions and syntactical structures of the oral and written language and introduces students to description and analysis of a variety of texts through written, oral, listening, and reading activities. Students read a contemporary Italian novel and a selection of Italian poetry.
Terms Offered: Spring
Prerequisite(s): ITAL 20200 or placement

ITAL 20400. Corso di perfezionamento. 100 Units.
This course helps students achieve a very high level of composition and style through the acquisition of numerous writing techniques. Using a variety of literary and nonliterary texts as models, students examine the linguistic structure and organization of several types of written Italian discourse. This course is also intended to help students attain high levels in reading, speaking, and listening through readings and debates on various issues of relevance in contemporary Italian society.
Terms Offered: Autumn
Prerequisite(s): ITAL 20300, placement, or consent of instructor

Literature and Culture

All literature and culture classes are conducted in Italian unless otherwise indicated. Students who are taking a course for credit toward the Italian major or minor do all work in Italian. With prior consent of instructor, nonmajors may write in English.

ITAL 16000. Italian Renaissance: Dante, Machiavelli, and the Wars of Popes and Kings. 100 Units.
This course will consider Florence, Rome, and the Italian city-states in the age of plagues and cathedrals, Dante and Machiavelli, Medici and Borgia (1250-1600), with a focus on literature, philosophy, primary sources, the revival of antiquity, and the papacy’s entanglement with pan-European politics. We will examine humanism, patronage, politics, corruption, assassination, feuds, art, music, magic, censorship, education, science, heresy, and the roots of the Reformation. Writing assignments focus on higher-level writing skills, with a creative writing component linked to our in-class live-action-role-played (LARP) reenactment of a Renaissance papal election. This is a Department of History Gateway course.
Instructor(s): A. Palmer Terms Offered: Spring
Prerequisite(s): Graduate students by consent only; register for the course as HIST 90000 (sect 53) Reading and Research: History.
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages
Equivalent Course(s): CLCV 22216, KNOW 12203, RLST 22203, SIGN 26034, HIST 12203

ITAL 22101. Dante’s Divine Comedy-3: Paradiso. 100 Units.
An in-depth study of the third cantica of Dante’s masterpiece, considered the most difficult but in many ways also the most innovative. Read alongside his scientific treatise the Convivio and his political manifesto the Monarchia.
Instructor(s): H. J. Steinberg Terms Offered: Winter
Prerequisite(s): Completion of the previous courses in the sequence not required, but students should familiarize themselves with the Inferno and the Purgatorio before the first day of class.
Note(s): Taught in English
Equivalent Course(s): FNDL 21804, REMS 32101, ITAL 32101
ITAL 22900. Vico's New Science. 100 Units.
This course offers a close reading of Giambattista Vico's masterpiece, New Science (1744)—a work that sets out to refute "all opinions hitherto held about the principles of humanity." Vico, who is acknowledged as the most resolute scourge of any form of rationalism, breathed new life into rhetoric, imagination, poetry, metaphor, history, and philology in order to promote in his readers that originary "wonder" and "pathos" which sets human beings on the search for truth. However, Vico argues, the truths that are most available and interesting to us are the ones humanity "-authored" by means of its culture and history-creating activities. For this reason the study of myth and folklore as well as archeology, anthropology, and ethnology must all play a role in the rediscovery of man. The New Science builds an "alternative philosophy" for a new age and reads like a "novel of formation" recounting the (hi)story of the entire human race and our divine ancestors. In Vico, a prophetic spirit, one recognizes the fulfillment of the Renaissance, the spokesperson of a particular Enlightenment, the precursor of the Kantian revolution, and the forefather of the philosophy of history (Herder, Hegel, and Marx).
The New Science remained a strong source of inspiration in the twentieth century (Cassirer, Gadamer, Berlin, Joyce, Beckett, etc.) and may prove relevant in disclosing our own responsibilities in postmodernity.
Instructor(s): R. Rubini Terms Offered: Winter
Note(s): Taught in English.
Equivalent Course(s): CMLT 22501, FNDL 21408, ITAL 32900, CMLT 32501

ITAL 23101. Early Italian Lyric: Dante and His Rivals. 100 Units.
This course examines Dante's complicated relationship with other contemporary and near-contemporary lyric poets. In particular, we examine Dante's texts as part of a dense web of contending vernacular discourses instead of as the final word or telos of our studies. For this reason, special emphasis is given to the sonnet form as a ritualized genre in which poetic communities are formed and contending philosophical, political, and sociological visions of society are constructed and deconstructed. The role of books and manuscript culture is especially important as we try to understand the material production and reception of the emergent vernacular literature, and its role and function in late medieval urban Italy.
Instructor(s): J. Steinberg Terms Offered: Autumn
Prerequisite(s): Interested undergraduates should contact instructor before the first day of class
Note(s): The first hour will be dedicated to close reading of poem/s in Italian. Auditors without knowledge of Italian are welcome to arrive for the discussion after that.
Equivalent Course(s): ITAL 33101

ITAL 24218. Unveiling Chivalry: Chivalric literature in Medieval and Early Modern Europe (1100-1600) 100 Units.
The myth of chivalry has been fostered and reshaped from the Middle Ages to the present with damsels-in-distress, knights' self-sacrifice, adventures and courtly love. But how was chivalry in eleventh- or sixteenth-century literature different from today's perception? What changed between historical chivalry and its fictional representation? This course aims to challenge the narrative of chivalry as one characterized by rise and fall, or a movement from virtue to parody, or spirituality to skepticism. We will see instead how each text provides multiple layers of interpretation and how chivalry is redefined across time and space. Exploring the notion of chivalry will also allow us to focus on the so-called "spirituality" of the Middle Ages and the relationship between the Renaissance and the past. We will study chivalric literature from the Chanson de Roland to Cervantes's Don Quijote. A strong emphasis will be given to Italian literature, including Dante's Commedia, Boccaccio's Decameron and Ariosto's Orlando furioso. Readings will also include Chrétien de Troyes's Lancelot and Perceval, with a final session devoted to T.S. Eliot's The Waste Land.
Instructor(s): F. Petricca Terms Offered: Autumn
Note(s): Taught in English.
Equivalent Course(s): ITAL 24218

ITAL 25218. Reading Nonhuman Animals: A Challenge to Anthropocentrism. 100 Units.
How can we “read” a literary nonhuman animal? In what ways does literature deal with ethical and political issues concerning nonhuman animals? What does it mean to live in a multicultural and multispecies world? What does it mean to be “human”? In this course we will ask these and other related questions as they are presented and represented in Italian 20th century literary texts, read alongside philosophical writings, scholarly essays, and visual materials. While maintaining a focus on Italian literature, a comparative approach involving literary works of non-Italian authors will be key in understanding the pervasiveness of the problems that have caused our detachment from nature and our broken relationship with nonhuman animals. We will closely analyze and critically evaluate the works of several authors, including those by Italo Calvino, Primo Levi, Anna Maria Ortese, Elsa Morante, Italo Svevo, Alice Walker, and Franz Kafka, giving particular attention to techniques of close reading. A thematic approach will enable us to explore a large number of critical discourses, from the moral status of nonhuman animals to the long-held assumptions regarding the anthropocentric set of values that have defined (Western) culture. We will also take into consideration different theoretical frameworks such as posthumanist theory and gender studies in order to discuss and evaluate the selected texts from different perspectives and entry points.
Instructor(s): E. Tavella Terms Offered: Winter
Note(s): Taught in English. No previous knowledge of Italian is required.
Equivalent Course(s): CMLT 25218
ITAL 26500. Renaissance Demonology. 100 Units.

In this course we analyze the complex concept of demonology according to early modern European culture from a theological, historical, philosophical, and literary point of view. The term 'demon' in the Renaissance encompasses a vast variety of meanings. Demons are hybrids. They are both the Christian devils, but also synonyms for classical deities, and Neo-platonic spiritual beings. As far as Christian theology is concerned, we read selections from Augustine's and Thomas Aquinas's treatises, some complex exorcisms written in Italy, and a recent translation of the infamous Malleus maleficarum, the most important treatise on witch-hunt. We pay close attention to the historical evolution of the so-called witch-craze in Europe through a selection of the best secondary literature on this subject, with special emphasis on Michel de Certeau's The Possession at Loudun. We also study how major Italian and Spanish women mystics, such as Maria Maddalena de' Pazzi and Teresa of Avila, approach the issue of demonic temptation and possession. As far as Renaissance Neoplatonic philosophy is concerned, we read selections from Marsilio Ficino's Platonic Theology and Girolamo Cardano's mesmerizing autobiography. We also investigate the connection between demonology and melancholy through a close reading of the initial section of Robert Burton's Anatomy of Melancholy and Cervantes's short story The Glass Graduate (El licenciado Vidriera).

Instructor(s): A. Maggi Terms Offered: Winter
Note(s): Taught in Italian.
Equivalent Course(s): KNOW 27700, CMLT 27602, HIST 22110

ITAL 27500. Women and the Mafia in Contemporary Italian Cinema. 100 Units.

This course will examine how gender dynamics within mafia contexts have been represented in a selection of Italian films. Students will engage in cinematic analysis by drawing from sociological and psychological studies on female roles in relation to organized crime. Both these fields, sociology and psychology, have underscored the important part that women play in relation to the mafia, notwithstanding the rigid patriarchal structure that allows only male affiliation. Although focusing primarily on Sicilian mafia, this course will include information on other types of Italian mafia, namely Camorra, 'Ndrangheta and Sacra Corona Unita. Vocabulary in Italian to identify formal elements of the films will be provided throughout the course.

Instructor(s): V. Vegna Terms Offered: Spring
Prerequisite(s): ITAL 20300 or consent of instructor.
Note(s): Taught in Italian.

ITAL 27700. The (Auto)Biography of a Nation: Francesco De Sanctis and Benedetto Croce. 100 Units.

At its core, this course examines the making and legacy of Francesco De Sanctis's History of Italian Literature (1870-71), a work that distinguished literary critic René Wellek defined as "the finest history of any literature ever written" and "an active instrument of aesthetic evolution." We will read the History in the larger context of De Sanctis's corpus, including his vast epistolary exchanges, autobiographical writings, and so-called Critical Essays in order to detail his reform of Hegelian aesthetics, his redefinition of the intellectual's task after the perceived exhaustion of the Renaissance, Enlightenment, and Romantic moments, and his campaign against the bent toward erudition, philology, and antiquarianism in 19th-century European scholarship. We will compare De Sanctis's methodology to that of his scholarly models in France (Alphonse de Lamartine, Alfred Mézières) and Germany (Georg Gottfried Gervinus, Georg Voigt) to explore De Sanctis's claim that literary criticisms - not just literary cultures - are "national." In the second part of the course, we assess Benedetto Croce's appropriation of De Sanctis in his Aesthetics (1902), arguably the last, vastly influential work in its genre and we conclude with Antonio Gramsci's use of De Sanctis for the regeneration of a literary savvy Marxism or philosophy of praxis.

Instructor(s): R. Rubini Terms Offered: Spring
Equivalent Course(s): KNOW 27700, ITAL 37700, CMLT 38800, KNOW 37700, CMLT 28800

ITAL 28219. Negative Empathy, Catharsis, Fear: An Intermedial Approach to Tragedy and Its Transformations. 100 Units.

Literature on empathy has enormously increased in recent decades, especially from the point of view of neuroscience and neuro-aesthetics. Scholars, however, have been focusing on the ethical dimension of empathy: on the identification with the victims, which is also highlighted by the political use of this concept. The course focuses instead on the (more or less latent) empathy with negative characters, which can have a strong cathartic and social function, as a discharge of destructive and self-destructive drives, and is often linked to the representation of fear and other strong emotions. The preliminary step is a theoretical introduction to the category of empathy, from its first eighteenth-century conceptions to new aesthetic and psychoanalytic elaborations at the beginning of twentieth century (especially Theodor Lipp), up to recent developments coming from the neurosciences. Other parallel issues to be introduced are catharsis, identification, and discharge. Greek tragedy, Shakespeare, Giuseppe Verdi and Pier Paolo Pasolini will be studied, as well as the TV series "Breaking Bad," which brilliantly exemplifies what negative empathy means today.

Instructor(s): M. Fusillo Terms Offered: Spring
Note(s): Taught in English.
ITAL 28400. Pasolini. 100 Units.
This course examines each aspect of Pasolini’s artistic production according to the most recent literary and cultural theories, including Gender Studies. We shall analyze his poetry (in particular “Le Ceneri di Gramsci” and “Poesie informa di rosa”), some of his novels (“Ragazzi di vita,” “Una vita violenta,” “Teorema,” “Petrolio”), and his numerous essays on the relationship between standard Italian and dialects, semiotics and cinema, and the role of intellectuals in contemporary Western culture. We shall also discuss the following films: “Accattone,” “La ricotta,” “Edipo Re,” “Teorema,” and “Salo”.
Instructor(s): A. Maggi Terms Offered: Winter
Equivalent Course(s): ITAL 38400, FNDL 28401, CMST 23500, GNSE 28600, CMST 33500

ITAL 29600. The Worlds of Harlequin: Commedia Dell’arte. 100 Units.
This course is an introduction to the Italian art of theatrical improvisation or commedia dell’arte, a type of theater featuring masked characters and schematic plots. We will look at the influence of Boccaccio’s Decameron on the formation of stock-characters, the introduction of women into the realm of theatrical professionalism, the art of costume and mask making, and the Italian knack for pantomime and gestural expression. Readings include such masterpieces in the tradition of comic theater as Machiavelli’s The Mandrake and Goldeni’s Harlequin Servant of Two Masters, as well as their renditions in film.
Instructor(s): R. Rubini Terms Offered: Spring
Equivalent Course(s): ITAL 39601, TAPS 28480

ITAL 29700. Readings in Special Topics. 100 Units.
This course provides directed readings in special topics not covered as part of the program in Italian. Subjects treated and work to be completed for the course must be chosen in consultation with the instructor no later than the end of the preceding quarter.
Terms Offered: Autumn Spring Winter
Prerequisite(s): ITAL 10300 or 20300, depending upon the requirements of the program for which credit is sought
Note(s): Students are required to submit the College Reading and Research Course Form.

ITAL 29900. BA Paper Preparation: Italian. 100 Units.
In consultation with a faculty member, students must devote the equivalent of a one-quarter course to the preparation of a BA project.
Terms Offered: Autumn Winter
Prerequisite(s): Consent of undergraduate adviser
Note(s): Students are required to submit the College Reading and Research Course Form. Students seeking honors may count this course towards their course requirements. Must be taken for a quality grade.

PORTUGUESE/LUSO-BRAZILIAN COURSES

Language
Must be taken for a quality grade. No auditors are permitted.

PORT 10100-10200-10300. Beginning Elementary Portuguese I-II-III.
This sequence is intended for beginning and beginning/intermediate students in Portuguese. It provides students with a solid foundation in the basic patterns of spoken and written Portuguese (e.g., grammar, vocabulary, phonetics, sociocultural norms) to develop their speaking, listening, writing, and reading skills. Although the three courses constitute a sequence, there is enough review and recycling at every level for students to enter the sequence whenever it is appropriate for them.

PORT 10100. Beginning Elementary Portuguese I. 100 Units.
This sequence is intended for beginning and beginning/intermediate students in Portuguese. It provides students with a solid foundation in the basic patterns of spoken and written Portuguese (e.g., grammar, vocabulary, phonetics, sociocultural norms) to develop their speaking, listening, writing, and reading skills. Although the three courses constitute a sequence, there is enough review and recycling at every level for students to enter the sequence whenever it is appropriate for them. This course is intended for students who have no previous knowledge of Portuguese and for students who need an in-depth review of the basic patterns of the language.
Terms Offered: Autumn

PORT 10200. Beginning Elementary Portuguese II. 100 Units.
This course is a rapid review of the basic patterns of the language and expands on the material presented in PORT 10100.
Terms Offered: Winter
Prerequisite(s): PORT 10100 or placement

PORT 10300. Beginning Elementary Portuguese III. 100 Units.
This course expands on the material presented in PORT 10200, reviewing and elaborating the basic patterns of the language.
Terms Offered: Spring
Prerequisite(s): PORT 10200 or placement
Note(s): Successful completion of PORT 10300 fulfills the competency requirement
PORT 10200. Beginning Elementary Portuguese II. 100 Units.
This course is a rapid review of the basic patterns of the language and expands on the material presented in PORT 10100.
Terms Offered: Winter
Prerequisite(s): PORT 10100 or placement

PORT 10300. Beginning Elementary Portuguese III. 100 Units.
This course expands on the material presented in PORT 10200, reviewing and elaborating the basic patterns of the language.
Terms Offered: Spring
Prerequisite(s): PORT 10200 or placement
Note(s): Successful completion of PORT 10300 fulfills the competency requirement

PORT 12200. Portuguese For Spanish Speakers. 100 Units.
This course is intended for speakers of Spanish to develop competence quickly in spoken and written Portuguese. In this intermediate-level course, students learn ways to apply their Spanish language skills to mastering Portuguese by concentrating on the similarities and differences between the two languages.
Terms Offered: Autumn Spring
Prerequisite(s): SPAN 20100 or consent of instructor
Equivalent Course(s): LACS 12200

PORT 13120. Accelerated Portuguese for Speakers of Romance Languages. 300 Units.
Our summer Portuguese course helps students gain intermediate skills in spoken and written Portuguese quickly by building on their prior knowledge of another Romance language (Spanish, French, or Italian). By relying on the many similarities with other Romance languages, students can focus on mastering the different aspects of Portuguese, allowing them to make very quick progress and to develop their abilities for further study at the advanced level or for professional purposes. All students enrolled in Accelerated Portuguese will conclude the program by participating in an ACTFL Oral Proficiency Interview. Each student will then receive an independent, certified rating of speaking ability to document the student’s speaking abilities.
Terms Offered: Summer
Prerequisite(s): At least one year of recent college-level study of Spanish, French, or Italian.
Note(s): This course provides 140 contact hours and accepts the FLAS grant as full tuition.

PORT 14100. Portuguese for Speakers of Romance Languages. 100 Units.
This course helps students quickly gain skills in spoken and written Portuguese by building on their prior working knowledge of another Romance language (Spanish, French, Catalan or Italian). By relying on the many similarities with other Romance languages, students can focus on mastering the different aspects of Portuguese, allowing them to develop their abilities for further study. This class covers content from PORT 10100 and 10200.
Terms Offered: Winter
Prerequisite(s): PORT 20100 or consent of instructor.
Equivalent Course(s): LACS 14100

PORT 14500. Portuguese for the Professions: Intensive Business Portuguese. 100 Units.
This is an accelerated language course that covers vocabulary and grammar for students interested in working in a business environment where Portuguese is spoken. The focus of this highly interactive class is to develop basic communication skills and cultural awareness through formal classes, readings, discussions, and writings.
Instructor(s): A. Lima Terms Offered: Spring
Prerequisite(s): PORT 10200, SPAN 20100, or consent of instructor.

In this intermediate/advanced-level sequence, students review and extend their knowledge of all basic patterns (e.g., grammar, vocabulary, phonetics, sociocultural norms) of the language. They develop their oral and written skills in describing, narrating, and presenting arguments. They are exposed to texts and audio-visual materials that provide them with a deeper understanding of Portuguese literature, culture, and contemporary society.

PORT 20100. Intermediate Portuguese. 100 Units.
This sequence is intended for beginning and beginning/intermediate students in Portuguese. It provides students with a solid foundation in the basic patterns of spoken and written Portuguese (e.g., grammar, vocabulary, phonetics, sociocultural norms) to develop their speaking, listening, writing, and reading skills. Although the three courses constitute a sequence, there is enough review and recycling at every level for students to enter the sequence whenever it is appropriate for them. This course is a general review and extension of all basic patterns of the language for intermediate students. Students explore selected aspects of Luso-Brazilian tradition through a variety of texts.
Terms Offered: Autumn
Prerequisite(s): PORT 10300, 12200 or placement
PORT 20200. Advanced Portuguese. 100 Units.
This course helps students develop their descriptive and narrative skills through exposure to written and oral documents (e.g., literary texts, interviews). Students are taught the grammatical and lexical tools necessary to understand these documents, as well as to produce their own analysis and commentaries.
Terms Offered: Winter
Prerequisite(s): PORT 20100 or placement

PORT 21500. Curso de Aperfeiçoamento. 100 Units.
This course helps students develop their skills in understanding, summarizing, and producing written and spoken arguments in Portuguese through readings and debates on various issues of relevance in contemporary Luso-Brazilian societies. Special consideration is given to the major differences between continental and Brazilian Portuguese. In addition to reading, analyzing, and commenting on advanced texts (both literary and nonliterary), students practice and extend their writing skills in a series of compositions.
Instructor(s): A. Lima Terms Offered: Spring
Prerequisite(s): PORT 20200 or consent of instructor

Literature and Culture
PORT 27200. Introduction to Brazilian Culture. 100 Units.
This course provides a survey of Brazilian culture through its literature, music, cinema, visual arts, and digital culture. Through these different media, we will discuss topics such as urban development, racial issues, gender issues, modernity, deforestation, and internal migrations, besides samba, bossa nova, funk, and visual arts movements, among others. Authors may include Machado de Assis, Oswald de Andrade, Rubem Fonseca, Bernardo Carvalho, Angélica Freitas, Glauber Rocha, Suzana Amaral, and Walter Salles.
Instructor(s): V. Saramago Terms Offered: Winter
Note(s): Taught in English
Equivalent Course(s): LACS 27200, LACS 37200, PORT 37200

PORT 29700. Readings in Special Topics. 100 Units.
This course is directed readings in special topics not covered as part of the program in Portuguese. Subjects treated and work to be completed for the course must be chosen in consultation with the instructor no later than the end of the preceding quarter.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): PORT 10300 or 20200, depending upon the requirements of the program for which credit is sought
Note(s): Students are required to submit the College Reading and Research Course Form.

SPANISH COURSES
Language

Must be taken for a quality grade. No auditors are permitted.

SPAN 10100-10200-10300. Beginning Elementary Spanish I-II-III.
This three-quarter sequence is intended for beginning and beginning/intermediate students in Spanish. It provides students with a solid foundation in the basic patterns of spoken and written Spanish (e.g., grammar, vocabulary, sociocultural norms) to develop their speaking, listening, writing, and reading skills to the level required to demonstrate competency on the Spanish examination. Although the three classes constitute a sequence leading to the Spanish competency examination, there is enough review and recycling at every level for students to enter the sequence whenever it is appropriate for them.

SPAN 10100. Beginning Elementary Spanish I. 100 Units.
This course is intended for students who have no previous knowledge of Spanish, and for those who need an in-depth review of the basic patterns of the language.
Terms Offered: Autumn Winter

SPAN 10200. Beginning Elementary Spanish II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in SPAN 10100.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 10100 or placement
SPAN 10300. Beginning Elementary Spanish III. 100 Units.
This course expands on the material presented in SPAN 10200, reviewing and elaborating the basic patterns of the language as needed to prepare students for the Spanish competency examination.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 10200 or placement

SPAN 10123. Summer Intensive Elementary Spanish. 300 Units.
Summer Elementary Spanish is an eight-week course which helps beginning students build a solid foundation in the basic patterns of written and spoken Spanish and their use in everyday communication. It is specifically designed to help you obtain functional competency in speaking, reading, writing and listening in Spanish. The curriculum in Summer Elementary Spanish is the equivalent of SPAN 10100-10200-10300 during the regular academic year.
Terms Offered: Summer
Note(s): Successfully completing this course will fulfill the College language competency requirement.

SPAN 10200. Beginning Elementary Spanish II. 100 Units.
This course offers a rapid review of the basic patterns of the language and expands on the material presented in SPAN 10100.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 10100 or placement

SPAN 10300. Beginning Elementary Spanish III. 100 Units.
This course expands on the material presented in SPAN 10200, reviewing and elaborating the basic patterns of the language as needed to prepare students for the Spanish competency examination.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 10200 or placement

SPAN 20100-20200-20300. Language, History, and Culture I-II-III.
In this intermediate-level sequence, students review but most of all extend their knowledge of all basic patterns (e.g., grammar, vocabulary, sociocultural norms) of the language. They develop their oral and written skills in describing, narrating, and presenting arguments. They are exposed to texts and audio-visual materials that provide them with a deeper understanding of the Spanish-speaking world.

SPAN 20100. Language, History, and Culture I. 100 Units.
This course is a general extension of all basic patterns of the language for intermediate students. Students explore the diversity of the Spanish-speaking world through a variety of texts and audio-visual materials.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 10300 or placement

SPAN 20200. Language, History, and Culture II. 100 Units.
This course focuses on both objective and subjective description of people, places, and life processes. A variety of written, oral, listening, and reading activities allow students to explore different genres while reviewing grammatical and lexical items pertaining to each individual theme in context. Cultural awareness is enhanced through exposure to an array of target-language media, as well as through in-class discussion.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 20100 or placement

SPAN 20300. Language, History, and Culture III. 100 Units.
This course develops the use of persuasive and argumentative language. Our focus is on analyzing and debating current issues pertaining to the Spanish-speaking world, and articulating sound personal perspectives on these issues. A variety of written, oral, listening, and reading activities allow students to explore an ample selection of topics, while reviewing grammatical and lexical items pertaining to each individual theme in context. Cultural awareness is enhanced through exposure to an array of target-language media as well as through in-class oral presentations and discussions.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 20200 or placement

SPAN 20102-20202-20302. Language, History, and Culture for Heritage Speakers I-II-III.
SPAN 20102. Language, History, and Culture for Heritage Speakers I. 100 Units.
The goal of this first course in a two-course intermediate sequence is to help students who are heritage learners of Spanish to improve their oral, writing and reading skills and to formalize their linguistic ability. Basic grammatical patterns (e.g. grammar, vocabulary, socio-cultural norms) and orthographic conventions are reviewed and practiced in a variety of short papers, oral presentations and class discussions. Awareness of contemporary Hispanic societies and their historical roots will be enhanced through exposure to a variety of literary and non-literary texts and authentic audio-visual materials.
Terms Offered: Winter
Prerequisite(s): SPAN 10300 or placement. Open only to heritage speakers or with consent of instructor.
SPAN 20202. Intermediate Spanish for Heritage Speakers. 100 Units.
This intermediate-level course, which is intended for native or heritage speakers of Spanish, focuses on improving descriptive language skills. Challenging grammatical structures and orthographic conventions are reviewed and practiced in a variety of short papers and class discussions. Both literary and nonliterary texts are read and discussed to enhance awareness of contemporary Hispanic societies and their historical roots. Students are also exposed to the linguistic diversity of Spanish-speaking countries through a variety of audio-visual materials.
Terms Offered: Winter
Prerequisite(s): SPAN 20102 or consent of instructor (based on evaluation)
Note(s): Must be taken for a quality grade.

SPAN 20302. Language, History, and Culture for Heritage Speakers III. 100 Units.
The goal of this second course in a two-course intermediate sequence is to teach heritage learners of Spanish how to use formal written and spoken language to debate and to formulate cogent arguments. Students are expected to analyze particular topics related to the Spanish-speaking world and to participate within an academic forum. Challenging grammatical structures and orthographic conventions are reviewed and practiced in a variety of writing exercises and through class discussions. Students are exposed to a wide range of literary and non-literary texts and audio-visual materials that exemplify the different cultures and regional varieties within the Spanish-speaking world.
Terms Offered: Autumn Spring
Prerequisite(s): SPAN 20102 or placement. Open only to heritage speakers or with consent of instructor.

SPAN 20200. Language, History, and Culture II. 100 Units.
This course focuses on both objective and subjective description of people, places, and life processes. A variety of written, oral, listening, and reading activities allow students to explore different genres while reviewing grammatical and lexical items pertaining to each individual theme in context. Cultural awareness is enhanced through exposure to an array of target-language media, as well as through in-class discussion.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 20100 or placement

SPAN 20300. Language, History, and Culture III. 100 Units.
This course develops the use of persuasive and argumentative language. Our focus is on analyzing and debating current issues pertaining to the Spanish-speaking world, and articulating sound personal perspectives on these issues. A variety of written, oral, listening, and reading activities allow students to explore an ample selection of topics, while reviewing grammatical and lexical items pertaining to each individual theme in context. Cultural awareness is enhanced through exposure to an array of target-language media as well as through in-class oral presentations and discussions.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 20200 or placement

SPAN 20302. Language, History, and Culture for Heritage Speakers III. 100 Units.
The goal of this second course in a two-course intermediate sequence is to teach heritage learners of Spanish how to use formal written and spoken language to debate and to formulate cogent arguments. Students are expected to analyze particular topics related to the Spanish-speaking world and to participate within an academic forum. Challenging grammatical structures and orthographic conventions are reviewed and practiced in a variety of writing exercises and through class discussions. Students are exposed to a wide range of literary and non-literary texts and audio-visual materials that exemplify the different cultures and regional varieties within the Spanish-speaking world.
Terms Offered: Autumn Spring
Prerequisite(s): SPAN 20102 or placement. Open only to heritage speakers or with consent of instructor.

SPAN 20304. Spanish for the Professions. 100 Units.
This course is designed as an alternative to SPAN 20300 for students aspiring to use Spanish in a professional context. In order for both courses to serve as equal preparation for the following course in the sequence (SPAN 20400), the textbook used and the grammatical topics covered in SPAN 20300 and 20304 are identical, while some readings, listenings, and vocabulary will differ. Students will expand their lexical and cultural knowledge of their chosen professional area through self-selected readings and a presentation, and will hone linguistic skills relevant to any workplace environment.
Terms Offered: Spring
Prerequisite(s): SPAN 20200 or consent of instructor

SPAN 20400-20500. Composición y conversación avanzada I-II.
Third-year language sequence
SPAN 20400. Composición y conversación avanzada I. 100 Units.
This course targets the development of advanced writing skills and oral proficiency in Spanish through the study of a wide variety of contemporary journalistic texts and unscripted recordings. Students will review problematic grammatical structures, write a number of essays, and participate in multiple class debates, using the authentic readings and listening segments as linguistic models on which to base their own production.
Terms Offered: Autumn Spring Winter
Prerequisite(s): SPAN 20300 or consent of instructor

SPAN 20500. Composición y conversación avanzada II. 100 Units.
This course, the second segment of two in the third-year language sequence, continues the development of advanced writing skills and oral proficiency in Spanish through the study of a wide variety of contemporary journalistic texts and unscripted recordings. Students will review problematic grammatical structures, write a number of essays, and participate in multiple class debates, using the authentic readings and listening segments as linguistic models on which to base their own production.
Terms Offered: Spring Winter
Prerequisite(s): SPAN 20400 or consent of instructor

SPAN 20602. Discurso académico para hablantes nativos. 100 Units.
This seminar/practicum focuses on developing vocabulary and discourse styles for academic verbal communication. This goal is achieved through exposure to taped formal and informal interviews and public debate in the media. Most important, however, is active class participation. Through a number of class presentations, students put into practice a variety of discourse styles (e.g., debates, lectures, seminars, interviews).
Terms Offered: Spring
Prerequisite(s): SPAN 20400 or consent of instructor. Open only to native and heritage speakers with consent of instructor.

SPAN 23333. Reading Spanish for Research Purposes. 100 Units.
This intensive course is designed to take students with a basic knowledge of Spanish to the level of reading proficiency needed for research. To that end, students will work on grammar, vocabulary, and reading strategies. Students will read a range of scholarly texts, a number of which will be directly drawn from their respective areas of research.
Terms Offered: Spring Summer
Prerequisite(s): One quarter of French or equivalent, placement into SPAN 10200, or an intermediate level of another Romance or classical language.
Equivalent Course(s): SPAN 33333

Literature and Culture
All literature and culture classes are conducted in Spanish unless otherwise indicated. Students who are majoring in Spanish do all work in Spanish. With prior consent of instructor, nonmajors may write in English.

SPAN 21100. Las regiones del español. 100 Units.
This sociolinguistic course expands understanding of the historical development of Spanish and awareness of the great sociocultural diversity within the Spanish-speaking world and its impact on the Spanish language. We emphasize the interrelationship between language and culture as well as ethno-historical transformations within the different regions of the Hispanic world. Special consideration is given to identifying lexical variations and regional expressions exemplifying diverse sociocultural aspects of the Spanish language, and to recognizing phonological differences between dialects. We also examine the impact of indigenous cultures on dialectical aspects. The course includes literary and nonliterary texts, audio-visual materials, and visits by native speakers of a variety of Spanish-speaking regions.
Terms Offered: Spring Winter
Prerequisite(s): SPAN 20300 or consent of instructor
Equivalent Course(s): LACS 21100

SPAN 21703. Introducción a las literaturas hispánicas: textos españoles clásicos. 100 Units.
This course involves careful reading and discussion of significant works from the Spanish Middle Ages, Renaissance, and the Golden Age, including Juan Manuel’s Conde Lucanor, Jorge Manrique’s Coplas, the anonymous Lazarillo de Tormes, and the theater of Calderón.
Instructor(s): F. de Armas Terms Offered: Autumn Winter
Prerequisite(s): SPAN 20300 or consent of instructor
SPAN 21803. Introducción a las literaturas hispánicas: textos españoles contemporáneos. 100 Units.
Este curso ofrecerá un amplio panorama de las literaturas españolas de los siglos XIX y XX. Buena parte de la historia cultural de España ha estado marcada por la ansiedad respecto al supuesto atraso cultural, político, social y económico del país. La modernidad se convierte así en objeto de deseo y de disputa cultural para los intelectuales españoles que luchan por definir en qué consiste y cómo alcanzarla. Este es el tema que nos guiará, de manera flexible, por las obras de autores como Mariano José de Larra, Gustavo Adolfo Bécquer, Rosalía de Castro, Emilia Pardo Bazán, Leopoldo Alas Clarín, Antonio Machado, Federico García Lorca, Ana María Matute, Max Aub y Manuel Rivas, entre otros, complementadas por algunas películas. En relación con este tema principal, se explorarán también el lugar del campo y la ciudad en la imaginación moderna, la cuestión nacional, las luchas por la emancipación de la mujer, las tensiones creativas entre tradición y vanguardia artística, o los debates sobre la historia y la memoria del pasado reciente de España.
Terms Offered: Spring
Prerequisite(s): SPAN 20300 or consent of instructor

SPAN 21903. Intro. a las lit. hispánicas: textos hispanoamericanos desde la colonia a la independencia. 100 Units.
This course examines an array of representative texts written in Spanish America from the colonial period to the late nineteenth century, underscoring not only their aesthetic qualities but also the historical conditions that made their production possible. Among authors studied are Christopher Columbus, Hernán Cortés, Sor Juana Inés de la Cruz, Simón Bolívar, and José Martí.
Instructor(s): L. Brewer-Garcia Terms Offered: Autumn
Prerequisite(s): SPAN 20300 or consent of instructor
Equivalent Course(s): LACS 21903, CRES 21903

SPAN 21910. Contemporary Catalan Literature. 100 Units.
This course provides a survey of major authors, works, and trends in Catalan literature from the beginning of the twentieth century to the present. We study works representing various literary genres (novel, poetry, short story) and analyze the most important cultural debates of the period.
Instructor(s): A. Giron Masot Terms Offered: Winter
Note(s): Taught in English.
Equivalent Course(s): SPAN 31910, CATA 21900, CATA 31900

SPAN 22003. Introducción a las literaturas hispánicas: del Modernismo al presente. 100 Units.
Students in this course study an array of texts written in Spanish America from the late nineteenth century to the present, including the literature of the Hispanic diasporas. Authors may include José Martí, Rubén Darío, Mariano Azuela, Pablo Neruda, César Vallejo, Teresa de la Parra, Jorge Luis Borges, Octavio Paz, Rosario Castellanos, Mario Vargas Llosa, and Pedro Pietri.
Terms Offered: Spring Winter
Prerequisite(s): SPAN 20300 or consent of instructor
Equivalent Course(s): LACS 22003

SPAN 22218. De capa y espada: Martial Arts Culture in the Spanish Golden Age. 100 Units.
In this course we will study the surprising interconnections between literature and Hispanic martial arts in the early modern period (16th and 17th centuries). The course is divided in three units. In Unit 1, we will discuss general issues regarding the practice of fencing and other early modern martial arts, as well as its social and ideological implications. In Unit 2 we will examine the theme of arms and letters by analyzing two philosophical fencing treatises by Jerónimo Carranza and Luis Pacheco-two of the most famous swordsmen in early modern Europe. We will read these masters in the light of the most renowned literary authors of the moment, from Garcilaso de la Vega in the 16th century to Miguel de Cervantes and Francisco de Quevedo in the 17th century. In Unit 3, we will study the importance of fencing in the cultural (re)construction of concepts such as honor, race, gender, and other social issues. To this end, we will explore the narrative production of Maria de Zayas-a pioneer of literary feminism-and two plays by Lope de Vega and Andrés Claramonte.
Instructor(s): M. Olmedo Terms Offered: Autumn
Prerequisite(s): SPAN 20300 or consent of instructor
SPAN 23201. Art, Ekphrasis, and Myth in Early Modern Spanish Theater. 100 Units.
In the early modern age, the verbal had a strong visual component. Poets and playwrights utilized the sense of sight since it was the highest of the Platonic senses and a mnemonic key to lead spectators to remember vividly what they had read or heard, long before spectacle plays were in fashion. One important technique for visualization was ekphrasis, the description of an art work within a text. Often, to perform was to imitate the affects, sentiments and poses of a painting. For this purpose, playwrights such as Cervantes, Lope de Vega and Calderón often turned to the mythological canvases of the Italian Renaissance along with the portraits of great rulers and images of battle. The class will examine the uses of art onstage: mnemonic, mimetic, political, religious comic, tragic, lyric and licentious. It will also delve into different forms of ekphrasis from the notion to the dramatic and from the fragmented to the reversed. Although the course will focus on Spanish plays of the early modern period, it will also include ancient treatises by Cicero, and Pliny as well as Renaissance mnemonic treatises by Della Porta. The course will be in English. Reading knowledge of Spanish is required since plays will be read in the original. Those taking the class for credit in Spanish must write their final paper in Spanish.
Instructor(s): Frederick de Armas Terms Offered: Autumn
Equivalent Course(s): SPAN 33201, CMLT 23212, CMLT 33212

SPAN 23219. Leyes del deseo: miradas queer en España y Latinoamérica. 100 Units.
This course will follow the traces of queer voices throughout different textual and artistic manifestations - from poetry to scenic arts, from narrative to cinema - with the aim to draw an intersectional, unstable and transnational map of rebel textualities and visualities in both the Latin American countries and Spain. As a lateral way of looking, queerness brings together, not without conflict, activism and academia, theory, action and creation. During the course, we will address how these Hispanic queer works problematize notions such as the canon, the tradition, the sociopolitical structures or the idea of family and lineage. By questioning them, we will see how not only these works challenge the fundamental basis of social, political and literary order, but also unfold a fluid, productive alternative to neoliberalism.
Instructor(s): I. Fanlo Terms Offered: Spring
Prerequisite(s): SPAN 20300 or consent of instructor
Note(s): Taught in Spanish. Readings in Spanish and English.

SPAN 23619. Music and Ethnic Authenticity in Mexico and Cuba. 100 Units.
Music and Ethnic Authenticity in Mexico and Cuba, 1900-1950 This course uses literary, artistic, and musical materials to compare visions of Afro-Cuban and Native Mexican cultures as imagined by artists in this time period. Some of the issues in the political and cultural changes behind the remarkable new repertoires created in these two countries include nationalism, nativism, modernism, and relations with France and the U.S. We look at representations of these non-European cultures in paintings, "high-culture" music, anthropological research, and literature. Graduate students will have longer papers and more intense readings. Students will prepare one (oral) reading report, take two short ID/listening quizzes, and prepare a final paper due on Tuesday of Week 11.
Instructor(s): Robert Kendrick Terms Offered: Autumn. Autumn 18 TR 3:30-4:50 GoH 205
Prerequisite(s): Prerequisites: ONE of the following: (a) a Music Core course (101, 102, 104, 122); OR (b) a LACS Core Civ course (LACS 161 or 163); OR (c) a RLL Latin American literature course (e.g. SPAN 219 or 220, or the equivalent). Music-reading NOT necessary; Spanish at a 103 level will help.
Equivalent Course(s): SPAN 33619, LACS 23619, MUSI 33619, LACS 33619, MUSI 33619

SPAN 24019. The Translation Zone: Languages in Catalan-Speaking Territories. 100 Units.
This course will be focusing on Catalan culture and translation in order to address different aspects of translation history, ethics and practice in relation to minority and minoritized languages, identities and communities. The classes would seek to explore and analyze what happens to Catalan literature, film, theatre and performance representations of these non-European cultures in paintings, "high-culture" music, anthropological research, and literature. Graduate students will have longer papers and more intense readings. Students will prepare one (oral) reading report, take two short ID/listening quizzes, and prepare a final paper due on Tuesday of Week 11.
Instructor(s): H. Buffery Terms Offered: Spring
Equivalent Course(s): SPAN 34019, CATALA 34019, CATA 24019

SPAN 24202. Don Quijote. 100 Units.
The course will provide a close reading of Cervantes' Don Quijote and discuss its links with Renaissance art and Early Modern narrative genres. On the one hand, Don Quijote can be viewed in terms of prose fiction, from the ancient Greek romances to the medieval books of knights errant and the Renaissance pastoral novels. On the other hand, Don Quijote exhibits a desire for Italy through the utilization of Renaissance art. Beneath the dusty roads of La Mancha and within Don Quijote's chivalric fantasies, the careful reader will come to appreciate glimpses of images with Italian designs.
Instructor(s): F. de Armas, T. Pavel Terms Offered: Winter
Note(s): Taught in English. Students seeking Spanish credit will read the text in the original and use Spanish for the course assignments.
Equivalent Course(s): SCPT 38250, FNDL 21221, REMS 34202, SPAN 34202, CMLT 38101, CMLT 28101
SPAN 25818. Signs of the Americas. 100 Units.
It is a common misconception that literature can happen only in the alphabet or that such non-alphabetical literatures have long ago ceased to be made. This course corrects such misconceptions by exploring modern and contemporary literatures that have been written with, or in response to, such sign-systems as pictographs, hieroglyphs, totem poles, wampum, and khipu. Focusing especially on the sign-systems of the native Americas, this class gives students a basic introduction to the mechanics of these signs, in order to discuss how these mechanics might be at play in the works of such poets, writers, and artists as Anni Albers, Simon Ortiz, Gerald Vizenor, Louise Erdrich, John Borrows, Charles Olson, Bill Reid, Robert Brighurst, Fred Wah, Clayton Eshleman, Cy Twombly, Joaquin Torres-Garcia, Cecilia Vicuña, and others. Key questions to be asked include: how are these signs an interface for contemporary histories of nation and capital? And: how do those material histories and their identifications in race, gender, kinship, and ecology change when cast in the mechanics, tropes, and figures of these signs? As a "Makers Seminar," this course will include creative alternatives to the standard analytical college paper. (Fiction, Poetry, Theory)
Instructor(s): Edgar Garcia Terms Offered: Spring
Equivalent Course(s): ENGL 25804, LACS 25804

SPAN 26555. Self-determination and Democracy in Spain: The Case of Catalonia. 100 Units.
In recent years, tensions between Spain and Catalonia have called attention to a number of long-standing issues that have remained unresolved in modern Spanish cultural and political history: the recognition of national or regional identities, the rights of minority cultures and languages, the nature of democracy and citizenship… This course will study the history of Spanish and Catalan nation-building, as well as the ideological and cultural discourses generated around those projects, and it will pay particular attention to current debates regarding Catalonia’s claim to self-determination.
Instructor(s): M. Santana Terms Offered: Autumn
Equivalent Course(s): CATA 26555, SPAN 36555, CATA 36555

SPAN 29117. Theater and Performance in Latin America. 100 Units.
What is performance? How has it been used in Latin America and the Caribbean? This course is an introduction to theatre and performance in Latin America and the Caribbean that will examine the intersection of performance and social life. While we will place particular emphasis on performance art, we will examine some theatrical works. We ask: how have embodied practice, theatre and visual art been used to negotiate ideologies of race, gender and sexuality? What is the role of performance in relation to systems of power? How has it negotiated dictatorship, military rule, and social memory? Ultimately, the aim of this course is to give students an overview of Latin American performance including blackface performance, indigenous performance, as well as performance and activism.
Instructor(s): D. Roper Terms Offered: Winter
Prerequisite(s): Undergraduates must be in their third or fourth year
Note(s): Taught in English.
Equivalent Course(s): TAPS 38479, LACS 39117, SPAN 39117, GNSE 29117, CRES 39117, CRES 29117, TAPS 28479, LACS 29117, GNSE 39117

SPAN 29700. Readings in Special Topics. 100 Units.
This course involves directed readings on special topics not covered by courses offered as part of the program in Spanish. Subjects treated and work to be completed for the course must be chosen in consultation with the instructor no later than the end of the preceding quarter.
Terms Offered: Autumn,Winter,Spring
Prerequisite(s): SPAN 10300 or 20300, depending on the requirements of the program for which credit is sought
Note(s): Students are required to submit the College Reading and Research Course Form.

SPAN 29900. BA Paper Preparation: Spanish. 100 Units.
In consultation with a faculty member, students must devote the equivalent of a one-quarter course to the preparation of a BA project.
Terms Offered: Autumn Winter
Prerequisite(s): Consent of undergraduate adviser
Note(s): Students are required to submit the College Reading and Research Course Form. Students seeking honors may count this course towards their course requirements. Must be taken for a quality grade.
RUSSIAN AND EAST EUROPEAN STUDIES

Department Website: http://slavic.uchicago.edu

PROGRAM OF STUDY

The Department of Slavic Languages and Literatures offers courses in the Bosnian/Croatian/Serbian, Czech, Polish, and Russian languages and literatures, and other Slavic and East European cultures, leading to a BA in Russian and East European Studies. The BA degree program is designed to provide students with skills and facility in the languages and cultures of the region. It is intended for students preparing for graduate work, those planning a career in government or industry, and those whose primary aim is to master Russian and East European cultures in the original languages. Students interested in the program are encouraged to consult with the director of undergraduate studies. The contact information for the current director of undergraduate studies may be obtained by consulting the departmental website at slavic.uchicago.edu.

Students who are majoring in other fields of study may also complete a minor in Russian and East European Studies.

GENERAL EDUCATION

Depending on the language(s) of concentration, it is recommended that students majoring in REES satisfy the general education requirement in civilization studies with SOSC 24000-24100 (http://collegecatalog.uchicago.edu/search/?P=SOSC%2024000-24100) Introduction to Russian Civilization I-II or HIST 13100-13200-13300 (http://collegecatalog.uchicago.edu/search/?P=HIST%2013100-13200-13300) History of Western Civilization I-II-III.

GRADING

Students who are majoring or minorin in Russian and East European Studies must receive a quality grade in all courses taken to meet requirements in the major or minor. Nonmajors and nonminors have the option of taking courses on a P/F basis at the discretion of the instructor (except for language courses, which must be taken for quality grades). For the major a minimum of seven courses must bear University of Chicago course numbers and be completed for quality grades.

HONORS

To be eligible for honors in Russian and East European Studies, students must maintain an overall College GPA of 3.25 or higher and of 3.5 or higher in the major. Students must indicate their intention to pursue honors to the director of undergraduate studies no later than the end of the first week of the first quarter of their fourth year.

In addition, students pursuing honors must write an acceptable BA paper in their final year under the supervision of a faculty member in the Department of Slavic Languages and Literatures. Students must submit the BA paper to the BA supervisor no later than Friday of fifth week in Spring Quarter of their fourth year.

At the latest by the Autumn Quarter of their fourth year, students should begin the BA process by consulting with the director of undergraduate studies. Students may register for the BA Paper seminar (REES 29900 BA Paper Workshop) with approval of the BA supervisor. This course will confer general College elective credit, but it will not count toward the major. If the completed bachelor’s paper is judged by the supervisor and a second faculty member to be a distinguished example of original research or criticism, the student is recommended to the College for graduation with honors in Russian and East European Studies. The final decision regarding the granting of any degree with honors rests with the Collegiate divisional master.

ADVISING

Students wishing to declare the major should meet with the director of undergraduate studies. Further information on the undergraduate program is available in the departmental office (Foster 406, 773.702.8033). Questions about placement, competency, and proficiency examinations in Russian should be directed to the coordinator of Russian language courses.

STUDY ABROAD

Several study abroad opportunities are offered in subjects and geographic areas of interest to students who are majoring in Russian and East European Studies, including those described below. For more information, students should consult with the study abroad advisers or visit study-abroad.uchicago.edu.

1. Smolny College: The University of Chicago sponsors summer, semester-long, and year-long programs at Smolny College, a joint Russian-American college in St. Petersburg. College-level courses are taught in Russian and English on a broad range of subjects, as well as language courses.

2. Russian Civilization in Paris: A three-part sequence of courses is taught by University of Chicago faculty at the Center in Paris. The program includes an extended excursion to a Russian city. This program satisfies the general education requirement in civilization studies.

3. FLAG study: Students who wish to do a summer study abroad program can apply for a Foreign Language Acquisition Grant (FLAG) that is administered by the College and provides support for a
minimum of eight weeks of study at a recognized summer program abroad. Students must have completed RUSS 10300 Elementary Russian-3 or its equivalent to be eligible for FLAG support for the study of Russian. For more information, visit study-abroad.uchicago.edu/programs/byType/summer-grants.

PROGRAM REQUIREMENTS

Major in Russian and East European Studies (REES). The BA in REES requires twelve courses, which fall into two categories: courses in the major language of study and elective courses. In this way students have the flexibility to construct a course of study that accords with their interests.

MAJOR IN RUSSIAN AND EAST EUROPEAN STUDIES

1. Six language courses at the 20000 level or beyond. In exceptional circumstances students may petition to substitute three courses in a concentrated area of study for three quarters of study in the major language.

   This requirement may be satisfied in whole or in part by examination credit based on a University placement exam. Students who fulfill the language requirement with fewer than three quarters of study must substitute elective courses offered in the Department of Slavic Languages and Literatures.

2. Six elective courses in REES or in languages offered by Slavic Languages and Literatures. This requirement is designed to allow students to tailor their program to their intended goals and career track.

   A maximum of one Reading and Research course (REES 29700 [http://collegecatalog.uchicago.edu/search/?P=REES%2029700] Reading/Research: Russian and Eastern European Studies) may be counted as an elective course.

   Courses in the major may not be double-counted with general education requirements. A minimum of seven courses in the major must be completed for quality grades at the University of Chicago.

   NOTE: Students who entered the University prior to Autumn 2015 may choose to fulfill the requirements here or those that were in place when they entered the University. For questions about course eligibility, contact the director of undergraduate studies.

SUMMARY OF REQUIREMENTS FOR THE MAJOR IN RUSSIAN AND EAST EUROPEAN STUDIES

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Six courses in Russian or an East European language at the 20000 level or above*</td>
<td>600</td>
</tr>
<tr>
<td>Six elective courses</td>
<td>600</td>
</tr>
<tr>
<td>Total Units</td>
<td>1200</td>
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</tbody>
</table>

* Credit may be granted by examination. Up to three quarters worth of placement credit can be counted toward the major. When more than half of the language requirement (the equivalent of four to six quarters of study) is met by examination, electives in the Department of Slavic Languages and Literatures must be substituted for the additional quarters of language credit granted (i.e., if a student places out of four quarters of language study, one elective course must be substituted into the major. If five quarters of credit are granted, two electives must be substituted, etc.). Introductory courses in another Slavic or East European language can be used as electives.

MINOR PROGRAM IN RUSSIAN AND EAST EUROPEAN STUDIES

The minor in Russian and East European Studies requires seven courses, including at least three language courses at the 20000 level or higher and at least two REES courses.

Courses in the minor (1) may not be double counted with the student’s major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor in Russian and East European Studies

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<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
<tr>
<td>Three second-year courses in a Russian or East European language*</td>
<td>300</td>
</tr>
<tr>
<td>Four elective courses (including at least two REES courses)</td>
<td>400</td>
</tr>
<tr>
<td>Total Units</td>
<td>700</td>
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*Credit may be granted by examination.
**Bosnian, Croatian, and Serbian Courses**

**BCSN 10103-10203-10303. First-Year Bosnian/Croatian/Serbian I-II-III.**
The major objective of the sequence is to build a solid foundation in the basic grammatical patterns of written and spoken Bosnian/Croatian/Serbian, while simultaneously introducing both the Cyrillic and Latin alphabets. This sequence is complemented with cultural and historical media from the Balkans and is designed for students with a wide range of interests. Screenings of movies and other audio-visual materials are held in addition to scheduled class time. Knowledge of a Slavic language and background in linguistics not required.

**BCSN 10103. First-Year Bosnian/Croatian/Serbian I. 100 Units.**
In this introductory course of a three-course sequence in Bosnian/Croatian/Serbian (BCS) languages and cultures, students are encouraged to concentrate on the language of their interest and choice. The major objective is to build a solid foundation in the grammatical patterns of written and spoken BCS, while introducing both the Cyrillic and Latin alphabets. This is achieved through a communicative situation-based approach, textbook dialogues, reinforcement by the instructor, screenings of film shorts, TV announcements, documentaries, commercials, and the like. The course includes a sociolinguistic component, an essential part of understanding the similarities and differences between the languages. Mandatory drill sessions are held twice per week, offering students ample opportunity to review and practice materials presented in class.
Instructor(s): Nada Petkovic
Terms Offered: Autumn

**BCSN 10203. First-Year Bosnian/Croatian/Serbian II. 100 Units.**
In this introductory course of a three-course sequence in Bosnian/Croatian/Serbian (BCS) languages and cultures, students are encouraged to concentrate on the language of their interest and choice. The major objective is to build a solid foundation in the grammatical patterns of written and spoken BCS, while introducing both the Cyrillic and Latin alphabets. This is achieved through a communicative situation-based approach, textbook dialogues, reinforcement by the instructor, screenings of film shorts, TV announcements, documentaries, commercials, and the like. The course includes a sociolinguistic component, an essential part of understanding the similarities and differences between the languages. Mandatory drill sessions are held twice per week, offering students ample opportunity to review and practice materials presented in class.
Instructor(s): Nada Petkovic
Terms Offered: Winter

**BCSN 10303. First-Year Bosnian/Croatian/Serbian III. 100 Units.**
In this three-quarter sequence introductory course in Bosnian/Croatian/Serbian (BCS) languages and cultures, students are encouraged to concentrate on the language of their interest and choice. The major objective is to build a solid foundation in the grammatical patterns of written and spoken BCS, while introducing both the Cyrillic and Latin alphabets. This is achieved through a communicative situation-based approach, textbook dialogues, reinforcement by the instructor, screenings of film shorts, TV announcements, documentaries, commercials, and the like. The course includes a sociolinguistic component, an essential part of understanding the similarities and differences between the languages. Mandatory drill sessions are held twice per week, offering students ample opportunity to review and practice materials presented in class.
Instructor(s): Nada Petkovic
Terms Offered: Spring
BCSN 20103-20203-20303. Second-Year Bosnian/Croatian/Serbian I-II-III.
The second-year sequence in Bosnian/Croatian/Serbian languages and cultures is a continuation of first-year BCS and therefore assumes one year of formal study of the target language(s) or equivalent course work elsewhere. The sequence is focused on spoken and written modern BCS, emphasizing communicative practice in authentic cultural contexts. The language(s) are introduced through a series of dialogues gathered from a variety of textbooks published in Serbia, Croatia, and Bosnia, as well as newspaper articles, short biographies, poems, and song lyrics in both the Latin and Cyrillic alphabets. A vast archive of audiovisual materials, representing both high and popular culture, constitutes an integral part of every unit. Simultaneously, aural comprehension, speaking, grammar, and vocabulary are reinforced and further developed throughout the year. Mandatory drill sessions are held twice a week, offering students ample opportunity to review and practice materials presented in class.

BCSN 20103. Second-Year Bosnian/Croatian/Serbian I. 100 Units.
The first quarter is devoted to an overview of grammar, with emphasis on verbal morphology and syntax, through the reading of a series of literary texts in both the Latin and Cyrillic alphabets.
Instructor(s): Nada Petkovic Terms Offered: Autumn
Prerequisite(s): BCSN 10303 or consent of instructor

BCSN 20203. Second-Year Bosnian/Croatian/Serbian II. 100 Units.
The second and third quarters are devoted to further developing active mastery of Bosnian/Croatian/Serbian through continued readings, grammar drills, compositions, and conversational practice. Study of word formation, nominal and adjectival morphology, and syntax are emphasized. Screenings of movies and other audio-visual materials are held in addition to scheduled class time.
Instructor(s): Nada Petkovic Terms Offered: Winter

BCSN 20303. Second-Year Bosnian/Croatian/Serbian III. 100 Units.
The second and third quarters are devoted to further developing active mastery of Bosnian/Croatian/Serbian through continued readings, grammar drills, compositions, and conversational practice. Study of word formation, nominal and adjectival morphology, and syntax are emphasized. Screenings of movies and other audio-visual materials are held in addition to scheduled class time.
Instructor(s): Nada Petkovic Terms Offered: Spring

BCSN 21100. Advanced BCS: Literary Readings. 100 Units.
Equivalent Course(s): BCSN 31103

BCSN 21101. Advanced Bosnian/Croatian/Serbian: Language through Fiction. 100 Units.
Advanced BCS courses encompass both the 3rd and 4th years of language study, with the focus changed from language structure and grammar to issues in interdisciplinary content. The courses are not in sequence. Language through Fiction is designed to help students and instructors over one of the most difficult hurdles in language training—the transition from working through lessons in a textbook to reading unedited texts. Literature represents the greatest development of the expressive possibilities of a language and reveals the bounds within which language operates. The texts will immerse motivated language students in a complete language experience, as the passages and related exercises present the language's structure on every page. Students will learn how to engage the natural, organic language of a literary text across a variety of styles and themes. The course assumes that students are familiar with basic grammar and vocabulary, as well as both the Latin and Cyrillic alphabets. It is particularly appealing to students who are interested in the literature, history, and anthropology of the region. Equivalent Course(s): REES 31103, BCSN 31101, REES 21100
Instructor(s): Nada Petkovic Terms Offered: Autumn
Equivalent Course(s): REES 21101, BCSN 31104, REES 31104
BCSN 21200. Advanced Bosnian/Croatian/Serbian: Language Through Film. 100 Units.
Advanced BCS courses encompass both the 3rd and 4th years of language study, with the focus changed from language structure and grammar to issues in interdisciplinary content. The courses are not in sequence. This course addresses the theme of Yugoslav and Post-Yugoslav identity through discussion and interpretation based on selected films, documentaries, images, and related texts-historical and literary, popular press, advertisements, screenplays, and literature on film. Emphasis is on interpersonal communication as well as the interpretation and production of language in written and oral forms. The course engages in systematic grammar review, along with introduction of some new linguistic topics, with constant practice in writing and vocabulary enrichment. The syllabus includes the screening of six films, each from a different director, region, and period, starting with Cinema Komunisto (2012), a documentary by Mila Turajlić. This film will be crucial for understanding how Yugoslav cinema was born and how, in its origins, it belongs to what a later cinephile, Fredric Jameson, has called a “geopolitical aesthetic.” We shall investigate the complex relationship between aesthetics and ideology in the Yugoslav and Post-Yugoslav cinema, and pay close attention to aesthetic conceptions and concrete formal properties, and more importantly, to language, narrative logic, and style.
Instructor(s): Nada Petkovic Terms Offered: Winter
Equivalent Course(s): BCSN 31203

BCSN 21300. (Re)Branding the Balkan City: Contemp. Belgrade/Sarajevo/Zagreb. 100 Units.
The course will use an urban studies lens to explore the complex history, infrastructure, and transformations of these three cities, now the capitals of Serbia, Bosnia and Hercegovina, and Croatia. Drawing on anthropological theory and ethnography of the city, we will consider processes of urban destruction and renewal, practices of branding spaces and identities, urban life as praxis, art and design movements, architectural histories and styles, metropolitan citizenship, and the broader politics of space. The course is complemented by cultural and historical media, guest speakers, and virtual tours. Classes are held in English. No knowledge of BCS is required. However, this module can fulfill a language requirement or simply further the study of BCS with additional weekly sections, materials, discussions, and presentations in the target language.
Instructor(s): Nada Petkovic Terms Offered: Spring
Equivalent Course(s): REES 31303, REES 21300, BCSN 31303

BCSN 21400. Advanced BCS: Language through Art and Architecture. 100 Units.
The advanced Bosnian/Croatian/Serbian (BCS) language course is designed to lead a diverse group of students—including heritage speakers—through a variety of topics and subjects to impart nuanced communication, comprehension, and writing proficiency. This course, which encompasses both the 3rd and 4th years of language study, changes the focus from language structure and grammar to issues in interdisciplinary content. Each module foregrounds a different theme and leverages a different medium-fiction, film, art and architecture, urban anthropology, etc. Unlike the first- and second-year courses, advanced BCS courses are not in sequence, and students can take them randomly, over the course of two academic years to fulfill their 3rd and/or 4th year of language study. This year’s sequences are as follows: Language through Fiction-Autumn Quarter 2017; Language through Film-Winter Quarter 2018; Language through Art and Architecture-Spring Quarter 2018. The course is complemented with cultural and historical media from the Balkans, guest speakers, cultural events, and field trips.
Equivalent Course(s): BCSN 31403

BCSN 29701. Intensive BCS Language and Culture Study. 100 Units.

CZECH COURSES

CZEC 10203. First-Year Czech-2. 100 Units.
No description available.
Terms Offered: Winter

CZEC 10303. First Year Czech-3. 100 Units.
No description available.
Terms Offered: Spring

CZEC 20103. Second Year Czech-1. 100 Units.
The main goal of this course is to enable students to read Czech proficiently in their particular fields. Conversation practice is included. The program is flexible and may be adjusted according to the needs of the students.
Instructor(s): Malynne Sternstein Terms Offered: Autumn
Prerequisite(s): CZEC 10303 or consent of instructor.

CZEC 29700. Reading and Research Course. 100 Units.
Terms Offered: Autumn,Winter,Spring
Prerequisite(s): Consent of instructor and Departmental Adviser
Note(s): Students are required to submit the College Reading and Research Course Form.
CZEC 29900. BA Paper. 100 Units.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Open to fourth-year students who are majoring in Slavic Languages and Literatures with consent of instructor and Departmental Adviser
Note(s): Students are required to submit the College Reading and Research Course Form. This course must be taken for a quality grade.

Polish Courses

POLI 10103-10203-10303. First-Year Polish I-II-III.
This sequence teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.

POLI 10103. First-Year Polish I. 100 Units.
This course teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.
Instructor(s): Staff
Terms Offered: Autumn

POLI 10203. First-Year Polish II. 100 Units.
This course includes instruction in grammar, writing, and translation, as well as watching selected Polish movies. Selected readings are drawn from the course textbook, and students also read Polish short stories and press articles. In addition, the independent reading of students is emphasized and reinforced by class discussions. Work is adjusted to each student’s level of preparation. Drill sessions to be arranged.
Terms Offered: Winter

POLI 10303. First Year Polish-3. 100 Units.
This course teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.
Terms Offered: Spring

POLI 10203. First-Year Polish II. 100 Units.
This course includes instruction in grammar, writing, and translation, as well as watching selected Polish movies. Selected readings are drawn from the course textbook, and students also read Polish short stories and press articles. In addition, the independent reading of students is emphasized and reinforced by class discussions. Work is adjusted to each student’s level of preparation. Drill sessions to be arranged.
Terms Offered: Winter

POLI 10303. First Year Polish-3. 100 Units.
This course teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.
Terms Offered: Winter

POLI 20103-20203-20303. Second-Year Polish I-II-III.
This sequence includes instruction in grammar, writing, and translation, as well as watching selected Polish movies. Selected readings are drawn from the course textbook, and students also read Polish short stories and press articles. In addition, the independent reading of students is emphasized and reinforced by class discussions. Work is adjusted to each student’s level of preparation.

POLI 20103. Second-Year Polish I. 100 Units.
This course includes instruction in grammar, writing, and translation, as well as watching selected Polish movies. Selected readings are drawn from the course textbook, and students also read Polish short stories and press articles. In addition, the independent reading of students is emphasized and reinforced by class discussions. Work is adjusted to each student’s level of preparation.
Instructor(s): Staff
Terms Offered: Autumn
Prerequisite(s): POLI 10300 or equivalent

POLI 20203. Second-Year Polish II. 100 Units.
No description available.
Terms Offered: Winter
POLI 20303. Second-Year Polish-3. 100 Units.
This course teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.
Terms Offered: Spring
Prerequisite(s): POLI 10300 or equivalent; drills to be scheduled

POLI 20203. Second-Year Polish II. 100 Units.
No description available.
Terms Offered: Winter

POLI 20303. Second-Year Polish-3. 100 Units.
This course teaches students to speak, read, and write in Polish, as well as familiarizes them with Polish culture. It employs the most up-to-date techniques of language teaching (e.g., communicative and accelerated learning, and learning based on students’ native language skills), as well as multileveled target-language exposure.
Terms Offered: Spring
Prerequisite(s): POLI 10300 or equivalent; drills to be scheduled

POLI 20403. Third Year Polish-1. 100 Units.
The process of learning in all three quarters of Third-Year Polish is framed by three themes, which most succinctly but aptly characterize Polish life, culture, and history: in the Autumn Quarter—the noble democracy in the Commonwealth of Both Nations, in the Winter Quarter—the fight for independence, and in the Spring Quarter—the newly independent Poland. During the course of the year, students also improve their knowledge of advanced grammar and stylistics. All work in Polish.
Equivalent Course(s): POLI 30403

POLI 20503. Third-Year Polish - 1. 100 Units.
Equivalent Course(s): POLI 30503

POLI 20603. Third-Year Polish-3. 100 Units.
The process of learning in all three quarters of Third-Year Polish is framed by three themes, which most succinctly but aptly characterize Polish life, culture, and history: in the Autumn Quarter—the noble democracy in the Commonwealth of Both Nations, in the Winter Quarter—the fight for independence, and in the Spring Quarter—the newly independent Poland. During the course of the year, students also improve their knowledge of advanced grammar and stylistics. All work in Polish.
Equivalent Course(s): POLI 30603

POLI 20700. Third-Year Polish III. 100 Units.
Terms Offered: Spring
Equivalent Course(s): POLI 30700

POLI 24300. Polish Through Literary Readings III. 100 Units.
Instructor(s): Kinga Kosmala Terms Offered: Spring
Prerequisite(s): POLI 30300 or equivalent

POLI 27100. From Poland to Popland. 100 Units.
In Poland, the divide between high and low strata of culture was not negotiable until the postwar advance of mass culture and technology, facilitated by the void created by the disappearing Polish folklore and social programs such as a systemic building of a classless society. Therefore, this course’s main focus is on the trajectory of negotiations and mutual impact between these two cultural spheres, which in turn created a new set of cultural references and associations. On the one hand, the course offers an analysis of this complex interaction, through cinematic adaptations, between Polish canonical literature and contemporary cinema; while on the other, it discusses the young generation of Polish writers’ recent engagement of youth culture, consumerism, popnationalism, and the standardized subculture of nouveau-riches. The course discusses main theoretical approaches to the popular culture; all materials are in English.
Instructor(s): B. Shallcross Terms Offered: Winter 2013
Equivalent Course(s): POLI 37100

RUSSIAN COURSES

RUSS 10103. First-Year Russian-1. 100 Units.
This course introduces modern Russian to students who would like to speak Russian or to use the language for reading and research. All four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed. Students are also introduced to Russian culture through readings, videos, and class discussions. This year-long course prepares students for the College Language Competency Exam, for continued study of Russian in second-year courses, and for study or travel abroad in Russian-speaking countries. Conversation practice is held twice a week.
RUSS 10123. Summer Intensive Introductory Russian. 300 Units.

RUSS 10203. First-Year Russian-2. 100 Units.
This course introduces modern Russian to students who would like to speak Russian or to use the language for reading and research. All five major communicative skills (i.e., reading, writing, listening, comprehension, and speaking) are stressed. Students are also introduced to Russian culture through readings, videos, and class discussions. This yearlong course prepares students for the College Language Competency Exam, for continued study of Russian in second-year courses, and for study or travel abroad in Russian-speaking countries. Conversation practice is held twice a week.

RUSS 10303. First-Year Russian-3. 100 Units.
This course introduces modern Russian to students who would like to speak Russian or to use the language for reading and research. All four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed. Students are also introduced to Russian culture through readings, videos, and class discussions. This yearlong course prepares students for the College Language Competency Exam, for continued study of Russian in second-year courses, and for study or travel abroad in Russian-speaking countries. Conversation practice is held twice a week.

RUSS 10400-10500-10600. Russian through Pushkin I-II-III.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s *The Bronze Horseman*), as well as excerpts from *Eugene Onegin* and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.

RUSS 10400. Russian Through Pushkin I. 100 Units.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s *The Bronze Horseman*), as well as excerpts from *Eugene Onegin* and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.
Instructor(s): Mark Baugher Terms Offered: Autumn
Note(s): Not open to students who have taken RUSS 10100-10200-10300.

RUSS 10500. Russian through Pushkin II. 100 Units.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s *The Bronze Horseman*), as well as excerpts from *Eugene Onegin* and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.
Instructor(s): Mark Baugher Terms Offered: Winter
Note(s): Not open to students who have taken RUSS 10100-10200-10300.

RUSS 10600. Russian through Pushkin III. 100 Units.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s *The Bronze Horseman*), as well as excerpts from *Eugene Onegin* and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.
Instructor(s): Mark Baugher Terms Offered: Spring
Note(s): Not open to students who have taken RUSS 10100-10200-10300.

RUSS 10500. Russian through Pushkin II. 100 Units.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s *The Bronze Horseman*), as well as excerpts from *Eugene Onegin* and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.
Instructor(s): Mark Baugher Terms Offered: Winter
Note(s): Not open to students who have taken RUSS 10100-10200-10300.
RUSS 10600. Russian through Pushkin III. 100 Units.
This literary and linguistic approach to Russian allows students to learn the language by engaging classic Russian poetic texts (e.g., Pushkin’s The Bronze Horseman), as well as excerpts from Eugene Onegin and selections from Pushkin’s shorter poems and prose works. Although the focus is on reading Russian, all four major communicative skills (i.e., reading, writing, listening comprehension, speaking) are stressed, preparing students for the College Language Competency Exam and for continued study of Russian in second-year courses. Conversation practice is held twice a week.
Instructor(s): Mark Baugher Terms Offered: Spring
Note(s): Not open to students who have taken RUSS 10100-10200-10300.

RUSS 20103. Second-Year Russian I. 100 Units.
This course continues RUSS 10103-10203-10303; it includes review and amplification of grammar, practice in reading, elementary composition, and speaking and comprehension. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading rather than translating. Readings are selected to help provide historical and cultural background. Conversation practice is held twice a week.

RUSS 20104. Second-Year Russian Studies I. 100 Units.

RUSS 20203. Second-Year Russian II. 100 Units.
This course continues RUSS 10103-10203-10303; it includes review and amplification of grammar, practice in reading, elementary composition, and speaking and comprehension. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading rather than translating. Readings are selected to help provide historical and cultural background. Conversation practice is held twice a week.

RUSS 20204. Second-Year Russian Studies II. 100 Units.
This course continues RUSS 10103-10203-10303; it includes review and amplification of grammar, practice in reading, elementary composition, and speaking and comprehension. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading rather than translating. Readings are selected to help provide historical and cultural background. Conversation practice is held twice a week.

RUSS 20303. Second-Year Russian III. 100 Units.
This course continues RUSS 10103-10203-10303; it includes review and amplification of grammar, practice in reading, elementary composition, and speaking and comprehension. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading rather than translating. Readings are selected to help provide historical and cultural background. Conversation practice is held twice a week.

RUSS 20304. Second-Year Russian Studies III. 100 Units.
This course continues RUSS 10103-10203-10303; it includes review and amplification of grammar, practice in reading, elementary composition, and speaking and comprehension. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading rather than translating. Readings are selected to help provide historical and cultural background. Conversation practice is held twice a week.

RUSS 20702-20802-20902. Third-Year Russian through Culture I-II-III.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Autumn
Prerequisite(s): RUSS 20300 (two years of Russian) or equivalent

RUSS 20702. Third-Year Russian through Culture I. 100 Units.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Autumn
Prerequisite(s): RUSS 20300 (two years of Russian) or equivalent

RUSS 20802. Third-Year Russian through Culture II. 100 Units.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Winter
RUSS 20902. Third-Year Russian through Culture III. 100 Units.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Spring
Equivalent Course(s): RUSS 30902

RUSS 20802. Third-Year Russian through Culture II. 100 Units.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Winter

RUSS 20902. Third-Year Russian through Culture III. 100 Units.
This course, which is intended for third-year students of Russian, covers various aspects of Russian grammar in context and emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in a culturally authentic context. Excerpts from popular Soviet/Russian films and clips from Russian television news reports are shown and discussed in class. Classes conducted in Russian; some aspects of grammar explained in English. Drill practice is held twice a week.
Instructor(s): V. Pichugin Terms Offered: Spring
Equivalent Course(s): RUSS 30902

RUSS 21302-21402-21502. Advanced Russian through Media I-II-III.
This is a three-quarter sequence designed for fourth- and fifth-year students of Russian. It is also suitable for native speakers of Russian. This sequence covers various aspects of advanced Russian stylistics and discourse grammar in context. This sequence emphasizes the four communicative skills of listening, reading, speaking, and writing in a culturally authentic context. It builds transcultural competence by expanding students’ knowledge of the language, culture, history, and daily lives of the Russian-speaking people. Vocabulary building is strongly emphasized. We add to the existing skills and develop our abilities to analyze increasingly complex texts for their meaning: to identify various styles and registers of the Russian language and to provide their neutral equivalents in standard Russian. We also work on developing our abilities to paraphrase, narrate, describe, support opinions, hypothesize, discuss abstract topics, and handle linguistically unfamiliar situations (in spoken and written format). Classes conducted in Russian. Course-specific grammar issues are covered during drill sessions (weekly) and office hours (by appointment). Oral Proficiency Interviews are conducted in the beginning and the end of the course (Autumn and Spring Quarters).

RUSS 21302. Advanced Russian Thru Media-1. 100 Units.
This is a three-quarter sequence designed for fourth- and fifth-year students of Russian. It is also suitable for native speakers of Russian. This sequence covers various aspects of advanced Russian stylistics and discourse grammar in context. This sequence emphasizes the four communicative skills of listening, reading, speaking, and writing in a culturally authentic context. It builds transcultural competence by expanding students’ knowledge of the language, culture, history, and daily lives of the Russian-speaking people. Vocabulary building is strongly emphasized. We add to the existing skills and develop our abilities to analyze increasingly complex texts for their meaning: to identify various styles and registers of the Russian language and to provide their neutral equivalents in standard Russian. We also work on developing our abilities to paraphrase, narrate, describe, support opinions, hypothesize, discuss abstract topics, and handle linguistically unfamiliar situations (in spoken and written format). Classes conducted in Russian. Course-specific grammar issues are covered during drill sessions (weekly) and office hours (by appointment). Oral Proficiency Interviews are conducted in the beginning and the end of the course (Autumn and Spring Quarters). Prerequisite(s): Four years of Russian, or equivalent, or consent of instructor.
Instructor(s): Valentina Pichugin Terms Offered: Autumn
Equivalent Course(s): RUSS 30102

RUSS 21402. Adv Russian Through Media-2. 100 Units.
This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a week.
Instructor(s): Valentina Pichugin Terms Offered: Winter
Prerequisite(s): Four years of Russian, or equivalent, or consent of instructor.
Equivalent Course(s): RUSS 30202
RUSS 21502. Adv Russian Through Media-3. 100 Units.
This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a week.
Equivalent Course(s): RUSS 30302, REES 21502, REES 30302

RUSS 21402. Adv Russian Through Media-2. 100 Units.
This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a week.
Instructor(s): Valentina Pichugin Terms Offered: Winter
Prerequisite(s): Four years of Russian, or equivalent, or consent of instructor.
Equivalent Course(s): RUSS 30202

RUSS 21502. Adv Russian Through Media-3. 100 Units.
This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a week.
Equivalent Course(s): RUSS 30302, REES 21502, REES 30302

RUSS 21600. Russian For Heritage Learners. 100 Units.
This course examines the major aspects of Russian grammar and stylistics essential for heritage learners. Students engage in close readings and discussions of short stories by classic and contemporary Russian authors (e.g., Pushkin, Dostoevsky, Tolstoy, Chekhov, Platonov, Bulgakov, Erofeev, Tolstaya), with special emphasis on their linguistic and stylistic differences. All work in Russian.
Instructor(s): Maria Yakubovich Terms Offered: Autumn
Prerequisite(s): Ability to speak Russian fluently required; formal training in Russian not required

RUSS 23333. Reading Russian for Research Purposes. 100 Units.
This course prepares students to read and do research in Russian. Students will gain a fundamental knowledge of Russian grammar and a basic vocabulary while learning to work intensively with primary and secondary texts in their area of academic interest. Reading Russian for Research Purposes has a limited number of spots available for participation via electronic course sharing, intended for students who are unable to be in Chicago physically for the course.
Equivalent Course(s): RUSS 33333

RUSS 26900. Strangers to Ourselves: Twentieth Century Émigré Literature from Russia and SE Europe. 100 Units.
Being alienated from myself, as painful as that may be, provides me with that exquisite distance within which perverse pleasure begins, as well as the possibility of my imagining and thinking,” writes Julia Kristeva in Strangers to Ourselves, the book from which this course takes its title. The authors whose works we are going to examine often alternate between nostalgia and the exhilaration of being set free into the breathless possibilities of new lives. Leaving home does not simply mean movement in space. Separated from the sensory boundaries that defined their old selves, immigrants inhabit a warped, fragmentary, disjointed time. Immigrant writers struggle for breath - speech, language, voice, the very stuff of their craft resounds somewhere else. Join us as we explore the pain, the struggle, the failure and the triumph of emigration and exile. Vladimir Nabokov, Joseph Brodsky, Marina Tsvetaeva, Nina Berberova, Julia Kristeva, Alexander Hemon, Dubravka Ugrešić, Norman Manea, Miroslav Penkov, Ilija Trojanow, Tea Obreht.
Equivalent Course(s): SOSL 36900, SOSL 26902, RUSS 36900, CMLT 36902

RUSS 29910. Special Topics in Advanced Russian. 100 Units.
Must complete Advanced Russian through Media or equivalent, or obtain consent of instructor. Class meets for 2 hours each week. We’ll work with several topics, all of them are relevant to the general theme of “Geography and Worldview: Russian Perspective”. There will be maps, reading materials, several documentaries, clips from TV programs and other media, and feature films. Class meetings will be a combination of group discussions, short presentations, and lectures. Final - one term paper at the end (in English) based on Russian materials.
Equivalent Course(s): RUSS 39910

RUSS 29911. Special Topics in Advanced Russian. 100 Units.
Equivalent Course(s): RUSS 39911

RUSS 29912. Special Topics in Advanced Russian. 100 Units.
Equivalent Course(s): REES 29912, RUSS 39912, REES 39912
**RUSSIAN AND EAST EUROPEAN STUDIES COURSES**

**REES 13803. The Soviet Union. 100 Units.**
This lecture course surveys the making and unmaking of the Soviet Union as a society, culture, economy, superpower, and empire from 1917 to 1991. The Soviet Union began as an unprecedented radical experiment in remaking society and economy, ethnic and gender relations, personal identities, even human nature. In the course of its history, it came to resemble other (capitalist) societies, sharing, in turn, their violence, welfare provisions, and consumerism. The story of this transformation—from being unique and exhilarating to being much like everyone else, only poorer and more drab—will be at the center of our exploration. The main themes of the course include social and cultural revolutions; ideology and the role of Marxism; political violence from the birth of the socialist state to the end of the Stalin terror; Stalinism, its origins, practices, aesthetics, legacies, and critiques; law, dissent, and human rights; nationality policies and the role of ethnic minorities; the economy of shortages and the material culture it created; institutions of daily life (communal apartments, courtyards, peasant markets, dachas, and boiler rooms); socialist realism and the Soviet dreamworld.

Instructor(s): E. Gilburd  Terms Offered: Spring
Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.
Equivalent Course(s): HIST 13803

**REES 20004. Nabokov: Lolita. 100 Units.**
Lolita, light of my life, fire of my loins. My sin, my soul, Lolita: the tip of the tongue taking a trip of three steps down the palate, to tap at three on the teeth." Popular as Nabokov’s “all-American” novel is, it is rarely discussed beyond its psychosexual profile. This intensive text-centered and discussion-based course attempts to supersede the univocal obsession with the novel’s pedophilic plot as such by concerning itself above all with the novel’s language: language as failure, as mania, and as conjuration.

Instructor(s): M. Sternstein Terms Offered: Autumn
Equivalent Course(s): ENGL 28916, FNDL 25300, GNSE 24900, SIGN 26027

**REES 20007. Pushkin and His Age. 100 Units.**
This course approaches the Golden Age of Russian culture through the prism of the artistic and intellectual legacy of its most influential writer. We read and analyze Pushkin’s poetry, prose fiction, essays, and critical works in the context of the critical, philosophical, and political debates of his time. We also consider writers such as Rousseau, Montesquieu, Karamzin, Balzac, Chaadaev, and Belinsky. Texts in English or the original; classes conducted in English.

Instructor(s): Daria Khitrova  Terms Offered: Autumn
Equivalent Course(s): HIST 23602, HIST 33602, REES 30007

**REES 20011. Gogol. 100 Units.**
One of the most enigmatic authors in Russian literature, Nikolai Gogol (1809-1852) was hailed in his own lifetime as the leading prose writer of his generation, a brilliant comic writer, and the innovator of the new school of Russian Naturalism/Realism. Since his death, Gogol has been the subject of ever-greater critical controversy. Reading representative works from each period of Gogol’s career, including his Petersburg Tales and Dead Souls, we will trace the author’s creative development and consider it in relation to his biography and early 19th-century Russian literary and social history. We will work together to identify the characteristic features of Gogol’s narrative technique as well as the challenges to interpretation his texts pose. No knowledge of Russian required.

Equivalent Course(s): REES 30011

**REES 20013. Dostoevsky. 100 Units.**
Dostoevsky was an inveterate risk-taker, not only at the baccarat tables of the Grand Casino in Baden-Baden, but in his personal life, his political activities, and his artistic endeavors. This course is intended to investigate his two greatest wagers: on the presence of the divine in the world and on the power of artistic form to convey and articulate this presence. Dostoevsky’s wager on form is evident even in his early, relatively conventional texts, like The Double. It intensifies after his decade-long sojourn in Siberia, exploding in works like The Notes from Underground, which one-and-a-half centuries later remains an aesthetic and philosophical provocation of immense power. The majority of the course will focus on Dostoevsky’s later novels. In Crime and Punishment Dostoevsky adapts suspense strategies to create a metaphysical thriller, while in The Demons he pairs a study of nihilism with the deformation of the novel as a genre. Through close readings of these works we will trace how Dostoevsky’s formal experimentation created new ways of exploring realms of existence that traditionally belonged to philosophy and theology. The results were never comfortable or comforting; we will focus on interpreting Dostoevsky’s metaphysical provocations.

Equivalent Course(s): RLIT 39501, REES 30013, HUMA 24800, RLST 28204, FNDL 24612

**REES 20020. Pale Fire. 100 Units.**
This course is an intensive reading of Pale Fire by Nabokov.
Equivalent Course(s): GNSE 29610, GNSE 39610, ENGL 22817, REES 30020, FNDL 25311
**REES 20021. Dostoyevsky’s Crime and Punishment. 100 Units.**
We will engage in a rigorous quarter-long close reading of Dostoevsky’s 1867 novel with the intention of unfolding as fully as possibly its significance in the history of literary form, philosophical thought, and social critique. To this purpose we will also read selected texts from such contemporaries as Friedrich Nietzsche and Karl Marx, as well as a sampling of critical responses to Dostoevsky’s novel and its adaptations in other media. Instructor(s): R. Bird Terms Offered: Winter
Prerequisite(s): Required of new Fundamentals majors; open to others with consent of instructor.
Note(s): Slavic and Fundamentals majors get first priority.
Equivalent Course(s): RLST 28205, FNDL 29100

**REES 21000. Gombrowicz: The Writer as Philosopher. 100 Units.**
In this course, we dwell on Witold Gombrowicz the philosopher, exploring the components of his authorial style and concepts that substantiate his claim to both the literary and the philosophical spheres. Entangled in an ongoing battle with basic philosophical tenets and, indeed, with existence itself, this erudite Polish author is a prime example of a 20th century modernist whose philosophical novels explode with uncanny laughter. In contrast to many of his contemporaries, who established their reputations as writers/philosophers, Gombrowicz applied distinctly literary models to the same questions that they explored. We investigate these models in depth, as we focus on Gombrowicz’s novels, philosophical lectures, and some of his autobiographical writings. With an insight from recent criticism of these primary texts, we seek answers to the more general question: What makes this author a philosopher? Instructor(s): Bozena Shallcross Terms Offered: Winter
Note(s): All readings in English.
Equivalent Course(s): FNDL 26903, REES 31000, ISHU 29405

**REES 21006. Joseph Conrad’s Secret Agent: (In)action, Surveillance, Terrorism. 100 Units.**
Course centers on Joseph Conrad’s The Secret Agent: A Simple Tale. Contemporary critics often consider this novel the archetypal fictional work about terrorism, as it is based on the bomb attack that occurred in Greenwich in 1888. The Secret Agent demonstrates, however, much more than its prophetic significance rediscovered after 9/11. Therefore, the course seeks how the novel’s relevance stems in equal measure from Conrad’s interest in a wider political process and his distrust of state power; in particular, the course explores how these forces determine the individual caught in a confining situation. We read The Secret Agent as a political novel, that struggle for solutions defies chaos as well as an imposition of a single ideology or one authorial point of view. Its ambiguities and political antinomies allow for interdisciplinary readings that also present an opportunity to critically overview the established approaches to main Conradian themes. In analyzing the formation of the narrative’s ideology we discuss Conrad’s historical pessimism that demonstrates with sustained irony how capitalism breeds social injustice that, in turn, breeds anarchism. The class also focuses on how the novel exposes duplicity in staging surveillance, terrorism, as well as adjacent forms of violence or sacrifice. Critical texts include several older but still influential readings (Jameson, Eagleton) and the most recent. Equivalent Course(s): ENGL 21006, REES 31006, ENGL 31006, FNDL 21006

**REES 21101. Advanced Bosnian/Croatian/Serbian: Language through Fiction. 100 Units.**
Advanced BCS courses encompass both the 3rd and 4th years of language study, with the focus changed from language structure and grammar to issues in interdisciplinary content. The courses are not in sequence. Language through Fiction is designed to help students and instructors over one of the most difficult hurdles in language training-the transition from working through lessons in a textbook to reading unedited texts. Literature represents the greatest development of the expressive possibilities of a language and reveals the bounds within which language operates. The texts will immerse motivated language students in a complete language experience, as the passages and related exercises present the language’s structure on every page. Students will learn how to engage the natural, organic language of a literary text across a variety of styles and themes. The course assumes that students are familiar with basic grammar and vocabulary, as well as both the Latin and Cyrillic alphabets. It is particularly appealing to students who are interested in the literature, history, and anthropology of the region. Equivalent Course(s): REES 31103, BCSN 31101, REES 21100
Instructor(s): Nada Petkovic Terms Offered: Autumn
Equivalent Course(s): BCSN 21100, BCSN 31104, REES 31104

**REES 21300. (Re)Branding the Balkan City: Comtemp. Belgrade/Sarajevo/Zagreb. 100 Units.**
The course will use an urban studies lens to explore the complex history, infrastructure, and transformations of these three cities, now the capitals of Serbia, Bosnia and Herzegovina, and Croatia. Drawing on anthropological theory and ethnography of the city, we will consider processes of urban destruction and renewal, practices of branding spaces and identities, urban life as praxis, art and design movements, architectural histories and styles, metropolitan citizenship, and the broader politics of space. The course is complemented by cultural and historical media, guest speakers, and virtual tours. Classes are held in English. No knowledge of BCS is required. However, this module can fulfill a language requirement or simply further the study of BCS with additional weekly sections, materials, discussions, and presentations in the target language.
Instructor(s): Nada Petkovic Terms Offered: Spring
Equivalent Course(s): REES 31003, BCSN 31003, BCSN 21300
REES 21502. Adv Russian Through Media-3. 100 Units.
This course, which is designed for fifth-year students of Russian, covers various aspects of Russian stylistics
and discourse grammar in context. It emphasizes the four communicative skills (i.e., reading, writing, listening
comprehension, speaking) in culturally authentic context. Clips from Russian/Soviet films and television news
reports are shown and discussed in class. Classes conducted in Russian. Conversation practice is held twice a
week.
Equivalent Course(s): RUSS 30302, RUSS 21502, REES 30302

REES 22007. Milan Kundera. 100 Units.
In this course on selected works by Franco-Czech writer Milan Kundera we explore questions of art and kitsch,
citizenship pre- and post-communism, and the values of modernity. Texts read include the Czech novels The
Joke, the film The Joke (1969), Unbearable Lightness of Being, The Book of Laughter and Forgetting, Farewell
Waltz, and the French novels, Ignorance and Festival of Insignificance, and selected essays from essay collections,
The Art of the Novel, Testaments Betrayed, and The Curtain. All texts will be read in their authorized English
translations.
Equivalent Course(s): REES 32007, FNDL 22007

REES 22008. The Fact of the Prague Spring: 1949-1989. 100 Units.
In 1949 Vladimir Holan composed a poem entitled "To Enemies." The final line of the poem, "Být není lehké…
Lehká jsou jen hovna…" (Being is not easy...Only shit is easy...) echoed throughout the era of Czech state
communism up to 1989 and beyond, percussive in dissident Czech art, artifacts, and political performance.
This course concerns itself with the era in images, film, literature, pop culture, plastic arts, and philosophy
from conditions leading to the rebellion known as the Prague Spring, the clampdown in its aftermath known as
"Normalization," and the movements simminger in the "parallel polis" that led to the "Velvet Revolution." Mass
culture, underground culture, and official culture are all confronted in seminar discussion. Texts include but are
not limited to the work of Milan Kundera, Jan Patočka, Václav Havel, Eva and Jan Švankmajer, Bohumil Hrabal,
The Plastic People of the Universe, and Czech New Wave film.
Instructor(s): Malynne Sternstein Terms Offered: Spring

REES 22402. Fate and Duty: European Tragedy from Aeschylus to Brecht. 100 Units.
This class will explore the development of European drama from Attic tragedy and comedy and their reception
in Ancient Rome and French Neoclassicism to the transformation of dramatic form in 18-20th c. European
literatures. The focus will be on the evolution of plot, characterization, time-and-space of dramatic action,
ethical notions (free will, guilt, conscience), as well as on representations of affect. All readings in English. No
prerequisites.
Equivalent Course(s): CLAS 32117, GRMN 22402, CLCV 22117, CMLT 22402

REES 23005. Russia’s 3 Cinemas: BETW Politics and Cultures. 100 Units.
REES 23015. Cinema and Poetry: The Modern City. 100 Units.
Equivalent Course(s): CMST 14502

REES 23019. Europe Betw Black & Baltic Seas, Betw Russ & EU. 100 Units.

REES 23020. When Moscow was Paris. 100 Units.
No description available

REES 23108. Contact Linguistics. 100 Units.
This seminar focuses on current research in contact linguistics in a global perspective, including but not limited
to the impact of languages of wider communication (e.g. English, Russian) in contact with other languages.
Topics to be covered include the following: language/dialect contact, convergence and language shift resulting
in attrition and language endangerment and loss. Other contact-induced linguistic changes and processes to
be considered include borrowing, code-switching, code-shifting, diglossia, loss of linguistic restrictions and
grammatical permeability, and the impact of language contact in the emergence and/or historical development of
languages.
Instructor(s): Victor Friedman and Lenore Grenoble Terms Offered: Winter
Prerequisite(s): LING 20001 or consent of instructor
Equivalent Course(s): LING 26310, LING 36310

REES 23115. Old Church Slavonic. 100 Units.
This course is an introduction to the language of the oldest Slavic texts. It begins with a brief historical overview
of the relationship of Old Church Slavonic to Common Slavic and the other Slavic languages. This is followed
by a short outline of Old Church Slavonic inflectional morphology. The remainder of the course is spent in the
reading and grammatical analysis of original texts in Cyrillic or Cyrillic transcription of the original Glagolitic.
Equivalent Course(s): REES 33115, LING 23115, LING 35100
REES 23119. Language/Power/Identity in South East Europe. 100 Units.
This course familiarizes students with the linguistic histories and structures that have served as bases for the formation of modern Balkan ethnic identities and that are being manipulated to shape current and future events. The course is informed by the instructor’s thirty years of linguistic research in the Balkans as well as his experience as an adviser for the United Nations Protection Forces in Former Yugoslavia and as a consultant to the Council on Foreign Relations, the International Crisis Group, and other organizations. Course content may vary in response to ongoing current events.
Instructor(s): V. Friedman Terms Offered: Winter
Equivalent Course(s): LING 27200, REES 33119, ANTH 27400, LING 37200, ANTH 37400, HUMA 27400

REES 23137. Narratives Suspense in European/Russian Lit/Film. 100 Units.
This course examines the nature and creation of suspense in literature and film as an introduction to narrative theory. We will question how and why stories are created, as well as what motivates us to continue reading, watching, and listening to stories. We will explore how particular genres (such as detective stories and thrillers) and the mediums of literature and film influence our understanding of suspense and narrative more broadly. Close readings of primary sources will be supplemented with critical and theoretical readings. Literary readings will include work by John Buchan, Arthur Conan Doyle, Fedor Dostoevsky, Graham Greene, Bohumil Hrabal, and J.M. Coetzee. We will also explore Alfred Hitchcock’s take on 39 Steps and the Czech New Wave manifesto film, Pearls of the Deep. With theoretical readings by: Roland Barthes, Viktor Shklovsky, Erich Auerbach, Paul Ricoeur, and others.
Equivalent Course(s): ENGL 46901, CMST 25102, CMST 35102, REES 33137, ENGL 26901, HUMA 26901, CMLT 22100

REES 23141. Avant-Garde in East Central Europe. 100 Units.
The avant-gardes of the “other” Europe are the mainstay of this course, which focuses especially, but not exclusively, on the interwar avant-gardes of Austria, Czechoslovakia, Hungary, Poland, Romania, Slovenia, and Yugoslavia. A comparative framework is employed whenever suggestive to comprehend the East/Central European movements in the wider context of the European avant-garde. The course also traces the development and legacy (political and artistic) of these avant-gardes in their contemporary scenes. Plastic, verbal, and performative arts (including film) are studied.
Instructor(s): Malynne Sternstein Terms Offered: Spring
Equivalent Course(s): ARTH 25500, ARTH 35500, CMST 25100, CMST 35100, REES 33141

REES 23157. Central Asian Cinema. 100 Units.
Nowhere has the advent of modernity been more closely entwined with cinema than in Central Asia, a contested entity which for our purposes stretches from Turkey in the West to Kyrgyzstan in the East, though our emphasis will be squarely on Soviet and post-Soviet Central Asia (especially Uzbekistan and Kazakhstan). This course will trace the encounter with cinematic modernity through the analysis of individual films by major directors, including (but not limited to) Shukhrat Abbasov, Melis Ubukeev, Ali Khamaev, Tolomush Okeev, Sergei Paradzhanov, Gulshad Omarova. In addition to situating the films in their cultural and historical situations, close attention will be paid to the sources of Central Asian cinema in cinemas both adjacent and distant; to the ways in which cinema enables a distinct encounter with modernity; and to the cinematic construction of Central Asia as a cultural entity.
Instructor(s): R. Bird Terms Offered: Autumn
Prerequisite(s): PQ: CMST 10100 Introduction to Film or consent of instructor.
Equivalent Course(s): ARTH 25500, ARTH 35500, CMST 25100, CMST 35100, REES 33141

REES 24401. Vampires, Villains, & Magic: The Supernatural in Eastern Euro. 100 Units.

REES 24403. Puppet Theory. 100 Units.
Equivalent Course(s): TAPS 28477

REES 24410. Animation in the Eastern Bloc. 100 Units.
In this course we will explore thematic, aesthetic, and theoretical aspects of animated film in socialist Central and Eastern Europe from the 1920s through the late 1980s. Rather than attempting an exhaustive survey of the region’s animated films and their contexts, we will bring a sampling of films from the Soviet Union, Czechoslovakia, Poland, Yugoslavia, Hungary, and Bulgaria together with readings from the growing body of theoretical and critical works on animated film in hopes of building an understanding of animated film as a medium and of what does (or does not) make the animated films of socialist Central and Eastern Europe unique.
REES 24414. Soviet Science Fiction. 100 Units.
In the Soviet Union, science fiction played an integral part in intellectual debates about the best way to engage with the new realities of the twentieth century. This literary and cinematic genre was thought capable of reinventing the lives, realities and even beliefs of the Soviets. This course will study the cultural, historical, and political contexts of science fiction from the Soviet Union through literature such as Evgenii Zamiatin’s dystopian novel We (the inspiration for George Orwell’s 1984), Ivan Efremov’s The Andromeda Nebula (1956), and the work Arkady and Boris Strugatsky, as well as through films such as Iakov Protazanov’s Aelita (1924), the first Soviet science fiction film, along with later imaginings of space travel such as Pavel Klushantsev’s Road to the Stars (1957), and Andrei Tarkovsky’s Solaris (1972)—a mysterious, human drama set in space. The primary goal of the course is to study how Soviet writers and filmmakers utilize science fiction to interpret and/or comment upon their present historical moment? What alternatives to Soviet reality were proposed through science fiction? Lastly, how did science fiction texts and films relate to scientific research in the Soviet Union, especially the Soviet space program?
Equivalent Course(s): CMST 24414

REES 24415. The Intelligentsia: On Slavic Social Thought. 100 Units.
Isaiah Berlin described the notion of the Intelligentsia as “arguably Russia’s greatest contribution to world civilization.” But just how culturally specific-or, alternatively, universal-is that concept? Many of the chief theoretical concerns of the Intelligentsia (the role of the public intellectual in society, the expression of dissidence and the ethics of exile) have preoccupied thinkers since Socrates. What distinguishes the Intelligentsia from other models of public intellectualism? How have various Slavic public intellectuals maintained, or broken with, this tradition? In order to establish a theoretical vocabulary, the course will begin with an introduction to several classical and contemporary theories of the role of the intellectual in society. We will then ground our inquiry in the historical invention of the Russian Intelligentsia during the mid-19th Century before setting off to analyze its 20th and 21st-century manifestations. Throughout the course, our main goal will be to examine the ways in which these thinkers conceive of and perform the role of a “public intellectual.” How do they balance the tasks of documenting and participating in the historical events they describe? What strategies do they utilize in order to relay their intellectual activity to a larger public? What do they consider to be the responsibility of intellectuals?
Equivalent Course(s): HIST 29907

REES 24416. Russian Literature in the Composer’s Ear. 100 Units.
The dialogue between author and composer in Russia is probably without parallel in other national traditions. This course will examine the musical transposition of literary works in Mussorgsky, Tchaikovsky, Rimsky-Korsakov, Stravinsky, Shostakovich, Prokofiev and Shchedrin. While Stravinsky makes use of oral tradition and folk culture, our other examples will be drawn from classic literary works, primarily from the 19th century. We will integrate close textual readings with focused analyses of the musical pieces, while devoting considerable attention to contexts of composition and reception. Throughout, we will be concerned with cultural and socio-political events from the mid-19th century to the fall of Soviet Union-events that colored the performance and interpretation of these works and often set the tone for their composition as well.
Equivalent Course(s): REES 24416, MUSI 34317, MUSI 24317

REES 25001. Introduction to the Musical Folklore of Central Asia. 100 Units.
This course explores the musical traditions of the peoples of Central Asia, both in terms of historical development and cultural significance. Topics include the music of the epic tradition, the use of music for healing, instrumental genres, and Central Asian folk and classical traditions. Basic field methods for ethnomusicology are also covered. Extensive use is made of recordings of musical performances and of live performances in the area.
Instructor(s): K. Arik Terms Offered: Spring
Prerequisite(s): Knowledge of Arabic and/or Islamic studies helpful but not required
Equivalent Course(s): MUSI 23803, NEHC 20765, REES 35001, ANTH 29505, MUSI 33503, NEHC 30765

REES 25003. Philosophy of Architecture. 100 Units.
Readings are culled from Central and East European and Russian theoretical writings on architecture and discussed in both an architecturally specific and broader interdisciplinary context (i.e., philosophies of technology, utopic space, psychogeographies) in this course. We read and look at primary texts and architectural executions (e.g., Karel Teige’s 1932 manifesto Minimum Dwelling).
Equivalent Course(s): REES 35003

REES 25005. History of International Cinema II: Sound Era to 1960. 100 Units.
The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell’s Film History: An Introduction; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.
Instructor(s): RBird Terms Offered: Winter
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or minoring in Cinema and Media Studies.
Note(s): CMST 28500/48500 strongly recommended
Equivalent Course(s): REES 45005, CMST 48600, ENGL 29600, ARTH 28600, ARTH 38600, CMLT 32500, ARTV 20003, CMST 28600, ENGL 48900, CMLT 22500, MAPH 33700
REES 25600. Realism in Russia. 100 Units.
From the 1830s to the 1890s, most Russian prose writers and playwrights were either engaged in the European-wide cultural movement known as “realistic school” which set for itself the task of engaging with social processes from the standpoint of political ideologies. The ultimate goal of this course is to distill more precise meanings of “realism,” “critical realism,” and “naturalism” in nineteenth-century Russian through analysis of works by Gogol, Turgenev, Tolstoy, Dostoevsky, Aleksandr Ostrovsky, Goncharov, Saltykov-Shchedrin, and Kuprin. Texts in English and the original. Optional Russian-intensive section offered.
Instructor(s): W. Nickell Terms Offered: Winter
Equivalent Course(s): HUMA 24000

REES 25602. Russian Short Fiction: Experiments in Form. 100 Units.
Russian literature is known for the sweeping epics that Henry James once dubbed the “loose baggy monsters.” However, in addition to the famed ‘doorstop novels,’ the Russian literary canon also has a long tradition of innovative short fiction—of short stories and novellas that experiment with forms of storytelling and narration. This course focuses on such works, as well as the narrative strategies and formal devices that allow these short stories and novellas to be both effective and economical. Throughout the quarter, we will read short fiction from a variety of Russian authors and examine the texts that establish the tradition of Russian short fiction as well as those that push its boundaries. This course will serve as a general survey of Russian Literature, as well as a focused introduction to a particular genre in that tradition. Although predominantly discussion-based, the class will also include short lectures by the instructor to introduce students to the broader historical contexts of the course texts, and to sample diverse theoretical approaches to those texts.
Equivalent Course(s): HIST 14001

REES 25603. Media and Power in the Age of Putin and Trump. 100 Units.
Over the past 200 years, various political and cultural regimes of Russia have systematically exploited the gap between experience and representation to create their own mediated worlds—from the tight censorship of the imperial and Soviet periods to the propaganda of the Soviet period and the recent use of media simulacra for strategic geopolitical advantage. During this same period state control of media has been used to seclude Russia from the advancement of liberalism, market economics, individual rights, modernist art, Freud, Existentialism, and, more recently, Western discourses of inclusion, sustainability, and identity. Examining this history, it is sometimes difficult to discern whether the architects of Russian culture have been hopelessly backward or shrewd phenomenologists, keenly aware of the relativity of experience and of their ability to shape it. This course will explore the worlds that these practices produce, with an emphasis on Russia’s recent confrontations with Western culture and power, and including various practices of subversion of media control, such as illegal printing and circulation. Texts for the course will draw from print, sound, and visual media, and fields of analysis will include aesthetics, cultural history, and media theory.
Instructor(s): William Nickell Terms Offered: Winter
Equivalent Course(s): REES 35603, SIGN 26029

REES 25701. Memoir in Modernism. 100 Units.
This course serves as an introduction to Russian and European modernism, taking the fictionalized autobiography as its focus. In the early twentieth century the novel-memoir becomes arguably the foremost vehicle for literary modernism. We will examine the literary strategies used to represent the workings of memory and the construction of their autobiographical worlds. What role does tradition play in foregrounding the writers’ approach to their immediate familial and cultural past? How is the experience of time reconfigured by the processes of memory, and what rhetorical techniques are used to effect this in prose narratives? Readings may include James Joyce’s A Portrait of the Artist as a Young Man, Andrei Bely’s Kotik Letaev, Virginia Woolf’s To the Lighthouse, Osp Manedlshtam’s The Noise of Time and Vladimir Nabokov’s Speak, Memory, as well as selections from Boris Pasternak, Marcel Proust, Andrei Platonov, Marina Tsvetaeva and others. Supplementary readings will include texts by Sigmund Freud, Henri Bergson, Gérard Genette and Mikhail Bakhtin. No knowledge of Russian or French is required, but an additional discussion section can be arranged for students with sufficient reading fluency in Russian.
Equivalent Course(s): CMLT 24000

REES 26011-26012. Introduction to Russian Civilization I-II.
This two-quarter sequence, which meets the general education requirement in civilization studies, provides an interdisciplinary introduction to Russian civilization. The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
REES 26011. Intro to Russian Civilization-1. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): E. Gilburd, W. Nickell Terms Offered: Autumn
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24000, HIST 13900

REES 26012. Intro Russian Civilization-2. 100 Units.
The first quarter covers the ninth century to the 1870s; the second quarter continues on through the post-Soviet period. Working closely with a variety of primary sources—from oral legends to film and music, from political treatises to literary masterpieces—we will track the evolution of Russian civilization over the centuries and through radically different political regimes. Topics to be discussed include the influence of Byzantine, Mongol-Tataric, and Western culture in Russian civilization; forces of change and continuity in political, intellectual, and cultural life; the relationship between center and periphery; systems of social and political legitimation; and symbols and practices of collective identity.
Instructor(s): R. Bird, E. Gilburd Terms Offered: Winter
Note(s): Taking these courses in sequence is recommended but not required.
Equivalent Course(s): SOSC 24100, HIST 14000

REES 26017. The Soviet Visual Experience. 100 Units.
The Soviet Union was a world in pictures, enabled and shaped by the media revolutions that accompanied every major period in its history, from the rise of cinema to the dawn of the internet. We will try to see communism as history and as promise, and to see how this relates to our own desire for social change in our own worlds. We will examine the interaction between Marxism, state power and image culture by focusing on key moments from the entire lifespan of the USSR (1917-1991) and from across the range of media, from graphic art and film to their reflections in literature and aesthetic theory. In addition to class readings and discussions, we will be able to engage directly with a vast array of material at exhibits of graphic art (three on campus, three more across the city) and film series that will be conducted in fall 2011 as part of the city-wide Soviet Arts Experience.
Instructor(s): R. Bird Terms Offered: Autumn
Equivalent Course(s): CMST 26601, CMST 36601, REES 36017

REES 26019. Symbolism and Cinema. 100 Units.
In his 1896 essay on cinema, Russian writer Maxim Gorky described the new medium to "madness or symbolism." The connection between cinema and symbolism was not surprising insofar as symbolism was a dominant aesthetic paradigm throughout Europe at the time. However it does suggest (perhaps surprisingly) that from the very beginning cinema was seen as a means of visualizing the non-rational, uncanny and even invisible. This course examines the relationship between symbolism and cinema with particular attention to French and Russian writings and films. Examining how symbolist aesthetics became applied to the cinematic medium, we will pay particular attention the resources it provided for conceptualizing the uncanny and the mystical. We will question whether there exists a distinct symbolist tradition in film history and how it relates to notions of poetic or experimental cinema. Films will represent a broad cross-section of European (and some American) cinema, from Jean Epstein to Sergei Eisenstein and Alexander Dovzhenko, and from Stan Brakhage to Andrei Tarkovsky.
Instructor(s): R. Bird
Equivalent Course(s): CMST 25514, CMST 35514, REES 36019
REES 26047. Pushkin and Gogol. 100 Units.
Alexander Pushkin (1799-1837) is widely considered the founding genius of modern Russian literature, especially in his lyric and epic poetry; Nikolai Gogol (1809-1852) injected a manic strain of magic realism to create the modern Russian novel. Apollon Grigor’ev later called Pushkin "our everything"; Dostoevsky claimed "We all emerged out of Gogol’s ‘Overcoat.’" During the quarter we will read a representative selection of both writers' major works, including Pushkin's verse novel Evgenii Onegin, verse epic The Bronze Horseman, and novel The Captain's Daughter, and Gogol's novel Dead Souls in addition to his fantastic stories "The Nose" and "The Overcoat." We will focus on close readings of the texts, paying particular attention to their experiments with literary form, as well as attending to their broader historical contextualization. We will focus particularly on the conceptions of realism projected by the texts and imposed by later readers. All readings will be in English translation.
Instructor(s): Robert Bird
Terms Offered: Autumn
Note(s): This course will be offered in place of RUSS 25000
Equivalent Course(s): REES 36047, FNDL 26047

REES 26064. Revolution. 100 Units.
Revolution primarily denotes radical political change, but this definition is both too narrow and too broad. Too broad, because since the late eighteenth century revolution has been associated specifically with an emancipatory politics, from American democracy to Soviet communism. Too narrow, because revolutionary political change is always accompanied by change in other spheres, from philosophy to everyday life. We investigate the history of revolution from 1776 to the present, with a particular focus on the Bolshevik revolution of 1917, in order to ascertain how social revolutions have been constituted, conducted, and enshrined in political and cultural institutions. We also ask what the conditions and prospects of revolution are today. Readings will be drawn from a variety of fields, from philosophy to social history. Most readings will be primary documents, from Rousseau and Marx to Bill Ayers, but will also include major statements in the historiography of revolution.
Equivalent Course(s): HIST 23707, REES 36070, HIST 33707

REES 26068. The Underground: Alienation, Mobilization, Resistance. 100 Units.
The ancient and multivalent image of the underground has crystallized over the last two centuries to denote sites of disaffection from-and strategies of resistance to-dominant social, political and cultural systems. We will trace the development of this metaphor from the Underground Railroad in the mid-1800s and the French Resistance during World War II to the Weather Underground in the 1960s-1970s, while also considering it as a literary and artistic concept, from Fyodor Dostoevsky's Notes from the Underground and Ellison's Invisible Man to Chris Marker's film La Jetée and Andrei Tarkovsky's Stalker. Alongside with such literary and cinematic tales, drawing theoretical guidance from refugeeiks from Henry David Thoreau to Guy Debord, this course investigates how countercultural spaces become-or fail to become-sites of political resistance, and also how dissenting ideologies give rise to countercultural spaces. We ask about the relation between social deviance (the failure to meet social norms, whether willingly or unwittingly) and political resistance, especially in the conditions of late capitalism and neo-colonialism, when countercultural literature, film and music (rock, punk, hip-hop, DIY aesthetics etc.) get absorbed into-and coopted by-the hegemonic socio-economic system. In closing we will also consider contemporary forms of disobedience-from Pussy Riot to Black Lives Matter-that rely both on the vulnerability of individual bodies and global communication networks.
Instructor(s): Robert Bird
Terms Offered: Winter
Equivalent Course(s): CMST 34568, SIGN 26012, REES 36068, CMST 24568

REES 26071. Film and Revolution. 100 Units.
On the fiftieth anniversary of 1968 our course couples the study of revolutionary films (and films about revolution) with seminal readings on revolutionary ideology and on the theory of film and video. The goal will be to articulate the mechanics of revolution and its representation in time-based media. Students will produce a video or videos adapting the rich archive of revolutionary film for today's situation. The films screened will be drawn primarily from Soviet and US cinema, from the 1920s to the present day, proceeding more or less chronologically. We begin with newsreels and a "poetic documentary" by Dziga Vertov; they will be paired with classic readings from revolutionary theory, from Karl Marx and Vladimir Lenin to Fidel Castro and Bill Ayres, and from film theory, including Vertov, Andre Bazin and Jean-Luc Godard. Readings will acquaint students with a variety of fields, from philosophy to social history. Most readings will be primary documents, from Rousseau and Marx to Bill Ayers, but will also include major statements in the historiography of revolution.
Instructor(s): R. Bird; C. Smith
Terms Offered: Autumn
Equivalent Course(s): REES 36071, CMST 24521, CMST 34521

REES 26075. For Science Fiction in Eastern Europe and Russia. 100 Units.
In this course we will examine the cultural, historical, and political contexts of some of the great works of science fiction from Eastern Europe and Russia through literature like (but not limited to) Karel Čapek's R.U.R. (origin of the robot), Evgenii Zamiatin's dystopian novel We (the inspiration for George Orwell's 1984), and Stanislaw Lem's Solaris (the inspiration for several film versions including Andrei Tarkovsky's in 1972). Our primary objective will be to examine how these writers used science fiction to interpret, comment upon, or critique their historical moment. How did these works propose alternate realities? Or how did they engage with the new and changing realities of the 20th century? All readings will be in English.
Instructor(s): Esther Peters
Terms Offered: Winter
Equivalent Course(s): REES 36075
REES 26076. Russian Modernist Poetry. 100 Units.
Equivalent Course(s): REES 36076

REES 26077. Russian Modernist Theater. 100 Units.
Russian Modernist Theater explores the theory and practice of the new stage forms developed in Russia from 1900 to 1940. The course begins with the Stanislavsky school, and then delves deeply into the more experimental work of Meyerhold and his generation and the first attempts to create a revolutionary Soviet theater in the 1920s. The course will include a production, which will be scaled to the number and ambitions of the enrolled students. Course requirements can be met through the writing of a conventional paper, or through the production, via set or costume design, dramaturgy, performance, or staging. Each of these production assignments will require a write-up relating the work to the course materials and discussions.
Instructor(s): William Nickell Terms Offered: Autumn
Equivalent Course(s): REES 36077

REES 26660. The Rise of the Global New Right. 100 Units.
This course traces the intellectual genealogies of the rise of a Global New Right in relation to the contexts of late capitalist neoliberalism, the fall of the Soviet Union, as well as the rise of social media. The course will explore the intertwining political and intellectual histories of the Russian Eurasianist movement, Hungarian Jobbik, the American Traditional Workers Party, the French GRECE, Greek Golden Dawn, and others through their published essays, blogs, vlogs and social media. Perhaps most importantly, the course asks: can we use f-word (fascism) to describe this problem? In order to pose this question we will explore the aesthetic concerns of the New Right in relation to postmodern theory, and the affective politics of nationalism. This course thus frames the rise of a global new right interdisciplinary and comparatively as a historical, geopolitical and aesthetic problem.
Instructor(s): Leah Feldman Terms Offered: Winter
Equivalent Course(s): CMLT 26660, REES 36660, SIGN 26050, CMLT 36660, ENGL 26660, ENGL 36660

REES 27026. Kieslowski: The Decalogue. 100 Units.
In this class, we study the monumental series "The Decalogue" by one of the most influential filmmakers from Poland, Krzysztof Kieslowski. Without mechanically relating the films to the Ten Commandments, Kieslowski explores the relevance of the biblical moral rules to the state of modern man forced to make ethical choices. Each part of the series contests the absolutism of moral axioms through narrative twists and reversals in a wide, universalized sphere. An analysis of the films will be accompanied by readings from Kieslowski's own writings and interviews, including criticism by Zizek, Insdorf, and others.
Equivalent Course(s): REES 37026, CMST 36705, CMST 26705, FNDL 24003

REES 27027. Cinema and the Holocaust. 100 Units.
Focuses on cinematic responses by several leading film directors from East & Central Europe to a central event of 20th century history -- the Holocaust. Nazis began a cinematic documentation of WWII at its onset, positioning cameras in places of actual atrocities. Documentary footage produced was framed by hostile propagandistic schemes; contrary to this "method", Holocaust feature films are all but a representation of Jewish genocide produced after the actual traumatic events. This class aims at discussing the challenge of representing the Jewish genocide which has often been defined as un-representable. Because of this challenge, Holocaust films raise questions of ethical responsibility for cinematic production & a search for relevant artistic means with which to engage post-traumatic representation. Therefore, among major tropes we will analyze voyeuristic evocation of death & suffering; a truthful representation of violence versus purported necessity of its cinematic aesthetization; intertwined notions of chance & hope as conditions of survival versus hagiographic representation of victims. The main goal is to grasp the potential of cinema for deepening our understanding of the Holocaust, the course simultaneously explores extensive & continuous cinematic production of the genre & its historical development in various European countries, to mention the impact of censorship by official ideologies in the Soviet Union, Poland, Hungary, & Czechoslovakia during the Cold War.
Instructor(s): Bozena Shallcross Terms Offered: Winter
Note(s): Course requirements: film screenings, class participation, reading assignments, one class presentation, and a final project. All readings for the core texts are in English; they can be downloaded from Canvas.
Equivalent Course(s): CMST 32507, CMST 22507, JWSC 29550, REES 37027

REES 27028. David Bergelson's Strange New World. 100 Units.
Born in a shtetl in Kiev province in the Pale of Settlement in 1884, Bergelson began writing in Hebrew and Russian before switching to Yiddish, although his Yiddish always retained the trace of other languages. He lived through the First World War and the Russian revolution and civil war, and survived Hitler, but not Stalin, who had him executed for "nationalism" in 1952. "Yiddish" and "shtetl" may suggest a self-enclosed community of pious Jews, celebrating their rituals in an annual cycle. In Bergelson's world, however, time is out of joint. Anachronism, belatedness, and untimeliness, both joyful and tragic, unfold as an emotional, sensory, and existential condition in the world his fiction creates and the world in which he lived. For Bergelson Yiddish is the vehicle for questions about time, history, justice, art, and bodily experience. This course provides an introduction to Bergelson's novels and short stories, from his earliest writing to his Holocaust works.
Instructor(s): Harriet Murav Terms Offered: Spring
Equivalent Course(s): REES 37028, JWSC 27028
REES 29007. The Brighter Side of the Balkans: Humor & Satire in Lit & Film. 100 Units.
In this course, we examine the poetics of laughter in the Balkans. In order to do so, we introduce humor as both cultural and transnational. We unpack the multiple layers of cultural meaning in the logic of "Balkan humor." We also examine the functions and mechanisms of laughter, both in terms of cultural specificity and general practice and theories of humor. Thus, the study of Balkan humor will help us elucidate the "Balkan" and the "World," and will provide insight not only into cultural mores and social relations, but into the very notion of "funny." Our own laughter in class will be the best measure of our success - both cultural and intellectual.
Instructor(s): Angelina Ilieva
Terms Offered: Spring
Prerequisite(s): Readings in English. Background in the Balkans will make the course easier, but is not required.
Equivalent Course(s): NEHC 30884, NEHC 20884, CMLT 26610

REES 29009. Balkan Folklore. 100 Units.
Vampires, fire-breathing dragons, vengeful mountain nymphs. 7/8 and other uneven dance beats, heart-rending laments, and a living epic tradition. This course is an overview of Balkan folklore from historical, political, and anthropological perspectives. We seek to understand folk tradition as a dynamic process and consider the function of different folklore genres in the imagining and maintenance of community and the socialization of the individual. We also experience this living tradition firsthand through visits of a Chicago-based folk dance ensemble, "Balkan Dance."
Instructor(s): A. Ilieva
Terms Offered: Winter
Equivalent Course(s): REES 39009, NEHC 30568, ANTH 25908, NEHC 20568, ANTH 35908, CMLT 23301, CMLT 33301

REES 29010. 20th Century Russian & South East European Emigre Literature. 100 Units.
Being alienated from myself, as painful as that may be, provides me with that exquisite distance within which perverse pleasure begins, as well as the possibility of my imagining and thinking," writes Julia Kristeva in "Strangers to Ourselves," the book from which this course takes its title. The authors whose works we are going to examine often alternate between nostalgia and the exhilaration of being set free into the breathless possibilities of new lives. Leaving home does not simply mean movement in space. Separated from the sensory boundaries that defined their old selves, immigrants inhabit a warped, fragmentary, disjointed time. Immigrant writers struggle for breath-speech, language, voice, the very stuff of their craft resounds somewhere else. Join us as we explore the pain, the struggle, the failure, and the triumph of emigration and exile. Vladimir Nabokov, Joseph Brodsky, Marina Tsvetaeva, Nina Berberova, Julia Kristeva, Alexander Hemon, Dubravka Ugrešić, Norman Manea, Miroslav Penkov, Ilija Trojanow, Tea Obreht.
Instructor(s): Angelina Ilieva
Terms Offered: Autumn
Equivalent Course(s): REES 39010, CMLT 36912, CMLT 26912

REES 29012. Returning the Gaze: The Balkans and Western Europe. 100 Units.
This course investigates the complex relationship between South East European self-representations and the imagined Western "gaze" for whose benefit the nations stage their quest for identity and their aspirations for recognition. We also think about differing models of masculinity, the figure of the gypsy as a metaphor for the national self in relation to the West, and the myths Balkans tell about themselves. We conclude by considering the role that the imperative to belong to Western Europe played in the Yugoslav wars of succession. Some possible texts/films are Ivo Andric, Bosnian Chronicle; Aleko Konstantinov, Baj Ganyo; Emir Kusturica, Underground; and Milcho Manchevski, Before the Rain.
Instructor(s): A. Ilieva
Terms Offered: Autumn
Equivalent Course(s): REES 39012, NEHC 30884, CMLT 26912

REES 29013. The Burden of History: The Nation and Its Lost Paradise. 100 Units.
What makes it possible for the imagined communities called nations to command the emotional attachments that they do? This course considers some possible answers to Benedict Anderson's question on the basis of material from the Balkans. We will examine the transformation of the scenario of paradise, loss, and redemption into a template for a national identity narrative through which South East European nations retell their Ottoman past. From the Balkans we will provide insight not only into cultural mores and social relations, but into the very notion of "funny." Our own laughter in class will be the best measure of our success - both cultural and intellectual.
Instructor(s): Angelina Ilieva
Terms Offered: Winter
Equivalent Course(s): HIST 34005, CMLT 23401, NEHC 20573, CMLT 33401, NEHC 30573, REES 39013, HIST 33301

REES 29016. Gender in the Balkans: Wounded Men, Sworn Virgins, Eternal Mothers. 100 Units.
This introductory course examines the poetics of femininity and masculinity in some of the best works of the Balkan region. We contemplate how the experiences of masculinity and femininity are constituted and the issues of socialization related to these modes of being. Topics include the traditional family model, the challenges of modernization and urbanization, the socialist paradigm, and the post-socialist changes. Finally, we consider the relation between gender and nation, especially in the context of the dissolution of Yugoslavia. All work in English.
Instructor(s): A. Ilieva
Terms Offered: Winter
Equivalent Course(s): REES 39016, CMLT 23902, CMLT 33902, GNSE 27607
REES 29018. Imaginary Worlds: The Fantastic and Magic Realism in Russia and Southeastern Europe. 100 Units.
In this course, we will ask what constitutes the fantastic and magic realism as literary genres while reading some of the most interesting writings to have come out of Russia and Southeastern Europe. While considering the stylistic and narrative specificities of this narrative mode, we also think about its political functions -from subversive to escapist, to supportive of a nationalist imaginary-in different contexts and at different historic moments in the two regions.
Instructor(s): A. Ilieva Terms Offered: Spring
Equivalent Course(s): CMLT 27701, CMLT 37701, REES 39018

REES 29021. The Shadows of Living Things: The Writings of Mikhail Bulgakov. 100 Units.
What would your good do if evil did not exist, and what would the earth look like if all the shadows disappeared? After all, shadows are cast by things and people…. Do you want to strip the earth of all the trees and living things just because of your fantasy of enjoying naked light?” asks the Devil. Mikhail Bulgakov worked on his novel The Master and Margarita throughout most of his writing career, in Stalin’s Moscow. Bulgakov destroyed his manuscript, re-created it from memory, and reworked it feverishly even as his body was failing him in his battle with death. The result is an intense contemplation on the nature of good and evil, on the role of art and the ethical duty of the artist, but also a dazzling world of magic, witches, and romantic love, and an irresistible seduction into the comedic. Laughter, as shadow and light, as the subversive weapon but also as power’s whip, grounds human relation to both good and evil. Brief excursions to other texts that help us better understand Master and Margarita.
Equivalent Course(s): FNDL 29020, REES 39021

REES 29023. Returning the Gaze: The West and the Rest. 100 Units.
Aware of being observed. And judged. Inferior… Abject… Angry… Proud… This course provides insight into identity dynamics between the "West," as the center of economic power and self-proclaimed normative humanity, and the "Rest," as the poor, backward, volatile periphery. We investigate the relationship between South East European self-representations and the imagined Western gaze. Inherent in the act of looking at oneself through the eyes of another is the privileging of that other’s standard. We will contemplate the responses to this existential position of identifying symbolically with a normative site outside of oneself-self-consciousness, defiance, arrogance, self-exoticization-and consider how these responses have been incorporated in the texture of the national, gender, and social identities in the region. Orhan Pamuk, Ivo Andrić, Nikos Kazantzakis, Aleko Konstantinov, Emir Kusturica, Milcho Manchevski.
Instructor(s): Angelina Ilieva Terms Offered: Autumn
Equivalent Course(s): NEHC 39023, CMLT 39023, NEHC 29023, HIST 23609, REES 39023, HIST 33609, CMLT 29023

REES 29024. States of Surveillance. 100 Units.
What does it feel to be watched and listened to all the time? Literary and cinematic works give us a glimpse into the experience of living under surveillance and explore the human effects of surveillance - the fraying of intimacy, fracturing sense of self, testing the limits of what it means to be human. Works from the former Soviet Union (Sолженицын, Abram Tertz, Andrey Zvyagintsev), former Yugoslavia (Ivo Andrić, Danilo Kiš, Dušan Kovačević), Romania (Norman Manea, Cristian Mungiu), Bulgaria (Valeri Petrov), and Albania (Ismail Kadare).
Instructor(s): Angelina Ilieva Terms Offered: Autumn
Equivalent Course(s): REES 39024, CMLT 29024, CMLT 39024

REES 29700. Reading/Research: Russian and Eastern European Studies. 100 Units.
This is an independent study course which is arranged, planned, and managed by a supervising professor in conjunction with the goals that are proposed by the student, and then refined and approved by the supervising professor. This course involves more student self-discipline and a greater sense of direction than do most courses - the student must be willing to plan and execute his/her activities with much less monitoring and without prompting by fellow classmates. The student and the professor discuss and propose goals, topics, and projects.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of instructor and Departmental Adviser
Note(s): Students are required to submit the College Reading and Research Course Form.

REES 29701. Reading/Research: Russian and Eastern European Studies II. 100 Units.
This is the second part of an independent study course which is arranged, planned, and managed by a supervising professor in conjunction with the goals that are proposed by the student, and then refined and approved by the supervising professor. This course involves more student self-discipline and a greater sense of direction than do most courses—the student must be willing to plan and execute his/her activities with much less monitoring and without prompting by fellow classmates. The student and the professor discuss and propose goals, topics, and projects.
REES 29702. Studies III. 100 Units.
This is the third part of an independent study course which is arranged, planned, and managed by a supervising professor in conjunction with the goals that are proposed by the student, and then refined and approved by the supervising professor. This course involves more student self-discipline and a greater sense of direction than do most courses - the student must be willing to plan and execute his/her activities with much less monitoring and without prompting by fellow classmates. The student and the professor discuss and propose goals, topics, and projects.
Terms Offered: Spring
Prerequisite(s): Consent of instructor.

REES 29800. Reading/Research: Czech. 100 Units.

REES 29801. Intercultural Adaptation: Kurosawa and His Russian Sources. 100 Units.
Equivalent Course(s): CMLT 21704

REES 29811. The Novel-Essay and its Past. 100 Units.
No description available
Equivalent Course(s): CMLT 21705, GRMN 32716, CMLT 31705, GRMN 22716

REES 29900. BA Paper Workshop. 100 Units.
Students pursuing honors must write an acceptable BA paper in their final year under the supervision of a faculty member in the Department of Slavic Languages and Literatures. At the latest by the Autumn Quarter, students should begin the BA process by consulting with the director of undergraduate studies. Students may register for the BA Paper seminar (REES 29900 BA Paper Workshop) with the approval of the BA supervisor. This course will confer general College elective credit, but it will not count toward the major. If the completed bachelor's paper is judged by the supervisor and a second faculty member to be a distinguished example of original research or criticism, the student is recommended to the College for graduation with honors in Russian and East European Studies. The final decision regarding the granting of any degree with honors rests with the Collegiate divisional master.
Instructor(s): Staff Terms Offered: Autumn Spring Winter

REES 29912. Special Topics in Advanced Russian. 100 Units.
Equivalent Course(s): RUSS 29912, RUSS 39912, REES 39912
Sociology Department Website: http://sociology.uchicago.edu

PROGRAM OF STUDY

The discipline of sociology explores the nature, structure, and dynamics of social life, and also its causes and consequences for the world. With this broad mandate, sociology encompasses a diversity of substantive interests, methodological approaches, and theoretical orientations. Sociologists study diverse social phenomena ranging from online conversations, friendship, and families to neighborhoods, governments, and global markets. They study cities and communities, inequality, social mobility and social class, patterns of population change and migration, social identities such as race, class, and gender, ethnic relations and social conflict, social media and digital interaction, and social dimensions of sex, health, business, education, law, politics, religion, and science. Sociologists study the emergence, stabilization, disintegration, and wide-ranging implications of these social institutions, behaviors, and meanings. Methodologies of the field range from ethnography, interviews, and historical research to surveys, computational modeling, and big data analysis.

The University of Chicago's sociology department was the first in the United States, and it stewards the American Journal of Sociology, the discipline's longest running sociology journal. Chicago sociology builds on these legacies by continuing to sponsor pathbreaking research. Chicago training in sociology confers deep understanding of social organization and human relations, along with skill in drawing inferences from data, which has made it attractive for students considering careers in business, social media, data science, education, law, marketing, medicine, journalism, social work, politics, public administration, and urban planning. Chicago's sociology education forms an excellent basis for specialized graduate work and affords entry to careers in federal, state, and local agencies, as well as into business enterprises, private foundations, and research institutes. Chicago's sociology program provides a preeminent foundation for students considering careers in advanced research and university teaching. The program is designed to meet the needs of diverse students, and students declare a student-designed specialty that reflects their course work and BA thesis research, such as social policy or social analytics.

PROGRAM REQUIREMENTS

Students pursuing a BA degree in sociology are expected to complete the following requirements. All required sociology courses are offered annually, and students should inquire directly of the director of undergraduate studies if they need to know when a course will be offered in the next academic year.

A. Social Theory

Two required courses acquaint students with some of the fundamental problems and analytic perspectives of the field of sociology.

SOCI 20002 Social Structure and Change. The central objective of this course is to introduce students to the sociological study of individuals in society—how individual actions are shaped by their position in society, while contributing to its structure and change. We focus on sociological approaches to American society, its position in the international system, and principal dimensions including race and ethnicity, age, gender, and social class.

SOCI 20005 Sociological Theory. Drawing on the classics as well as on contemporary works in sociological theory, this course raises questions about the nature of sociological theory and its relation to both empirical research and sociological inquiry. Authors include Weber, Durkheim, Simmel, Dewey, Parsons, and Merton.

With the approval of the undergraduate program director, students may use other courses toward this requirement.

B. Methodology

Students are required to take at least one of the following methodology courses.

SOCI 20001 Sociological Methods. This course introduces the philosophy and practice of social research. It explores questions of causality in social research and the limits of knowledge. It then covers the basic practices that are components of all methods of social research through an in-depth examination of interviews, ethnography, surveys, and archival, online, and computational research. Students spend the quarter working on a series of assignments that culminate in a research proposal for the BA thesis.

SOCI 20140 Qualitative Field Methods. This course introduces techniques and approaches to ethnographic field research. Emphasis is placed on quality of attention and awareness of perspective as foundational aspects of the craft. Students conduct research at a site, compose and share field notes, and produce a final paper distilling sociological insight from fieldwork.

C. Statistics

Students must take the following statistics requirement.

SOCI 20004 Statistical Methods of Research. This required course provides a comprehensive introduction to widely used quantitative methods in sociology and related social sciences. Topics include analysis of variance and multiple regression, tools used often by practicing social scientists. Substitutes for this course are STAT
D. Additional Courses

Students must take seven additional courses in sociology or related fields, and at least four of these must be in sociology. They may be drawn from any of the 20000-level courses in sociology and, after the student completes SOCI 20002 Social Structure and Change, from any 30000-level courses in sociology that have not been cross-listed with undergraduate course numbers. Students may also count graduate courses (e.g., 40000-level or higher) in which they may enroll with permission of course instructors toward this requirement.

Courses outside of sociology must be approved by the undergraduate program director. Students must submit the College’s General Petition Form (https://college.uchicago.edu/advising/forms-and-petitions) for review. With a few exceptions, courses offered in the Division of the Social Sciences are accepted. Other courses with significant social science content or special relevance to a student’s BA thesis may also be accepted.

Area of Specialization. At least three of the additional courses in sociology or related fields, outlined above, must comprise a self-defined area of specialization. Students will declare a specialization which reflects an emphasis of their course work and BA thesis research. Students in the Class of 2019 and beyond are required to develop a specialization; students in the Classes of 2017 and 2018 may elect to do so.

Students are encouraged to consider their specialization from the time that they enter the program in order to guide their selection of courses and prepare them for the substantial research project of the BA thesis. Students formally propose their specialization at the start of their penultimate quarter of residence (ordinarily, this will be due in January of the student’s fourth year). The proposal should include a theme with three (or more) courses in sociology or related fields that students have completed or are completing within that domain. These proposals are to be submitted on the College’s General Petition Form (https://college.uchicago.edu/advising/forms-and-petitions) and must be approved by the undergraduate program director. Some examples of specializations might be:

- Urban Studies (e.g., SOCI 20215 Urban Health, SOCI 20219 Urban Ethnography, SOCI 20221 Crime and the City)
- Social Policy (e.g., SOCI 20192 The Effects of Schooling, PBPL 22300 Policy Implementation)
- Gender and Sexuality (e.g., SOCI 20107 Sociology of Human Sexuality, SOCI 20175 The Sociology of Deviant Behavior, GNSE 10310 Theories of Gender and Sexuality)
- Organizations (e.g., SOCI 20101 Organizational Analysis, PLSC 27500 Organizational Decision Making, ECON 28000 Industrial Organization)
- Social Analytics (e.g., SOCI 20157 Mathematical Models, SOCI 20209 Culture and Social Networks, STAT 22600 Analysis of Categorical Data)
- Demography (e.g., SOCI 28062 American Families: Inequality and Change, SOCI 20103 Social Stratification)

E. BA Thesis

During their fourth year, students majoring in sociology are expected to complete an original project of sociological inquiry on a topic of their choice, culminating in a final paper from twenty to forty pages in length. The project is an independent research project in which questions are formulated and data are collected and analyzed by the student. Recent projects have included studies of emerging forms of social interaction on the Internet, conflict and safety in urban Chicago neighborhoods, immigration and national identity in Germany and Guatemala, processes of gendering in the workplace, homosexuality and AIDS in South Africa, church leadership transition among Korean immigrants, the power of public rhetoric in public housing, role models among Mexican American youth, gender roles in families of graduate students, peer pressure and teenage pregnancy, and attitudes toward immigration.

The senior project is written under the guidance of an assigned preceptor from the department and a faculty member that students select during Spring Quarter of SOCI 29998 Sociology BA Thesis Seminar. After a faculty member agrees to advise a student’s thesis, the student will have the faculty member sign a hard copy of the BA Thesis Faculty Adviser Consent Form available for printing at sociology.uchicago.edu/sites/sociology.uchicago.edu/files/AdvisorConsentForm.pdf, which is to be turned in to the Department of Sociology office. Students may register for additional reading courses (SOCI 29997 Readings in Sociology); however, only two sociology reading/research courses can be counted toward courses required for the sociology major.

BA Seminar. The senior project is researched, discussed, and written in the context of SOCI 29998 Sociology BA Thesis Seminar, which is a required yearlong course. Students are required to attend this senior seminar in Spring Quarter of their third year and in the Autumn and Winter Quarters of their fourth year, but they must register for the seminar in only one of the three terms. Students who plan to study abroad during any of these quarters must still participate in the seminar by completing required assignments and submitting them online and on time. The completed thesis is submitted during Spring Quarter of their fourth year. Students graduating in a quarter
other than Spring Quarter must turn in their theses by Friday of seventh week of their final quarter. When circumstances justify it, the department may set individual deadlines and procedures.

**SUMMARY OF REQUIREMENTS**

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<th>Two of the following:</th>
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<tr>
<td>SOCI 20002 Social Structure and Change</td>
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<td>SOCI 20005 Sociological Theory</td>
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<td>or approved substitute</td>
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<td>One of the following:</td>
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<td>SOCI 20001 Sociological Methods</td>
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<td>SOCI 20140 Qualitative Field Methods</td>
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<td>SOCI 20004 Statistical Methods of Research</td>
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Three approved courses in an area of specialization 300
Four additional courses in sociology or related fields 400

**SOCI 29998 Sociology BA Thesis Seminar** 100

**Total Units** 1200

* No more than three courses from outside sociology and no more than two reading and research courses may be used toward the major. Students must submit the College’s General Petition Form (https://college.uchicago.edu/advising/forms-and-petitions) for approval of courses outside sociology. See “Additional Courses” section for details.

** May substitute STAT 20000 or higher

**GRADING**

All courses required for completion of the sociology program must be taken for quality grades (e.g., not P/F).

**HONORS**

If the student’s cumulative GPA is at or above 3.25 and the student's GPA in the major is at or above 3.5, the student may be nominated for graduation with honors on the basis of the excellence of the thesis. The thesis must be based on substantial individual research conducted under the guidance of a faculty member, and it must be evaluated both by the student’s adviser and by the program chair at A- or A.

**ENTERING THE MAJOR**

No special application is required for admission to the sociology program, but students should discuss their plans with their College adviser prior to declaring the major. They must then declare their intention to major at my.uchicago.edu and inform the Department of Sociology at sociology.uchicago.edu/content/majoring-sociology-intake-form, which includes a short entry survey. Students may enter the program at any time upon completion of any social sciences general education sequence, but no later than the beginning of Spring Quarter in their third year.

Students are encouraged to complete the required introductory sociology courses (SOCI 20002 Social Structure and Change and SOCI 20005 Sociological Theory) as early as possible, and to enroll in a required methodology course by Spring Quarter of their third year, the quarter in which students begin SOCI 29998 Sociology BA Thesis Seminar.

**ADVISING**

Students should address technical questions regarding the program (e.g., required courses, petitions) to the undergraduate program director. During Spring Quarter of the third year, students will also select a faculty member to serve as adviser. Students may wish to contact their faculty adviser to address general questions regarding the discipline of sociology and to receive guidance in designing an individualized program of study and selecting a specialization.

**Handbook**

Students interested in pursuing the BA degree in sociology are encouraged to read the brochure Undergraduate Program in Sociology, which is available in the Office of the Department of Sociology (SS 307).
SOCIOLOGY COURSES

SOCI 20000. Invitation to Sociology. 100 Units.
What do sociologists do all day? This course introduces students to the vast terrain of contemporary sociology, including: culture, deviance, economic life, education, family, health and the body, politics, population, professions, race, science and knowledge, and sex/gender, employing institutionalization as a basic lens that leads sociology to have a somewhat different approach from other social sciences. Why an invitation? Unlike introductory courses that cover 10 topics in 10 weeks with an emphasis on foundational texts, students will get to know sociology by reading and analyzing a rotating selection of books and articles that exemplify the field today. Students will complete exercises and write-ups that link claims about the social world to evidence. Throughout the quarter, class format takes a variety of forms, including lectures, informal presentations, student-led discussions, debates, and guest speakers.
Instructor(s): J. Martin and J. Trinitapoli Terms Offered: Spring

SOCI 20001. Sociological Methods. 100 Units.
This course introduces the philosophy and practice of social research. Working from the idea that the research process is fundamentally a critical dialogue, we begin by exploring questions of causality and the epistemology of social research. Then we turn to examine the basic practices that are a component of all methods of social research through an in-depth examination of interviews, ethnography, surveys, and archival research. Assignments culminate in a research proposal for the BA thesis.
Instructor(s): R. Vargas Terms Offered: Spring
Note(s): Required of students who are majoring in Sociology

SOCI 20002. Social Structure and Change. 100 Units.
The title of this course is traditional more than it is descriptively accurate. It should be called How to Think Sociologically. Rather than attempt to survey the state of the field as introductory courses typically do, this course advances a particular vision of the discipline. We will be reading authors that fundamentally inform this vision (not all of whom were sociologists proper), including Durkheim, Weber, Simmel, Garfinkel, Goffman, Geertz, Levi-Strauss, Mauss, Bourdieu, and Fanon. We will learn how to identify properly sociological objects and how to engage in various modes of sociological analysis. We will discuss social facts, forms, types, and relations; the collective nature of social reality, social identities such as race and gender, and social class. We may even get to talk about social structure and change. The course has been designed to provide students majoring in sociology a more solid-although, again, a very particular-disciplinary foundation. The readings fill the gap between the classical sociology covered in the social science cores Self and Power and the contemporary sociology covered by other departmental offerings.
Instructor(s): M. Garrido Terms Offered: Winter
Note(s): Required of students who are majoring in Sociology

SOCI 20004. Statistical Methods of Research. 100 Units.
This course provides a comprehensive introduction to widely used quantitative methods in sociology and related social sciences. Topics include analysis of variance and multiple regression, considered as they are used by practicing social scientists.
Instructor(s): S. Raudenbush Terms Offered: Winter
Prerequisite(s): Priority registration for Ugrad Sociology majors and Sociology PhD students. No prior instruction in statistical analysis is required. Others by consent of instructor.
Note(s): Students are expected to attend two lectures and one lab per week. Required of students who are majoring in Sociology
Equivalent Course(s): SOCI 30004

SOCI 20005. Sociological Theory. 100 Units.
The course provides a basic introduction to modern sociological theory. Readings focus on classic texts by Weber, Durkheim, Simmel, and Dewey, ending with an individually chosen (by each student) text by a theoretical writer from outside Europe and North America. Lectures provide a background history of modern social thought.
Instructor(s): A. Glaeser Terms Offered: Autumn
Note(s): Required of students who are majoring in Sociology

SOCI 20101. Organizational Analysis. 100 Units.
This course is a systematic introduction to theoretical and empirical work on organizations broadly conceived (e.g., public and private economic organizations, governmental organizations, prisons, professional and voluntary associations, health-care organizations). Topics include intraorganizational questions about organizational goals and effectiveness, communication, authority, and decision making. Using recent developments in market, political economy, and neoinstitutional theories, we explore organizational change and interorganizational relationships for their implications in understanding social change in modern societies. Social network analysis will inform much of the discussion.
Instructor(s): E. Laumann Terms Offered: Autumn
Equivalent Course(s): PBPL 23000, SOCI 30101
SOCI 20103. Social Stratification. 100 Units.
Social stratification is the unequal distribution of the goods that members of a society value - earnings, income, authority, political power, status, prestige etc. This course introduces various sociological perspectives about stratification. We look at major patterns of inequality throughout human history, how they vary across countries, how they are formed and maintained, how they come to be seen as legitimate and desirable, and how they affect the lives of individuals within a society. The readings incorporate classical theoretical statements, contemporary debates, and recent empirical evidence. The information and ideas discussed in this course are critical for students who will go on in sociology and extremely useful for students who want to be informed about current social, economic, and political issues.
Instructor(s): R. Stolzenberg Terms Offered: Spring. Cancelled - Not offered in 2018/19
Equivalent Course(s): SOCI 30103

SOCI 20104. Urban Structure and Process. 100 Units.
This course reviews competing theories of urban development, especially their ability to explain the changing nature of cities under the impact of advanced industrialism. Analysis includes a consideration of emerging metropolitan regions, the microstructure of local neighborhoods, and the limitations of the past American experience as a way of developing urban policy both in this country and elsewhere.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): SOSC 25100, CRES 20104, SOCI 30104, GEOG 22700, GEOG 32700

SOCI 20107. Sociology of Human Sexuality. 100 Units.
After briefly reviewing several biological and psychological approaches to human sexuality as points of comparison, this course explores the sociological perspective on sexual conduct and its associated beliefs and consequences for individuals and society. Substantive topics include gender relations; life-course perspectives on sexual conduct in youth, adolescence, and adulthood; social epidemiology of sexually transmitted infections (including AIDS); sexual partner choice and turnover; and the incidence/prevalence of selected sexual practices. Network analytic approaches will be introduced.
Instructor(s): E. Laumann Terms Offered: Spring
Prerequisite(s): Introductory social sciences course
Equivalent Course(s): SOCI 30107, GNSE 27100

SOCI 20125. Rational Foundations of Social Theory. 100 Units.
This course introduces conceptual and analytical tools for the micro foundations of macro and intermediate-level social theories, taking as a basis the assumption of rational action. Those tools are then used to construct theories of power, social exchange, collective behavior, socialization, trust, norm, social decision making and justice, business organization, and family organization.
Instructor(s): K. Yamaguchi Terms Offered: Spring
Equivalent Course(s): SOCI 30125

SOCI 20126. Japanese Society: Functional/Cultural Explanations. 100 Units.
The objective of this course is to provide an overview of social structural characteristics and the functioning of contemporary Japanese society by a juxtaposition of universalistic functional (or rational) explanations and particularistic cultural (and historical) explanations. As well become clear as complementary to each other. Substantively, the course primarily focuses on 1) the forms of social interaction and structure, 2) work organization and family, and 3) education, social inequality, and opportunity. The course also presents discussions of the extent to which Japan is “unique” among industrial societies. In covering a broad range of English-language literature on Japanese society, the course not only presents reviews and discussions of various alternative theoretical explanations of the characteristics of Japanese society, but also a profound opportunity to critically review and study selected sociological theories.
Instructor(s): K. Yamaguchi Terms Offered: Spring
Equivalent Course(s): SOCI 30126

SOCI 20140. Qualitative Field Methods. 100 Units.
This course introduces techniques of, and approaches to, ethnographic field research. We emphasize quality of attention and awareness of perspective as foundational aspects of the craft. Students conduct research at a site, compose and share field notes, and produce a final paper distilling sociological insight from the fieldwork.
Instructor(s): O. McRoberts Terms Offered: Spring
Equivalent Course(s): CRES 20140, CHDV 20140

SOCI 20157. Mathematical Models. 100 Units.
This course examines mathematical models and related analyses of social action, emphasizing a rational-choice perspective. About half the lectures focus on models of collective action, power, and exchange as developed by Coleman, Bonacich, Marsden, and Yamaguchi. Then the course examines models of choice over the life course, including rational and social choice models of marriage, births, friendship networks, occupations, and divorce. Both behavioral and analytical models are surveyed.
Instructor(s): K. Yamaguchi Terms Offered: Winter
Equivalent Course(s): SOCI 30157
SOCI 20175. The Sociology of Deviant Behavior. 100 Units.
This course examines how distinctions between "normal" and "deviant" are created, and how these labels shift historically, culturally, and politically. We analyze the construction of social problems and moral panics (e.g., smoking, "satanic" daycares, obesity) to explore how various moral entrepreneurs shape what some sociologists call a "culture of fear." Additionally, we investigate the impact on individuals of being labeled "deviant" either voluntarily or involuntarily, as a way of illustrating how both social control and social change operate in society.
Instructor(s): K. Schilt Terms Offered: Autumn
Equivalent Course(s): GNSE 20170

SOCI 20192. The Effects of Schooling. 100 Units.
From at least the Renaissance until some time around the middle of the twentieth century, social class was the pre-eminent, generalized determinant of life chances in European and, eventually, American societies. Social class had great effect on one's social standing; economic well-being; political power; access to knowledge; and even longevity, health, and height. In that time, there was hardly an aspect of life that was not profoundly influenced by social class. In the ensuing period, the effects of social class have receded greatly, and perhaps have even vanished. In their place formal schooling has become the great generalized influence over who gets access to the desiderata of social life, including food, shelter, political power, and medical care. So it is that schooling is sociologically interesting for reasons that go well beyond education. The purpose of this course is to review what is known about the long-term effects of schooling.
Instructor(s): R. Stolzenberg Terms Offered: Spring. Cancelled - Not offered in 2018/19
Equivalent Course(s): SOCI 30192

SOCI 20226. Urban Schools and Communities. 100 Units.
This course focuses on urban communities and the contextual factors influencing the organization of schools. It emphasizes historical, anthropological, and sociological perspectives as we explore questions about the purpose and history of public schools, the influences on the character of their structure and organization (especially in urban areas), and the surrounding context, such as housing, policy, race and class. The topics detailed below provide essential intellectual perspectives on the history, work, and complexities of urban schools.
Instructor(s): S. Stoelinga Terms Offered: Autumn
Equivalent Course(s): PBPL 27821, CHDV 27821

SOCI 20233. Race in Contemporary American Society. 100 Units.
This survey course in the sociology of race offers a socio-historical investigation of race in American society. We will examine issues of race, ethnic and immigrant settlement in the United States. Also, we shall explore the classic and contemporary literature on race and inter-group dynamics. Our investigative tools will include an analysis of primary and secondary sources, multimedia materials, photographic images, and journaling. While our survey will be broad, we will treat Chicago and its environs as a case study to comprehend the racial, ethnic, and political challenges in the growth and development of a city.
Instructor(s): S. Hicks-Bartlett Terms Offered: Autumn Spring
Equivalent Course(s): MAPS 30233, SOCI 30233

SOCI 20242. States, Markets, and Bodies. 100 Units.
An introduction to political economy, this course will introduce students to theories, concepts, and tools for studying relations between states and markets that affect the structure of power relationships. Taking a global approach, we will examine the different forms of state repression, the consequences of a neoliberal and decentralized global market, and its affects on individual people/workers. This course is motivated by three interrelated questions: (1) What is the appropriate role of the government in the economy? (2) How should states govern their citizens? (3) What is the role of the individuals who make up civil society?
Instructor(s): K. Hoang Terms Offered: Winter

SOCI 20251. Trade, Development and Poverty in Mexico. 100 Units.
With a focus on the past two decades, this interdisciplinary course explores the impact of economic integration, urbanization, and migration on Mexico and, to a lesser extent, on the United States-in particular, working class communities of the Midwestern Rust Belt. The course will examine work and life in the borderland production centers; agriculture, poverty, and indigenous populations in rural Mexico; evolving trade and transnational ties (especially in people, food products and labor, and drugs) between the U.S. and Mexico; and trade, trade adjustment, and immigration policy.
Instructor(s): C. Broughton Terms Offered: Winter
Note(s): This course is offered in alternate years.
Equivalent Course(s): PBPL 24901, LACS 24901
SOCI 20253. Introduction to Spatial Data Science. 100 Units.
Spatial data science consists of a collection of concepts and methods drawn from both statistics and computer science that deal with accessing, manipulating, visualizing, exploring and reasoning about geographical data. The course introduces the types of spatial data relevant in social science inquiry and reviews a range of methods to explore these data. Topics covered include formal spatial data structures, geovisualization and visual analytics, rate smoothing, spatial autocorrelation, cluster detection and spatial data mining. An important aspect of the course is to learn and apply open source software tools, including R and GeoDa.
Instructor(s): L. Anselin
Terms Offered: Autumn
Prerequisite(s): STAT 22000 (or equivalent), familiarity with GIS is helpful, but not necessary
Equivalent Course(s): GEOG 30500, GEOG 20500, MACS 54000, SOCI 30253

SOCI 20263. Human Migration. 100 Units.
At any moment, spatial location is a fixed, essential characteristic of people and the places they inhabit. Over time, individuals and groups of people change places. In the long run, the places themselves move in physical, social, economic and political space. These movements can be characterized by their origins and destinations, as intentional or accidental, forced or voluntary, individual or collective, within political borders (e.g. the farm-to-city migration of the 1940’s in the U.S), migration across political boundaries (e.g. “displacement” of pariah ethnicities after World War II), and by other criteria. All of these phenomena are aspects of migration This course reviews contemporary demographic research and theory concerning the nature of migration, and its extent, causes and consequences for individuals and collectivities. The demographic perspective absorbs a wide range of disciplinary perspectives, including those of psychology (e.g. individual decision-making), sociology (collective behavior, stratification, race and ethnicity), economics (rational behavior, macroeconomic conditions), and more.
Instructor(s): R. Stolzenberg
Terms Offered: Winter. Cancelled - Not offered in 2018/19
Equivalent Course(s): SOCI 30263

SOCI 20264. Wealth. 100 Units.
Wealth is the value of a person’s accumulated possessions and financial assets. Wealth is more difficult for social researchers to measure than earnings and income, and wealthy people are notoriously uncooperative with efforts to study them and their assets. Further, wealth data conveys less information than income data about the lives of the middle- and lower-classes – who tend to have little or no wealth at all. However, information about wealth gives fundamentally important insight into the values, attitudes, behavior, consumption patterns, social standing, political power, health, happiness and yet more characteristics of individuals and population subgroups. This course considers the causes and consequences of wealth accumulation for individuals, the social groups to which they belong, and the societies in which they dwell.
Instructor(s): R. Stolzenberg
Terms Offered: Winter. Cancelled - Not offered in 2018/19
Equivalent Course(s): SOCI 30264

SOCI 20268. Health, Medicine, and Human Rights. 100 Units.
The World Health Organization, United Nations and other international bodies consider health a fundamental human right. At the same time, most countries around the world are characterized by profound inequalities in health and wellbeing. In this course, we leverage sociological and social scientific concepts through a human rights framework to understand how these inequalities in mental and physical health are perpetuated by the structure and culture of society, with an emphasis on U.S. society. We will also examine medicine as an institution with a problematic history of repeated human rights violations (in the U.S. and around the world) and explore how that history shapes the current practice of medicine, medical research, and relations between doctors and patients. Finally, we will explore how institutions provide (or fail to provide) equal access to healthcare, and how state understandings of the right to health influence the lives of individuals and communities.
Instructor(s): Mueller, Anna; Offidani-Bertrand, Carly
Terms Offered: Autumn
Note(s): CHDV Distribution: B, C, D
Equivalent Course(s): HMRT 23440, CHDV 23440

SOCI 20274. Urban Spatial Archaeology II. 100 Units.
This course builds off Urban Spatial Archaeology I, by focusing on more specific ways to apply the concepts of space and time to contemporary urban research issues. Students will also learn methods for analyzing the data they chose to digitize in the previous quarter, which will culminate in a research paper on a topic of their choosing. Students will walk away from this course with a deeper understanding of how researchers and policy makers think of space and time with respect to a particular urban issue. In addition, students will have produced a research paper and data visualization that would critique the ways researchers have traditionally conceptualized time and space.
Instructor(s): R. Vargas
Terms Offered: Spring. Cancelled - Not Offered in 2018/2019
Prerequisite(s): SOCI 20273/30273 and GEOG 20273/30273
Equivalent Course(s): GEOG 20274, SOCI 30274, GEOG 30274
SOCI 20280. The Politics of Popular Sovereignty: Participation and Protest. 100 Units.
If government is of, by and for the people, what kinds of politics are possible? Certainly, politics will operate
through established institutions such as elections and legislatures. But popular politics may also take other
forms: petitions, social movements, protest in the streets, and cultural critique. These efforts often fail, sometimes
dramatically, but they have also contributed to major social change including the abolition of slavery, the
expansion of rights, and demands for new understandings of justice. This course will explore the history of
popular politics within democratizing societies, the development of new forms of collective mobilization and
technologies of political influence, and the changing relation of popular politics to formal political institutions.
Instructor(s): E. Clemens Terms Offered: Autumn
Equivalent Course(s): PLSC 20280

SOCI 20281. Library Methods for the Social Sciences. 100 Units.
This course is a graduate introduction to the methods involved with "research with records"—that is, material
like manuscripts, books, journals, newspapers, ephemera, and government and institutional documents. (Such
material has been typically printed but may now be stored electronically as well as physically.) The course covers
the essentials of project design, bibliography, location, access, critical reading, source evaluation and provenance,
knowledge categorization and assembly, and records maintenance. The course is a methodological practicum and
will involve both small-scale exercises and a larger project. Major texts include Thomas Mann’s Oxford Guide to
Library Research and Andrew Abbott’s Digital paper.
Instructor(s): A. Abbott Terms Offered: Autumn
Note(s): Advanced undergrads by consent
Equivalent Course(s): SOCI 40142

SOCI 20282. Immigrant America. 100 Units.
Nearly 60 million immigrants have arrived in the U.S. in the past 50 years, mostly from Latin America and
Asia, but also from Africa and the Middle-East. Today, a near-record 14% of the country’s population is foreign
born compared with just 5% in 1965. These profound demographic changes raise critical questions: Why do
immigrants come to the U.S.? What impact do they have on U.S. society? Are today’s immigrants fundamentally
different from previous waves of immigrants? Are these immigrants assimilating to the U.S. or retaining their
culture? Why do some immigrant groups appear to fare better than others? This course will expose students to
the latest social science research on contemporary immigration to the United States. We will explore its origins,
adaptation patterns, and long-term effects on American society.
Instructor(s): R. Flores Terms Offered: Autumn

SOCI 20284. Survey Research Practicum. 100 Units.
The Survey Research Practicum is designed to give students real world experience in planning and administering
a mixed-mode survey research project using an address based sample. The course will focus on the planning and
administration of a ready-to-field survey, and on understanding how trade-off decisions in the planning phase
may affect survey errors. This is a hands-on course in which students will take part in the actual how-to of data
collection. Students will take part in every phase of the operational design and project execution. In the process
of planning and fielding the survey, students will learn to: prepare a scope of work and write a budget, prepare
and submit an IRB application, properly staff a field operation, learn to conduct a standardized survey interview,
track fieldwork and disposition outcomes, calculate response rates, process and clean data, and prepare a
methodological report. Students will also assist in the development and implementation of methodological
experiments in order to understand how changes to the survey design affect data outcomes.
Instructor(s): K. Ulrich Terms Offered: Autumn

SOCI 28080. Sociology of Medicine. 100 Units.
We often think of medical diagnoses as objective labels that reflect verifiable biological realities—but are they
always? This course complicates the biomedical model of health and illness by exploring the social, cultural,
economic, and political factors that shape medical research, clinical practice, and the structure of the healthcare
delivery system. Focusing primarily on the American context, students will investigate how disease labels
interact with social non-conformities, how medical diagnoses can serve as forms of social control, and how
healthcare inequalities emerge. Students will also learn about resistance to stigma and medicalization, as well as
the relationship between experiences of illness and new technologies, such as gene sequencing and the Internet.
Instructor(s): A. Brewer Terms Offered: Spring

SOCI 28081. The Social Life of the Law. 100 Units.
How does the American legal system create, solidify, or attempt to rectify social inequalities and injustices? This
course investigates the relationship(s) between law and society, with a focus on the American civil legal system’s
historical and current role in inequality, social problems, and social disputes. We will examine the ways in which
individuals and groups are oriented towards and mobilize the law within the constraints of the legal system and
everyday life. We will ask: What are the roots of “equality” as the basis for addressing social discrepancies? What
are the consequences of equality and rights forming the foundation for claims and cases in the American legal
system? How do the overlaps of the criminal justice system, civil law, and everyday understandings of legality
create or deny legal outcomes? What have the legal claims made by historical and current social movements
brought into the picture and what has been left out of frame? In a political context that debates the worthiness of
rights-based claims-making, where can we go from here?
Instructor(s): K. Hendricks Terms Offered: Autumn
SOCI 28082. Sociology of Higher Education. 100 Units.
This course is designed to introduce students to the sociological study of higher education in the United States. The course will examine the purpose of college and how inequalities in student pathways through higher education are shaped by individual context and institutional structure. This course will consider a number of critical problems and questions regarding higher education, including those related to preparation and access, forms of capital, campus experience, achievement, and outcomes.
Instructor(s): M. Osborne Terms Offered: Winter

SOCI 29997. Readings in Sociology. 100 Units.
Students are required to submit the College Reading and Research Course Form. With consent of instructor, students may take this course for P/F grading if it is not being used to meet program requirements.
Terms Offered: Summer, Autumn, Winter, Spring
Prerequisite(s): Consent of instructor and program chair.

SOCI 29998. Sociology BA Thesis Seminar. 100 Units.
This required yearlong course is a forum for students who are majoring in sociology to present their BA papers. Students attend the seminar in Spring Quarter of their third year and in Autumn and Winter Quarters of their fourth year. They may enroll during any one of these quarters, but must attend all three. They submit a completed thesis during Spring Quarter of their fourth year. Students who are not graduating in June should participate in three quarters of the senior seminar in the twelve months before graduation. Students who plan to study abroad during Spring Quarter of their third year should consult with the Undergraduate Program Chair well in advance of their trip. For a general statement about the BA paper, students should obtain the brochure Undergraduate Program in Sociology in the departmental office.
Terms Offered: Autumn, Winter, Spring
Prerequisite(s): Open only to students who are majoring in sociology.
Note(s): Must be taken for a quality grade.
**SOUTH ASIAN LANGUAGES AND CIVILIZATIONS**

Department Website: [http://salc.uchicago.edu](http://salc.uchicago.edu)

**PROGRAM OF STUDY**

The Department of South Asian Languages and Civilizations (SALC) offers an undergraduate major leading to a BA in the Humanities Collegiate Division. The social sciences are integrated into our program through the civilization sequence, and courses in the social sciences and religious studies are usually included in a student’s program of study. Students majoring in SALC will gain a broad knowledge of the literature and history of the South Asian subcontinent (i.e., Bangladesh, India, Nepal, Pakistan, Sri Lanka), and proficiency in at least one South Asian language that is equivalent to one year of study or more. Students currently can study Bangla (Bengali), Hindi, Malayalam, Marathi, Pali, Sanskrit, Tamil, Telugu, Tibetan, or Urdu. As part of their course of study, students are encouraged to participate in a study abroad program in South Asia, such as the South Asian Civilizations in India sequence (Pune program). The SALC curriculum will develop the student’s skills in formulating analyses of various types of texts (i.e., historical, literary, filmic), and students will also engage with social scientific approaches to South Asian cultures. The thorough area knowledge of South Asian arts, culture, history, and politics, and the critical and linguistic skills developed through the SALC degree may prepare a student for any number of careers.

Students in other fields of study may also complete a minor in SALC. Information on the minor follows the description of the major below.

**FORMS**

Students who intend to join the SALC undergraduate program should fill out the appropriate form below and schedule a meeting with the SALC Director of Undergraduate Studies. Additional information about the timeline for completing these forms can be found in the corresponding section below.

- Major form: [http://salc.uchicago.edu/sites/salc.uchicago.edu/files/SALC_majorform.pdf](http://salc.uchicago.edu/sites/salc.uchicago.edu/files/SALC_majorform.pdf)

**GRADING**

Students pursuing a major or minor in South Asian Languages and Civilizations must take a quality grade in all courses used to meet department requirements. More than half of the requirements must be met by courses bearing University of Chicago course numbers.

**TIMELINE**

**First and Second Year**

- Contact SALC Director of Undergraduate Studies and collect the form for intended minor/major.
- Start taking language, South Asia civilization, and other introductory classes.

**Third Year**

- Winter Quarter: If pursuing honors in SALC, find SALC faculty member who will act as your BA adviser to begin discussion of a research topic and schedule reading courses to be taken in the Autumn–Winter Quarters of the fourth year (SALC 29800 BA Paper I and SALC 29801 BA Paper II).

**Fourth Year**

- Autumn Quarter: Update form for departmental records. Submit a copy of the finalized form to your College adviser.
- Autumn-Winter Quarters: Take reading courses with SALC BA adviser.
- Spring Quarter: First week, submission of the BA thesis.

**PROGRAM REQUIREMENTS**

Ideally, students will begin their study with the two-quarter sequence SALC 20100-20200 Introduction to the Civilizations of South Asia I-II. All SALC majors must take this sequence or the equivalent program taught in Pune, SOSC 23004-23005-23006 South Asian Civilizations in India I-II-III. If this sequence is not used to satisfy the civilization studies general education requirement, then it will count toward the major.

The major requires three courses in a South Asian language at the second-year level or above. These courses must be taken at the University of Chicago, and credit cannot be granted by examination. Students with prior knowledge of one or the languages offered by SALC may take a placement test in order to determine the right level for them to enroll. The College’s language competency requirement may be satisfied by demonstrated proficiency equivalent to one year of study of a South Asian language offered through SALC.
Students are also required to take six courses related to South Asia. In addition to SALC offerings, courses with significant South Asian content that originate in other departments may be eligible, subject to the approval of the SALC Director of Undergraduate Studies. Three of these six courses may be language courses, either further courses in the same language or courses in another South Asian language. Students should choose courses in consultation with the SALC Director of Undergraduate Studies and fill out a form indicating what they intend to list for their major requirements.

SUMMARY OF REQUIREMENTS

One of the following two-quarter sequences: *

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>SALC 20100-20200</td>
<td>Introduction to the Civilizations of South Asia I-II</td>
<td>200</td>
</tr>
<tr>
<td>SOSC 23004 &amp; SOSC 23005</td>
<td>South Asian Civ In India-1 and South Asian Civ In India-2</td>
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</tbody>
</table>

Three courses in a South Asian language at second-year level or above **

Six courses related to South Asia ***

Total Units 1100

* All SALC majors must take one of these two sequences. If the sequence is being used to satisfy the general education requirement in civilization studies, two additional courses related to South Asia must be substituted into the major.

** Credit may not be granted by examination. Courses must be taken at the University of Chicago.

*** May include SALC 29801 BA Paper II, SOSC 23006 South Asian Civ In India-3, and up to three additional language courses (either further study in the same language or courses in another South Asian language). Courses from other departments with significant South Asian content require approval of the Director of Undergraduate Studies.

Sample Major Programs

The following groups of courses would comprise a major.

I. Emphasis on language(s)

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>Introduction to the Civilizations of South Asia I-II</td>
<td>200</td>
</tr>
<tr>
<td>TBTN 20100-20200-20300</td>
<td>Second-Year Tibetan I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>ANTH 25500</td>
<td>Cultural Politics of Contemporary India</td>
<td>100</td>
</tr>
<tr>
<td>SALC 20800</td>
<td>Music of South Asia</td>
<td>100</td>
</tr>
<tr>
<td>SALC 28700</td>
<td>The State In India</td>
<td>100</td>
</tr>
<tr>
<td>URDU 10100-10200-10300</td>
<td>First-Year Urdu I-II-III</td>
<td>300</td>
</tr>
</tbody>
</table>

Total Units 1100

II. Emphasis on civilization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALC 20100-20200</td>
<td>Introduction to the Civilizations of South Asia I-II</td>
<td>200</td>
</tr>
<tr>
<td>BANG 30100-30200-30300</td>
<td>Third-Year Bangla (Bengali) I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>ANTH 21401</td>
<td>Logic/Practice Of Archaeology</td>
<td>100</td>
</tr>
<tr>
<td>SALC 20400</td>
<td>The Mahabharata in English Translation</td>
<td>100</td>
</tr>
<tr>
<td>SALC 20901 &amp; SALC 20902</td>
<td>Indian Philosophy I: Origins and Orientations and Indian Philosophy II: The Classical Traditions</td>
<td>200</td>
</tr>
<tr>
<td>SALC 23104</td>
<td>Problems in the Study of Gender: Gender, Citizenship, Violence</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Units 1100

HONORS

To be eligible for honors, students must:

1. maintain an overall GPA of 3.0 or higher
2. maintain a GPA of 3.3 or higher in courses satisfying major requirements
3. complete a BA thesis of superior quality

In order to be eligible to write a BA thesis in SALC, students must meet the civilization studies sequence and language requirements by the end of their third year. By then, they must also have completed the honors form and returned it to the SALC Director of Undergraduate Studies. In Winter Quarter of their third year, the student will arrange to work with a SALC faculty member for the Autumn and Winter Quarters of the following year. It is the student’s responsibility to find and make an arrangement with an appropriate faculty member who will be in residence during the student’s fourth year. In consultation with the BA thesis adviser, the student must also suggest the name of a faculty member who will act as a second reader.
Students will research, discuss, and write the BA thesis in the context of SALC 29800 BA Paper I and SALC 29801 BA Paper II, for which they will register in the Autumn and Winter Quarters of their fourth year. **Students may use SALC 29801 as one of their six content courses in the major.** SALC 29800 will be for general elective credit only.

Two hard copies of the thesis must be submitted to the SALC departmental office, and a PDF version must be sent electronically to the Director of Undergraduate Studies. The deadline for the submission of the thesis is Friday at 5 p.m. in the first week of Spring Quarter.

**MINOR PROGRAM IN SOUTH ASIAN LANGUAGES AND CIVILIZATIONS**

The minor program in South Asian Languages and Civilizations requires a total of seven or six courses, broken down into three categories.

**Civilization Studies**

All students in the minor are required to take two quarters of SALC 20100-20200 Introduction to the Civilizations of South Asia I-II or SOSC 23004-23005-23006 South Asian Civilizations in India I-II-III (taught in Pune). These two quarters will count toward either the general education requirement in civilization studies or the minor itself. If SALC 20100-20200 Introduction to the Civilizations of South Asia I-II or SOSC 23004-23005-23006 South Asian Civilizations in India I-II-III are not used to meet the general education requirement, both courses in the sequence must be included in the minor, for a total of seven courses. If they are counting toward the general education requirement instead, students must seek approval from the SALC Director of Undergraduate Studies to fulfill the requirement in the minor with one additional course related to South Asian civilizations, for a total of six courses.

**Language**

Three courses in a South Asian language at any level. Credit may not be granted by examination.

**Electives**

Two additional courses that may either be (a) listed as SALC courses or as one of the SALC languages (e.g., Bangla, Hindi, etc.), or (b) courses focused on South Asia that originate in other departments (subject to the approval of the SALC Director of Undergraduate Studies).

Students choose courses in consultation with the SALC Director of Undergraduate Studies.

**SUMMARY OF REQUIREMENTS FOR THE MINOR IN SOUTH ASIAN LANGUAGES AND CIVILIZATIONS**

<table>
<thead>
<tr>
<th>One of the following two-quarter sequences:</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALC 20100-20200 Introduction to the Civilizations of South Asia I-II</td>
<td></td>
</tr>
<tr>
<td>SOSC 23004 South Asian Civ In India-1 &amp; SOSC 23005 and South Asian Civ In India-2</td>
<td>300</td>
</tr>
<tr>
<td>Three courses in a South Asian language at any level</td>
<td>200</td>
</tr>
<tr>
<td>Two courses related to South Asia</td>
<td>700</td>
</tr>
</tbody>
</table>

* All students in the minor are required to take one of these two-quarter sequences. Students using one of the sequences to satisfy the general education requirement in civilization studies may not also use it toward the minor. In that case, students must seek approval from the SALC Director of Undergraduate Studies to fulfill the requirement in the minor with one additional course related to South Asian civilizations, for a total of six courses.

** Credit may not be granted by examination. Courses must be taken at the University of Chicago.

*** Two additional courses that may either be (a) listed as SALC courses or as one of the SALC languages (e.g., Bangla, Hindi, etc.), or (b) courses focused on South Asia that originate in other departments (subject to the approval of the SALC Director of Undergraduate Studies).

Students must receive the approval of the SALC Director of Undergraduate Studies on a form obtained from their College adviser and return it by the Spring Quarter of their third year. Students must also indicate their intent to minor in SALC with a form obtained from the SALC Director of Undergraduate Studies.

Courses in the minor (1) may not be counted double with the student’s major(s) or with other minors and (2) may not be counted double toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

**SALC Sample Minors**

The following groups of courses would comprise a minor.
I. Seven-Course SALC Sample Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALC 20100-20200</td>
<td>Introduction to the Civilizations of South Asia I-II</td>
<td>200</td>
</tr>
<tr>
<td>TAML 20100-20200-20300</td>
<td>Second-Year Tamil I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>SALC 27701</td>
<td>Mughal India: Tradition &amp; Transition</td>
<td>100</td>
</tr>
<tr>
<td>SALC 23000</td>
<td>From Gender Critique to Gay Marriage in India</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>700</strong></td>
</tr>
</tbody>
</table>

II. Six-Course SALC Sample Minor

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALC 20700</td>
<td>Critics Of Colonialism: Gandhi and Fanon</td>
<td>100</td>
</tr>
<tr>
<td>BANG 10100-10200-10300</td>
<td>First-Year Bangla (Bengali) I-II-III</td>
<td>300</td>
</tr>
<tr>
<td>SALC 20701</td>
<td>Postcolonial Theory</td>
<td>100</td>
</tr>
<tr>
<td>SALC 23900</td>
<td>Philosophical Education in Indo-Tibetan Buddhism</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>600</strong></td>
</tr>
</tbody>
</table>

Pune Program: SOSC 23004-23005-23006 South Asian Civilizations in India I-II-III

One of the College's study abroad programs that meet the general education requirement in civilization studies, the Autumn Quarter program in Pune (Poona) is devoted to the study of South Asian history and culture. It is built upon a three-course civilizations sequence examining the history, culture, and society of the South Asian subcontinent through course work, field studies, and direct experience. During the first seven weeks of the quarter, the program will be based in the city of Pune, where students will complete two courses and participate in expeditions to nearby cultural and historical sites.

Students participating in the Pune Program receive three credits for the civilizations sequence, which meets the general education requirement in civilization studies. Students who have already met the civilization studies requirement may use these SALC credits as electives. Two South Asian civilizations courses are required for students in the major or minor, as described above. The additional civilizations course, SOSC 23006 South Asian Civ In India-3, can be used toward other SALC requirements. Course titles, units of credit, and grades will be placed on the Chicago transcript.

In addition to the civilizations sequence, students take a fourth course in Hindi during the first seven weeks of the quarter. For students with no prior experience in South Asian languages, this course is designed to facilitate their access to local culture and to provide a basis for further study. Advanced sections will be held for those students with prior course work or experience in Hindi.

Pune is a city of some four million inhabitants, situated on the eastern foothills of the Indian western coastal mountains, or ghats, about 100 miles southeast of Mumbai. Labeled famously by India's first prime minister, Jawaharlal Nehru, as "the Oxford and Cambridge of India," it is a major center for Indian art, religion, and higher education, and an ideal site for cultural immersion.

For further details, consult the Study Abroad website (study-abroad.uchicago.edu/programs/pune-south-asian-civilization-india). For more information about this and other study abroad programs, contact Lauren Schneider, Pune Project Coordinator, at lschneider12@uchicago.edu. For information on other study abroad programs in South Asia, contact the SALC undergraduate adviser.

SALC Language Courses

SALC language courses at all levels are open to undergraduates. Additional advanced courses in all SALC languages are also offered, either on a regular basis or by arrangement with the instructors.

Graduate-Level Language Courses

Graduate-level language courses that may be open to qualified undergraduates can be found in the Graduate Announcements (http://graduateannouncements.uchicago.edu/graduate/departmentsofsouthasianlanguagesandcivilizations).

Bangla Courses

**BANG 10100-10200-10300. First-Year Bangla (Bengali) I-II-III.**

This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, attendance, homework assignments, projects, quizzes and final examination.
BANG 10100. First-Year Bangla (Bengali) I. 100 Units.
This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, attendance, homework assignments, projects, quizzes and final examination.
Instructor(s): Mandira Bhaduri Terms Offered: Autumn

BANG 10200. First-Year Bangla-2. 100 Units.
This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, attendance, homework assignments, projects, quizzes and final examination.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): BANG 10100 or consent of instructor

BANG 10300. First-Year Bangla-3. 100 Units.
This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, attendance, homework assignments, projects, quizzes and final examination.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): BANG 10200 or consent of instructor

BANG 10200. First-Year Bangla-2. 100 Units.
This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, homework assignments, projects, quizzes and final examination.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): BANG 10100 or consent of instructor

BANG 10300. First-Year Bangla-3. 100 Units.
This sequence concentrates on developing skills in speaking, listening, reading and writing Bangla at the novice and intermediate low levels. It is designed both for scholars who want to do research on Bengal and for those who want to gain proficiency in elementary Bangla for communication purposes. Evaluation will be based on classroom performance, homework assignments, projects, quizzes and final examination.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): BANG 10200 or consent of instructor

BANG 20100-20200-20300. Second-Year Bangla (Bengali) I-II-III.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
BANG 20100. Second-Year Bangla (Bengali) I. 100 Units.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
Instructor(s): Mandira Bhaduri Terms Offered: Autumn
Prerequisite(s): BANG 10300 or consent of instructor
BANG 20200. Second-Year Bangla-2. 100 Units.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): BANG 20100 or consent of instructor

BANG 20300. Second-Year Bangla-3. 100 Units.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): BANG 20200 or consent of instructor

BANG 20200. Second-Year Bangla-2. 100 Units.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): BANG 20100 or consent of instructor

BANG 20300. Second-Year Bangla-3. 100 Units.
This sequence is a continuation of First-Year Bangla and aims at gaining intermediate high proficiency in the language. Students who have prior knowledge of elementary Bengali can join the course. The course concentrates equally on speaking, listening, reading and writing skills. At the end of the course the learner is supposed to have a command of Bengali language and culture that allows him/her to communicate with native speakers with ease. He/she will have sufficient reading abilities to comprehend non-technical modern texts. Evaluation will be based on classroom performance, homework assignments, projects, tests, and final examination.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): BANG 20200 or consent of instructor

HINDI COURSES

HIND 10100-10200-10300. First-Year Hindi I-II-III.
This five-day-a-week sequence presents an introduction to the world’s second most spoken language through reading, writing, listening, memorizing, and speaking. We begin with the Devanagari script, and we then introduce the Urdu script in Winter Quarter.

HIND 10100. First-Year Hindi I. 100 Units.
This five-day-a-week introductory sequence presents a dynamic, fun, and lively introduction to the world’s second most spoken language through intensive conversation, reading, writing, and listening. No prior Hindi knowledge necessary.
Instructor(s): J. Grunebaum Terms Offered: Autumn
Prerequisite(s): BANG 20100 or consent of instructor

HIND 10200. First-Year Hindi II. 100 Units.
This five-day-a-week sequence presents an introduction to the world’s second most spoken language through reading, writing, listening, memorizing, and speaking. We begin with the Devanagari script, and we then introduce the Urdu script in Winter Quarter.
Instructor(s): J. Grunebaum Terms Offered: Winter
Prerequisite(s): HIND 10100 or consent of instructor

HIND 10300. First-Year Hindi-3. 100 Units.
This five-day-a-week sequence presents an introduction to the world’s second most spoken language through reading, writing, listening, memorizing, and speaking. We begin with the Devanagari script, and we then introduce the Urdu script in Winter Quarter.
Instructor(s): J. Grunebaum Terms Offered: Spring
Prerequisite(s): HIND 10200 or consent of instructor
HIND 10200. First-Year Hindi II. 100 Units.
This five-day-a-week sequence presents an introduction to the world’s second most spoken language through reading, writing, listening, memorizing, and speaking. We begin with the Devanagari script, and we then introduce the Urdu script in Winter Quarter.
Instructor(s): J. Grunebaum Terms Offered: Winter
Prerequisite(s): HIND 10100 or consent of instructor

HIND 10300. First-Year Hindi-3. 100 Units.
This five-day-a-week sequence presents an introduction to the world’s second most spoken language through reading, writing, listening, memorizing, and speaking. We begin with the Devanagari script, and we then introduce the Urdu script in Winter Quarter.
Instructor(s): J. Grunebaum Terms Offered: Spring
Prerequisite(s): HIND 10200 or consent of instructor

HIND 15001. Elementary Hindi in India. 100 Units.

HIND 15002. Elementary Hindi in India. 100 Units.

HIND 15003. Intermediate Hindi in India. 100 Units.

HIND 15004. Intermediate Hindi in India. 100 Units.

HIND 15005. Advanced Hindi in India. 100 Units.

HIND 15006. Advanced Hindi in India. 100 Units.

HIND 20100-20200-20300. Second-Year Hindi I-II-III.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi.

HIND 20100. Second-Year Hindi I. 100 Units.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi. Prerequisite(s): HIND 10300 or consent of instructor
Instructor(s): J. Grunebaum Terms Offered: Autumn
Prerequisite(s): HIND 10300 or consent of instructor

HIND 20200. Second-Year Hindi II. 100 Units.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HIND 20100 or consent of instructor

HIND 20300. Second-Year Hindi-3. 100 Units.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi.
Instructor(s): J. Grunebaum Terms Offered: Spring
Prerequisite(s): HIND 20200 or consent of instructor

HIND 20200. Second-Year Hindi II. 100 Units.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): HIND 20100 or consent of instructor

HIND 20300. Second-Year Hindi-3. 100 Units.
This intermediate Hindi sequence presupposes knowledge of the basic grammar of Hindi and requires substantial reading and translating of Hindi prose, alongside exposure to advanced Hindi grammar topics. Regular attention is given to conversation and composition. Texts in Hindi.
Instructor(s): J. Grunebaum Terms Offered: Spring
Prerequisite(s): HIND 20200 or consent of instructor
MARATHI COURSES

MARA 10100-10200-10300. First-Year Marathi I-II-III.
This sequence follows the textbook Marathi in Context (with its online supplement Marathi Online) in its focus on developing the basic skills—comprehension, speaking, reading, and writing—of Marathi language use. It covers all the fundamentals of Marathi grammar, but only as they are encountered in context, within a wide array of social and conversational “situations.”

MARA 10100. First-Year Marathi-1. 100 Units.
This sequence follows the textbook Marathi in Context (with its online supplement Marathi Online) in its focus on developing the basic skills—comprehension, speaking, reading, and writing—of Marathi language use. It covers all the fundamentals of Marathi grammar, but only as they are encountered in context, within a wide array of social and conversational “situations.”
Instructor(s): P. Engblom Terms Offered: Autumn
Prerequisite(s): MARA 10100 or consent of instructor

MARA 10200. First-Year Marathi-2. 100 Units.
This sequence follows the textbook Marathi in Context (with its online supplement Marathi Online) in its focus on developing the basic skills—comprehension, speaking, reading, and writing—of Marathi language use. It covers all the fundamentals of Marathi grammar, but only as they are encountered in context, within a wide array of social and conversational “situations.”
Instructor(s): P. Engblom Terms Offered: Winter
Prerequisite(s): MARA 10100 or consent of instructor

MARA 10300. First-Year Marathi-3. 100 Units.
This sequence follows the textbook Marathi in Context (with its online supplement Marathi Online) in its focus on developing the basic skills—comprehension, speaking, reading, and writing—of Marathi language use. It covers all the fundamentals of Marathi grammar, but only as they are encountered in context, within a wide array of social and conversational “situations.”
Instructor(s): P. Engblom Terms Offered: Spring
Prerequisite(s): MARA 10200 or consent of instructor

MARA 15001. Elementary Marathi in India. 100 Units.

MARA 15002. Elementary Marathi in India. 100 Units.

MARA 15003. Intermediate Marathi in India. 100 Units.

MARA 15004. Intermediate Marathi in India. 100 Units.

MARA 15005. Advanced Marathi in India. 100 Units.

MARA 15006. Advanced Marathi in India. 100 Units.

MARA 20100-20200-20300. Second-Year Marathi I-II-III.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.

MARA 20100. Second-Year Marathi-1. 100 Units.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.
Instructor(s): P. Engblom Terms Offered: Autumn
Prerequisite(s): MARA 10300 or consent of instructor

MARA 20200. Second-Year Marathi-2. 100 Units.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.
Instructor(s): P. Engblom Terms Offered: Winter
Prerequisite(s): MARA 20100 or consent of instructor

MARA 20300. Second-Year Marathi-3. 100 Units.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.
Instructor(s): P. Engblom Terms Offered: Spring
Prerequisite(s): MARA 20200 or consent of instructor
MARA 20200. Second-Year Marathi-2. 100 Units.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.
Instructor(s): P. Engblom Terms Offered: Winter
Prerequisite(s): MARA 20100 or consent of instructor

MARA 20300. Second-Year Marathi-3. 100 Units.
This sequence significantly extends both the breadth and the depth of the social and conversational situations introduced in the first year and includes numerous readings, largely from An Intermediate Marathi Reader. It covers all the grammar required for reading most kinds of modern Marathi prose texts.
Instructor(s): P. Engblom Terms Offered: Spring
Prerequisite(s): MARA 20200 or consent of instructor

Pali Courses

PALI 20100-20200-20300. Second-Year Pali I-II-III.
Students in this intermediate Pali sequence read Pali texts that are chosen in accordance with their interests. The texts read in the introductory course are usually taken from a single, early stratum of Pali literature. The intermediate course takes examples of Pali from different periods and in different styles. Texts in Pali.

PALI 20100. Second-Year Pali-1. 100 Units.
No description available.
Instructor(s): S. Collins Terms Offered: Winter
Prerequisite(s): PALI 10300 or consent of instructor

PALI 20200. Second-Year Pali-2. 100 Units.
Instructor(s): S. Collins Terms Offered: Spring
Prerequisite(s): PALI 20100 or consent of instructor

PALI 20300. Second-Year Pali-3. 100 Units.
Students in this intermediate Pali sequence read Pali texts that are chosen in accordance with their interests. The texts read in the introductory course are usually taken from a single, early stratum of Pali literature. The intermediate course takes examples of Pali from different periods and in different styles. Texts in Pali.
Instructor(s): S. Collins Terms Offered: Not offered in 2017-18
Prerequisite(s): PALI 20200 or consent of instructor

Sanskrit Courses

SANS 10100-10200-10300. First-Year Sanskrit I-II-III.
The first half (about fifteen weeks) of this sequence is spent mastering the reading and writing of the Devanagari script and studying the grammar of the classical Sanskrit language. The remainder of the sequence is devoted to close analytical reading of simple Sanskrit texts, which are used to reinforce the grammatical study done in the first half of this course. The aim is to bring students to the point where they are comfortably able, with the help of a dictionary, to read simple, narrative Sanskrit. Texts in Sanskrit.
SANS 10100. First-Year Sanskrit-I. 100 Units.
The first half (about fifteen weeks) of this sequence is spent mastering the reading and writing of the Devanagari script and studying the grammar of the classical Sanskrit language. The remainder of the sequence is devoted to close analytical reading of simple Sanskrit texts, which are used to reinforce the grammatical study done in the first half of this course. The aim is to bring students to the point where they are comfortably able, with the help of a dictionary, to read simple, narrative Sanskrit. Texts in Sanskrit.
Instructor(s): Staff Terms Offered: Autumn

SANS 10200. First-Year Sanskrit-2. 100 Units.
The first half (about fifteen weeks) of this sequence is spent mastering the reading and writing of the Devanagari script and studying the grammar of the classical Sanskrit language. The remainder of the sequence is devoted to close analytical reading of simple Sanskrit texts, which are used to reinforce the grammatical study done in the first half of this course. The aim is to bring students to the point where they are comfortably able, with the help of a dictionary, to read simple, narrative Sanskrit. Texts in Sanskrit.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SANS 10100 or consent of instructor

SANS 10300. First-Year Sanskrit-3. 100 Units.
The first half (about fifteen weeks) of this sequence is spent mastering the reading and writing of the Devanagari script and studying the grammar of the classical Sanskrit language. The remainder of the sequence is devoted to close analytical reading of simple Sanskrit texts, which are used to reinforce the grammatical study done in the first half of this course. The aim is to bring students to the point where they are comfortably able, with the help of a dictionary, to read simple, narrative Sanskrit. Texts in Sanskrit.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SANS 10200 or consent of instructor

SANS 20100-20200-20300. Second-Year Sanskrit I-II-III.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently.

SANS 20100. Second-Year Sanskrit I. 100 Units.
The intermediate-level Sanskrit sequence will equip students to apply the core grammar concepts that they learned in the introductory course to selected narrative, poetic, dramatic, philosophical, and scholastic texts in Sanskrit. In-class activities and selected assignments that develop skills in writing, speaking, listening, and vocabulary retention will support students’ success in reading the text(s) at hand. Students will expand their abilities to apply grammar concepts by bringing increased attention to syntax and morphology. Students will be able to identify major poetic meters. Students will begin to build the skills that they will need to make use of Sanskrit commentarial works. As a whole, the sequence in Intermediate Sanskrit will prepare students to read and analyze Sanskrit texts in a range of literary styles at the advanced level, and to do so with confidence.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): SANS 10300 or consent of instructor

SANS 20200. Second-year Sanskrit: Rdgs. in the Mahabharata. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Mahabharata.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20100 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20300. Second-Year Sanskrit II. 100 Units.
The second half of the Second-Year Sanskrit sequence will equip students to apply the core grammar concepts that they learned in the introductory course to selected narrative, poetic, dramatic, philosophical, and scholastic texts in Sanskrit. In-class activities and selected assignments that develop skills in writing, speaking, listening, and vocabulary retention will support students’ success in reading the text(s) at hand. Students will expand their abilities to apply grammar concepts by bringing increased attention to syntax and morphology. Students will be able to identify major poetic meters. Students will begin to build the skills that they will need to make use of Sanskrit commentarial works. As a whole, the sequence in Intermediate Sanskrit will prepare students to read and analyze Sanskrit texts in a range of literary styles at the advanced level, and to do so with confidence.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SANS 10200 or consent of instructor

SANS 20400. Second-Year Sanskrit III. 100 Units.
The third half of the Second-Year Sanskrit sequence will equip students to apply the core grammar concepts that they learned in the introductory course to selected narrative, poetic, dramatic, philosophical, and scholastic texts in Sanskrit. In-class activities and selected assignments that develop skills in writing, speaking, listening, and vocabulary retention will support students’ success in reading the text(s) at hand. Students will expand their abilities to apply grammar concepts by bringing increased attention to syntax and morphology. Students will be able to identify major poetic meters. Students will begin to build the skills that they will need to make use of Sanskrit commentarial works. As a whole, the sequence in Intermediate Sanskrit will prepare students to read and analyze Sanskrit texts in a range of literary styles at the advanced level, and to do so with confidence.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): SANS 20300 or consent of instructor

SANS 20500. Second-Year Sanskrit: Rdgs. in the Vedas. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Vedas.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20400 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20600. Second-Year Sanskrit: Rdgs. in the Upanishads. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Upanishads.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20500 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20700. Second-Year Sanskrit: Rdgs. in the Bhagavad-Gita. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Bhagavad-Gita.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20600 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20800. Second-Year Sanskrit: Rdgs. in the Smriti. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Smriti.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20700 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20900. Second-Year Sanskrit: Rdgs. in the Vaiśeṣika-Saṅgītavani. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Vaiśeṣika-Saṅgītavani.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20800 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000
SANS 20300. Second-Year Sanskrit-3. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Mahabharata.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SANS 20200 or consent of instructor

SANS 20200. Second-year Sanskrit: Rdgs. in the Mahabharata. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Mahabharata.
Instructor(s): W. Doniger Terms Offered: Winter
Prerequisite(s): SANS 20100 or consent of instructor
Equivalent Course(s): SALC 48400, HREL 36000

SANS 20300. Second-Year Sanskrit-3. 100 Units.
This sequence begins with a rapid review of grammar learned in the introductory course, followed by readings from a variety of Sanskrit texts. The goals are to consolidate grammatical knowledge, expand vocabulary, and gain confidence in reading different styles of Sanskrit independently. The winter quarter will be a reading of the Mahabharata.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): SANS 20200 or consent of instructor

SOUTH ASIAN LANGUAGES AND CIVILIZATIONS COURSES

SALC 20100-20200. Introduction to the Civilizations of South Asia I-II.
This sequence introduces core themes in the formation of culture and society in South Asia from the early modern period until the present. This sequence meets the general education requirement in civilization studies. These courses must be taken in sequence.

SALC 20100. Introduction to the Civilizations of South Asia I. 100 Units.
The first quarter focuses on Islam in South Asia, Hindu-Muslim interaction, Mughal political and literary traditions, and South Asia’s early encounters with Europe.
Instructor(s): M. Alam Terms Offered: Winter
Equivalent Course(s): SOSC 23000, HIST 10800, ANTH 24101

SALC 20200. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SOSC 23100, HIST 10900, ANTH 24102

SALC 20200. Introduction to the Civilizations of South Asia II. 100 Units.
The second quarter analyzes the colonial period (i.e., reform movements, the rise of nationalism, communalism, caste, and other identity movements) up to the independence and partition of India.
Instructor(s): Dipesh Chakrabarty Terms Offered: Spring
Prerequisite(s): SALC 20100, ANTH 24101, HIST 10800, SASC 20000, SOSC 23000
Equivalent Course(s): SOSC 23100, HIST 10900, ANTH 24102

SALC 20400. The Mahabharata in English Translation. 100 Units.
A reading of the Mahabharata in English translation (van Buitenen, Narasimhan, Ganguli, and Doniger [ms.]), with special attention to issues of mythology, feminism, and theology. (C)
Instructor(s): W. Doniger Terms Offered: Autumn
Equivalent Course(s): RLST 26800, FNDL 24400, SCTH 32201, SALC 48200, HREL 35000

SALC 20509. Bombay to Bollywood. 100 Units.
This course maps the transformation of the Hindi film industry in India. Starting out as a regional film production center, how did the Bombay film industry and Hindi cinema gain the reputation of being the leader of Indian cinema? This despite the fact that most critical acclaim, by the state and film critics, was reserved for “art cinema.” Through an analysis of Hindi films from the 1950s to the present we map the main trends of this complex artistic/industrial complex to arrive at an understanding of the deep connect between cinema and other social imaginaries.
Instructor(s): R. Majumdar Terms Offered: Winter
Equivalent Course(s): HIST 26709, HIST 36709, GNSE 20509, CMST 24107, SALC 30509, CMST 34107
SALC 20511. Screening India: Bollywood and Beyond. 100 Units.
Cinema is, unarguably, the medium most apposite for thinking through the complexities of democratic politics, especially so in a place like India. While Indian cinema has recently gained international currency through the song and dance ensembles of Bollywood, there remains much more to be said about that body of films. Moreover, Bollywood is a small (though very important) part of Indian cinema. Through a close analysis of a wide range of films in Hindi, Bengali, Kannada, and Urdu, this course will ask if Indian cinema can be thought of as a form of knowledge of the twentieth century.
Instructor(s): R. Majumdar Terms Offered: Spring
Equivalent Course(s): CMST 34112, CMST 24112, HIST 26808, KNOW 24112, SALC 30511, HIST 36808, KNOW 34112

SALC 20608. Beginning Panjabi Studies. 100 Units.
This course is intended for highly motivated students who have a specific interest in learning Panjabi. The course will be at an introductory level and focus on those aspects of the language most needed or wanted by the registered students: reading/writing (in which script, Gurmukhi or Perso-Arabic) or speaking. There are no prerequisites, though knowledge of another South Asian language will be an advantage.

SALC 20702. Colonizations III. 100 Units.
The third quarter considers the processes and consequences of decolonization both in the newly independent nations and the former colonial powers.
Note(s): This sequence meets the general education requirement in civilization studies. These courses can be taken in any sequence.
Equivalent Course(s): CRES 24003, HIST 18303, SOSC 24003, ANTH 24003

SALC 20722. Colonialisms and Literature: Adventures, Exoticisms, East and West. 100 Units.
European imperialism and colonialism have shaped the modern world as we know it today. The “Age of Empire” has bequeathed us a wealth of literary texts, from adventure tales to more serious novels about colonial encounters and life in the colonies. Colonialism also introduced the novel as a new literary genre to many literatures in Asia. Over the past decades literary critics, theorists, historians and philosophers have examined the interdependence of imperialism/colonialism and literature from many perspectives, notably in what is generally referred to as postcolonial theory. The present course provides a first introduction to colonial writing and theoretical approaches to literary practices under colonialism, to its key thinkers, concepts and methods by examining what Empire was in the case of British India and the Dutch East Indies (today’s Indonesia) and by reading English and Dutch novels together with the work of Asian writers (Forster, Rajam Aiyar, Couperus, Abdoel Moeis). We will explore key terms, such as “otherness”, “hybridity”, “agency”, “modernity”, “nationalism” as well as larger themes, such as empire and gender and sexuality or colonial knowledge formation. Of interest to students of literature, history, anthropology and other disciplines dealing with ‘texts’. Open to both undergraduate and graduate students; No prior knowledge of literary theory or South or Southeast Asian writing assumed.
Equivalent Course(s): CMLT 20702, SALC 30722, CMLT 30702

SALC 20800. Music of South Asia. 100 Units.
The course explores some of the music traditions that hail from South Asia—a region defined by the countries of India, Pakistan, Sri Lanka, Nepal, Bhutan, Afghanistan, Maldives, and their diasporas. The course will study music and some of its inextricably linked forms of dance and theatre through the lens of ethnomusicology, where music is considered in its social and cultural contexts. Students will develop tools to listen, analyze, watch, and participate in South Asian forms of music-making, using case-study based inquiries as guides along the way.
Instructor(s): Ameera Nimjee Terms Offered: Spring
Equivalent Course(s): MUSI 33706, RLST 27700, SALC 30800, MUSI 23706

SALC 20901. Indian Philosophy I: Origins and Orientations. 100 Units.
A survey of the origins of Indian philosophical thought, emphasizing the Vedas, Upanisads, and early Buddhist literature. Topics include concepts of causality and freedom, the nature of the self and ultimate reality, and the relationship between philosophical thought and ritual or ascetic religious practice.
Instructor(s): D. Arnold Terms Offered: Winter
Equivalent Course(s): HREL 30200, DVPR 30201, SALC 30901, RLST 24201

SALC 20902. Indian Philosophy II: The Classical Traditions. 100 Units.
Following on the Indian Philosophy I course, this course will survey major developments in the mature period of scholastic philosophy in India - a period, beginning a little before the middle of the first millennium C.E., that is characterized by extensive and sophisticated debate (made possible by the emergence of shared philosophical vocabulary and methods) among Buddhist, Brahmancial, and Jain philosophers. Students are encouraged (but not required) to take Indian Philosophy I before taking this course.
Instructor(s): M. Kapstein Terms Offered: Spring
Equivalent Course(s): SALC 30902, RLST 24202, DVPR 30302, HREL 30300
SALC 22603. Intro to Premodern South Asian Lit: Courts, Poets, Power. 100 Units.
The Indian subcontinent and the surrounding areas were home to some of the most vibrant literary traditions in world history. The aim of this course is to introduce students to the main trends in the premodern (pre-nineteenth century) literatures of South Asia through a selection of texts translated from a variety of languages (Bengali, Hindi, Marathi, Persian, Sanskrit, Tamil, Telugu, Urdu, etc.). We will discuss issues of literary historiography, the relations between orality and writing, the basic principles of Dravidian, Sanskrit, and Perso-Arabic poetics, the formation of vernacular literary traditions, multilingual literacy, and the role of literature in social interactions and community building in premodern South Asia. Each reading will thus be framed by the systematic exploration of those poetic systems and a close reading of representative texts. Attention will also be given to the original languages in which those texts were composed. The course offers a comprehensive and critical introduction to major non-western knowledge systems and aesthetic theories.
Instructor(s): T. D’Hubert Terms Offered: Autumn
Equivalent Course(s): SALC 42605

SALC 22604. A Poem in Every House#: An Introduction to Premodern South Asian Literatures 2, 100 Units.
100gehe gehe kalau kāvya# … In the Kali age, there is a poem in every house … (Vidyāpati [ca. 1370-1460], Mithila, Kīrtilatā). The Indian subcontinent was home to some of the most vibrant literary traditions in world history. The aim of this course is to introduce students to the main trends in the premodern (pre-nineteenth century) literatures of South Asia through a selection of poetic and theoretical texts translated from a variety of languages. We will discuss issues of literary historiography, the relations between orality and writing, literary and visual representations, poetry and music. Over two quarters, we will review the basic principles of Sanskrit, Dravidian, and Perso-Arabic poetics through a selection of representative theoretical treatises and poems. We will also explore the linguistic ecology of the Subcontinent, the formation of vernacular literary traditions, multilingual literacy, and the role of literature in social interactions and community building in premodern South Asia. Every week the first class will be devoted to the historical context and conceptual background of the texts we will read in the following class. Attention will be given to the original languages in which those texts were composed as well as the modes of performance of the poems and songs we will read together.
Instructor(s): Thibaut d’Hubert Terms Offered: Autumn
Prerequisite(s): The course is the perfect complement to the Introduction to South Asian Civilizations sequence (SALC 20100-20200). Beyond its focus on South Asia, students interested in classics, poetics, rhetoric, musicology, theater studies, and comparative literature will find plenty of food for thought in the readings, lectures, and class discussions. For students interested in languages, it is an ideal way to have a lively introduction to the linguistic variety of South Asia. No prior knowledge of South Asian languages is required.
Note(s): One session titled “Poetry Carved in Stones” will bring us to the Art Institute to study the relation between poetic and visual representations of gods and episodes drawn from the rich narrative tradition of South Asia. The first part of this sequence is devoted to Sanskrit, Middle Indic (Prakrit, Apabhramsha), and Dravidian (Tamil, Telugu, Kannada, Malayalam) literary traditions. Perso-Arabic (Persian, Dakani, Urdu) and northern vernacular literary traditions (Hindi, Panjabi, Maithili, Bengali) will be discussed in the Autumn Quarter of the following year. Students may take the courses in any order.

SALC 23103. Problems In the Study of Gender. 100 Units.
The notion of differential citizenship is a topic that exercises scholars the world over. In particular, those interested in issues of feminism and ethnicity have studied why women (and then some women more than others) or particular social groups experience disenfranchisement more than their counterparts. This is so even when officially many cultures grant them formal equality before the law. This course explores issues of disenfranchisement, inequality, and violence through a focus on South Asia. We will begin with a set of theoretical readings mainly John Locke and John Stuart Mill whose works demonstrate some early strands of thinking about the political and cultural role (or the lack thereof) of women within the (fraternal) social contract. We will then move to contemporary works such as Joan Scott’s Only Paradoxes to Offer (selections), Parite: Sexual Equality and the Crisis of French Universalism (selections), Leila Ahmed’s A Quiet Revolution (selections), Amy Dru Stanley’s From Bondage to Contract (selections) to frame the issue of differential citizenship and inequality in a historical and global context. Following this we turn to South Asia with a particular focus on gender and caste inequality and the violence unleashed by majoritarian politics (both overt and covert).
Instructor(s): R. Majumdar Terms Offered: Spring 2015
Note(s): Cross listed with GNSE 10100

SALC 23104. Problems in the Study of Gender: Gender, Citizenship, Violence. 100 Units.
Equivalent Course(s): HIST 11002, GNSE 10102
SALC 25304. Introduction to Hinduism. 100 Units.
In this course we will acquaint ourselves with the basic beliefs, practices, scriptures and varieties of the religion that goes by the name of “Hinduism.” We will follow its course through history, beginning with the earliest, most hallowed, little understood sources, the Vedas. We will look into the formation and peculiarities of its different branches such as the schools of Vaishnavism and Saivism, and learn about some of its central figures such as Shankara, Ramanuja and Chaitanya. Significant part of the course will be dedicated to the attempts to define and redefine Hinduism and its unity in the context of modernity, the encounter with colonialism and the course of globalization. We will explore some of its fundamental tensions, for instance between religion and liberation (dharma and moksha), social restrictions and freedom, knowledge and devotion. Finally, we will spend some time on the philosophical underpinnings of Hinduism, particularly the doctrine of karma, reincarnation and theodicy.
Instructor(s): A. Uskokov Terms Offered: Autumn
Equivalent Course(s): RLST 27411

SALC 25306. Sex and Censorship in South Asia. 100 Units.
Course description not available
Equivalent Course(s): GNSE 25306, HREL 35306, HIST 26710

SALC 25310. Extinction, Disaster, Dystopia: Environment and Ecology in the Indian Subcontinent. 100 Units.
This course aims to provide students an overview of key environmental and ecological issues in the Indian subcontinent. How have the unique precolonial, colonial, regional and national histories of this region shaped the peculiar nature of environmental issues? We will consider three major concepts “extinction”, “disaster” and “dystopia” to see how they can be used to frame issues of environmental and ecological concern. Each concept will act as a framing device for issues such as conservation and preservation of wildlife, erasure of adivasi (first dwellers) ways of life, environmental justice, water scarcity and climate change. The course will aim to develop students’ ability to assess the specificity of these concepts in different disciplines. For example: What methods and sources will an environmental historian use to write about wildlife? How does this differ from the approach an ecologist or literary writer might take? Students will analyze various media: both literary and visual, such as autobiographies of shikaris (hunters), graphic novels, photographs, documentary films, ethnographic accounts and environmental history.
Equivalent Course(s): HIST 26806, ENGL 22434, CRES 25310, GLST 25310

SALC 25311. The Harem: Gender, Family and Power in Early Modern and Modern South Asia. 100 Units.
Even today, the word “harem” evokes orientalist imaginations of an exotic east. Popular images drawn from colonial-era representations continue to define our understanding of this complex institution. In this course we will work to complicate this understanding through considering the harem as a site of interplay between gender, family ties, and power. Taking into account influences from the larger Islamicate world as well as more local, Indic practices, we will historicize the harem, tracking its changes over the course of this long period, and critiquing its various (mis)representations. We will explore how the harem constituted a diverse space including not only elite women and their male relatives, but also other figures such as slave girls, eunuchs and guards. We will furthermore look at how this space was transformed in the era of European expansionism and colonial rule in the subcontinent, becoming a flash point over questions of social reform and Indian nationalism. Materials will include not just secondary literature but also excerpts from contemporary historical accounts, paintings, short stories, photographs, and films. No prior knowledge of South Asian history required.
Equivalent Course(s): GNSE 25311, HIST 26612

SALC 25312. India between Empires: Regions, Remembrance, and Representation. 100 Units.
This is a course on South Asia in transition. It is also a course on the representation of that transition. The Mughal Empire-which had been the dominant power in India for nearly two hundred years-underwent a process of decentralization in the early eighteenth century. The ensuing years saw the rise of regional powers across much of the Indian subcontinent; some modeled their institutions of state on those of the weakened Mughal center, while others asserted their sovereignty by cultivating a distinctive identity. Although the British East India Company would gradually integrate these polities into its expanding network of political and economic interests, the memory of the once-grand Mughal Empire and its mighty regional heirs loomed large over the colonial experience and endures today.
Instructor(s): Andrew Halladay Terms Offered: Autumn
SALC 25706. Problems in the Study of Gender and Sexuality: Inequality. 100 Units.
This course analyzes inequality and the overt and covert violence that results from it. These inequalities are often grounded in gender and sex but also result from a complex intersection of gender, sex, and other identities. Inequality is what produces the experience of differential citizenship, a topic that exercises scholars the world over. In particular, those interested in issues of feminism, community, and ethnicity have studied why women (some women more than others) or particular social groups such as gay or trans groups, experience disenfranchisement more than their counterparts, even when, officially, many cultures/ nation states grant their members/citizens formal legal equality. Many of the examples around which this course is framed emerge out of South Asia, but our analyses will be structured through an engagement with theoretical texts that address issues of gendered oppression and discrimination in other parts of the world. Readings will include historical, anthropological, literary texts. Key themes of the course include: debates on parité in France and differential citizenship for religious minorities in India; caste based violence in India studied comparatively with debates on violence against aboriginal in Australia and Canada; rape and human rights; the politics of homosexuality; violence around popular and high culture; the panic around "family values". This course is part of the College Course Cluster program, Inequality.
Instructor(s): Rochona Majumdar Terms Offered: Autumn
Equivalent Course(s): GNSE 31106, GNSE 11006

SALC 26600. Asian Identities: 1890-1945. 100 Units.
Equivalent Course(s): HIST 16600

SALC 26611. Empires, Imperialism, and Islam. 100 Units.
This seminar course will survey interactions between empires and Islam from the early nineteenth century to the early twenty-first century. It will consider the varied responses of Islamic polities to the expansion of European empires, their role in proliferating networks of travel and communication, as well as the place of religion in anti-imperial and anticolonial movements. Geographically we will cover Asia very broadly defined: from the Ottoman Empire in the west, through the Middle East and Central and South Asia, to Indonesia and Malaysia to the east. Individual classes will focus, for instance, on imperial connections, the emergence of pan-Islamism, Sufi networks, oceanic travel, subaltern social and political movements, and Cold War-era Muslim ideologues. The course will conclude with a look at the rise of more militant Islamic ideologies in recent years. Investigating this two-century long history will help students understand the complex role that Islam has played in the making of the modern world. Course readings will be on the whole recent scholarship on these subjects, with key primary texts introduced in class.
Instructor(s): F. Zaman Terms Offered: Spring
Equivalent Course(s): SALC 36611, HIST 36611, HIST 26611

SALC 26709. Revolutionary Indian in a Global Context. 100 Units.
Equivalent Course(s): HIST 26609, HIST 36609

SALC 26804. Frontiers and Borders in South Asia. 100 Units.
Sometimes the frontline of empires and nation-states, sometimes neglected or inaccessible, peripheral spaces are often of core concern to the central state. The aim of this upper-level undergraduate seminar is to examine the history of borders, borderlands, and frontiers as political and social concepts and as produced spaces. We will examine an array of case studies in addition to more theoretical scholarship that spans the disciplines of history, environmental studies, political science, anthropology, and geography. While using South Asia (itself a rather recently invented "area") as the primary geographic and historical focus this course will not be bound exclusively to it. The first goal of the course is to explore the evolution of key concepts such as space, territory, frontier, and borders/borderlands. The second goal is to develop methods for analyzing subjects that are simultaneously physical spaces and political, social, and historical ideas. Finally, it seeks to introduce students to areas that often fall beyond the penumbra of historical surveys centered on the nation-state. No prior knowledge of South Asian history is assumed. Weekly readings will average 150 pages. Note: No prior knowledge of South Asian history is assumed.
Equivalent Course(s): GEOG 26400, HIST 26804, GLST 26804

SALC 26901. Orality, Literature and Popular Culture of Afghanistan and Pakistan. 100 Units.
Course description unavailable.
Instructor(s): C. R. Perkins Terms Offered: Winter 2013
Equivalent Course(s): NEHC 20901, CMLT 26901, HIST 26905, HIST 36905, CMLT 36901, NEHC 30901

SALC 26903. History and Literature of Pakistan: Postcolonial Representations. 100 Units.
No description available.
Instructor(s): C.R. Perkins Terms Offered: Autumn
Equivalent Course(s): NEHC 26903, SALC 46903, HIST 26608
SALC 27000. Survey/Lang/Lit of Pakistan. 100 Units.

SALC 27301. Buddhism in South Asia. 100 Units.
Buddhism has been an important presence in South Asian religion and culture since its origins in northern India some 2500 years ago. In this course, we will survey the history of ideas and practices in Indian and Tibetan Buddhism from its earliest traces to the present. (C)
Instructor(s): C. Wedemeyer Terms Offered: Winter
Equivalent Course(s): RLST 27302

SALC 27515. Race, Ethnicity, and Identity in and beyond South Asia. 100 Units.
Few parts of the world can lay claim to such a diverse array of ethno-linguistic, religious, and regional identities as South Asia. Not surprisingly, these identities have never been static. This course considers the modern history of ethnic, religious, and racial identities across South Asia with particular attention to their representation in literature and film. We will begin with the colonial-era "ethnographic" state and the development and reification of caste-, religion-, and race-based classifications. We will then shift to Independence, Partition, and South Asian diasporas. We will conclude with contemporary articulations of nationalism, with particular attention to the case of Kashmir. Throughout the course we will focus on the social and political means through which ethnic, racial, and other identity categories are constructed-including colonial re-articulations of caste and the creation of the so-called "martial races." We will also pay attention to moments of trans-national comparison, for instance Ambedkar's correspondence with W.E.B. Du Bois, and the relation between critiques of casteism and racism.
Equivalent Course(s): HIST 26807, CRES 27518

SALC 27701. Mughal India: Tradition & Transition. 100 Units.
The focus of this course is on the period of Mughal rule during the late sixteenth, seventeenth, and eighteenth centuries, especially on selected issues that have been at the center of historiographical debate in the past decades.
Instructor(s): M. Alam Terms Offered: Autumn
Prerequisite(s): Advanced standing or consent of instructor. Prior knowledge of appropriate history and secondary literature required.
Equivalent Course(s): SALC 37701, HIST 36602, NEHC 20570, HIST 26602, NEHC 30570

SALC 27904. Wives, Widows, and Prostitutes: Hindi Literature and the "Women's Question" 100 Units.
From the early 19th century onward, the debate on the status of Indian women was an integral part of the discourse on the state of civilization, Hindu tradition, and social reform in colonial India. This course will explore how Indian authors of the late 19th and early 20th centuries engaged with the so-called "women's question." Caught between middle-class conservatism and the urge for social reform, Hindi and Urdu writers addressed controversial issues such as female education, child marriage, widow remarriage, and prostitution in their fictional and discursive writings. We will explore the tensions of a literary and social agenda that advocated the "uplift" of women as a necessary precondition for the progress of the nation, while also expressing patriarchal fears about women's rights and freedom. The course is open to both undergraduate and graduate students. Basic knowledge of Hindi and/or Urdu is preferable, but not required. We will read works by Nazir Ahmad, Premcand, Jainendra Kumar, Mirza Hadi Ruswa, and Mahadevi Varma in English translation, and also look at texts used in Indian female education at the time.
Instructor(s): U. Stark Terms Offered: Spring
Prerequisite(s): Consent of instructor based on demonstrated knowledge of Hindi
Equivalent Course(s): GNSE 27902, SALC 43800, GNSE 47900

SALC 28510. Bombay/Mumbai: Urban Life/Urban Politics. 100 Units.
The Indian city of Bombay and the Mumbai it has now become has been referred to as the "imagined" city, the "kinetic" city, the "cosmopolitan city," and "the city of slums." What do these labels mean to the practice of sociality and politics in Bombay/Mumbai; how does the urban experience in South Asia differ from that in other parts of the world; and how do gender, religion and class influence the different experiences of the city? Bombay/Mumbai: Urban Life/Urban Politics is an interdisciplinary course that will address these and several related issues. Using the city of Mumbai as its lens it introduces students to the ways in which urban subjects and urban life are constituted in a globalizing South Asia. The course explores the city of Mumbai through an urban-culturalist perspective and problematizes the ways in which the built environment of the city: its transportation, streets, slums, neighborhoods, tenements, markets, malls and businesses animate and are animated by the everyday life and politics in the metropolis. It encourages students to think about the ways in which Mumbai's past and present patterns of urban informality, capitalism, consumption, criminality and urban dislocations mediate very particular experiences of politics, sociality, class, gender and globalization. The course uses a range of historical, theoretical, literary, and ethnographic readings as well as films, photography, and music to highlight the connections between place, space and everyday life in Mumbai.
Instructor(s): T. Bedi Terms Offered: Spring
Equivalent Course(s): PBPL 28510, GNSE 23303, INST 28550

SALC 29000. Introduction To Tibetan Civilization. 100 Units.
TBD
SALC 29002. Tibet: Culture, Art, and History. 100 Units.
This class will introduce students to Tibetan civilization from pre-modernity to the present with an emphasis on literature, society, visual arts, and history. Attention will be paid to Tibet’s relations with neighboring polities in South, East, and Central Asia, as well as distinctive indigenous practices. The course will cover a range of Tibetan cultural forms, highlighting pre-modern sciences of medicine, logic, and meditation, as well as contemporary developments in Tibetan modernity and the diaspora communities. Course materials will include primary sources in translation (e.g. Dunhuang manuscripts and other literature), contemporary scholarship, as well as audio-visual materials. In addition to informed participation in course meetings/discussions, including regular, timely completion of reading assignments, students are expected to write two short (5-7pp) papers on topics assigned by the instructors. “All course readings will be available on electronic reserve via Canvas (http://canvas.uchicago.edu/).”
Instructor(s): Karma Ngodup and Christian K. Wedemeyer Terms Offered: Autumn
Equivalent Course(s): SALC 39002

SALC 29300. South Asian Aesthetics: Rasa to Rap, Kamasutra to Kant. 100 Units.
This course introduces students to the rich traditions of aesthetic thought in South Asia, a region that includes (among others) the modern-day states of India, Pakistan, Afghanistan, Bangladesh, Nepal and Sri Lanka. By engaging with theories of art, literature and music from the Indic and Indo-Persian traditions, we will attempt to better understand what happens in an aesthetic experience. A central concern will be thinking about how much any aesthetic tradition, be it South Asian or other, is rooted in the particular epistemic and cultural values of the society that produced it; we will therefore explore how ideas from the South Asian tradition can help us to understand not only South Asian material, but art in other societies as well, and to re-think the boundaries of ‘aesthetic’ thought. Class discussion, small group work, and individual presentations will be regular features of the class. Two sessions will include performances by, and discussions with, performing artists (dancers and musicians). We will also make one visit to the Art Institute Chicago.
Equivalent Course(s): CMLT 29302, CMLT 39302, SALC 49300

SALC 29502. South India 1300-1700: Persons, Politics, Perceptions. 100 Units.

SALC 29503. Deccan Days: Exploring South Indian Frontiers. 100 Units.
This SALC seminar, open to both undergraduates and graduate students, attempts a cultural-historical overview of the great Deccan plateau and its major languages, cultures, literary and artistic monuments, and driving historical forces and themes. It follows a broad chronological order but also seeks to juxtapose thematic and generic topics from distinct historical periods. Each class presents at least one major text in translation, keyed to the period and the topics examined. Given the wide scope of Deccani history, the seminar seeks to make good use of expertise in many fields by SALC faculty and can be classed as a Faculty Seminar.
Instructor(s): David Shulman Terms Offered: Spring
Note(s): Grades: On the basis of seminar papers and oral presentations.
Equivalent Course(s): SALC 39503

SALC 29700. Introduction to Buddhism. 100 Units.
This course will be an introduction to the ideas and meditative practices of the Theravada school of South and Southeast Asian Buddhism, from ancient to modern times. It will study both classical texts and modern ethnography.
Instructor(s): S. Collins Terms Offered: Autumn
Equivalent Course(s): HREL 39700, CHDV 39701, CHDV 29701, SALC 39700, RLST 26150

SALC 29800-29801-29802. B.A. Paper III; BA Paper I-II.
Students register for this sequence for two quarters. One quarter is for directed reading; and the second quarter is for writing and submission of the BA paper, which can be credited toward the SALC major requirements.

SALC 29800. BA Paper I. 100 Units.
Students register for this sequence for two quarters. The first quarter is for directed reading and may only be used as general elective credit.
Terms Offered: Autumn
Prerequisite(s): Eligibility for honors, and consent of faculty supervisor and SALC adviser

SALC 29801. BA Paper II. 100 Units.
Students register for this sequence for two quarters. The second quarter is for writing and submission of the BA paper, which can be credited toward the SALC major requirements.
Terms Offered: Winter
Prerequisite(s): Eligibility for honors, and consent of faculty supervisor and SALC adviser

SALC 29802. B.A. Paper III. 100 Units.
BA Paper
Terms Offered: Spring
Prerequisite(s): Eligibility for honors, and consent of faculty supervisor and SALC adviser
SALC 29801. BA Paper II. 100 Units.
Students register for this sequence for two quarters. The second quarter is for writing and submission of the BA paper, which can be credited toward the SALC major requirements.
Terms Offered: Winter
Prerequisite(s): Eligibility for honors, and consent of faculty supervisor and SALC adviser

SALC 29802. B.A. Paper III. 100 Units.
BA Paper
Terms Offered: Spring
Prerequisite(s): Eligibility for honors, and consent of faculty supervisor and SALC adviser

SALC 29900. Informal Course: South Asia. 100 Units.
This individual reading course with faculty may be used for topics not requiring use of a South Asian language, for independent study, and by nonmajors who wish to explore a South Asian topic. Note(s): Students are required to submit the College Reading and Research Course Form.
Terms Offered: Autumn
Note(s): Students are required to submit the College Reading and Research Course Form.

Tamil Courses
TAML 10100-10200-10300. First-Year Tamil I-II-III.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher–student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes.
Instructor(s): E. Annamalai Terms Offered: Autumn

TAML 10100. First-Year Tamil-1. 100 Units.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher–student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes.
Instructor(s): E. Annamalai Terms Offered: Autumn

TAML 10200. First-Year Tamil-2. 100 Units.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher–student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Winter
Prerequisite(s): TAML 10100 or consent of instructor
TAML 10300. First-Year Tamil-3. 100 Units.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher-student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Spring
Prerequisite(s): TAML 10200 or consent of instructor

TAML 10200. First-Year Tamil-2. 100 Units.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher-student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Winter
Prerequisite(s): TAML 10100 or consent of instructor

TAML 10300. First-Year Tamil-3. 100 Units.
The grammar of modern Tamil, in its manifestation both in colloquial and formal styles, and a good amount of vocabulary needed for referring to the immediate environment and using in day today transactions will be acquired. The four language skills acquired will be at different levels of proficiency with listening and speaking at the top followed by reading of formal texts and ending with basic writing skills in the formal style. The gradual progression in listening will be from teacher-student to speaker-speaker; in speaking it will be from articulation of sounds and intonation to expressing personal needs and interests, performing practical tasks, narrating experience and expressing emotions; in reading it will be from alphabet and spelling in the two styles to sign boards, controlled texts, factual news stories, interpretive reports and jokes; in writing from conversion of colloquial style into conventional style to personal letters, paraphrasing and translation of sentences. The tools used are classroom conversations, conversational tapes, videos, graded print materials, select materials from the print media including tales, which are complemented by exercises and quizzes. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Spring
Prerequisite(s): TAML 10200 or consent of instructor

TAML 20100-20200-20300. Second-Year Tamil I-II-III.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing.
TAML 20100. Second-Year Tamil-1. 100 Units.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing. Prerequisite(s): TAML 10300 or consent of instructor
Instructor(s): E. Annamalai Terms Offered: Autumn
Prerequisite(s): TAML 20100 or consent of instructor

TAML 20200. Second-Year Tamil-2. 100 Units.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Winter
Prerequisite(s): TAML 20100 or consent of instructor

TAML 20300. Second-Year Tamil-3. 100 Units.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Spring
Prerequisite(s): TAML 20200 or consent of instructor

TAML 20200. Second-Year Tamil-2. 100 Units.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Winter
Prerequisite(s): TAML 20100 or consent of instructor
TAML 20300. Second-Year Tamil-3. 100 Units.
This sequence is structured in a similar fashion as in the first year to develop the higher order of the four language skills. All materials, aural and visual, will be uncontrolled and unedited. The student will be introduced to web sources and dictionaries for self-reference and to using Unicode for writing. The student also will be exposed to dialects to have a taste of them. At the end of the course, the student will be able to converse in Tamil about specific topics of interest, to understand programs in the visual media including lyrics, to ask questions in field work situations, to read and understand texts on current events in newspapers and magazines, to understand and appreciate modern fiction and poetry, to read and understand public communications such as pamphlets, invitations, announcements, advertisements, and public speeches, and to write short essays and reports. If there is interest, web pages will be added to printed pages for reading and email and chat groups will be added for practicing writing. The basic pedagogical materials are accessible at https://tamilcourse.uchicago.edu/.
Instructor(s): E. Annamalai Terms Offered: Spring
Prerequisite(s): TAML 20200 or consent of instructor

TIBETAN COURSES
TBTN 10100-10200-10300. First-Year Tibetan I-II-III.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.

TBTN 10100. First-Year Tibetan-1. 100 Units.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Autumn
Prerequisite(s): TBTN 10100 or consent of instructor

TBTN 10200. First-Year Tibetan-2. 100 Units.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Winter
Prerequisite(s): TBTN 10100 or consent of instructor

TBTN 10300. First-Year Tibetan-3. 100 Units.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Spring
Prerequisite(s): TBTN 10200 or consent of instructor

TBTN 10200. First-Year Tibetan-2. 100 Units.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Winter
Prerequisite(s): TBTN 10100 or consent of instructor

TBTN 10300. First-Year Tibetan-3. 100 Units.
The Tibetan language, with a history going back more than one thousand years, is one of Asia's major literary languages. At the present time, it is the first language of close to seven million people in Tibet, as well as in India, Nepal, and Bhutan. The textbook is The Manual of Standard Tibetan by Nicolas Tournade and Sangda Dorje. This introductory sequence covers the script and pronunciation, the grammar of the modern Lhasa dialect, as well as basic reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Spring
Prerequisite(s): TBTN 10200 or consent of instructor
TBTN 20100-20200-20300. Second-Year Tibetan I-II-III.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.

TBTN 20100. Second-Year Tibetan-I. 100 Units.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Autumn
Prerequisite(s): TBTN 10300 or consent of instructor

TBTN 20200. Second-Year Tibetan-2. 100 Units.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Winter
Prerequisite(s): TBTN 20100 or consent of instructor

TBTN 20300. Second-Year Tibetan-3. 100 Units.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.
Instructor(s): D. Tomlinson Terms Offered: Spring
Prerequisite(s): TBTN 20200 or consent of instructor

TBTN 20200. Second-Year Tibetan-2. 100 Units.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.
Instructor(s): K. Ngodup Terms Offered: Winter
Prerequisite(s): TBTN 20100 or consent of instructor

TBTN 20300. Second-Year Tibetan-3. 100 Units.
This intermediate sequence covers second-level pronunciation and grammar of the modern Lhasa dialect, as well as intermediate-level reading and speaking skills.
Instructor(s): D. Tomlinson Terms Offered: Spring
Prerequisite(s): TBTN 20200 or consent of instructor

URDU COURSES

URDU 10100-10200-10300. First-Year Urdu I-II-III.
These courses must be taken in sequence. This three-quarter sequence covers basic grammar and vocabulary. Spoken by thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. Our text is C. M. Naim's *Introductory Urdu, Volumes I and II*. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence. Prospective students should contact the instructor, Elena Bashir (http://salc.uchicago.edu/faculty/bashir).

URDU 10100. First-Year Urdu I. 100 Units.
These courses must be taken in sequence. This three-quarter sequence covers basic grammar and vocabulary. Spoken by thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. Our text is C. M. Naim's *Introductory Urdu, Volumes I and II*. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence. Prospective students should contact the instructor, Elena Bashir.
Instructor(s): E. Bashir Terms Offered: Autumn

URDU 10200. First-Year Urdu-2. 100 Units.
Spoken by over thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. It is written in the Perso-Arabic script, which facilitates learning to read and write several other South Asian languages. This three-quarter sequence covers basic grammar and vocabulary. Our text is C. M. Naim's *Introductory Urdu, Volumes I and II*. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. By the end of three quarters students have covered all the major grammatical structures of the language. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence, since the script is introduced in the Autumn quarter. Students should also be aware that they need to contact the instructor ahead of time to discuss scheduling if they are planning to take this course. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Winter
Prerequisite(s): URDU 10100 or consent of instructor
URDU 10300. First-Year Urdu-3. 100 Units.
Spoken by over thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. It is written in the Perso-Arabic script, which facilitates learning to read and write several other South Asian languages. This three-quarter sequence covers basic grammar and vocabulary. Our text is C. M. Naim’s Introductory Urdu, Volumes I and II. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. By the end of three quarters students have covered all the major grammatical structures of the language. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence, since the script is introduced in the Autumn quarter. Students should also be aware that they need to contact the instructor ahead of time to discuss scheduling if they are planning to take this course. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Spring
Prerequisite(s): URDU 10200 or consent of instructor.

URDU 10200. First-Year Urdu-2. 100 Units.
Spoken by over thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. It is written in the Perso-Arabic script, which facilitates learning to read and write several other South Asian languages. This three-quarter sequence covers basic grammar and vocabulary. Our text is C. M. Naim’s Introductory Urdu, Volumes I and II. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. By the end of three quarters students have covered all the major grammatical structures of the language. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence, since the script is introduced in the Autumn quarter. Students should also be aware that they need to contact the instructor ahead of time to discuss scheduling if they are planning to take this course. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Winter
Prerequisite(s): URDU 10100 or consent of instructor.

URDU 10300. First-Year Urdu-3. 100 Units.
Spoken by over thirty-five million people in South Asia, Urdu is the national language of Pakistan and one of the official languages of India. It is written in the Perso-Arabic script, which facilitates learning to read and write several other South Asian languages. This three-quarter sequence covers basic grammar and vocabulary. Our text is C. M. Naim’s Introductory Urdu, Volumes I and II. Students learn to read and write the Urdu script, as well as to compose/write in Urdu. By the end of three quarters students have covered all the major grammatical structures of the language. We also emphasize aural and oral skills (i.e., listening, pronunciation, speaking). These courses must be taken in sequence, since the script is introduced in the Autumn quarter. Students should also be aware that they need to contact the instructor ahead of time to discuss scheduling if they are planning to take this course. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Spring
Prerequisite(s): URDU 10200 or consent of instructor.

URDU 20100. Second-Year Urdu-1. 100 Units.
This sequence is a continuation of URDU 10100-10200-10300. There is increased emphasis on vocabulary building. Depending on ability levels and interests of the students, readings can include selections from various original sources. Prospective students should contact the instructor, Elena Bashir (http://salc.uchicago.edu/faculty/bashir).

URDU 20100. Second-Year Urdu-2. 100 Units.
PQ: First year Urdu or comparable level of language skills. This sequence is a continuation of URDU 10100-10200-10300. There is increased emphasis on vocabulary building and reading progressively complex texts. Depending on ability levels and interests of the students, readings can include selections from various original sources. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Winter
Prerequisite(s): URDU 20100 or consent of instructor.
URDU 20300. Second-Year Urdu III. 100 Units.
This sequence is a continuation of URDU 10100-10200-10300. There is increased emphasis on vocabulary building and reading progressively more complex texts. Depending on ability levels and interests of the students, readings can include selections from various original sources. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Spring
Prerequisite(s): URDU 20200 or consent of instructor.

URDU 20200. Second-Year Urdu-2. 100 Units.
PQ: First year Urdu or comparable level of language skills. This sequence is a continuation of URDU 10100-10200-10300. There is increased emphasis on vocabulary building and reading progressively complex texts. Depending on ability levels and interests of the students, readings can include selections from various original sources. Elena Bashir, Autumn-Winter-Spring. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Winter
Prerequisite(s): URDU 20100 or consent of instructor

URDU 20300. Second-Year Urdu III. 100 Units.
This sequence is a continuation of URDU 10100-10200-10300. There is increased emphasis on vocabulary building and reading progressively more complex texts. Depending on ability levels and interests of the students, readings can include selections from various original sources. Prospective students should contact instructor: ebashir@uchicago.edu.
Instructor(s): E. Bashir Terms Offered: Spring
Prerequisite(s): URDU 20200 or consent of instructor.
The modern science of statistics involves the development of principles and methods for modeling uncertainty, for designing experiments, surveys, and observational programs, and for analyzing and interpreting empirical data. Mathematics plays a major role in all areas of statistics, from probability theory to data analysis. Statistics is an appropriate field for students with strong mathematical and computational skills and an interest in applying these skills to problems in the natural and social sciences. A program leading to the bachelor’s degree in Statistics offers coverage of the principles and methods of statistics in combination with solid training in mathematics and some additional training in computation. The major can provide appropriate preparation for graduate study in statistics or in other subjects with strong quantitative components. Students considering graduate study in statistics or related fields are encouraged to discuss their programs with the Departmental Adviser for Majors at an early stage, whether or not they plan to receive an undergraduate degree in Statistics.

Students who are majoring in other fields of study may also complete a minor in Statistics and are encouraged to discuss their course choices with the Departmental Adviser for Majors. Information on the minor follows the description of the major.

**GENERAL COURSE INFORMATION**

Courses at the 20000 level are designed to provide instruction in statistics, probability, and statistical computation for students from all parts of the University. These courses differ in emphasis on theory or methods, in mathematical level, and in the direction of applications.

**Introductory Courses and Sequences**

To begin their studies in statistics, students can choose from several courses. Students and College advisers are encouraged to contact the Departmental Adviser for Introductory Courses for advice on choosing an appropriate first course.

For students with little or no math background who do not intend to continue on to more advanced statistics courses, STAT 20000 Elementary Statistics is an introductory course that emphasizes concepts rather than statistical techniques. STAT 20000 Elementary Statistics may not be taken by students with credit for STAT 22000 Statistical Methods and Applications, STAT 23400 Statistical Models and Methods, or more advanced courses in the Department of Statistics. STAT 20000 Elementary Statistics does not count toward the major or minor in Statistics.

Students with at least MATH 13100 Elem Functions and Calculus I or placement into MATH 15100 Calculus I are encouraged to take STAT 22000 Statistical Methods and Applications instead of STAT 20000 Elementary Statistics. Students with three quarters of calculus may choose either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods. Students may count either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods, but not both, toward the forty-two credits required for graduation.

STAT 22000 Statistical Methods and Applications is a general introduction to statistical concepts, techniques, and applications to data analysis and to problems in the design, analysis, and interpretation of experiments and observational programs. A score of 5 on the AP Statistics exam yields credit for STAT 22000 Statistical Methods and Applications, although this credit will not count toward the requirements for a major or minor in Statistics. STAT 22000 Statistical Methods and Applications can count toward the minor in Statistics, but for students matriculating in Autumn Quarter 2016 and after, cannot count toward the major in Statistics.

STAT 23400 Statistical Models and Methods covers much of the same material as STAT 22000 Statistical Methods and Applications, but at a somewhat higher mathematical level. The course is a one-quarter introduction to statistics that is appropriate for any student with a good command of univariate calculus including sequences and series. STAT 23400 Statistical Models and Methods can count toward the minor in Statistics, but for students matriculating in Autumn Quarter 2016 and after, cannot count toward the major in Statistics.

Students cannot hold credit for both STAT 22000 Statistical Methods and Applications and STAT 23400 Statistical Models and Methods. Students completing either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods forego their AP Statistics credit for STAT 22000 Statistical Methods and Applications.

STAT 24400-24500 Statistical Theory and Methods I-II is recommended for students who wish to have a thorough introduction to statistical theory and methodology. STAT 24400-24500 Statistical Theory and Methods I-II is more mathematically demanding than either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods. STAT 24400 Statistical Theory and Methods I assumes some familiarity with multivariate calculus, and STAT 24500 Statistical Theory and Methods II assumes some familiarity with linear algebra.
STAT 24410-24510 Statistical Theory and Methods Ia-IIa is an alternative version of STAT 24400-24500 Statistical Theory and Methods I-II that requires STAT 25100 Introduction to Mathematical Probability (or STAT 25150 Introduction to Mathematical Probability-A) as a prerequisite and that replaces some probability topics with additional statistical topics not normally covered in STAT 24400-24500 Statistical Theory and Methods I-II. STAT 24410-24510 Statistical Theory and Methods Ia-IIa is particularly well-suited for students with a strong mathematical background who are interested in more extensive coverage of probability and statistics. Students may count either STAT 24400 Statistical Theory and Methods I or STAT 24410 Statistical Theory and Methods Ia, but not both, toward the 4200 units of credit required for graduation. Similarly, students may count either STAT 24500 Statistical Theory and Methods II or STAT 24510 Statistical Theory and Methods IIa, but not both, and they may count STAT 25100 Introduction to Mathematical Probability or STAT 25150 Introduction to Mathematical Probability-A, but not both, toward the 4200 units of credits required for graduation.

Students considering a major in Statistics are encouraged to begin with either STAT 24400-24500 Statistical Theory and Methods I-II or with the alternative sequence consisting of STAT 25100 Introduction to Mathematical Probability and STAT 24410-24510 Statistical Theory and Methods Ia-IIa, rather than with STAT 23400 Statistical Models and Methods. Although students with a strong mathematical background can and do take either STAT 24400-24500 Statistical Theory and Methods I-II or the alternative sequence (STAT 25100 Introduction to Mathematical Probability and STAT 24410-24510 Statistical Theory and Methods Ia-IIa) without prior coursework in statistics or probability, some students find it helpful to take either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods as preparation.

The core of the Statistics major consists of three courses: STAT 25100 Introduction to Mathematical Probability and either STAT 24400-24500 Statistical Theory and Methods I-II or STAT 24410-24510 Statistical Theory and Methods Ia-IIa. Either of these is recommended as a three-quarter cognate sequence for students in the quantitative sciences and mathematics. Note that STAT 25100 Introduction to Mathematical Probability may be taken before, after, or concurrently with STAT 24400-24500 Statistical Theory and Methods I-II, though it is a prerequisite for STAT 24410-24510 Statistical Theory and Methods Ia-IIa.

Additional Courses in Statistical Theory, Methods, and Applications

For students interested in continuing their study of statistics beyond the introductory level, STAT 22200 Linear Models And Experimental Design, STAT 22400 Applied Regression Analysis, STAT 22600 Analysis of Categorical Data, STAT 22700 Biostatistical Methods, and STAT 26700 History of Statistics are recommended. Note that because there is some overlap between STAT 22600 Analysis of Categorical Data and STAT 22700 Biostatistical Methods, only one of these two courses, not both, may be counted toward a major or minor in Statistics. The courses STAT 22200 Linear Models And Experimental Design, STAT 22400 Applied Regression Analysis, STAT 22600 Analysis of Categorical Data, and STAT 22700 History of Statistics may be taken in any order. Each presumes two quarters of calculus (except STAT 22700 History of Statistics) and a previous course in statistics (STAT 22000 Statistical Methods and Applications or higher). STAT 22700 Biostatistical Methods has STAT 22400 Applied Regression Analysis as a prerequisite.

For students who have completed STAT 24400-24500 Statistical Theory and Methods I-II and are interested in more advanced statistical methodology courses, STAT 24620 Multivariate Statistical Analysis: Applications and Techniques, STAT 26100 Time Dependent Data, STAT 27400 Nonparametric Inference, STAT 27850 Multiple Testing, Modern Inference, and Replicability, and STAT 34300 Applied Linear Stat Methods are recommended. Many other graduate courses in Statistics offer opportunities for further study of statistical theory, methods, and applications. For details, consult the instructor or the Departmental Adviser for Majors, or visit the Graduate Announcements (http://graduateannouncements.uchicago.edu/departmentofstatistics).

Courses in Probability

Students interested in probability can begin with STAT 25100 Introduction to Mathematical Probability, which can be taken separately from any Statistics courses and can be supplemented with more advanced probability courses, such as STAT 25300 Introduction to Probability Models or MATH 23500 Markov Chains, Martingales, and Brownian Motion. Students with a strong mathematical background can take STAT 31200 Introduction to Stochastic Processes I, STAT 38100 Measure-Theoretic Probability I, and STAT 38300 Measure-Theoretic Probability III. Note that because there is some overlap between MATH 23500 Markov Chains, Martingales, and Brownian Motion and STAT 31200 Introduction to Stochastic Processes I, only one of these two courses, not both, may be counted toward a major in Statistics.

Courses in Machine Learning

A student with a strong computer science background and some knowledge of elementary statistics could take STAT 27725 Machine Learning. Other courses in the category of machine learning include the advanced statistical methodology courses STAT 24620 Multivariate Statistical Analysis: Applications and Techniques and STAT 27400 Nonparametric Inference. Graduate course offerings in machine learning include STAT 37601 Machine Learning and Large-Scale Data Analysis and STAT 37710 Machine Learning.
Courses in Optimization

A student with a strong mathematical background could take STAT 28000 Optimization. Graduate course offerings in optimization include STAT 31015 Convex Optimization and STAT 31020 Mathematical Computation IIB: Nonlinear Optimization.

GRADING

Students who are majoring or minoring in Statistics must receive a quality grade of at least C in all of the courses counted toward their major or minor program in Statistics. In addition, students who are majoring in Statistics must receive quality grades of at least C+ in both STAT 24400 Statistical Theory and Methods I and STAT 24500 Statistical Theory and Methods II (or at least C in both STAT 24410 Statistical Theory and Methods Ia and STAT 24510 Statistical Theory and Methods Ila). Subject to College and divisional regulations, and with the consent of the instructor, students may register for either quality grades or for P/F grading in any 20000-level Statistics course that is not counted toward a major or minor in Statistics. A grade of P is given only for work of C– quality or higher.

The following policy applies to students who wish to receive a mark of I for a Statistics course. In addition to submitting the official Incomplete Form required by the College, students must have completed at least half of the total required course work with a grade of C– or better, and they must be unable to complete the remaining course work by the end of the quarter due to an emergency. Students requesting a mark of I for STAT 20000 Elementary Statistics, STAT 22000 Statistical Methods and Applications, or STAT 23400 Statistical Models and Methods must obtain approval from both the current instructor and the Departmental Adviser for Introductory Courses.

PROGRAM REQUIREMENTS FOR MAJORS

The requirements for the BA and BS in Statistics were updated in 2017. Students who matriculated prior to Autumn 2017 may choose to follow these updated requirements; otherwise, they should consult the archived catalog from their year of matriculation (or, at their option, any later year) for the degree requirements in Statistics. All students who matriculated in Autumn 2017 or later should follow the updated requirements described below.

Every candidate must obtain approval of his or her course program from the Departmental Adviser for Majors. Students majoring in Statistics should meet the general education requirement in mathematical sciences with courses in calculus. The major program includes four additional prescribed mathematics courses, four prescribed statistics courses, and two prescribed computer science courses. Students are advised to complete the four mathematics courses by the end of their third year. Additional requirements include four approved elective courses in Statistics. The BA also requires an additional prescribed mathematics course and an approved, coherent, three-quarter sequence at the 20000 level in a field to which statistics can be applied. Students who are majoring in Statistics must receive quality grades of at least C+ in both STAT 24400 Statistical Theory and Methods I and STAT 24500 Statistical Theory and Methods II (or at least C in both STAT 24410 Statistical Theory and Methods Ia and STAT 24510 Statistical Theory and Methods Ila), and at least C in all other courses counted toward the Statistics major. A grade of P is not acceptable for any of these courses.

Prescribed Mathematics Courses

The prescribed mathematics courses include a Calculus III requirement (MATH 13300 Elementary Functions and Calculus III or MATH 15300 Calculus III or MATH 16300 Honors Calculus III) and a Linear Algebra requirement (STAT 24300 Numerical Linear Algebra or MATH 20250 Abstract Linear Algebra). Note that MATH 19620 Linear Algebra may not be used to meet the Linear Algebra requirement.

For the BA, one of the following pairs of courses is required: MATH 20000-20100 Mathematical Methods for Physical Sciences I-II or MATH 20400-20500 Analysis in Rn II-III or MATH 20800-20900 Honors Analysis in Rn II-III or the pair consisting of MATH 20000 Mathematical Methods for Physical Sciences I and STAT 28200 Dynamical Systems with Applications.

For the BS, students must take one of the following three courses: MATH 20000 Mathematical Methods for Physical Sciences I or MATH 20500 Analysis in Rn III or MATH 20900 Honors Analysis in Rn III; and, in addition, one of the following three courses: MATH 21000 Mathematical Methods for Physical Sciences II, MATH 27300 Basic Theory of Ordinary Differential Equations, or STAT 28200 Dynamical Systems with Applications; and, in addition, one of the following two courses: STAT 28000 Optimization or MATH 21100 Basic Numerical Analysis.

Students who are completing majors in both Statistics and Economics should follow the same mathematics requirements as Statistics majors. Students who have already taken MATH 19520 Mathematical Methods for Social Sciences and MATH 19620 Linear Algebra should discuss with the Departmental Adviser for Majors how best to meet the mathematics requirements for the Statistics major. For example, such students can petition to meet the requirements for the BA in Statistics by taking all three of MATH 20100 Mathematical Methods for Physical Sciences II, STAT 24300 Numerical Linear Algebra, and STAT 28200 Dynamical Systems with Applications.
Prescribed Statistics Courses
The four prescribed Statistics courses are STAT 25100 Introduction to Mathematical Probability, STAT 24400-24500 Statistical Theory and Methods I-II (or STAT 24410-24510 Statistical Theory and Methods Ia-IIa), and either STAT 22400 Applied Regression Analysis or STAT 34300 Applied Linear Stat Methods.

It is recommended that students who have had some multivariable calculus begin the major by taking either STAT 25100 Introduction to Mathematical Probability or STAT 24400 Statistical Theory and Methods I as their first course in probability and statistics. An alternative route to beginning the major would be to first take either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods, neither of which count toward the major, but which could serve as a prerequisite for courses such as STAT 22400 Applied Regression Analysis, STAT 22200 Linear Models And Experimental Design, and STAT 22600 Analysis of Categorical Data, which do count toward the major. This second path is recommended for students who need additional time to complete multivariable calculus and linear algebra prerequisites and who want to get started on the major in the meantime.

Electives
Candidates for the BA are required to take four electives, at least two of which must be on List B below. The remaining two electives may be from either List B or C. Students may count either STAT 22600 Analysis of Categorical Data or STAT 22700 Biostatistical Methods, but not both, toward the BA. Similarly, students may count either MATH 23500 Markov Chains, Martingales, and Brownian Motion or STAT 31200 Introduction to Stochastic Processes I, but not both, toward the BA.

Candidates for the BS are required to take four electives. A candidate for the BS who has not taken STAT 34300 Applied Linear Stat Methods as one of the four prescribed statistics courses must take at least one elective from List A below, a second elective from List B, and the remaining two electives may be from either List B or C. A candidate for the BS who has taken STAT 34300 Applied Linear Stat Methods as one of the four prescribed statistics courses must take at least two electives from List B and the remaining two electives may be from either List B or C. For the BS in Statistics, STAT 28000 Optimization counts as a List C elective only if MATH 21100 Basic Numerical Analysis is also included in the program. In other words, students cannot double-count STAT 28000 Optimization toward both the four-elective requirement and the requirement to take one of STAT 28000 Optimization and MATH 21100 Basic Numerical Analysis. Students may count either STAT 22600 Analysis of Categorical Data or STAT 22700 Biostatistical Methods, but not both, toward the BS. Similarly, students may count either MATH 23500 Markov Chains, Martingales, and Brownian Motion or STAT 31200 Introduction to Stochastic Processes I, but not both, toward the BS.

Note: The following lists may change from time to time as courses change and new courses are added. Please consult the Departmental Adviser for Majors for approval of your electives.

LIST A: Advanced Statistical Methodology
- STAT 24620 Multivariate Statistical Analysis: Applications and Techniques
- STAT 26100 Time Dependent Data
- STAT 27400 Nonparametric Inference
- STAT 27850 Multiple Testing, Modern Inference, and Replicability

LIST B: Statistical Methodology
- STAT 22200 Linear Models And Experimental Design
- STAT 22600 Analysis of Categorical Data
- STAT 22700 Biostatistical Methods
- STAT 24620 Multivariate Statistical Analysis: Applications and Techniques
- STAT 26100 Time Dependent Data
- STAT 26700 History of Statistics
- STAT 27400 Nonparametric Inference
- STAT 27850 Multiple Testing, Modern Inference, and Replicability
- STAT 35800 Statistical Applications
- STAT 37601 Machine Learning and Large-Scale Data Analysis

LIST C: Other Upper Level/Graduate Courses
- MATH 23500 Markov Chains, Martingales, and Brownian Motion
- STAT 25300 Introduction to Probability Models

* Students may count either STAT 22600 Analysis of Categorical Data or STAT 22700 Biostatistical Methods, but not both, toward the major.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>STAT 27725</td>
<td>Machine Learning</td>
</tr>
<tr>
<td>STAT 28000</td>
<td>Optimization</td>
</tr>
<tr>
<td>STAT 30900</td>
<td>Mathematical Computation I: Matrix Computation Course</td>
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<tr>
<td>STAT 31015</td>
<td>Convex Optimization</td>
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<tr>
<td>STAT 31020</td>
<td>Mathematical Computation II: Nonlinear Optimization</td>
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<td>STAT 31060</td>
<td>Further Mathematical Computation: Matrix Computation and Optimization</td>
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<tr>
<td>STAT 31200</td>
<td>Introduction to Stochastic Processes I</td>
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<tr>
<td>STAT 37710</td>
<td>Machine Learning</td>
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<tr>
<td>STAT 38100</td>
<td>Measure-Theoretic Probability I</td>
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<tr>
<td>STAT 38300</td>
<td>Measure-Theoretic Probability III</td>
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</tbody>
</table>

Some additional graduate courses in Statistics (must be approved by Departmental Adviser for Majors)

- Students may count either MATH 23500 Markov Chains, Martingales, and Brownian Motion or STAT 31200 Introduction to Stochastic Processes I, but not both, toward the major.

Computer Science Requirement

Candidates for either the BA or the BS are required to take one of the following sequences: CMSC 12100-12200 Computer Science with Applications I-II or CMSC 15100-15200 Introduction to Computer Science I-II or CMSC 16100-16200 Honors Introduction to Computer Science I-II.

BS Requirement of Three-Quarter Sequence in a Field to Which Statistics Can Be Applied

Candidates for the BS (but not the BA) are required to take an approved, coherent, three-quarter sequence at the 20000 level in a field to which statistics can be applied. Generally this sequence should be in the natural or social sciences, but a sequence in another discipline may be acceptable. Courses in MATH or CMSC may not be used for this requirement. Sequences in which earlier courses are prerequisites for later ones are preferred. Example sequences include BIOS 20198 Biodiversity-BIOS 20196 Ecology and Conservation-BIOS 23406 Biogeography; CHEM 22000-22100-22200 Organic Chemistry I-II-III; CHEM 26100-26200-26300 Quantum Mechanics; Thermodynamics; Chemical Kinetics and Dynamics; ECON 20000-20100-20200 The Elements of Economic Analysis I-II-III; GEOS 21000 Introduction to Mineralogy-GEOS 21100 Introduction to Petrology-GEOS 21200 Physics of the Earth; and PHYS 23400-23500 Quantum Mechanics I-II-PHYS 23700 Nuclei and Elementary Particles. All sequences must be approved by the Departmental Adviser for Majors.

**Summary of Requirements for the BA in Statistics**

**GENERAL EDUCATION**

One of the following sequences: 200

<table>
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<tr>
<td>MATH 13100-13200</td>
<td>Elementary Functions and Calculus I-II</td>
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<tr>
<td>MATH 15100-15200</td>
<td>Calculus I-II</td>
</tr>
<tr>
<td>MATH 16100-16200</td>
<td>Honors Calculus I-II</td>
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Total Units 200

**MAJOR**

One of the following: 100

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<td>Calculus III</td>
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<td>MATH 20000</td>
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<tr>
<td>STAT 28200</td>
<td>Dynamical Systems with Applications</td>
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<tr>
<td>MATH 20000-20100</td>
<td>Mathematical Methods for Physical Sciences I-II</td>
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<tr>
<td>MATH 20400-20500</td>
<td>Analysis in Rn II-III</td>
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<td>MATH 20800-20900</td>
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One of the following: 100

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<td>STAT 24300</td>
<td>Numerical Linear Algebra</td>
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### Summary of Requirements for the BS in Statistics

#### General Education

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<td>MATH 16100-16200</td>
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#### Major

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<td>MATH 20500</td>
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<tr>
<td>MATH 20100</td>
<td>Mathematical Methods for Physical Sciences II</td>
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<td>Basic Theory of Ordinary Differential Equations</td>
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<td>STAT 28200</td>
<td>Dynamical Systems with Applications</td>
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<tr>
<td>MATH 24300</td>
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<td>MATH 20250</td>
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<td>Optimisation</td>
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<td>MATH 21100</td>
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<td>MATH 24400-24500</td>
<td>Statistical Theory and Methods I-II</td>
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<td>Statistical Theory and Methods Ia-IIa</td>
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<td>STAT 25100</td>
<td>Introduction to Mathematical Probability</td>
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<td>STAT 25150</td>
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requirements of an undergraduate program. For example, a program in Statistics. Of the nine courses that are required at the appropriate level, up to three may also meet the third year. Students are strongly encouraged to consult both the Departmental Adviser for Majors and their College adviser early in their minimum criteria, admission is competitive, and additional qualifications may be needed. Interested students are for an MS in Statistics during their fourth year. To be considered, students should have completed almost all of their undergraduate requirements, including all of their general education and language competence for the program of study other than Statistics is recommended.

Participants must apply to the MS program in Statistics by June 1 of their third year for admission to candidacy. This program enables unusually well-qualified undergraduate students to complete an MS in Statistics along with a BA or BS during their four years at the College. Although a student may receive a BA or BS in any field, a joint BA/MS or BS/MS in Statistics.

Participants in the joint BA/MS or BS/MS program must meet the same requirements as students in the MS program in Statistics. Of the nine courses that are required at the appropriate level, up to three may also meet the requirements of an undergraduate program. For example, STAT 24410-24510 Statistical Theory and Methods Ia-
Ila and STAT 34300 Applied Linear Stat Methods, which satisfy requirements for the MS in Statistics, could also be used to satisfy requirements of a BA or BS program in Statistics.

Other requirements include a master's paper and participation in the Consulting Program of the Department of Statistics. For details, visit the Department of Statistics Admissions page (http://www.stat.uchicago.edu/admissions/featured).

**MINOR PROGRAM IN STATISTICS**

The Statistics minor focuses on statistical methodology, in contrast to the Statistics major, which has a substantial theoretical component. The minor in Statistics requires five courses, some prescribed and some elective, chosen in consultation with the Departmental Adviser for Minors. By the end of Spring Quarter of the student's third year, a student who wishes to complete the Statistics minor must complete the Consent to Complete a Minor Form (https://college.uchicago.edu/advising/forms-and-petitions) and obtain approval from the Departmental Adviser for Minors.

The core of the Statistics minor consists of STAT 22400 Applied Regression Analysis and either STAT 22200 Linear Models And Experimental Design or STAT 22600 Analysis of Categorical Data (or both). These three courses may be taken in any order after meeting the prerequisite of at least two quarters calculus and introductory statistics: STAT 22000 Statistical Methods and Applications, STAT 23400 Statistical Models and Methods, STAT 24500 Statistical Theory and Methods II, STAT 24510 Statistical Theory and Methods Ila, or AP credit for STAT 22000 Statistical Methods and Applications.

An approved substitute for STAT 22600 Analysis of Categorical Data is STAT 22700 Biostatistical Methods, which requires STAT 22400 Applied Regression Analysis as prerequisite and is offered by the Department of Public Health Sciences. Students may count either STAT 22600 Analysis of Categorical Data or STAT 22700 Biostatistical Methods, but not both, toward the Statistics minor. STAT 22700 Biostatistical Methods does not count against the limit of no more than two electives from outside the Department of Statistics.

To complete the five-course minor, students must choose from among the approved electives listed below. No more than two electives may be satisfied by courses offered by departments other than the Department of Statistics. Students may petition the Department Adviser for Minors to include more than two electives from outside the Department of Statistics. Regardless, at most one elective can be satisfied by a course offered by the Booth School of Business.

Either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods, but not both, may be used as an elective if taken prior to any other courses for which at least STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods is prerequisite. If either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods are used to fulfill a requirement for any major(s), other minors, or general education requirements, then neither course may be used to fulfill a requirement in the Statistics minor. Students may not use AP credit to meet a requirement for the Statistics minor.

The list of courses approved for the minor may change from time to time as courses change and new courses are added. Please consult the Departmental Adviser for Minors for approval of your minor program plan. Students may petition the Departmental Adviser for Minors for approval of another course. Such courses must have a minimum statistics prerequisite of introductory statistics (STAT 22000 Statistical Methods and Applications, STAT 23400 Statistical Models and Methods, STAT 24500 Statistical Theory and Methods II, or STAT 24510 Statistical Theory and Methods Ila) and cannot substantially overlap with the topics covered in departmental courses or other courses in the student’s minor program.

No courses in the Statistics minor can be double counted with the student’s major(s), other minors, or general education requirements. An approved elective must replace any course required for the Statistics minor that is used to meet the requirements for any major(s), other minors, or general education requirements.


Students who are minoring in Statistics must receive a quality grade of at least C+ in all of the courses counted toward the minor. A grade of P is not acceptable for any of these courses. More than half of the courses counted toward the Statistics minor must be met by registering for courses bearing University of Chicago course numbers. Students may not use AP Statistics credit for STAT 22000 Statistical Methods and Applications to meet a requirement for the Statistics minor.

**Summary of Requirements for the Minor in Statistics**

The following course:

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>STAT 22400</td>
<td>Applied Regression Analysis</td>
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</table>
Students may petition the Departmental Adviser for Minors to include more than two electives from outside the Department of Statistics. Regardless, at most one elective can be satisfied by a course offered by the Booth School of Business.

Non-Departmental Electives Approved for the Minor in Statistics

Because of the interdisciplinary nature of the College, the divisions, and the field of statistics, other departments and committees offer courses approved for use as electives for the Statistics minor. No more than two electives may be satisfied by courses offered by departments other than the Department of Statistics. Students may petition the Departmental Adviser for Minors to include more than two electives from outside the Department of Statistics. Regardless, at most one elective can be satisfied by a course offered by the Booth School of Business.

College-level courses are described below. Graduate-level course descriptions can be found in the Graduate Announcements (http://graduateannouncements.uchicago.edu/graduate/departmentofstatistics).

Non-Departmental Electives Approved for the Minor in Statistics

Because of the interdisciplinary nature of the College, the divisions, and the field of statistics, other departments and committees offer courses approved for use as electives for the Statistics minor. No more than two electives may be satisfied by courses offered by departments other than the Department of Statistics. Students may petition the Departmental Adviser for Minors to include more than two electives from outside the Department of Statistics. Regardless, at most one elective can be satisfied by a course offered by the Booth School of Business.

### Departmental Electives Approved for the Minor in Statistics

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Units</th>
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<tbody>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications 1,2</td>
<td>100</td>
</tr>
<tr>
<td>STAT 22200</td>
<td>Linear Models And Experimental Design 3</td>
<td>100</td>
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<tr>
<td>STAT 22600</td>
<td>Analysis of Categorical Data 3</td>
<td>100</td>
</tr>
<tr>
<td>STAT 23400</td>
<td>Statistical Models and Methods 1</td>
<td>100</td>
</tr>
<tr>
<td>STAT 26100</td>
<td>Time Dependent Data</td>
<td>100</td>
</tr>
<tr>
<td>STAT 26700</td>
<td>History of Statistics</td>
<td>100</td>
</tr>
</tbody>
</table>

1. Either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods, but not both, may be used as an elective if taken prior to any other courses for which at least STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods is prerequisite. If either STAT 22000 Statistical Methods and Applications or STAT 23400 Statistical Models and Methods is used to fulfill a requirement for any major(s), other minors, or general education requirements, then neither course may be used to fulfill a requirement in the Statistics minor.

2. Students may not use AP credit for STAT 22000 Statistical Methods and Applications to meet a requirement for the Statistics minor.

3. If STAT 22200 Linear Models And Experimental Design is used to fulfill a requirement of the Statistics minor, then STAT 22600 Analysis of Categorical Data may be used as an elective in the minor. Similarly, if STAT 22600 Analysis of Categorical Data is used to fulfill a requirement of the Statistics minor, then STAT 22200 Linear Models And Experimental Design may be used as an elective in the minor. No more than two electives may be satisfied by courses offered by departments other than the Department of Statistics. Students may petition the Departmental Adviser for Minors to include more than two electives from outside the Department of Statistics. Regardless, at most one elective can be satisfied by a course offered by the Booth School of Business.

4. If either STAT 24500 Statistical Theory and Methods Ia or STAT 24510 Statistical Theory and Methods IIa is used as an elective in the Statistics minor, then the prerequisite STAT 24400 Statistical Theory and Methods I may not be counted toward the minor, but may be counted toward any major(s) or other minors.

5. Undergraduate registration in 30000-level and 40000-level courses is by instructor consent only. Undergraduates cannot pre-register for 30000- or 40000-level courses. Instead, students should contact the instructor well in advance.

College-level courses are described below. Graduate-level course descriptions can be found in the Graduate Announcements (http://graduateannouncements.uchicago.edu/graduate/departmentofstatistics).
Offering departments include Public Health Sciences, Computer Science, Comparative Human Development, Human Genetics, Sociology, and the Booth School of Business. Some of these courses bear a Statistics course number and some do not. Some courses are at the 30000 or 40000 level, which require instructor consent for undergraduate registration. Undergraduates cannot pre-register for 30000- or 40000-level courses. Instead, students should contact the instructor well in advance.

Comparative Human Development

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>STAT 31900</td>
<td>Introduction to Causal Inference (Comparative Human Development)</td>
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Public Health Sciences

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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>STAT 22700</td>
<td>Biostatistical Methods</td>
</tr>
<tr>
<td>STAT 35800</td>
<td>Statistical Applications</td>
</tr>
<tr>
<td>STAT 36900</td>
<td>Applied Longitudinal Data Analysis</td>
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</table>

Other Departments

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<th>Course</th>
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<tbody>
<tr>
<td>BIOS 21216</td>
<td>Intro Statistical Genetics</td>
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<tr>
<td>BUSN 41201</td>
<td>Big Data</td>
</tr>
<tr>
<td>SOCI 20112</td>
<td>Applications of Hierarchical Linear Models</td>
</tr>
<tr>
<td>SOCI 20253</td>
<td>Introduction to Spatial Data Science</td>
</tr>
</tbody>
</table>

College-level courses bearing a Statistics course number are described below. Other College-level electives are described elsewhere in the College Catalog. Graduate-level course descriptions can be found in the Graduate Announcements (http://graduateannouncements.uchicago.edu).

STATISTICS COURSES

STAT 11800. Introduction to Data Science - I. 100 Units.
Data science provides tools for gaining insight into specific problems using data, through computation, statistics and visualization. This course introduces students to all aspects of a data analysis process, from posing questions, designing data collection strategies, management storing and processing of data, exploratory tools and visualization, statistical inference, prediction, interpretation and communication of results. Simple techniques for data analysis are used to illustrate both effective and fallacious uses of data science tools. Although this course is designed to be at the level of mathematical sciences courses in the Core, with little background required, we expect the students to develop computational skills that will allow them to analyze data. Computation will be done using Python and Jupyter Notebook.
Instructor(s): Michael J. Franklin, Dan Nicolae Terms Offered: Autumn. Note: This course will be crosslisted with STAT 11800.
Prerequisite(s): None
Equivalent Course(s): CMSC 11800

STAT 11900. Introduction to Data Science II. 100 Units.
This course is the second quarter of a two-quarter systematic introduction to the foundations of data science, as well as to practical considerations in data analysis. A broad background on probability and statistical methodology as well as a basic proficiency in RStudio will be provided. More advanced topics on data privacy and ethics, reproducibility in science, data encryption, and basic machine learning will be introduced. We will explore these concepts with real-world problems from different domains.
Terms Offered: Winter
Equivalent Course(s): CMSC 11900

STAT 20000. Elementary Statistics. 100 Units.
This course introduces statistical concepts and methods for the collection, presentation, analysis, and interpretation of data. Elements of sampling, simple techniques for analysis of means, proportions, and linear association are used to illustrate both effective and fallacious uses of statistics.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Note(s): For students with little or no math background. Not recommended for students planning to take STAT 22000 or STAT 23400 or more advanced courses in Statistics. Students with credit for STAT 22000, STAT 23400 or more advanced courses in Statistics not admitted. This course may not be used in the Statistics major or minor. This course meets one of the general education requirements in the mathematical sciences. Only one of STAT 20000 and STAT 22000, but not both, can count toward the general education requirement in the mathematical sciences.
STAT 22000. Statistical Methods and Applications. 100 Units.
This course introduces statistical techniques and methods of data analysis, including the use of statistical software. Examples are drawn from the biological, physical, and social sciences. Students are required to apply the techniques discussed to data drawn from actual research. Topics include data description, graphical techniques, exploratory data analyses, random variation and sampling, basic probability, random variables and expected values, confidence intervals and significance tests for one- and two-sample problems for means and proportions, chi-square tests, linear regression, and, if time permits, analysis of variance.
Terms Offered: Autumn Spring Winter
Note(s): Students may count either STAT 22000 or 23400, but not both, toward the forty-two credits required for graduation. Students with credit for STAT 23400 not admitted. This course meets one of the general education requirements in the mathematical sciences. Only one of STAT 20000 and STAT 22000, but not both, can count toward the general education requirement in the mathematical sciences.

STAT 22200. Linear Models And Experimental Design. 100 Units.
This course covers principles and techniques for the analysis of experimental data and the planning of the statistical aspects of experiments. Topics include linear models; analysis of variance; randomization, blocking, and factorial designs; confounding; and incorporation of covariate information.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): STAT 22000 or 23400 or 24500 or 24510 and two quarters of calculus.

STAT 22400. Applied Regression Analysis. 100 Units.
This course introduces the methods and applications of fitting and interpreting multiple regression models. The primary emphasis is on the method of least squares and its many varieties. Topics include the examination of residuals, the transformation of data, strategies and criteria for the selection of a regression equation, the use of dummy variables, tests of fit, nonlinear models, biases due to excluded variables and measurement error, and the use and interpretation of computer package regression programs. The techniques discussed are illustrated by many real examples involving data from both the natural and social sciences. Matrix notation is introduced as needed. Prerequisite: PBHS 32100. Equivalent Course(s): PBHS 32400
Terms Offered: Autumn Spring
Prerequisite(s): STAT 22000 or 23400 or 24500 or PBHS 32100
Equivalent Course(s): PBHS 32400

STAT 22600. Analysis of Categorical Data. 100 Units.
This course covers statistical methods for the analysis of qualitative and counted data. Topics include description and inference for binomial and multinomial data using proportions and odds ratios; multi-way contingency tables; generalized linear models for discrete data; logistic regression for binary responses; multi-category logit models for nominal and ordinal responses; loglinear models for counted data; and inference for matched-pairs and correlated data. Applications and interpretations of statistical models are emphasized.
Terms Offered: Winter
Prerequisite(s): STAT 22000 or 23400 or 24500
Equivalent Course(s): PBHS 32600

STAT 22700. Biostatistical Methods. 100 Units.
This course is designed to provide students with tools for analyzing categorical, count, and time-to-event data frequently encountered in medicine, public health, and related biological and social sciences. This course emphasizes application of the methodology rather than statistical theory (e.g., recognition of the appropriate methods; interpretation and presentation of results). Methods covered include contingency table analysis, Kaplan-Meier survival analysis, Cox proportional-hazards survival analysis, logistic regression, and Poisson regression.
Instructor(s): F. Yang Terms Offered: Winter
Prerequisite(s): PBHS 32400, STAT 22400 or STAT 24500 or equivalent or consent of instructor.
Equivalent Course(s): PBHS 32700

STAT 22810. Epidemiology and Population Health. 100 Units.
This course does not meet requirements for the biological sciences major. Epidemiology is the study of the distribution and determinants of health and disease in human populations. This course introduces the basic principles of epidemiologic study design, analysis, and interpretation through lectures, assignments, and critical appraisal of both classic and contemporary research articles.
Instructor(s): B. Lahey Terms Offered: Autumn
Prerequisite(s): Introductory statistics recommended or Consent of Instructor
Equivalent Course(s): PPHA 36410, ENST 27400, PBHS 30910
STAT 23400. Statistical Models and Methods. 100 Units.
This course is recommended for students throughout the natural and social sciences who want a broad background in statistical methodology and exposure to probability models and the statistical concepts underlying the methodology. Probability is developed for the purpose of modeling outcomes of random phenomena. Random variables and their expectations are studied; including means and variances of linear combinations and an introduction to conditional expectation. Binomial, Poisson, normal and other standard probability distributions are considered. Some probability models are studied mathematically, and others are studied via computer simulation. Sampling distributions and related statistical methods are explored mathematically, studied via simulation, and illustrated on data. Methods include, but are not limited to, inference for means and proportions for one- and two-sample problems, two-way tables, correlation, and simple linear regression. Graphical and numerical data description are used for exploration, communication of results, and comparing mathematical consequences of probability models and data. Mathematics employed is to the level of single-variable differential and integral calculus and sequences and series.
Terms Offered: Autumn Spring Winter
Prerequisite(s): MATH 13300, 15300, or 16200
Note(s): Students may count either STAT 22000 or 23400, but not both, toward the forty-two credits required for graduation.

STAT 24300. Numerical Linear Algebra. 100 Units.
This course is devoted to the basic theory of linear algebra and its significant applications in scientific computing. The objective is to provide a working knowledge and hands-on experience of the subject suitable for graduate level work in statistics, econometrics, quantum mechanics, and numerical methods in scientific computing. Topics include Gaussian elimination, vector spaces, linear transformations and associated fundamental subspaces, orthogonality and projections, eigenvectors and eigenvalues, diagonalization of real symmetric and complex Hermitian matrices, the spectral theorem, and matrix decompositions (QR, Cholesky and Singular Value Decompositions). Systematic methods applicable in high dimensions and techniques commonly used in scientific computing are emphasized. Students enrolled in the graduate level STAT 30750 will have additional work in assignments, exams, and projects including applications of matrix algebra in statistics and numerical computations implemented in Matlab or R. Some programming exercises will appear as optional work for students enrolled in the undergraduate level STAT 24300.
Terms Offered: Autumn
Prerequisite(s): Multivariate calculus (MATH 19520 or 20000 or 20500 or equivalent). Previous exposure to linear algebra is helpful.
Equivalent Course(s): STAT 30750

STAT 24400-24500. Statistical Theory and Methods I-II.
This sequence is a systematic introduction to the principles and techniques of statistics, as well as to practical considerations in the analysis of data, with emphasis on the analysis of experimental data.

STAT 24400. Statistical Theory and Methods I. 100 Units.
This course is the first quarter of a two-quarter systematic introduction to the principles and techniques of statistics, as well as to practical considerations in the analysis of data, with emphasis on the analysis of experimental data. This course covers tools from probability and the elements of statistical theory. Topics include the definitions of probability and random variables, binomial and other discrete probability distributions, normal and other continuous probability distributions, joint probability distributions and the transformation of random variables, principles of inference (including Bayesian inference), maximum likelihood estimation, hypothesis testing and confidence intervals, likelihood ratio tests, multinomial distributions, and chi-square tests. Examples are drawn from the social, physical, and biological sciences. The coverage of topics in probability is limited and brief, so students who have taken a course in probability find reinforcement rather than redundancy. Students who have already taken STAT 25100 have the option to take STAT 24410 (if offered) instead of STAT 24400.
Instructor(s): Staff
Terms Offered: Autumn Winter
Prerequisite(s): MATH 19520 or 20000 with a grade of B or better, or MATH 16300 or 20250 or 20300 or 20700 or STAT 24300 or PHYS 22100. Concurrent or prior linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent) is recommended for students continuing to STAT 24500.
Note(s): Some previous experience with statistics and/or probability helpful but not required. Students may count either STAT 24400 or STAT 24410, but not both, toward the forty-two credits required for graduation.

STAT 24500. Statistical Theory and Methods II. 100 Units.
This course is the second quarter of a two-quarter systematic introduction to the principles and techniques of statistics, as well as to practical considerations in the analysis of data, with emphasis on the analysis of experimental data.
STAT 24500. Statistical Theory and Methods II. 100 Units.
This course is the second quarter of a two-quarter systematic introduction to the principles and techniques of statistics, as well as to practical considerations in the analysis of data, with emphasis on the analysis of experimental data. This course continues from either STAT 24400 or STAT 24410 and covers statistical methodology, including the analysis of variance, regression, correlation, and some multivariate analysis. Some principles of data analysis are introduced, and an attempt is made to present the analysis of variance and regression in a unified framework. Statistical software is used.
Instructor(s): Staff Terms Offered: Spring Winter
Prerequisite(s): Linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent) and STAT 24400 or STAT 24410.
Note(s): Students may count either STAT 24500 or STAT 24510, but not both, toward the forty-two credits required for graduation.

This sequence provides a sophisticated introduction to statistical principles and methods and their application to the analysis of data. In addition to serving undergraduates with a strong interest in Statistics, it is the recommended sequence in theoretical statistics for MS students in Statistics.

STAT 24410. Statistical Theory and Methods Ia. 100 Units.
This course is the first quarter of a two-quarter sequence providing a principled development of statistical methods, including practical considerations in applying these methods to the analysis of data. The course begins with a brief review of probability and some elementary stochastic processes, such as Poisson processes, that are relevant to statistical applications. The bulk of the quarter covers principles of statistical inference from both frequentist and Bayesian points of view. Specific topics include maximum likelihood estimation, posterior distributions, confidence and credible intervals, principles of hypothesis testing, likelihood ratio tests, multinomial distributions, and chi-square tests. Additional topics may include diagnostic plots, bootstrapping, a critical comparison of Bayesian and frequentist inference, and the role of conditioning in statistical inference. Examples are drawn from the social, physical, and biological sciences. The statistical software package R will be used to analyze datasets from these fields and instruction in the use of R is part of the course.
Instructor(s): Staff Terms Offered: Autumn
Prerequisite(s): STAT 25100 or STAT 25150 or MATH 23500. Concurrent or prior linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent) is recommended for students continuing to STAT 24510.
Note(s): Some previous experience with statistics helpful but not required. Students may count either STAT 24400 or STAT 24410, but not both, toward the forty-two credits required for graduation.
Equivalent Course(s): STAT 30030

STAT 24510. Statistical Theory and Methods IIa. 100 Units.
This course is a continuation of STAT 24410. The focus is on theory and practice of linear models, including the analysis of variance, regression, correlation, and some multivariate analysis. Additional topics may include bootstrapping for regression models, nonparametric regression, and regression models with correlated errors.
Terms Offered: May be offered in Winter.
Prerequisite(s): STAT 24410. Linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent).
Note(s): Students may count either STAT 24500 or STAT 24510, but not both, toward the forty-two credits required for graduation.
Equivalent Course(s): STAT 30040

STAT 24500. Statistical Theory and Methods II. 100 Units.
This course is the second quarter of a two-quarter systematic introduction to the principles and techniques of statistics, as well as to practical considerations in the analysis of data, with emphasis on the analysis of experimental data. This course continues from either STAT 24400 or STAT 24410 and covers statistical methodology, including the analysis of variance, regression, correlation, and some multivariate analysis. Some principles of data analysis are introduced, and an attempt is made to present the analysis of variance and regression in a unified framework. Statistical software is used.
Instructor(s): Staff Terms Offered: Spring Winter
Prerequisite(s): Linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent) and STAT 24400 or STAT 24410.
Note(s): Students may count either STAT 24500 or STAT 24510, but not both, toward the forty-two credits required for graduation.
STAT 24510. Statistical Theory and Methods IIa. 100 Units.
This course is a continuation of STAT 24410. The focus is on theory and practice of linear models, including the analysis of variance, regression, correlation, and some multivariate analysis. Additional topics may include bootstrapping for regression models, nonparametric regression, and regression models with correlated errors.
Terms Offered: May be offered in Winter.
Prerequisite(s): STAT 24410. Linear algebra (MATH 19620 or 20250 or STAT 24300 or equivalent).
Note(s): Students may count either STAT 24500 or STAT 24510, but not both, toward the forty-two credits required for graduation.
Equivalent Course(s): STAT 30040

STAT 24620. Multivariate Statistical Analysis: Applications and Techniques. 100 Units.
This course focuses on applications and techniques for analysis of multivariate and high dimensional data. Beginning subjects cover principal component analysis, factor model, canonical correlation, multi-dimensional scaling, discriminant analysis, clustering, and common techniques of dimension reduction. Further topics on statistical learning for high dimensional data and complex structures include penalized regression models (LASSO, ridge, elastic net), sparse PCA, independent component analysis, Gaussian mixture model, and Expectation-Maximization methods. Theoretical derivations will be presented with emphasis on motivations, applications, and hands-on data analysis.
Terms Offered: Spring
Prerequisite(s): STAT 24400-24500 or STAT 24410-24510 or consent of instructor
Equivalent Course(s): STAT 32950

STAT 25100. Introduction to Mathematical Probability. 100 Units.
This course covers fundamentals and axioms; combinatorial probability; conditional probability and independence; binomial, Poisson, and normal distributions; the law of large numbers and the central limit theorem; and random variables and generating functions.
Instructor(s): Staff Terms Offered: Autumn Spring
Prerequisite(s): MATH 19520, 20000, 20500 or 20900. MATH 20000 or higher recommended.
Note(s): Students may count either STAT 25100 or STAT 25150, but not both, toward the forty-two credits required for graduation.

STAT 25150. Introduction to Mathematical Probability-A. 100 Units.
This course covers fundamentals and axioms; combinatorial probability; conditional probability and independence; binomial, Poisson, and normal distributions; the law of large numbers and the central limit theorem; and random variables and generating functions.
Instructor(s): Robert Fefferman Terms Offered: Not offered 2018-2019
Prerequisite(s): MATH 20500 or consent of instructor
Note(s): Students may count either STAT 25100 or STAT 25150, but not both, toward the forty-two credits required for graduation.

STAT 25300. Introduction to Probability Models. 100 Units.
This course introduces stochastic processes as models for a variety of phenomena in the physical and biological sciences. Following a brief review of basic concepts in probability, we introduce stochastic processes that are popular in applications in sciences (e.g., discrete time Markov chain, the Poisson process, continuous time Markov process, renewal process and Brownian motion).
Instructor(s): Staff Terms Offered: May be offered in Winter
Prerequisite(s): STAT 24400 or STAT 25100 or STAT 25150
Equivalent Course(s): STAT 31700

STAT 26100. Time Dependent Data. 100 Units.
This course considers the modeling and analysis of data that are ordered in time. The main focus is on quantitative observations taken at evenly spaced intervals and includes both time-domain and spectral approaches.
Instructor(s): Staff Terms Offered: Winter or Spring
Prerequisite(s): STAT 24500 or STAT 24510 is required; alternatively STAT 22400 and exposure to multivariate calculus. Some previous exposure to Fourier series is helpful but not required.
Equivalent Course(s): STAT 33600

STAT 26300. Introduction to Statistical Genetics. 100 Units.
As a result of technological advances over the past few decades, there is a tremendous wealth of genetic data currently being collected. These data have the potential to shed light on the genetic factors influencing traits and diseases, as well as on questions of ancestry and population history. The aim of this course is to develop a thorough understanding of probabilistic models and statistical theory and methods underlying analysis of genetic data, focusing on problems in complex trait mapping, with some coverage of population genetics. Although the case studies are all in the area of statistical genetics, the statistical inference topics, which will include likelihood-based inference, linear mixed models, and restricted maximum likelihood, among others, are widely applicable to other areas. No biological background is needed, but a strong foundation in statistical theory and methods is assumed.
Prerequisite(s): STAT 24500 or STAT 24510
STAT 26700. History of Statistics. 100 Units.
This course covers topics in the history of statistics, from the eleventh century to the middle of the twentieth century. We focus on the period from 1650 to 1950, with an emphasis on the mathematical developments in the theory of probability and how they came to be used in the sciences. Our goals are both to quantify uncertainty in observational data and to develop a conceptual framework for scientific theories. This course includes broad views of the development of the subject and closer looks at specific people and investigations, including reanalyses of historical data.
Instructor(s): S. Stigler Terms Offered: Spring
Equivalent Course(s): CHSS 32900, HIPS 25600, STAT 36700

STAT 27400. Nonparametric Inference. 100 Units.
Nonparametric inference is about developing statistical methods and models that make weak assumptions. A typical nonparametric approach estimates a nonlinear function from an infinite dimensional space rather than a linear model from a finite dimensional space. This course gives an introduction to nonparametric inference, with a focus on density estimation, regression, confidence sets, orthogonal functions, random processes, and kernels. The course treats nonparametric methodology and its use, together with theory that explains the statistical properties of the methods.
Instructor(s): Staff
Prerequisite(s): STAT 24400 or STAT 24410 is required; alternatively STAT 22400 and exposure to multivariate calculus and linear algebra.
Equivalent Course(s): STAT 37400

STAT 27725. Machine Learning. 100 Units.
This course offers a practical, problem-centered introduction to machine learning. Topics covered include the Perceptron and other online algorithms; boosting; graphical models and message passing; dimensionality reduction and manifold learning; SVMs and other kernel methods; artificial neural networks; and a short introduction to statistical learning theory. Weekly programming assignments give students the opportunity to try out each learning algorithm on real world datasets.
Instructor(s): R. Kondor Terms Offered: Autumn
Prerequisite(s): CMSC 15400 or CMSC 12300. STAT 22000 or STAT 23400 strongly recommended.
Equivalent Course(s): CMSC 25400

STAT 27850. Multiple Testing, Modern Inference, and Replicability. 100 Units.
This course examines the problems of multiple testing and statistical inference from a modern point of view. High-dimensional data is now common in many applications across the biological, physical, and social sciences. With this increased capacity to generate and analyze data, classical statistical methods may no longer ensure the reliability or replicability of scientific discoveries. We will examine a range of modern methods that provide statistical inference tools in the context of modern large-scale data analysis. The course will have weekly assignments as well as a final project, both of which will include both theoretical and computational components.
Equivalent Course(s): STAT 30850

STAT 28000. Optimization. 100 Units.
This is an introductory course on optimization that will cover the rudiments of unconstrained and constrained optimization of a real-valued multivariate function. The focus is on the settings where this function is, respectively, linear, quadratic, convex, or differentiable. Time permitting, topics such as nonsmooth, integer, vector, and dynamic optimization may be briefly addressed. Materials will include basic duality theory, optimality conditions, and intractability results, as well as algorithms and applications.
Instructor(s): Staff Terms Offered: Spring
Prerequisite(s): MATH 20500 or 20800; STAT 24300 or MATH 20250
Equivalent Course(s): CAAM 28000

STAT 28200. Dynamical Systems with Applications. 100 Units.
This course is concerned with the analysis of nonlinear dynamical systems arising in the context of mathematical modeling. The focus is on qualitative analysis of solutions as trajectories in phase space, including the role of invariant manifolds as organizers of behavior. Local and global bifurcations, which occur as system parameters change, will be highlighted, along with other dimension reduction methods that arise when there is a natural time-scale separation. Concepts of bi-stability, spontaneous oscillations, and chaotic dynamics will be explored through investigation of conceptual mathematical models arising in the physical and biological sciences.
Instructor(s): Mary Silber Terms Offered: Winter
Prerequisite(s): Multivariable calculus (MATH 19520, 20000 or 20400, or PHYS 22100, or equivalent). Linear algebra, including eigenvalues and eigenvectors (MATH 19620 or STAT 24300, or equivalent). Previous knowledge of elementary differential equations is helpful but not required.
Equivalent Course(s): CAAM 28200
STAT 29700. Undergraduate Research. 100 Units.
This course consists of reading and research in an area of statistics or probability under the guidance of a faculty member. A written report must be submitted at the end of the quarter.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of faculty adviser and Departmental Adviser for Majors
Note(s): Students are required to submit the College Reading and Research Course Form. Open to all students, including nonmajors. May be taken either for quality grades or for P/F grading.

STAT 29900. Bachelor’s Paper. 100 Units.
This course consists of reading and research in an area of statistics or probability under the guidance of a faculty member, leading to a bachelor’s paper. The paper must be submitted at the end of the quarter.
Terms Offered: Autumn Spring Winter
Prerequisite(s): Consent of faculty adviser and Departmental Adviser for Majors
Note(s): Students are required to submit the College Reading and Research Course Form. Open only to students who are majoring in Statistics. May be taken for P/F grading. Credit for STAT 29900 may not be counted toward the major in Statistics.
THEATER AND PERFORMANCE STUDIES

Department Website: http://taps.uchicago.edu

UNDERGRADUATE PROGRAM OF STUDY

Theater and Performance Studies (TAPS) seeks to animate the intersection of theory and practice in the arts. The program is comparative in multiple ways, requiring students to achieve practical facility in at least two media (e.g., theater, film, video, digital arts, dance, music, creative writing) and to gain fluency in the critical analysis of those media. Students work closely with the Director of Undergraduate Studies and faculty advisors to shape an individual course of study that reflects the student's interests while fulfilling the program's interdisciplinary and comparative requirements.

Students in other fields of study may also complete a minor in TAPS. Information follows the description of the major.

Requirements for the Major

Starting with the Class of 2020, students in the TAPS program must meet the following requirements:

1. Introduction to Theater & Performance Studies (TAPS 22900 Introduction to Theater & Performance Studies), designed to introduce students to foundational ideas and critical skills relevant to the study of theater and performance.

2. Six elective courses in theater and/or performance theory, considered broadly to include history, theory, aesthetics, or analysis. Theory courses may be selected from the TAPS course offerings listed below or from related course offerings in the College. Ideally, at least four of these courses will be taken from members of the faculty in TAPS. Course selection is subject to the approval of the Director of Undergraduate Studies.

3. Five elective courses in artistic practice. Many of these courses will be found in the practical course offerings of TAPS listed below, as well as the course offerings in Cinema and Media Studies, Creative Writing, the Department of Visual Arts, and the Department of Music, among others. Students are encouraged to work with more than one discipline and may need to supplement these course offerings with individually designed "reading" courses. Here, too, the student undertakes course selection in consultation with, and subject to the approval of, the Director of Undergraduate Studies.

4. Theater and Performance Studies BA Colloquium (TAPS 29800 B.A. Colloquium), to be taken in the student's fourth year, devoted to the preparation of the BA project. Although TAPS 29800 extends over two quarters, students register for the course in only Autumn or Winter Quarter, receiving 100 units of credit and one grade for the course.

Students in the Classes of 2018 and 2019 may adopt these requirements if they so choose.

BA Project

As the culmination of an undergraduate program combining practice and theory, BA projects in Theater and Performance Studies will encompass both original artistic work (e.g., staged reading, site-specific installation, solo performance, choreography) and a critical paper. BA project proposals are developed by the student in consultation with the Director of Undergraduate Studies, subject to the approval of the Chair of Theater and Performance Studies, and supervised by a faculty member.

During Spring Quarter of the third year, students, with the support of the Director of Undergraduate Studies and other TAPS faculty, will select a faculty advisor for their project and submit a BA Project Statement (for both Critical and Artistic Components) and Reading List.

In the fourth year, students will enroll in TAPS 29800 (http://collegecatalog.uchicago.edu/search/?P=TAPS%2029800), the Theater and Performance Studies BA Colloquium, which offers a weekly forum in Autumn and Winter Quarters to develop the BA project in collaboration with peers and in accordance with a carefully designed set of deadlines. During Spring Quarter of the fourth year, students will present their artistic works during third or fourth week, and will submit their final complete project by Friday of fifth week for honors consideration, or by Friday of the eighth week for the completion of the major. Students graduating in any quarter other than Spring should speak with the Director of Undergraduate Studies about an appropriate timeline.

Honors

Eligibility for honors requires an overall cumulative GPA of 3.25 or higher, a GPA of 3.5 or higher in the TAPS major, and a BA project that is judged by the designated advisors to display exceptional intellectual and creative merit. If the faculty advisors recommend the project for honors, the Chair of TAPS in consultation with the TAPS faculty will issue a recommendation to the Associate Dean and Master of the Humanities Collegiate Division, who makes the ultimate decision.

SUMMARY OF REQUIREMENTS FOR THE MAJOR

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 22900</td>
<td>Introduction to Theater &amp; Performance Studies</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Six (6) theory and analysis courses</td>
<td>600</td>
</tr>
</tbody>
</table>
Five (5) artistic practice courses 500
TAPS 29800 Theater and Performance Studies BA Colloquium 100
Completion of the BA project by fifth week of the graduating quarter
Total Units 1300

Application to the Major

Students interested in joining the program are encouraged to consult with the Director of Undergraduate Studies in Spring Quarter of their first year or as soon as possible thereafter. Students who have decided to join the program should file an Application to the Major form with the Director of Undergraduate Studies by the beginning of Spring Quarter of their second year or, in extraordinary circumstances, no later than the end of Autumn Quarter of their third year.

Students will need to formalize their declaration on my.uchicago.edu and regularly provide documentation of any approvals for the major to their College adviser for the necessary processing.

Grading

All courses in the major or minor must be taken for a quality grade.

MINOR PROGRAM IN THEATER AND PERFORMANCE STUDIES

Students interested in joining the minor program are encouraged to consult with the Director of Undergraduate Studies in Spring Quarter of their second year or as soon as possible thereafter. Students who have decided to join the program should file an Application to the Minor form with the Director of Undergraduate Studies by the beginning of Spring Quarter in their third year. The signed form must be submitted to the student’s College adviser by the deadline indicated on the form.

The TAPS minor requires a total of six courses plus an original artistic work (e.g., staged reading, site specific installation, solo performance piece, choreography). Required courses include: TAPS 22900 Introduction to Theater & Performance Studies and at least two advanced TAPS courses (i.e., 20000-level or higher). The remaining courses must bear a clear and coherent relationship to the original artistic work prepared for the TAPS minor.

In addition, all those minoring in TAPS must register for the Theater and Performance Studies BA Colloquium (TAPS 29800 B.A. Colloquium). The focus of this course will be the development of the student’s artistic project, as described above, to be presented by the fifth week of the quarter in which the student intends to graduate. Each student must also submit a short critical reflection on the project by eighth week of the graduating quarter.

Courses counted toward the minor may not also be counted toward the student’s major(s), toward other minors, or toward general education requirements. Courses in the minor must be taken for a quality grade, and more than half of the courses for the minor must bear University of Chicago course numbers.

Summary of Requirements for the Minor

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAPS 22900</td>
<td>100</td>
</tr>
<tr>
<td>Two TAPS courses (20000-level or higher)</td>
<td>200</td>
</tr>
<tr>
<td>Two arts electives (20000-level or higher)</td>
<td>200</td>
</tr>
<tr>
<td>TAPS 29800 Theater and Performance Studies BA Colloquium</td>
<td>100</td>
</tr>
<tr>
<td>A public presentation of the artistic project by fifth week of the graduating quarter</td>
<td></td>
</tr>
<tr>
<td>Critical reflection on the BA project by eighth week of the graduating quarter</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>600</td>
</tr>
</tbody>
</table>

THEATER AND PERFORMANCE STUDIES COURSES

**TAPS 10100. Drama: Embodiment and Transformation. 100 Units.**

Students examine the performance and the aesthetics of two dramatic works in contrasting styles but with unifying themes. The goal of this course is to develop an appreciation and understanding of a variety of techniques and of the processes by which they are theatrically realized. Rather than focus on the dramatic text itself, we concentrate on the piece in performance, including the impact of cultural context on interpretation. To achieve this, students are required to act, direct, and design during the course.

Instructor(s): D. New, P. Pascoe, S. Bockley, S. Murray, D. DeMayo, D. Dir
Terms Offered: Autumn Spring Winter
Note(s): Attendance at first class meeting is mandatory. This course meets the general education requirement in the arts.
TAPS 10200. Acting Fundamentals. 100 Units.
This course introduces fundamental concepts of performance in the theater with emphasis on the development of creative faculties and techniques of observation, as well as vocal and physical interpretation. Concepts are introduced through directed reading, improvisation, and scene study.
Instructor(s): D. New, P. Pascoe, L. Danzig, T. Pasculli, S. Murray, D. DeMayo Terms Offered: Autumn Spring Winter
Note(s): Attendance at first class meeting is mandatory; prior theater or acting training not required. This course meets the general education requirement in the arts.

TAPS 10300 through 10699. Text and Performance. Experience in dramatic analysis or performance not required. Workshops in dramatic technique and attendance at performances at Chicago theaters, in addition to class time, are required.

TAPS 10300. Text and Performance. 100 Units.
This course offers an introduction to a number of significant dramatic works and seminal figures in the theorization of theater and performance. But the course’s aspirations go much further: we will be concentrating upon the intersection of interpretation and enactment, asking how these pieces appear on stage and why. This will not be merely descriptive work, but crucially it will be interpretive and physical work. Students will prepare and present applied interpretations—that is, interpretations that enable conceptual insights to take artistic form. Throughout, we will be searching for that elusive combination of philological rigor, theoretical sophistication, and creative inspiration—probing the theoretical stakes of creativity and testing the creative implications of analytic insights.
Instructor(s): D. Levin, L. Kruger, S.Bockley, S. Murray, J. Muse Terms Offered: Autumn Spring Winter
Note(s): Attendance at first class meeting is mandatory. Experience in dramatic analysis or performance not required. This course meets the general education requirement in the arts.

TAPS 10500. Staging Terror. 100 Units.
This course meets the general education requirement in the dramatic, musical, and visual arts. This course explores the interplay between horror, terror, and pleasure through in-class discussions of theoretical works and the possibilities of practical creative application. The paradox of the attraction to repulsion will be considered as well as the values of shock, suspense, and subtlety. Texts will include Grand Guignol, Shakespeare, Gothic novels, and horror films.
Instructor(s): H. Coleman Terms Offered: Autumn
Note(s): Attendance at the first class is mandatory. This course is offered in alternate years. This course meets the general education requirement in the arts.

TAPS 10600. Staging Desire. 100 Units.
This course explores the interplays between romance, attractions, and distractions through in-class discussions of theoretical works and the possibilities of practical creative application. The paradox of instant gratification and prolonged desire will be considered as well as the values of shock, suspense, and subtlety. Texts will include classic and contemporary drama, vampire cult fiction, fairy tales, films, and theoretic source material. Working 4-dimensionally, we will examine how theorized stagings can evoke and undermine sentimentality. This course will constantly question how analysis itself can be a performative practice and how performance can serve as a critical endeavor. The course will culminate in a series of original scenes to be shown at the end of the quarter. Experience in dramatic analysis or performance not required.
Instructor(s): H. Coleman Terms Offered: Spring
Note(s): Attendance at first class meeting is mandatory. Course offered in alternate years. This course meets the general education requirement in the arts.

TAPS 10700. Introduction to Stage Design. 100 Units.
Course explores the application of the visual and aural arts to the varied forms of design for the stage (i.e., scenic, lighting, costume, sound). We pay particular attention to the development of a cogent and well-reasoned analysis of text and an articulate use of the elements of design through a set of guided practical projects.
Instructor(s): K. Boetcher Terms Offered: Autumn Spring
Note(s): Lab fee is required. Attendance at first class meeting is mandatory. This course meets the general education requirement in the arts.

TAPS 15500. Beginning Screenwriting. 100 Units.
This course introduces the basic elements of a literate screenplay, including format, exposition, characterization, dialog, voice-over, adaptation, and the vagaries of the three-act structure. Weekly meetings include a brief lecture period, screenings of scenes from selected films, extended discussion, and assorted readings of class assignments. Because this is primarily a writing class, students write a four- to five-page weekly assignment related to the script topic of the week. Equivalent Course(s): CRWR 27102
Instructor(s): J. Petrakis Terms Offered: Autumn, Winter
TAPS 20100. Twentieth-Century American Drama. 100 Units.
Beginning with O’Neill’s ‘Long Day’s Journey into Night’ through the American avant-garde to the most recent production on Broadway, this course focuses on American contemporary playwrights who have made a significant impact with regard to dramatic form in context to specific decade as well as cumulatively through the twentieth century. Textual analysis is consistently oriented towards production possibilities, both historically and hypothetically.
Instructor(s): H. Coleman Terms Offered: TBD
Note(s): Attendance at first class meeting is mandatory. This course is offered in alternate years.

TAPS 20600. Adapting the Unadaptable. 100 Units.
Fiction has always provided rich source material for drama. But much 20th and 21st century fiction can seem unadaptable—it is often sprawling, poetic, interior, fragmentary, or cerebral (or all of the above!). This hands-on course will challenge students to approach modern and contemporary literature with unconventional tools of staging, editing, and design. Students will also be introduced to the work of contemporary theater companies and productions that have taken on seemingly impossible adaptation projects, and closely study adaptations of Jorge Luis Borges, Franz Kafka, Virginia Woolf and others.
Instructor(s): S. Bockley Terms Offered: TBD
Note(s): Attendance at first class is mandatory.

TAPS 20610. Adaptation & Translation in Theater-Making. 100 Units.
This course combines seminar and studio practices to investigate the ways in which theater and performance-makers create work in relation to shifting contexts. How are theatre adaptations and translations shaped by aesthetics, geography, socio-economic conditions, cultural transition, shifting formulations of race, ethnicity, and gender? How do theatre-makers conceive and realize the resonance of their work within local and across transnational spaces? This course explores these and other questions through practical experiments in adaptation and translation, case studies of artists, attending performances, critical readings on adaptation and translation theory, and discussions of the relationship between art and national and transnational political imaginaries. At the center of the course is a visit from the artistic directors of two theater companies working with translations and adaptations of “World Literature” for a (post)Soviet context, one based in Uzbekistan and the other in Kazakhstan. We hope the exposure to their working processes will animate the questions of the course in exciting and unpredictable ways. For their final project, students will have the option of writing a critical paper, writing a proposal for a speculative work, or creating an artistic work.
Instructor(s): L. Danzig, L. Feldman Terms Offered: Autumn
Note(s): Attendance at first class session is mandatory.
Equivalent Course(s): HMRT 20610, HMRT 30610, CMLT 20610, CMLT 30611, TAPS 30610, ENGL 30610, ENGL 20610

TAPS 20700. Dramaturgy and Dramatic Criticism. 100 Units.
This course is an orientation and practicum in contemporary dramaturgy. After surveying Enlightenment treatises that occasioned Western dramaturgical practices, students will critically engage present-day writings that consider the objectives and ultimate raisons d’être for the production dramaturg. Students then undertake dramaturgical research, exploring different methodologies and creative mind-sets for four representative performance genres: period plays; new plays; operas or musicals; and installations or performance art. Special attention will be given to cultivating skills for providing constructive feedback and practicing dramaturgy as an artistic collaborator and fellow creator. The class culminates in the design and compilation of a sourcebook for actors, directors, and designers, followed by a dramaturgical presentation intended for a professional rehearsal room.
Instructor(s): D. Matson Terms Offered: Winter
Note(s): Attendance at first class is mandatory.

TAPS 21440. Court Theater Artist Master Class. 100 Units.
This advanced acting class will develop the actor’s ability to apply contemporary acting technique to the performance of classical roles. Additionally, there will be opportunities to attend different stages of the rehearsal process for Harvey at Court Theatre, question the process techniques observed, and learn from guest lecturers affiliated with Chicago’s top classical theatres.
Terms Offered: TBD
Note(s): Attendance at first course meeting is mandatory.
Equivalent Course(s): TAPS 31440

TAPS 21600. Acting Workshop. 100 Units.
This advanced acting course will prepare you for the professional industry. The classes are based on the Meisner Technique and the Black Box Acting Studio Method. You will work on technique, auditions, and learn to consistently bring your full self to the table.
Terms Offered: TBD
Note(s): Attendance at first class meeting is mandatory. CONSENT ONLY.
TAPS 21700. An Actor Observes. 100 Units.
This course addresses techniques and modes of observation and their application to scene study. Observation study is used to strengthen acting choices, build the physical world of the play, and create original, vital characterizations. It also serves to deepen awareness of group dynamics, integrate symbolic, psychological and physical meaning in a character’s behavior, and guide the process of breaking down a scene. Students will perform observation exercises and apply their discoveries to scene work.
Instructor(s): P. Pascoe Terms Offered: Autumn
Note(s): Attendance at first class meeting is mandatory.

TAPS 21730. Movement for Actors. 100 Units.
This course will explore how an actor uses movement as a tool to communicate character, psychological perspective and style. The foundation of our movement work will center on the skills of balance, coordination, strength, flexibility, breath control and focus. Building on the skills of the actor both in terms of naturalistic character work and stylized theatrical text. Students will put the work into practice utilizing scene work and abstract gesture sequences through studying the techniques of Michael Chekov, Vsevolod Meyerhold, Anne Bogart, Complicite and Frantic Assembly.

TAPS 22300. Performance Art Installation: The Dreamer and the Dream. 100 Units.
In this course we will explore the relations between dreaming and waking life using a broad interdisciplinary approach. Our point of departure will be psychological, cultural, and religious understandings of dreams. On the basis of the readings and the skills and backgrounds of participants, the class will develop a “performance installation” around the liminal spaces of dream and wakefulness. Readings will include literary texts by Apuleius, Calderon, Shakespeare, ;Schnitzler, and Neil Gaiman, and theoretical texts by Freud, Jung, Klein, and Winnicott.
Instructor(s): P. Pascoe Terms Offered: Winter
Note(s): Attendance at first class meeting is mandatory.

TAPS 22880. Theorizing Performance. 100 Units.
An exploration of the intersection of performance theory and performance practice. Each week we will consider a particular production (e.g., theater, dance, opera) and seek out theoretical material that helps us to elucidate that production. Our goal will be interpretive rather than applicational: we will attempt to develop a theoretical vocabulary that is duly nuanced, illuminating, and sensitive to the particular aspirations and problems of a given production. In addition to weekly screenings and readings, we will attend rehearsals and performances around Chicago.
Instructor(s): David J. Levin Terms Offered: Spring
Prerequisite(s): Previous coursework in theater & performance studies or related fields required.
Note(s): Course is designed for advanced undergraduates and graduates.
Equivalent Course(s): TAPS 32880

TAPS 22900. Introduction to Theater & Performance Studies. 100 Units.
This course is designed to introduce students to foundational concepts and critical skills relevant to the study of theater and performance. In addition to wide-ranging readings and discussions, students will attend a variety of performances and screenings representing a cross-section of genres, interpretive styles, and institutional settings. The course is open to all undergraduate students as an elective; it also serves as a required course for all TAPS majors and minors.
Instructor(s): F. Rokem Terms Offered: Spring
Note(s): Attendance at first class session is mandatory.
Equivalent Course(s): TAPS 32900

TAPS 23000. Introduction to Directing. 100 Units.
This course employs a practice in the fundamental theory of play direction and the role of the director in collaboration with the development of textual analysis. By examining five diverse different texts using three different approaches to play analysis (Aristotle, Stanislavski, Ball) students begin developing a method of directing for the stage in support of the written text. In alternating weeks, students implement textual analysis in building an understanding of directorial concept, theme, imagery and staging through rehearsal and in-class presentations of three-minute excerpts from the play analysis the previous week. The culmination is a final five-minute scene combining the tools of direction with a method of analysis devised over the entire course.
Instructor(s): S. Murray Terms Offered: Winter
Note(s): Attendance at first class meeting is mandatory.

TAPS 23100. Advanced Directing. 100 Units.
This course will investigate the intersections of time, space, text and the body in the creation of performance. The coursework is structured to deconstruct all four ideas and practice their application through a range of scripted and unscripted projects.
Instructor(s): Will Davis Terms Offered: Spring
Note(s): Attendance at first class meeting is mandatory.
TAPS 23110. Directing Study. 100 Units.
This seminar results from the production work of the quarter, with text analysis, dramaturgical reading, and discussions based on the participating MainStage directors. Typically initiating in weekly sessions the quarter prior to production, academic credit is given the quarter of production following a final written exam.
Instructor(s): H. Coleman Terms Offered: Autumn,Spring,Winter
Note(s): Attendance at first class session is mandatory. Consent Only.
Equivalent Course(s): TAPS 33110

TAPS 23410. Camp and Theatre of the Ridiculous. 100 Units.
Looking at the writings of Charles Ludlum and his Ridiculous Manifesto, we will explore the role of camp, homage, collage and The Ridiculous. Students will stage existing works and be asked to create their own original scenes that use camp, collage and the ridiculous to explore current politics and ideas.
Instructor(s): S. Murray Terms Offered: Autumn
Note(s): Attendance at first class session is mandatory.

TAPS 23600. Improv and Sketch. 100 Units.
This course will explore the many different schools of thought in the Chicago improv comedy community, including but not limited to The Second City, iO, and The Annoyance. Organic discovery and plot will be highlighted within scene work as well as the group dynamic, with comedy as the result. Come ready to play and play hard.
Instructor(s): S. Messing Terms Offered: Autumn,Winter
Note(s): Attendance at first class meeting is mandatory. This course is offered in alternate years.

TAPS 23610. Fundamentals of Musical Improv. 100 Units.
Learn story and song structure and game-in-song techniques using real theatre-driven emotional response preparation with working industry professionals Julie Nichols & Matthew Van Colton. This course explores the fundamental concepts of improvisation, comedic games and theatre-based techniques for on-the-spot musical improvisation. Students of all experiences and backgrounds are encouraged to enroll.
Instructor(s): J. Nichols & M. Van Colton Terms Offered: Autumn
Note(s): Attendance at first class session is mandatory.

TAPS 23700. Playwriting: Creating Natural Dialogue for the Stage. 100 Units.
This course employs collaboration among the students to help each individual writer create natural dialogue for the stage. Students will utilize improvisation to write a contemporary scene focusing on the natural rhythms and nuances of modern communication. Through these improvisations, the students create a framework for their narrative with a special focus on developing unique voices for each character. Students read scenes from contemporary plays which emphasize spontaneous and realistic dialogue. Students have weekly assignments that further explore the characters they are writing. Each class includes an active roundtable discussion of the weekly assignments as well as collaborative exercises that further explore the voices of their characters. In addition to the weekly assignments, students write two complete scenes that will receive readings by their classmates. Note(s): Attendance at first class meeting is mandatory.
Instructor(s): E. Linder Terms Offered: Autumn
Note(s): Attendance at first class meeting is mandatory.

TAPS 23910. Advanced Playwriting Workshop. 100 Units.
A workshop that explores and develops authenticity in playwriting with playwright, Calamity West. Students will write original full-length plays to be developed over the course of ten weeks.
Instructor(s): C. West Terms Offered: Winter
Note(s): Attendance at first class meeting is mandatory

TAPS 24410. Transmedia Puzzle Design & Performance. 100 Units.
This course will introduce students to the burgeoning field of immersive puzzle design. Students will develop, implement and playtest puzzles that are suited for a range of experiences: from the tabletop to the immersive, from online puzzle hunts to broad-scaled alternate reality games (ARG). Students in this course will work directly with master puzzler, Sandor Wiesz, the commissioner of The Mystery League.
Equivalent Course(s): MAAD 24410, TAPS 34410

TAPS 24500. Chicago Theater: Budgets and Buildings. 100 Units.
This course examines the current state of Chicago theater, focusing on the relationships between facilities, budgets, and missions. Field trips required to venues including Side Project, Timeline, Raven, Steppenwolf, Theater Building, and Greenhouse. Attendance at first class meeting is mandatory.
Instructor(s): H. Coleman Terms Offered: Spring
Note(s): Attendance at first class meeting is mandatory. This course is offered in alternate years.
TAPS 24902. Performance Lab: Non-Fiction Sources. 100 Units.
How do you create a solo or group performance from sources other than a play? How do you build original performance out of personal stories, interviews, research, or historical or current event? What are the methods for collecting non-fictional material, learning about someone else’s experience, uncovering the complexities of something that has occurred? And how does one compose that material into a staged event? This course explores what constitutes a story, the blurred boundaries between what’s ‘real’ and what’s ‘fiction,’ the status of interpretation, the stakes of performing as oneself and as other people, and the ethics of turning lived experience into staged performance. Students will work individually and collaboratively on creating original performances based on topics of their choice, in addition to viewing live and recorded performances, reading essays and scripts, and meeting visiting artists.
Instructor(s): L. Danzig, E. Lansana Terms Offered: Spring
Note(s): Attendance at first class is mandatory.
Equivalent Course(s): TAPS 34902

TAPS 25500. Advanced Screenwriting. 100 Units.
This course requires students to complete the first draft of a feature-length screenplay (at least ninety pages in length), based on an original idea brought to the first or second class. No adaptations or partially completed scripts are allowed. Weekly class sessions include reading of script pages and critique by classmates and instructor. PQ: TAPS 15500/ CRWR 27102, and consent of instructor based on twelve-page writing sample in screenplay format. Limited class size. ATTENDANCE AT FIRST CLASS SESSION IS MANDATORY. CONSENT ONLY via APPROVAL FORM.
Instructor(s): J. Petrakis Terms Offered: Spring
Prerequisite(s): TAPS 15500, and consent of instructor based on fifteen-page writing sample in screenplay format.
Note(s): Class limited to eight students.

TAPS 25515. Contemporary Political Strategies in Performance. 100 Units.
The emphasis of the course is on strategies-in the words of curator Florian Malzacher, “artistic strategies in politics, and political strategies in art.” In moments of political struggle, what can art DO, and what can it not? We will be combining case studies with theoretical background, examining strategies like occupation, participation, parafiction, ‘technologies of care,’ détournement and the art strike. Students will have the opportunity to put some of these approaches to the test by designing one or more local interventions according to the interests of the group.
Instructor(s): A. Dorsen Terms Offered: Autumn
Equivalent Course(s): TAPS 35515

TAPS 25910. Short Form Digital Storytelling: Creating a Web Series. 100 Units.
This course examines the short form storytelling of the digital web series. Through lectures, viewings and discussions in weekly meetings students will determine what makes a strong web series and apply the findings to writing and polishing the pilot episode of their own web series. Students will write weekly 4-5 page assignments building toward the creation of a 5-6 episode series.

TAPS 26100. Dance Composition. 100 Units.
When does movement become text? How do bodies combine with time, space, and energy to communicate ideas? In this workshop-formatted course, we explore these questions as we study and create dance. Students develop improvisational skills by exploring the dance principles of space, time, dynamics, and the process of abstraction. Through physical exercises, discussions, and readings, students learn how to initiate and develop movement ideas. Major dance works from many styles (e.g., ballet, modern, avant-garde) are viewed and analyzed, as students develop an understanding of choreographic forms. Students also develop a proficiency in the areas of observation and constructive criticism. The course culminates with a choreographic project.
Instructor(s): J. Rhoads Terms Offered: Autumn
Note(s): Attendance at first class meeting is mandatory.

TAPS 26400. Post-Dramatic Theater. 100 Units.
This class sets out to explore the gamut of contemporary experimental theater, encompassing its varied theories and practices. Using Hans-Thies Lehmann’s path-breaking study Postdramatic Theatre as an ongoing point of reference, we consider a diverse array of practices from an eclectic group of artists spanning a broad range of eras and theatrical cultures (e.g., Annie Dorsen, Elevator Repair Service, Forced Entertainment, Richard Foreman, Heiner Müller, Theater Oobleck, SheShePop, Robert Wilson) in a format that encompasses seminar-style discussion and laboratory-style practical experimentation. Team-taught by Seth Bockley (Chicago-based director) and David Levin (Chair of TAPS). Attendance at first class meeting is mandatory.
Equivalent Course(s): GRMN 26400, TAPS 36400, GRMN 36401
TAPS 26530. Staging the Internet. 100 Units.
The theater has often been used as a means to embody psychic spaces, from Medieval mystery plays and other allegorical works to Richard Foreman's attempt to give theatrical form to consciousness itself. This practice-based lab class will propose to 'stage the internet' - what techniques and strategies can we develop to give tangible shape to the virtual world? Our explorations will be catalyzed by readings on data and interfaces, networks and protocols, procedural/algorithmic art, digital labor, and competing notions of the virtual.
Instructor(s): A. Dorsen Terms Offered: Spring
Prerequisite(s): Course is designed for advanced undergraduates and graduates. Previous coursework in theater & performance studies or related fields required.
Note(s): Attendance at first class meeting is mandatory.
Equivalent Course(s): TAPS 46530

TAPS 27100. Scene Painting. 100 Units.
This course is designed to introduce students to the theatrical art of scenic painting for the stage and film. A scenic artist is the hand of the theatrical designer, translating the small scale of the designer's rendering into full size theatrical environments. In this course, students will explore the unique tools and techniques used by scenic artists to create scenery. The end result of this class will be a basic mastery of painting "faux" surfaces and an understanding of how a scenic artist transforms the designer's ideas into realized pieces of theatrical art.
Instructor(s): K. Boetcher Terms Offered: Autumn
Note(s): Attendance for first class meeting is mandatory. This course is offered in alternate years. Please note a $30 fee for supplies and materials applies to this course.

TAPS 27500. Costume Design for the Stage. 100 Units.
In this course, students will learn the basics of designing costumes for theatrical productions, encompassing the skills of text and character analysis, theatrical rendering and sketching. Students will learn to adopt a vocabulary using the elements and principles of design, understand and experience the process intrinsic to producing costumes for the theater, analyze the production needs related to costumes, and prepare a finalized costume design for a theatrical production.
Terms Offered: Spring
Note(s): Attendance at first class meeting is mandatory. This course is offered in alternate years.

TAPS 27700. Introduction to Puppetry. 100 Units.
Introduction to Puppetry invites students to explore the vast and dynamic world of the history of Puppet Theater and expertly trains students in multiple forms of the medium. From Bun Ra Ku to hand puppetry, Mask Performance to Shadow Puppetry, Toy Theater to banners and contastorias, students will be exposed to the form through real examples of sophisticated objects and expert direction. Students will be immersed in the history, literature, and philosophy of the ritual and performance of the puppet, and will be provided the opportunity to build their own draft of a short production.
Instructor(s): F. Maugeri Terms Offered: Winter
Note(s): Attendance at first class meeting is mandatory.

TAPS 28000. Scenic Design. 100 Units.
This course is an exploration of various forms and processes of designing sets for theatrical performance. We pay particular attention to a cohesive reading of a text, contextual and historical exploration, and visual and thematic research, as well as the documentation needed to complete a show (e.g., model, drafting, paint elevations). We also explore, nominally, the history of stage design and look at major trends in modern stage design.
Instructor(s): K. Boetcher Terms Offered: Winter
Note(s): Attendance at first class meeting is mandatory.

TAPS 28100. Lighting Design for the Stage. 100 Units.
This course places equal emphasis on the theory and practice of modern stage lighting. Students learn the mechanical properties of lighting equipment; how to create, read, and execute a lighting plot; the functions of lighting in a theatrical context; color and design theory; and how to read a text as a lighting designer.
Instructor(s): M. Durst Terms Offered: Spring
Note(s): Attendance at first class meeting is mandatory.

TAPS 28320. The Mind as Stage: Podcasting. 100 Units.
Audio storytelling insinuates itself into the day-to-day unlike other narrative forms. People listen to podcasts while they do the dishes, drive to work, or walk the dog. This hands-on course will explore the unique opportunities that this intimate relationship with an audience affords the storyteller. Documentary techniques and practices will form the basis of the course, with assignments from audio fiction and non-fiction, oral history, documentary theater, and comedy. Students will complete several short audio exercises and one larger podcast project.
Instructor(s): S. Geis Terms Offered: Winter
Note(s): Attendance at first class session is mandatory.
Equivalent Course(s): TAPS 38320
Theater and Performance Studies

TAPS 28466. Alternate Reality Games: Theory and Production. 100 Units.
Games are one of the most prominent and influential media of our time. This experimental course explores the emerging genre of "alternate reality" or "transmedia" gaming. Throughout the quarter, we will approach new media theory through the history, aesthetics, and design of transmedia games. These games build on the narrative strategies of novels, the performative role-playing of theater, the branching techniques of electronic literature, the procedural qualities of video games, and the team dynamics of sports. Beyond the subject matter, students will design modules of an Alternate Reality Game in small groups. Students need not have a background in media or technology, but a wide-ranging imagination, interest in new media culture, or arts practice will make for a more exciting quarter.

Instructor(s): Patrick Jagoda, Heidi Coleman Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing. Instructor consent required. To apply, submit writing through online form at http://bigproblems.uchicago.edu; see course description. Once given consent, attendance on the first day is mandatory. Questions: mb31@uchicago.edu.

Note(s): English majors: this course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): ARTV 20700, CMST 35954, MAAD 25954, CMST 25954, BPRO 28700, ENGL 32314, ENGL 25970, ARTV 30700

TAPS 29900. Reading and Research. 100 Units.
This is a reading and research course for independent study.
Equivalent Course(s): TAPS 49900

TAPS 29800. Theater and Performance Studies BA Colloquium. 100 Units.
This two-quarter sequence is open only to fourth-year students who are majoring and/or minoring in theater and performance studies.
Terms Offered: Autumn Winter
Prerequisite(s): Consent of Director of Undergraduate Studies.
Note(s): 100 units credit is granted only after successful completion of the Winter term.
**Tutorial Studies**

**Program of Study**

Tutorial Studies is a program only in an administrative sense; it serves as an alternative for students who propose a coherent course of studies that clearly will not fit within a regular major. Students in the College may be admitted to Tutorial Studies at any point in their careers; their requirements will then be written to fill the time they have left until graduation. On the whole, the New Collegiate Division prefers to admit students to this format late rather than early: for a senior year in Tutorial Studies rather than a two-year program and for two years rather than three. Admission to Tutorial Studies is handled separately from admission to other New Collegiate Division programs.

Students in Tutorial Studies are held to all College requirements and to the New Collegiate Division requirements, including the production of substantial written work. Tutorial Studies makes no other requirements of students admitted to the program, but particular students may be held to certain requirements judged appropriate by the tutor or the program chairman.

Students in Tutorial Studies have no major; instead, all students have a tutor. A tutor is a member of the Chicago faculty who has agreed to take responsibility for their work. An individual student's education is worked out between the student and the tutor under the general supervision of the program chairman. Because of the special burden placed on the tutor, the rule states: *the student and the tutor are admitted together*. Students may enter Tutorial Studies only when they have found a tutor and after there has been sufficient discussion among student, tutor, and program chairman to establish to the satisfaction of all three that:

1. the student knows what he or she wants to do
2. the tutor understands it and wants to take charge of it
3. it is something worth doing and something that will constitute an appropriate segment of a College education
4. it can be done with the available resources
5. it cannot be done effectively within any existing College program.

A student in Tutorial Studies, like other New Collegiate Division students, takes both regular courses and reading courses. Reading courses may be taken with members of the faculty other than the tutor.

In the past, successful Tutorial Studies students have generally belonged to one of two categories:

1. students who wish to focus on some relatively narrow topic (the poetry of Baudelaire, for example) but in a rather broad way, that is, in terms of poetics, culture history, psychology, and so on.
2. students who wish to construct some more conventional program that the College does not offer: American studies, for instance, or education.

**Program Requirements**

Admissions to Tutorial Studies are made by the master of the New Collegiate Division upon the recommendation of the program chairman. In the nature of the case, requirements in Tutorial Studies can hardly be specified. It is expected that thirteen courses will be devoted to the immediate purposes of the student's project, of which several will be individual study courses with the principal tutor or other faculty members.

NOTE: Courses used to meet requirements for the Tutorial Studies major must be chosen in consultation with the faculty tutor and completed subsequent to admission into the program.

**Grading, Transcripts, and Recommendations**

The independent study and major papers required by the New Collegiate Division are best evaluated in faculty statements on the nature and quality of the work. In support of the independent study grades of Pass, Fail, and Incomplete, faculty supervisors are asked to submit such statements to student files maintained in the New Collegiate Division office. Responses to the major papers and copies of the papers themselves are also available in this collection of statements, which is used to support graduate applications and to evaluate New Collegiate Division candidates for Phi Beta Kappa, College honors, and other awards. Students should request statements of reference from faculty with whom they have worked.

**Honors**

Honors are awarded in all the New Collegiate Division majors. In Tutorial Studies the essential requirement for honors is an exceptionally distinguished senior paper. Papers considered worthy of honors by the initial readers are referred to a third reader whose identity is unknown to the student. In addition, honors depend on the student's grades, especially in the Tutorial Studies program; a 3.50 GPA is roughly the floor but, because a
good deal of New Collegiate Division work tends to be ungraded, the GPA standard cannot be stated precisely. Faculty evaluations of ungraded work are taken into account along with grades.
Department Website: http://dova.uchicago.edu

PROGRAM OF STUDY

The Department of Visual Arts (DoVA) is concerned with art making as a vehicle for exploring creativity, expression, perception, and the constructed world. Whether students take courses listed under ARTV to meet a general education requirement or as part of a major in visual arts, the goal is that they will develop communicative, analytical, and expressive skills through the process of artistic production. The following three courses meet the general education requirement in the arts: ARTV 10100 Visual Language: On Images, ARTV 10200 Visual Language: On Objects, and ARTV 10300 Visual Language: On Time and Space. Most advanced courses require one of these as a prerequisite. (See individual course listings for specific prerequisites.)

Range of Course Offerings

The following courses introduce visual communication through the manipulation of various traditional and nonart materials, engaging principles of visual language while stressing the relationship between form and meaning. Readings and visits to local museums and galleries are required.

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<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>prerequisites</th>
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<tbody>
<tr>
<td>ARTV 10100</td>
<td>Visual Language: On Images</td>
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<tr>
<td>ARTV 10200</td>
<td>Visual Language: On Objects</td>
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<tr>
<td>ARTV 10300</td>
<td>Visual Language: On Time and Space</td>
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</tbody>
</table>

ARTV courses numbered 21000 to 29700 include media specific courses that teach technical skills and provide a conceptual framework for working in these media (e.g., painting, photography, sculpture, video). Also included are more advanced studio courses designed to investigate the vast array of objects, spaces, and ideas embedded in the contemporary artistic landscape. ARTV courses numbered 20000 to 20999 are not studio-based and may not be counted toward studio requirements for the major or minor. ARTV courses in the 20000 to 20999 range may be counted toward the two electives relevant to the major. (See Program Requirements for more information.)

Students in other fields of study may also complete a minor in visual arts. Information follows the description of the major.

PROGRAM REQUIREMENTS

The BA program in the Department of Visual Arts is intended for students interested in the practice and study of art. DoVA’s faculty consists of a core of artists and other humanists interested in making and thinking about art. Students who major in visual arts take an individually arranged program of studio, lecture, and seminar courses that may include some courses outside the Humanities Collegiate Division. The program seeks to foster understanding of art from several perspectives: the practice and intention of the creator, the visual conventions employed, and the perception and critical reception of the audience. In addition to work in the studio, these aims may require study of many other subjects, including but not limited to art history, intellectual history, criticism, and aesthetics.

All students take ARTV 10100 Visual Language: On Images, ARTV 10200 Visual Language: On Objects, or ARTV 10300 Visual Language: On Time and Space in the first two years of their studies. After completing one of these general education courses but no later than Winter Quarter of their third year, students meet with the Director of Undergraduate Studies to plan the rest of their program. At least six of the courses beyond the general education requirement in the arts must be drawn from the second level of studio-based offerings (studio art courses numbered 21000 and above). Please note that only courses that are primarily focused on art making can be applied toward this requirement. Students may take up to two studio-based independent study courses (ARTV 29700 Independent Study in Visual Arts) toward their six studio requirements. Two of the remaining three electives may include any intellectually consistent combination of visual arts studio courses, visual arts critical and theory courses, and any other relevant offerings in the College. One elective must be a 20000-level (not meeting the general education requirement in the arts) course in Art History (ARTH).

Students take ARTV 29600 Junior Seminar in their third year. At the end of the Junior Seminar, students may choose to apply for the visual arts studio track. Places in the studio track are limited. Applicants will be reviewed by a faculty committee at the end of their third year, and studio track decisions will be announced before the start of the Autumn Quarter of fourth year. Students in the studio track present their work in a thesis exhibition and may be eligible to receive shared studio space in their senior year. (See “Studio Track” section below for more details.)

Students who wish to study abroad in their third year should contact the department as soon as possible to discuss options for taking the Junior Seminar, which is generally only offered one quarter per year, in the Spring Quarter. Junior Seminar can sometimes be taken in the second year with permission from the Director of Undergraduate Studies.

All visual arts majors must take ARTV 29850 Senior Seminar in the Autumn Quarter of their fourth year. Students in the studio track are required to take an additional course, ARTV 29900 Senior Project, which serves
as a critical forum to prepare for the thesis exhibition in the spring. (See “Studio Track” section below for more details.)

**SUMMARY OF REQUIREMENTS FOR MAJORS**

**MAJOR**

One of the following: 100

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ARTV 10100</td>
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<tr>
<td>ARTV 10300</td>
<td>Visual Language: On Time and Space</td>
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<tr>
<td>ARTV 29600</td>
<td>Junior Seminar</td>
</tr>
<tr>
<td>ARTV 29850</td>
<td>Senior Seminar</td>
</tr>
</tbody>
</table>

Six studio art courses numbered 21000 and above** 600

Two electives relevant to the major 200

One 20000-level course in Art History † 100

**Total Units** 1200

**‡** ARTH courses that satisfy the general education requirement in the arts are not eligible.

**ARTV courses numbered 20000 to 20999 cannot be used toward this requirement.**

**STUDIO TRACK**

Visual arts majors may apply for the studio track at the end of their third year. Places in the studio track are limited. Applicants will be reviewed by a faculty committee at the end of the third year, and studio track decisions will be announced before the start of the Autumn Quarter of fourth year. Studio track students work in consultation with the Director of Undergraduate Studies and the visual arts faculty to mount a thesis exhibition at the beginning of the Spring Quarter of their senior year. Studio track students may also be awarded shared studio space during the senior year, based on merit and need, and contingent upon space being available.

Additionally, studio track students must take ARTV 29900 Senior Project in the Winter Quarter of their final year, in preparation for their thesis exhibition.

**SUMMARY OF REQUIREMENTS FOR STUDIO TRACK MAJORS**

**MAJOR**

One of the following: 100

<table>
<thead>
<tr>
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<tr>
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<td>ARTV 29850</td>
<td>Senior Seminar</td>
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<tr>
<td>ARTV 29900</td>
<td>Senior Project</td>
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</tbody>
</table>

Six studio art courses numbered 21000 and above** 600

Two electives relevant to the major 200

One 20000-level course in Art History † 100

**Total Units** 1300

**‡** ARTH courses that satisfy the general education requirement in the arts are not eligible.

**HONORS**

Students must have a portfolio of exceptional quality to be recommended to graduate with honors in visual arts. Visual arts faculty make final honors decisions at the end of the student’s fourth year, based on performance in visual arts courses, the quality of participation in critiques, and the thesis exhibition.

**GRADING**

Students majoring in visual arts must receive quality grades for the 12 or 13 courses that constitute the major. With consent of their College adviser and the instructor, nonmajors may take visual arts courses for P/F grades if the courses are not used to meet a general education requirement.

**MINOR PROGRAM IN THE DEPARTMENT OF VISUAL ARTS**

The minor in visual arts requires six courses: one is from the 10000-level sequence (ARTV 10100 Visual Language: On Images, ARTV 10200 Visual Language: On Objects, or ARTV 10300 Visual Language: On Time and Space), and five are drawn from visual arts studio courses numbered 21000 to 29700, chosen in consultation with
the Director of Undergraduate Studies. ARTV courses numbered 20000 to 20999 are not studio-based and may not be counted toward studio requirements for the minor.

Students who elect the minor program in visual arts must meet with the Director of Undergraduate Studies before the end of Spring Quarter of their third year to declare their intention to complete the minor. Students choose courses in consultation with the Director of Undergraduate Studies. The Director's approval for the minor program should be submitted to a student's College adviser by the deadline above on a form obtained from the adviser.

Courses in the minor (1) may not be double counted with the student's major(s) or with other minors; and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Summary of Requirements for the Minor in Visual Arts

<table>
<thead>
<tr>
<th>MINOR</th>
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<tbody>
<tr>
<td>One of the following:</td>
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<tr>
<td>ARTV 10100. Visual Language: On Images</td>
</tr>
<tr>
<td>ARTV 10200. Visual Language: On Objects</td>
</tr>
<tr>
<td>ARTV 10300. Visual Language: On Time and Space</td>
</tr>
<tr>
<td>Five studio art courses numbered 21000 and above**</td>
</tr>
<tr>
<td>Total Units</td>
</tr>
</tbody>
</table>

** ARTV courses numbered 20000 to 20999 cannot be used toward this requirement.

Course Attendance

Students must attend the first and second classes to confirm enrollment. No exceptions will be made unless the student notifies the instructor before the first class.

VISUAL ARTS COURSES

ARTV 10100. Visual Language: On Images. 100 Units.

Through studio work and critical discussions on 2D form, this course is designed to reveal the conventions of images and image-making. Basic formal elements and principles of art are presented, but they are also put into practice to reveal perennial issues in a visual field. Form is studied as a means to communicate content. Topics as varied as, but not limited to, illusion, analogy, metaphor, time and memory, nature and culture, abstraction, the role of the author, and universal systems can be illuminated through these primary investigations. Visits to museums and other fieldwork required, as is participation in studio exercises and group critiques. Students must attend class for the full first week to confirm enrollment. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0

Terms Offered: Autumn, Spring, Winter

Note(s): ARTV 10100, 10200, and 10300 may be taken in sequence or individually. This course meets the general education requirement in the arts. Previous experience in media-based studio courses not accepted as a substitute for this course. Students must attend class for the full first week to confirm enrollment. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0

ARTV 10200. Visual Language: On Objects. 100 Units.

Through studio work and critical discussions on 3D form, this course is intended to reveal the conventions of sculpture while investigating its modes of production. Basic formal elements and principles of art are presented, but also put into practice to reveal perennial issues in a visual field. Form is studied as a means to communicate content. Topics as varied as, but not limited to, platonic form, analogy, metaphor, verisimilitude, abstraction, nature and culture, and the body politic can be illuminated through these primary investigations. Visits to museums and other fieldwork required, as is participation in studio exercises and group critiques. Students must attend class for the full first week to confirm enrollment. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0

Terms Offered: Autumn, Spring, Winter

Note(s): ARTV 10100, 10200, and 10300 may be taken in sequence or individually. This course meets the general education requirement in the arts. Previous experience in media-based studio courses not accepted as a substitute for this course. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0
ARTV 10300. Visual Language: On Time and Space. 100 Units.
Through studio work and critical discussion on four-dimensional form, this course is designed to reveal the conventions of the moving image, performance, and/or the production of digital-based media. Basic formal elements and principles of art are presented, but also put into practice to reveal perennial issues in a visual field. Form is studied as a means to communicate content. Topics as varied as but not limited to narrative, mechanical reproduction, verisimilitude, historical tableaux, time and memory, the body politic, and the role of the author can be illuminated through these primary investigations. Some sections focus solely on performance; others incorporate moving image technology. Please check Class Search at registrar.uchicago.edu/classes for details. Visits to museums and other fieldwork required, as is participation in studio exercises and group critiques. Students must attend class for the full first week in order to confirm enrollment. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0
Terms Offered: Spring Winter
Note(s): ARTV 10100, 10200, and 10300 may be taken in sequence or individually. This course meets the general education requirement in the arts. Previous experience in media-based studio courses not accepted as a substitute for this course. Students must attend class for the full first week to confirm enrollment. Wait list requests are due several weeks before the quarter begins. Sign up for the wait list at dova.uchicago.edu/content/wait-list-core-courses-0

ARTV 15500. A Curating History: The Documenta Case. 100 Units.
This course proposes a reading of recent art history as seen through the periodical prism of one of the field’s most important, signature events - the five-yearly Documenta exhibition in Kassel, Germany. Starting with the landmark 1972 edition organized by Harald Szeemann and ending with the 2017 edition which I worked on as a member of its curatorial team, the course will discuss one Documenta edition per class to touch upon key issues of contemporary art practice and theory: the dynamics of globalization; gender and identity; the vagaries of market influence; history and memory; the pressures of the political; questions of aesthetics and beauty. As a history of exhibition making and curatorial practice, the course will also draw on recent developments of the biennial model (in Venice, Sao Paulo, Shanghai, the Whitney etc.), and will be recounted in part from the perspective of actual exhibition-making experience. The class will consist of hands-on curatorial experimentation, as well as writing and reading assignments that mirror and follow the 45-year arc of our historical periodization. Instructor(s): D. Roelstraete Terms Offered: Winter
Note(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): ARTH 17705

ARTV 15650. Art Since 1900. 100 Units.
Focusing on the interrelationships between avant-garde culture and the emerging mass cultural formations of industrializing societies, our survey will address a wide range of historical and methodological questions: the impact of new technologies of production, the utopian projects of the Euro-American avant-gardes, the transformation of modernist conceptions of artistic autonomy, the changing roles of cultural institutions, the construction of social Others, the formation of new audiences, and the rise of “contemporary art.”
Equivalent Course(s): ARTH 15650

ARTV 16210. Media Art and Design Practice. 100 Units.
This studio-based course explores the practice, conventions, and boundaries of contemporary media art and design. This can encompass areas as diverse as interactive installation, app design, and the Internet meme. Through projects and critical discussion, students engage with the problems and opportunities of digitally-driven content creation. Fundamental elements of digital production are introduced, including basic properties of image, video, and the global network. Further topics as varied as-though not limited to-web production, digital fabrication, interfaces, the glitch, and gaming may be considered. Sections will vary based on the instructor’s fields of expertise. This course counts towards the General Education requirement in Art-Music-Drama.
Terms Offered: Spring
Note(s): This course meets the general education requirement in the arts.

This sequence is required of students majoring in Cinema and Media Studies. Taking these courses in sequence is strongly recommended but not required.
ARTV 20002. History of International Cinema I: Silent Era. 100 Units.
This course provides a survey of the history of cinema from its emergence in the mid-1890s to the transition to sound in the late 1920s. We will examine the cinema as a set of aesthetic, social, technological, national, cultural, and industrial practices as they were exercised and developed during this 30-year span. Especially important for our examination will be the exchange of film techniques, practices, and cultures in an international context. We will also pursue questions related to the historiography of the cinema, and examine early attempts to theorize and account for the cinema as an artistic and social phenomenon.
Instructor(s): A.Field
Terms Offered: Autumn
Note(s): This is the first part of a two-quarter course.
Equivalent Course(s): CMST 48500, ENGL 48700, ARTH 38500, CMLT 32400, ENGL 29600, ARTH 28600, ARTH 38600, CMLT 32500, CMST 28600, ENGL 48900, CMLT 22500, MAPH 33700

ARTV 20003. History of International Cinema II: Sound Era to 1960. 100 Units.
The center of this course is film style, from the classical scene breakdown to the introduction of deep focus, stylistic experimentation, and technical innovation (sound, wide screen, location shooting). The development of a film culture is also discussed. Texts include Thompson and Bordwell's Film History: An Introduction; and works by Bazin, Belton, Sitney, and Godard. Screenings include films by Hitchcock, Welles, Rossellini, Bresson, Ozu, Antonioni, and Renoir.
Instructor(s): R.Bird
Terms Offered: Winter
Prerequisite(s): Prior or concurrent registration in CMST 10100 required. Required of students majoring or minoring in Cinema and Media Studies.
Note(s): CMST 28500/48500 strongly recommended
Equivalent Course(s): REES 45005, REES 25005, CMST 48600, ENGL 29600, ARTH 28600, ARTH 38600, CMLT 32500, CMST 28600, ENGL 48900, CMLT 22500, MAPH 33700

ARTV 20006. Contemporary Art. 100 Units.
This course will consider the practice and theory of visual art in the late twentieth and early twenty-first centuries. Among the subjects that will drive our narrative will be the rise of postmodernism, pop art, the aesthetics of the social movements of the 1960s, institutional critique, the relationship between reproductive media and Feminism, the concept of spectacle, conceptual art, the appearance of a global art industry after 1989, the connections between art school and art-making, "relational aesthetics," the fate of art in the age of the Internet, the art of the post-studio moment, and what happens to art when it engages with "everything".
Instructor(s): M. Jackson
Terms Offered: Spring
Prerequisite(s): Students must attend first class to confirm enrollment. This course meets the general education requirement in the arts.
Equivalent Course(s): ARTH 15800

ARTV 20008. Ways of Curating and Collecting. 100 Units.
This seminar takes stock of contemporary currents in curating and collecting practices at a time when we are experiencing rapid expansion of the museum sector internationally, and witnessing the growing ubiquity of "curation" within the spheres of leisure, culture, entertainment and tourism. Using institutions across campus, the city of Chicago and beyond as our primary locus, we will explore curatorial and collecting strategies employed by a variety of visual arts institutions and platforms from the scale of the single-room/single curator gallery, to the museum and the international biennial. We will consider how curatorial and exhibition-making practices have evolved from the latter half of the 20th century to the present day. We will consider the sociocultural and political implications of curatorial work, and reflect on the shifting status of the art object within collecting and non-collecting institutions. Together we will explore significant curatorial projects at a local, national and international level; we will undertake site visits as well as play host to visiting curators, artists and thinkers. Course readings will feature the writings of seminal international curators as well as selections from historians and theorists in the field of curatorial studies. Students will work through a series of independent and collaborative assignments as well as a final project that integrates curatorial theory and practice.
Instructor(s): Y. Umolu
Terms Offered: Spring
Equivalent Course(s): ARTV 30008, ARTH 26110, ARTH 36110
ARTV 20010. Contemporary Art in Paris. 100 Units.
In this course, we will explore important institutions and contexts for exhibiting contemporary international art in the city of Paris. Our approach will be ethnographic as well as aesthetic and take place at various scales: from national museums to arts foundations, galleries, artist studios, and alternative spaces and artists’ “squats.” Of special interest will be how different architectures and spaces of installation affect our reception and understanding of art. Video and moving image installation will be a special emphasis where possible. Course work will include presentations and weekly contributions to a public blog. Possible field trips could include the Musée d’art moderne de la ville de Paris, la Cinémathèque Française, Fondation Cartier pour l’art contemporain, Galerie Marion Goodman, Les Frigos, and the Paris Art Fair at the Grand Palais.

ARTV 20012. A Curating Case-Study: The Hut. 100 Units.
This course - part curatorial practice, part art theory - will be taught in tandem with an exhibition titled “The Hut”, opening at the Neubauer Collegium gallery in the spring of 2019. We will be using this exhibition project, originally conceived for the 2018 Venice architecture biennial, as a framework, test site and occasional hut-sized classroom for hands-on curatorial exercises as much as artistic and philosophical debate. Both seminar and exhibition center on three philosophers’ huts; these act as platforms to discuss a wide range of issues pertaining to modern and contemporary art debates: Ludwig Wittgenstein’s hut in Norway, Martin Heidegger’s hut in the Black Forest, and a Ian Hamilton Finlay sculpture titled “Adorno’s Hut” (after Theodor Adorno). The course will map the relationships between these three philosophers and the shadows they cast across 20th century aesthetics and art theory, as well as consider topics related to escape and escapism, exile and retreat, habitation and homelessness, as seen through the prism of architecturally inflected contemporary art practices. The seminar's bibliography will be shaped in large part by readings of said philosophers. We will also be studying artworks, meeting artists and visiting exhibitions and sites of architectural interest. A final project, consisting of writing & construction work, will seek to expand the scope of philosophical architecture and building philosophy.
Instructor(s): D. Roelstraete Terms Offered: Spring
Equivalent Course(s): ARTH 26790, ARTV 30012, ARTH 36790

ARTV 20210. Imagining Chicago's Common Buildings. 100 Units.
This class is an architectural studio based in the common residential buildings of Chicago and the city’s built environment. While a design project and architectural skills will be the focus of the class, it will also incorporate readings, a small amount of writing, and some social and geographical history. We will: (1) give students interested in pursuing architecture or the study of cities experience with a studio class and some skills related to architectural thinking, (2) acquaint students intimately with Chicago's common residential buildings and built fabric, and (3) situate all this within a context of social thought about residential architecture, common buildings, housing, and the city.
Instructor(s): L. Joyner Terms Offered: Autumn
Equivalent Course(s): AMER 24190, ARTH 24190, GEOG 24190, ENST 24190

ARTV 20300. Introduction to Film Analysis. 100 Units.
This course introduces basic concepts of film analysis, which are discussed through examples from different national cinemas, genres, and directorial oeuvres. Along with questions of film technique and style, we consider the notion of the cinema as an institution that comprises an industrial system of production, social and aesthetic norms and codes, and particular modes of reception. Films discussed include works by Hitchcock, Porter, Griffith, Eisenstein, Lang, Renoir, Sternberg, and Welles.
Instructor(s): Staff Terms Offered: Autumn Spring Winter
Note(s): Required of students taking a major or minor in Cinema and Media Studies.
Equivalent Course(s): ENGL 10800, ARTH 20000, CMST 10100

ARTV 20400. Theories of Media. 100 Units.
This course will explore the concept of media and mediation in very broad terms, looking not only at modern technical media and mass media, but at the very idea of a medium as a means of communication, a set of institutional practices, and a habitat in which images proliferate and take on a “life of their own.” The course will deal as much with ancient as with modern media, with writing, sculpture, and painting as well as television and virtual reality. Readings will include classic texts such as Plato’s Allegory of the Cave and Craytulus, Aristotle’s Poetics, and modern texts such as Marshall McLuhan’s Understanding Media, Regis Debray’s Mediology, and Friedrich Kittler’s Gramophone, Film, Typewriter. We will explore questions such as the following: What is a medium? What is the relation of technology to media? How do media affect, simulate, and stimulate sensory experiences? What sense can we make of concepts such as the “unmediated” or “immediate”? How do media become intelligible and concrete in the form of “metapictures” or exemplary instances, as when a medium reflects on itself (films about films, paintings about painting)? Is there a system of media? How do we tell one medium from another, and how do they become “mixed” in hybrid, intermedial formations? We will also look at recent films such as The Matrix and Existenz that project fantasies of a world of total mediation and hyperreality.
Instructor(s): W. J. T. Mitchell Terms Offered: Winter
Prerequisite(s): Any 100-level ARTH or COVA course, or consent of instructor.
Equivalent Course(s): ENGL 32800, CMST 27800, AMER 30800, ARTH 35900, ENGL 12800, ARTH 25900, CMST 37800

ARTV 20500. Introduction to Genres: Writing the Visual Arts. 100 Units.
Equivalent Course(s): CRWR 12121
ARTV 20663. Urban Studies: Placemaking. 100 Units.
This course considers the values that drive neighborhood transformation, how policy is shaped and implemented, and the role that arts and culture can play in mindful city-building. Classroom hours will be spent with Theaster Gates, professor, Department of Visual Art, in addition to other UChicago faculty, discussing key principles in guiding city redevelopment in mindful and equitable ways. Students will gain field experience working with Place Lab, Gates’s multidisciplinary team that documents and demonstrates urban ethical redevelopment strategies initiated through arts and culture. Working across a variety of projects, students will be exposed to programming, data collection, development, community building, strategy, and documentation. Weekly site visits will give students the opportunity to see analogous projects and meet practitioners throughout Chicago.
Equivalent Course(s): PBPL 25663

ARTV 20700. Alternate Reality Games: Theory and Production. 100 Units.
Games are one of the most prominent and influential media of our time. This experimental course explores the emerging genre of “alternate reality” or “transmedia” gaming. Throughout the quarter, we will approach new media theory through the history, aesthetics, and design of transmedia games. These games build on the narrative strategies of novels, the performative role-playing of theater, the branching techniques of electronic literature, the procedural qualities of video games, and the team dynamics of sports. Beyond the subject matter, students will design modules of an Alternate Reality Game in small groups. Students need not have a background in media or technology, but a wide-ranging imagination, interest in new media culture, or arts practice will make for a more exciting quarter.
Instructor(s): Patrick Jagoda, Heidi Coleman Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing. Instructor consent required. To apply, submit writing through online form at http://bigproblems.uchicago.edu; see course description. Once given consent, attendance on the first day is mandatory. Questions:mb31@uchicago.edu.
Note(s): Note(s): English majors: this course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): CMST 35954, MAAD 25954, CMST 25954, BPRO 28700, ENGL 32314, TAPS 28466, ENGL 25970, ARTV 30700

ARTV 20704. Photo/Modernism/Esthetic. 100 Units.
The course presents the history of photographic practices in the United States, beginning in the late 19th century and extending into the 1980s, aimed at gaining an audience for photographs within museums of art. The issues under study include the contention over claims about medium specificity, notions of photographic objectivity, a peculiarly photographic esthetics, the division of photography into two categories-art vs. documentary-and the role of tradition and canon formation in the attempted definition of the photographic medium.
Instructor(s): J. Snyder Terms Offered: Spring
Equivalent Course(s): ARTH 37304, ARTV 30704, ARTH 27304

ARTV 20805. Framing, Re-framing, and Un-framing Cinema. 100 Units.
By cinema, we mean the art of the moving image, which is not limited to the material support of a flexible band called film. This art reaches back to early devices to trick the eye into seeing motion and looks forward to new media and new modes of presentation. With the technological possibility of breaking images into tiny pixels and reassembling them and of viewing them in new way that this computerized image allows, we now face the most radical transformation of the moving image since the very beginnings of cinema. A collaboration between the OpenEndedGroup (Marc Downie and Paul Kaiser), artists who have created new modes of the moving image for more than decade, and film scholar Tom Gunning, this course will use this moment of new technologies to explore and expand the moving image before it becomes too rigidly determined by the powerful industrial forces now propelling it forward. This course will be intensely experimental as we see how we might use new computer algorithms to take apart and re-experience classic films of the past. By using new tools, developed for and during this class, students will make new experiences inside virtual reality environments for watching, analyzing and recombining films and that are unlike any other. These tools will enable students, regardless of previous programming experience, to participate in this crucial technological and cultural juncture.
Equivalent Course(s): ARTV 30805, CMST 37805, CMST 27805

ARTV 21002. Life Drawing. 100 Units.
This course is designed to introduce the student to observational drawing of the human figure. The subject of the course will be the live nude model. The object of the course is to see through proportions and the anatomy of the human body and draw out a likeness, rendering present the body as seen in its materiality, its structure, its finitude. Lectures on anatomy and the history of drawing will be ongoing and stitched into this studio course, as will the critique of drawings generated in class.
Instructor(s): D. Schutter Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31002
ARTV 21501. Introduction to Printmaking. 100 Units.
An introduction to basic printmaking techniques, including monoprint, intaglio (drypoint), planographic, and relief printing. Printmaking will be explored as a "bridge medium": a conduit between drawing, painting, and sculpture. Emphasis will be placed upon investigating visual structures through "calculated spontaneity" and "controlled accidents," as well as on the serial potential inherent in printmaking, as opposed to the strictly technical aspects of this medium.
Instructor(s): K. Desjardins Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 31501

ARTV 21701. Conceptual Drawing. 100 Units.
When does a drawing become an object rather than a picture? How can a line leave the page and be made as an action in the world? Can a design tell a story? These questions and many others will guide course work, addressing the history of drawing, its contemporary condition as its potential for presenting personal ideas and innovative new forms. Art historical examples and non-art formats such as maps, instructional graphics and schematics will be introduced as models for weekly assignments and longer-term projects.
Instructor(s): S. Wolniak Terms Offered: Autumn
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31701

ARTV 21702. Drawing Concepts. 100 Units.
This course will focus on expanding the definition and practice of drawing. Studio work will engage traditional, spatial and process-oriented mark making in order to materialize thematically driven projects. Emphasis will be placed equally on the formal concerns of subject, material, and technique as well as the ability to effectively convey one’s concept. Projects will include weekly and longer-term assignments, in addition to critique. Participation in field trips is required.
Instructor(s): B. Collins Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31702

ARTV 21800. Studio Practice. 100 Units.
This course considers a variety of methods, processes and media to explore conceptual issues pertinent to a contemporary art practice. Through research, material investigation, experimentation and revision, students will develop their own approach to a daily self-directed practice. Projects will include weekly and longer-term assignments, individual and collaborative work. We will also look at the practices of established artists for possible models. Participation in several field trips is required.
Instructor(s): B. Collins Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31800

ARTV 21801. Repetitive Acts. 100 Units.
This course will engage serial forms and processes in a range of media to investigate their relation to our aesthetic and conceptual experience. Repetition often provokes questions as to the nature of time, the organization of information, and the relationship of time and order to experience, subjectivity and meaning. Studio work will implement strategies of repetition-including replication, ordering, compiling, editing, and revising-to materialize thematically driven projects. Projects will include weekly and longer-term assignments, in addition to critique. Participation in field trips is required.
Instructor(s): B. Collins Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31801

ARTV 21902. Color: Theory and Experience. 100 Units.
This studio course proposes a hands-on investigation into the way we experience color in the world and in our own work. We will study a range of approaches to color, including; "haptic" color perception, Symbolic/Spiritual color theories, as well as more widely known theories of "optical color." In the studio, you will be introduced to a unique series of exercises that elucidate the expressive, symbolic, scientific, and cultural aspects of color perception using both acrylic pigment and light. Lectures, field trips, and guest speakers will broaden our discussion of color. A final project in a medium of your choice will serve as a culminating experience for the course.
Instructor(s): K. Desjardins Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 31902

ARTV 22000-22002. Introduction to Painting I-II.
This studio course introduces students to the fundamental elements of painting (its language and methodologies) as they learn how to initiate and develop an individualized investigation into subject matter and meaning. This course emphasizes group critiques and discussion. Courses taught concurrently.
ARTV 2200. Introduction to Painting I. 100 Units.
This studio course introduces students to the fundamental elements of painting (its language and methodologies) as they learn how to initiate and develop an individualized investigation into subject matter and meaning. This course emphasizes group critiques and discussion.
Equivalent Course(s): ARTV 32200

ARTV 2202. Introduction to Painting II. 100 Units.
No description available
Instructor(s): K. Desjardins Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 32202

ARTV 2220. Introduction to Sculpture. 100 Units.
This course introduces the technical fundamentals of sculptural practice. Using basic introductions to welding, basic woodworking and metal fabrication students will undertake assignments designed to deploy these new skills conceptually in their projects. Lectures and reading introduce the technical focus of the class in various historical, social and economic contexts. Discussions and gallery visits help engender an understanding of sculpture within a larger societal and historical context.
Instructor(s): Staff Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 32000

ARTV 22303. Material as Site: Tree. 100 Units.
Taking trees as a site for research, this studio class will consider the processes, assumptions and practices used to render a tree useful to human endeavoring. Following through lines of material possibilities, this class will experiment in material production. We will make charcoal, cellulose as a paint medium, paper and lumber, to name a few. The results of these experimental processes will become the basis for our studio materials.
Instructor(s): A. Ginsburg Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 32303

ARTV 22305. Performing Tableware. 100 Units.
Performing Tableware takes the actions and objects of the table as a site of research. Through demonstrations, readings and production, tableware will be considered in the context of contemporary practices in design, sculpture, installation and performance. Materia...
ARTV 23801. Video. 100 Units.
This is a production course geared towards short experimental works and video within a studio art context.
Instructor(s): S. Wolniak Terms Offered: Autumn
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 33801

ARTV 23804. Experimental Animation: Exploring Manual Techniques. 100 Units.
Individually directed video shorts will be produced in this intensive studio course. Experimental and improvised
approaches to animation and motion picture art will focus on analog and material techniques, with basic digital
post-production also being introduced. Early and experimental cinema, puppetry and contemporary low-tech
animation will be presented as formal and technical examples.
Instructor(s): S. Wolniak Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 33804

ARTV 23808. Introduction to 16mm Filmmaking. 100 Units.
The goal of this intensive laboratory course is to give its students a working knowledge of film production
using the 16mm gauge. The course will emphasize how students can use 16mm technology towards successful
cinematography and image design (for use in both analog and digital postproduction scenarios) and how to
develop their ideas towards constructing meaning through moving pictures. Through a series of group exercises,
students will put their hands on equipment and solve technical and aesthetic problems, learning to operate and
care for the 16mm Bolex film camera; prime lenses; Sekonic light meter; Sachtler tripod; and Arri light kit and
accessories. For a final project, students will plan and produce footage for an individual or small group short
film. The first half the class will be highly structured, with demonstrations, in-class shoots and lectures. As the
semester continues, class time will open up to more of a workshop format to address the specific concerns and
issues that arise in the production of the final projects. This course is made possible by the Charles Roven Fund
for Cinema and Media Studies.
Equivalent Course(s): CMST 38921, CMST 28921, ARTV 33808

ARTV 23809. Experimental Animation: Digital and Camera-less Production. 100 Units.
Through digital and camera-less production techniques such as scanning, signal manipulation, and
appropriation, this course will emphasize image construction, digital effects, and post-production for creation
of animated art. It can function as a continuation of Experimental Animation: Exploring Manual Techniques
or be a stand alone course. Early video effects and image processing, and a wide variety of digital and abstract
animation will be presented as formal and technical examples.
Instructor(s): S. Wolniak Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300.
Equivalent Course(s): ARTV 33809

ARTV 23905. Creative Thesis Workshop. 100 Units.
This seminar will focus on how to craft a creative thesis in film or video. Works-in-progress will be screened
each week, and technical and structural issues relating to the work will be explored. The workshop will also
develop the written portion of the creative thesis. The class is limited to seniors from CMS and DOVA, and
MAPH students working on a creative thesis.
Instructor(s): J. Hoffman Terms Offered: Spring Winter
Prerequisite(s): CMST 23930; CMST 23931 or 27600; departmental approval of senior creative thesis project.
Equivalent Course(s): CMST 23905, ARTV 33905, CMST 33905

ARTV 23930. Documentary Production I. 100 Units.
This course is intended to develop skills in documentary production so that students may apply for
Documentary Production II. Documentary Production I focuses on the making of independent documentary
video. Examples of various styles of documentary will be screened and discussed. Issues embedded in the
documentary genre, such as the ethics and politics of representation and the shifting lines between fact and
fiction will be explored. Pre-production methodologies, production, and post-production techniques will be
taught. Students will be expected to develop an idea for a documentary video, crews will be formed, and each
crew will produce a five-minute documentary. Students will also be expected to purchase an external hard drive.
Instructor(s): J. Hoffman Terms Offered: Autumn
Note(s): Prior or concurrent enrollment in CMST 10100 recommended for undergraduate students.
Equivalent Course(s): HMRT 25106, MAAD 23930, ARTV 33930, CMST 33930, CMST 23930, HMRT 35106

ARTV 23931. Documentary Production II. 100 Units.
This course focuses on the shaping and crafting of a nonfiction video. Students are expected to write a treatment
detailing their project. Production techniques focus on the handheld camera versus tripod, interviewing
and microphone placement, and lighting for the interview. Post-production covers editing techniques and
distribution strategies. Students then screen final projects in a public space.
Instructor(s): J. Hoffman Terms Offered: Winter
Prerequisite(s): CMST 23930, HMRT 25106, or ARTV 23930
Equivalent Course(s): ARTV 33931, HMRT 35107, CMST 23931, MAAD 23931, HMRT 25107, CMST 33931
ARTV 24000. Introduction to Black and White Film Photography. 100 Units.
Photography is a familiar medium due to its ubiquitous presence in our visual world, including popular culture and personal usage. In this course, students learn technical procedures and basic skills related to the 35mm camera, black and white film, and print development. They also begin to establish criteria for artistic expression. We investigate photography in relation to its historical and social context in order to more consciously engage the photograph’s communicative and expressive possibilities. Course work culminates in a portfolio of works exemplary of the student’s understanding of the medium. Field trips required.
Instructor(s): E. Hogeman Terms Offered: Autumn Winter
Prerequisite(s): ARTV 10100, 10200 or 10300.
Note(s): Students need their own DSLR camera (with manual settings) or a 35mm film camera.
Equivalent Course(s): ARTV 34000

ARTV 24004. Introduction to Color Photography. 100 Units.
In this course students learn technical procedures and basic skills related to camera operation, color editing workflows, and inkjet printing. Students interested in working with film will learn how to make inkjet prints from high resolution scans from 35mm negatives. Through readings, discussions, and field trips we will investigate color photography in relation to its historical and social context in order to more consciously engage the contemporary photographer’s communicative and expressive possibilities. Course work culminates in a portfolio of works exemplary of the student’s understanding of the medium. Students need their own DSLR camera (with manual settings) or a 35mm film camera.
Instructor(s): E. Hogeman Terms Offered: Autumn
Prerequisite(s): ARTV 10100, 10200 or 10300
Note(s): Students need their own DSLR camera (with manual settings) or a 35mm film camera.
Equivalent Course(s): ARTV 34004

ARTV 24112. Advanced Problems in Sculpture. 100 Units.
This course is open to all manifestations of sculptural practice broadly defined, including performance and film/video. A particular focus of the course will be considering issues of presence/the index, material histories, economic determination, and societal legibility. Readings on sculptural history from the 19th through the 21st century will be used to illuminate contemporary concerns and issues.
Instructor(s): G. Oppenheimer Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300 and ARTV 22200 or consent of instructor.
Equivalent Course(s): ARTV 34112

ARTV 24121. Adopted Strategies. 100 Units.
In this interdisciplinary course, students will investigate cultural codes and narratives of the past and present, and use them as templates for artmaking. Adopted models can originate from a range of histories, disciplines, and communities ranging from military tactics of the Mongols, restaurant work, homological algebra, joke telling, a favorite film or film scene, etc. Independent selection and research of the chosen source(s), as well as individual and group critiques, will facilitate development of students’ ideas to a completed project. Central topics will include theories of imitation, how power exerts itself through narrative, and the work of art’s tendency to fold rather than transcend what might otherwise be perceived as linear, homogeneous time. Readings include Michael Taussig’s "Mimesis and Alterity," Avital Ronell’s "Stupidity," and Oswald Spengler’s "Decline of the West." Sample artists: Pinar Yolacan, Yoshua Okon, Mickalene Thomas, Natalie Jeremijenko, and Lari Pittman, among others.
Instructor(s): C. Jackson Terms Offered: Spring
Equivalent Course(s): ARTV 34121

ARTV 24201. Collage. 100 Units.
This studio course explores collage as a means for developing content and examining complex cultural and material relationships. Projects and assigned texts outline the history of collage as a dynamic art form with a strong political dimension, as well as critically addressing how it is being used today.
Instructor(s): S. Wolniak Terms Offered: Winter
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 34201
ARTV 24203. Synthesis, Procedure and Objecthood. 100 Units.
Synthesis: the composition, combination or transformation of parts or elements to form a whole. This course will explore the unique position of combining various mediums and techniques in the visual arts platform. What does it mean to use principles of drawing in the making of a photograph? Why explore sculptural forms through the materiality of painting? Encountering and interrogating the terms collage, ready-made, mixed media, new media and objecthood along with their art historical and contemporary precedents is integral. We will look closely at a select group of contemporary artists who move fluidly through modes of working/thinking. The course consists of the following key areas: material, form, concept, intersection and synthesis. Throughout the studio, students will address conceptual, formal and process-oriented issues related to working across mediums in the visual arts. Throughout the course students will explore studio and post-studio art practices. Studio assignments, group critiques, readings and visits to studios/art spaces will help students refine and/or identify their formal and conceptual aspirations. Students will develop an understanding of how to balance formal and contextual issues in order to achieve desired syntheses in visual art. For students working in various mediums and searching to develop their visual vocabulary; open to all levels of experience.
Instructor(s): L. Hewitt Terms Offered: Autumn
Prerequisite(s): Note: This is a five-week condensed class meeting 10/5, 10/19, 10/26, 11/2, and 11/16. Some of the scheduled course time will be set aside for individual conferences and studio/lab hours.
Equivalent Course(s): ARTV 34203

ARTV 24301. Writing for Performance. 100 Units.
This course is an exploration of select texts for performance written by performance artists primarily but not entirely operating within the context of art. Via historical context and literary technique, students read, discuss, and analyze texts by various authors spanning the history of performance art: Hugo Ball, John Cage, Richard Foreman, Carolee Schneeman, Joseph Beuys, Karen Finley, Nature Theater of Oklahoma, John Leguizamo, and create and perform their own writing. Field trips and attendance at first class are required.
Instructor(s): W. Pope L. Terms Offered: Autumn
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 34301

ARTV 24403. Advanced Photography. 100 Units.
The goal of this course is to develop students' investigations and explorations in photography, building on beginning level experience and basic facility with this medium. Students pursue a line of artistic inquiry by participating in a process that involves experimentation, reading, gallery visits, critiques, and discussions, but mostly by producing images. Primary emphasis is placed upon the visual articulation of the ideas of students through their work, as well as the verbal expression of their ideas in class discussions, critiques, and artist's statements. As a vital component of articulating ideas and inquiry, students will refine their skills, e.g., black and white or color printing, medium or large format camera usage, or experimenting with light-sensitive materials.
Instructor(s): L. Letinsky Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200, or 10300; and 24000.
Note(s): Camera and light meter required.
Equivalent Course(s): ARTV 34403

ARTV 24550. Shopcraft: Methods and Materials. 100 Units.
Designed as a complementary course to the DOVA sculpture sequence, Shopcraft explores the tools and techniques available to students in the wood shop. Topics covered include shop safety; the properties of woods; the planning and material selection process for sculpture, furniture, and other woodworking applications; the care and use of hand tools; and interpreting and creating scale drawings and conceptual plans. A series of small projects designed to challenge and expand students’ design, drafting, and woodworking skills are assigned. In addition, students are invited to incorporate projects from sculpture classes or their individual studio practice into the course.
Instructor(s): D. Wolf Terms Offered: Autumn
Prerequisite(s): ARTV 10100, 10200, or 10300
Equivalent Course(s): ARTV 34550

ARTV 24706. Drawing Through the World: Relational Ways of Seeing. 100 Units.
This studio drawing course proposes an examination of the relationship between drawing and seeing, knowing, and revealing connections in our experience of the world. Our departure point is the human figure. Rather than moving inward (anatomy), we move outward from the figure in to space, drawing diagrammatically through the visual field, intent on expanding our ability to make visual and conceptual connections as we sharpen our observational drawing skills. A wide range of ideas--including Klee, Piaget, and Bourriaud--will be considered alongside our efforts in class. Guest speakers, field trips, and seminar discussions augment this studio drawing course. No prior drawing experience required. Students from across disciplines/working with any art media welcome.
Instructor(s): K. Desjardins Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 34706
ARTV 25117. The Audience, The Archaeologist, and the Art Historian. 100 Units.
This course will address archaeological objects as well as the techniques that have been developed in order to
capture them in a broader sense: to capture their meaning, to capture their form, to capture their trajectories.
Archaeological objects change depending on the place where they are and the people who manipulate them.
Instructor(s): Castillo Deball, Mariana Terms Offered: Autumn
Note(s): Tinker Visiting Professor 2018; There is a studio component to this course.
Equivalent Course(s): LACS 35117, ARTV 35117, LACS 25117

ARTV 25401. Transmedia Game. 100 Units.
This experimental course explores the emerging game genre of “transmedia” or “alternate reality” gaming.
Transmedia games use the real world as their platform while incorporating text, video, audio, social media,
websites, and other forms. We will approach new media theory through the history, aesthetics, and design
of transmedia games. Course requirements include weekly blog entry responses to theoretical readings; an
analytical midterm paper; and collaborative participation in a single narrative-based transmedia game project.
No preexisting technical expertise is required but a background in any of the following areas will help: creative
writing, literary or media theory, web design, visual art, computer programming, performance, and game design.
Instructor(s): P. Jagoda Terms Offered: Autumn
Equivalent Course(s): CRWR 26003, ARTV 35401, CMST 25953, CMST 35953, ENGL 25953, ENGL 32311, TAPS
28457, CRWR 46003

ARTV 26205. Big Art - Little Art. 100 Units.
Over the last 5 decades, art movements and people and policies that shape them have undergone considerable
change. From performance practices, to the advent of place making initiatives, to large public works designed by
architects and artists teams, the role artists play within the cultural/sculptural sphere continues to expand. This
seminar/workshop will look closely at archival documents, artist writings and theory that have helped to shape
our understanding of public art, public artists and public policy. Field trips required.
Instructor(s): T. Gates Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300
Equivalent Course(s): ARTV 36205, PPHA 39712, PBPL 26205

ARTV 27200. Painting. 100 Units.
Presuming fundamental considerations, this studio course emphasizes the purposeful and sustained
development of a student’s visual investigation through painting, accentuating both invention and clarity of
image. Requirements include group critiques and discussion.
Instructor(s): D. Schutter Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200 or 10300; and 22000 or 22002
Equivalent Course(s): ARTV 37200

ARTV 27210. Intermediate/Advanced Painting. 100 Units.
The goal of this course is to literally expand your painting practice and your definition of painting. Through
a series of studio projects, we will consider fundamental issues surrounding 21st-century painting such as:
figuration/abstraction, the body, digital/analog, painting’s expanded relationship to itself and to other media. In
the studio we will frequently subject painting to juxtaposition with other 2-D, 3-D, and 4-D media as we come to
terms with the actual physical properties of paint. A final project serves as a culminating experience.
Instructor(s): K. Desjardins Terms Offered: Spring
Prerequisite(s): ARTV 10100, 10200, or 10300; and 22000 or 22002
Equivalent Course(s): ARTV 37210

ARTV 27920. Virtual Reality Production. 100 Units.
Focusing on experimental moving-image approaches at a crucial moment in the emerging medium of virtual
reality, this class will explore and interrogate each stage of production for VR. By hacking their way around
the barriers and conventions of current software and hardware to create new optical experiences, students
will design, construct and deploy new ways of capturing the world with cameras and develop new strategies
and interactive logics for placing images into virtual spaces. Underpinning these explorations will be a careful
discussion, dissection and reconstruction of techniques found in the emerging VR “canon” that spans new modes
of journalism and documentary, computer games, and narrative “VR cinema.” Film production and computer
programming experience is welcome but not a prerequisite for the course. Students will be expected to complete
short “sketches” of approaches in VR towards a final short VR experience.
Equivalent Course(s): MAAD 27920, CMST 37920, CMST 27920, ARTV 37920

ARTV 27921. Augmented Reality Production. 100 Units.
Focusing on experimental moving-image approaches at a crucial moment in the emerging medium of augmented
reality, this class will explore and interrogate each stage of production of AR works. Students in this production-
based class will examine the techniques and opportunities of this new kind of moving image. During this class
we’ll study the construction of examples across a gamut from locative media, journalism, and gameplay-based
works to museum installations. Students will complete a series of critical essays and sketches towards a final
augmented reality project using a custom set of software tools developed in and for the class.
Instructor(s): M. Downie Terms Offered: Autumn
Equivalent Course(s): CMST 37911, ARTV 37921, CMST 27911
ARTV 27922. Sound / Image Mapping. 100 Units.
This class will examine the history and production of “hard” sound-image relationships through the lens of computational form. Through studying the range of digital and mechanical tools that have sought to couple the senses - from 19th century color organs and dreams of synesthesia, through music videos and contemporary new media installations, to recent advances in “machine listening” - students will complete a series of critical essays and sketches leading towards a final project using custom software developed in and for the class.
Instructor(s): M. Downie Terms Offered: Winter
Equivalent Course(s): CMST 28010

ARTV 27923. Experimental Captures. 100 Units.
This production-based class will explore the possibilities and limits of capturing the world with imaging approaches that go beyond the conventional camera. What new and experimental image-based artworks can be created with technologies such as laser scanning, structured light projection, time of flight cameras, photogrammetry, stereography, motion capture, sensor augmented cameras or light field photography? This hands-on course welcomes students with production experience while being designed to keep established tools and commercial practices off-kilter and constantly in question.
Instructor(s): M. Downie Terms Offered: Spring
Equivalent Course(s): CMST 37011, CMST 27011, ARTV 37923

ARTV 29600. Junior Seminar. 100 Units.
Students in the Junior Seminar engage in two main activities: (1) a series of studio projects challenging the imagination and enlarging formal skills; and (2) an introduction to the contemporary art world through selected readings, lectures, careful analysis of art objects/events, and critical writing. Studio skills are developed while contending with the central task of articulating ideas through a resistant medium. Toward the end of the quarter, students who wish to apply for the Honors Track may submit their applications to the Department. Visits to museums, galleries, and other cultural and commercial sites required, as is attendance at designated events.
Instructor(s): S. Wolniak, A. Ginsburg Terms Offered: Spring
Prerequisite(s): For Visual Arts majors only
Note(s): Students who are majoring in visual arts should enroll in this required course in Spring Quarter of their third year. Students who plan to study abroad in Spring of their third year should contact the Department and register for Junior Seminar in their second year.

ARTV 29700. Independent Study in Visual Arts. 100 Units.
Students in this reading course should have already done fundamental course work and be ready to explore a particular area of interest much more closely.
Terms Offered: Autumn Spring Winter
Prerequisite(s): ARTV 10100, 10200, or 10300 and consent of instructor
Note(s): Students are required to submit the College Reading and Research Course Form.

ARTV 29850. Senior Seminar. 100 Units.
This is a critique-based course utilizing group discussion and individual guidance in the service of advancing the art practice of students who are majoring in visual arts. Emphasis is placed on the continued development of student’s artistic production that began in the preceding Junior Seminar. Readings and written responses required. In addition to studio work, visits to museums and galleries required.
Instructor(s): K. Desjardins, W. Pope.L Terms Offered: Autumn
Note(s): Required of students who are majoring in Visual Arts. Students must take this class in the Autumn Quarter of their fourth year, after having completed Junior Seminar.

ARTV 29900. Senior Project. 100 Units.
Required of Visual Arts majors in the Studio Track. This course provides an opportunity for students to engage in a sustained and intense development of their art practice in weekly critiques throughout the Winter Quarter.
Instructor(s): L. Letinsky Terms Offered: Winter
Prerequisite(s): Only students who are in the Studio Track may register for this class.
INTERDISCIPLINARY OPPORTUNITIES

These pages identify interdisciplinary areas and courses in those areas. Some students may explore these areas through one of the formal programs of study. Students may also wish to plan their own programs in one of these areas: Interdisciplinary Studies in the Humanities or Tutorial Studies. Students should discuss these options with their College advisers.

- Big Problems
- Chicago Studies
- Clinical and Translational Science
- Course Clusters
- Signature Courses in the College
- Stevanovich Institute on the Formation of Knowledge
Big Problems

Department Website: http://bigproblems.uchicago.edu

The Big Problems courses that follow are among a growing number of capstone experiences offered as electives to fourth-year students in the College. Under special circumstances involving senior project needs, third-year students may petition for permission to register for a Big Problems course.

"Big problems" are characteristically matters of global or universal concern that intersect with several disciplines and affect a variety of interest groups. They are problems for which solutions are crucially important but not obviously available.

Big Problems courses emphasize process as well as content: learning how to creatively confront difficult intellectual and pragmatic problems wider than one's area or expertise and to consider how to deal with the uncertainty that results. This often points to the importance of working in groups. If the core curriculum provides a basis for learning and the majors develop more specialized knowledge, the Big Problems experience leads to the development of skills for thinking about and dealing with the important but unyielding issues of our time.

Big Problems courses encourage linkage to BA papers, research experiences, or internships. They use interdisciplinary team teaching, seeking to cross disciplines and divisions and to transcend familiar models of content, organization, and instruction.

Each year a Big Problems Lecture Series features outside speakers and additional workshops for interested students.

Big Problems Courses Offered in 2018–19

BPRO 28200. Narrating Migration. 100 Units.

Human migration is one of the most pressing global problems of our time, though it is not a new phenomenon. It has shaped societies throughout time, and the degree to which it is perceived as a "problem" or an "opportunity" changes radically according to circumstances and ideologies. In this course, we will analyze the different ways in which migration has been perceived, understood, and experienced. We will focus on two intense episodes in the global history of migration: migration from early nineteenth-century Britain; and migration to late 20th and 21st-century America. Our emphasis throughout will be on the ways in which migration is narrated: the stories that societies tell about the migration of themselves and others. We will cover a wide range of migration narratives, including those of creative writers and artists, and will consider them through the lenses of literary criticism, history, theory, and also artistic practice itself.

Instructor(s): J. Mcdonagh, V. Tran
Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ENGL 28200

BPRO 28300. Disability and Design. 100 Units.

Disability is often an afterthought, an unexpected tragedy to be mitigated, accommodated, or overcome. In cultural, political, and educational spheres, disabilities are non-normative, marginal, even invisible. This runs counter to many of our lived experiences of difference where, in fact, disabilities of all kinds are the "new normal." In this interdisciplinary course, we center both the category and experience of disability. Moreover, we consider the stakes of explicitly designing for different kinds of bodies and minds. Rather than approaching disability as a problem to be accommodated, we consider the affordances that disability offers for design. This course begins by situating us in the growing discipline of Disability Studies and the activist (and intersectional) Disability Justice movement. We then move to four two-week units in specific areas where disability meets design: architecture, infrastructure, and public space; education and the classroom; economics, employment, and public policy; and aesthetics. Traversing from architecture to art, and from education to economic policy, this course asks how we can design for access.

Instructor(s): M. Friedner, J. Iverson
Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): MUSI 25719, CHDV 28301

BPRO 28400. Thinking Psychoanalytically: From the Sciences to the Arts. 100 Units.

Since Freud's seminal investigation into the nature of the mind, psychoanalytic thinking has offered a unique approach to unconscious, relational, and meaningful dimensions of human experience. Despite assaults on the field from numerous quarters, psychoanalytic thinking remains central to the work of practitioners across an array of disciplines. After an introduction to key psychoanalytic concepts including the unconscious, repression, and transference, we will investigate some of the ways in which these ideas are mobilized within clinical practice, neuroscience, anthropology, education, philosophy, literary studies, and the visual arts through a series of lectures presented by specialists from these fields. Along the way, we will gain an appreciation for some of the ways in which psychoanalytic perspectives continue to inspire a variety of current scientific and humanistic projects.

Instructor(s): A. Beal; Staff
Terms Offered: Spring
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ANTH 24316
BPRO 28700. Alternate Reality Games: Theory and Production. 100 Units.
Games are one of the most prominent and influential media of our time. This experimental course explores the emerging genre of “alternate reality” or “transmedia” gaming. Throughout the quarter, we will approach new media theory through the history, aesthetics, and design of transmedia games. These games build on the narrative strategies of novels, the performative role-playing of theater, the branching techniques of electronic literature, the procedural qualities of video games, and the team dynamics of sports. Beyond the subject matter, students will design modules of an Alternate Reality Game in small groups. Students need not have a background in media or technology, but a wide-ranging imagination, interest in new media culture, or arts practice will make for a more exciting quarter.
Instructor(s): Patrick Jagoda, Heidi Coleman Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing. Instructor consent required. To apply, submit writing through online form at http://bigproblems.uchicago.edu; see course description. Once given consent, attendance on the first day is mandatory. Questions:mb31@uchicago.edu.
Note(s): English majors: this course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): ARTV 20700, CMST 35954, MAAD 25954, CMST 25954, ENGL 32314, TAPS 28466, ENGL 25970, ARTV 30700

BPRO 28800. From Fossils to Fermi’s Paradox: Origin and Evolution of Intelligent Life. 100 Units.
The course approaches Fermi’s question, “Are we alone in the universe?,” in the light of recent evidence primarily from three fields: the history and evolution of life on Earth (paleontology), the meaning and evolution of complex signaling and intelligence (cognitive science), and the distribution, composition and conditions on planets and exoplanets (astronomy). We also review the history and parameters governing extrasolar detection and signaling. The aim of the course is to assess the interplay between convergence and contingency in evolution, the selective advantage of intelligence, and the existence and nature of life elsewhere in the universe - in order to better understand the meaning of human existence.
Instructor(s): P. Sereno; L. Rogers; S. London Terms Offered: Winter
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ASTR 18700, PSYC 28810

BPRO 28900. Inequality: Origins, Dimensions, and Policy. 100 Units.
For the last four decades, incomes in the United States and across the globe have grown more unequal. That fact has attracted worldwide attention from scholars, governments, religious figures, and public intellectuals. In this interdisciplinary course, participating faculty members drawn from across the University and invited guest speakers will trace and examine the sources and challenges of inequality and mobility in many of its dimensions, from economic, political, legal, biological, philosophical, public policy, and other perspectives. This course is part of the College Course Cluster program: Inequality.
Instructor(s): A. Sanderson and Staff Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing
Note(s): ECON 24720 or ECON 22410 may be used as an Economics elective, but only one of the two may be used toward Economics major requirements.
Equivalent Course(s): ECON 24720, PBPL 28920

BPRO 29000. Energy and Energy Policy. 100 Units.
This course shows how scientific constraints affect economic and other policy decisions regarding energy, what energy-based issues confront our society, how we may address them through both policy and scientific study, and how the policy and scientific aspects can and should interact. We address specific technologies, both those now in use and those under development, and the policy questions associated with each, as well as with more overarching aspects of energy policy that may affect several, perhaps many, technologies.
Instructor(s): S. Berry, G. Tolley Terms Offered: TBD. May be offered 2018-2019
Prerequisite(s): PQ: Third- or fourth-year standing. For ECON majors who want ECON credit for this course (ECON 26800): PQ is ECON 20100.
Equivalent Course(s): PBPL 29000, CHSS 37502, PPFA 39201, ENST 2900, ECON 26800, PSMS 39000

BIG PROBLEMS COURSES OFFERED IN PREVIOUS YEARS
Any of these courses may be offered in the future.

BPRO 21500. What is Civic Knowledge? 100 Units.
What is civic knowledge? Although civic rights and duties are supposedly universal to all citizens in a “democratic” nation, their implementation often depends on the strength of community connections and the circulation of knowledge across racial, class, and social boundaries. Focusing on the city of Chicago, we ask how citizens (in their roles as citizens) forge communities, make urban plans, and participate in civic affairs. How does the city construct the public spheres of its residents? Are the social practices of Chicagoans truly “democratic”? Could they be? What does “Chicago” stand for, as a political and cultural symbol? For both Chicagoans and their representatives, the circulation of knowledge depends not only on conventional media but also on how the city is constructed and managed through digital media.
Instructor(s): R. Schultz, M. Browning, Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): PHIL 21006, LLSO 24906, HUMA 24906, PBPL 21500
BPRO 22200. Boundaries, Modules, and Levels. 100 Units.
This course investigates conceptual problems arising in the attempt to analyze the structure of complex systems in a variety of biological, psychological, social, and technological contexts, and how the answers may vary with how the boundaries are drawn. We confront descriptive, critical, and normative puzzles arising from questions such as the following: Is a society just a collection of people, an organized collection of people, or something more? Can a corporation have rights and responsibilities? Can groups have identities? Why are minds in the head, or are they? And are genes the bearers of heredity?
Instructor(s): W. Wimsatt, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HIPS 20601, PHIL 22210

BPRO 22300. Empire. 100 Units.
Students in this course read a variety of texts (e.g., writings of Thucydides, Vergil, and Forster; documents from the caliphate of Andalusia; current articles). By viewing their own experiences in the light of Arab, British, Greek, and Roman empires, students reflect on America’s role in the cultures and countries of the twenty-first century. Economics, language, culture, ecology, and social ethics may provide the lenses through which students view and review their experiences.
Instructor(s): Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing. Completion of the general education requirement in civilization studies through a College-sponsored study abroad program.
Equivalent Course(s): HUMA 22303, CLCV 28707

BPRO 22400. The Ugly American Comes Home. 100 Units.
The aims of this course are to interrogate not only the experience of studying abroad, but also the condition of coming “home” and facing a range of needs to assimilate and articulate your experience. We address being abroad and afterward through a range of reading materials, including travel writings, philosophies of education, and considerations of narrative and perception. Writing assignments will explicitly address the challenge of integrating study abroad with other forms of knowledge and experience that characterize collegiate education.
Instructor(s): J. Ketelaar, M. Merritt Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing; completion of a study abroad program (University of Chicago program, other institution’s program, or self-structured program).
Equivalent Course(s): INST 22400

BPRO 22500. Medicine and Society: Things, Bodies, Persons. 100 Units.
Course description isn’t available.
Terms Offered: Not offered in 2018-2019
Equivalent Course(s): BIOS 29310, PHIL 22501, HIPS 22501

BPRO 22600. Autonomy & Medical Paternalism. 100 Units.
Course description isn’t available.
Terms Offered: Not offered in 2018-2019
Equivalent Course(s): BIOS 29311, PHIL 22601, HIPS 21901

BPRO 22612. Medical Ethics: Central Topics. 100 Units.
Decisions about medical treatment, medical research, and medical policy often have profound moral implications. Taught by a philosopher, two physicians, and a medical lawyer, this course will examine such issues as paternalism, autonomy, assisted suicide, kidney markets, abortion, and research ethics.
Instructor(s): D. Brudney; Staff Terms Offered: TBD. May be offered in 2019-2020
Prerequisite(s): Third- or fourth year standing. This course does not meet requirements for the Biological Sciences major.
Note(s): Undergrads enroll in section 01 and 02. Graduates enroll in section 03. For Philosophy majors: this course fulfills the practical philosophy (A) requirement.
Equivalent Course(s): PHIL 31609, BIOS 29314, PHIL 21609, HIPS 21609
BPRO 22800. Drinking Alcohol: Social Problem or Normal Cultural Practice? 100 Units.

Alcohol is the most widely used psychoactive agent in the world, and, as archaeologists have recently demonstrated, it has a very long history dating back at least 9,000 years. This course will explore the issue of alcohol and drinking from a trans-disciplinary perspective. It will be co-taught by an anthropologist/archaeologist with experience in alcohol research and a neurobiologist who has experience with addiction research. Students will be confronted with literature on alcohol research from anthropology, sociology, history, biology, medicine, psychology, and public health and asked to think through the conflicts and contradictions. Selected case studies will be used to focus the discussion of broader theoretical concepts and competing perspectives introduced in the first part of the course. Topics for lectures and discussion include: What is alcohol? The early history of alcohol; Histories of drinking in ancient, medieval, and modern times; Alcohol and the political economy; Alcohol as a cultural artifact; Styles of drinking and intoxication; Alcohol, addiction, and social problems; Alcohol and religion; Alcohol and health benefits; Comparative case studies of drinking.

Instructor(s): M. Dietler, W. Green
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing.
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): BIOS 02280, ANTH 25310

BPRO 23000. Cosmos and Conscience: Looking for Ourselves Elsewhere. 100 Units.

Science and religion are two ways, among many others, that people can seek to know about reality: how do we construct ordered pictures of the whole-cosmos or civilization and how do we relate to them in terms of action? How do we know what we do not know, and what does that kind of “knowledge” mean for the orientation and direction of human existence? How would cultural biases be affected by knowing that there are others “out there” in the universe, should we discover them? From various perspectives, this course addresses these questions of the origins, structures, and ends of reality as we look for ourselves-seek understanding of the human condition-in the cosmos but also in complex religious and cultural traditions. Whereas in our popular culture, science is often identified with the realm of knowledge and religion is simply “belief” or “practice,” the course also seeks to trace the rational limits of science and the rational force of religion with respect to the ethical problem of the right and good conduct of human life.

Instructor(s): W. Schweiker, D. York
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing.
Equivalent Course(s): RLST 23603, ASTR 23000

BPRO 23400. Is Development Sustainable? 100 Units.

This course examines alternative concepts and theoretical grounds for notions of sustainable development. We analyze core issues underlying population growth, resource extraction, “sustainable consumption,” environmental change, and social transformation through a consideration of economic, political, scientific, and cultural institutions and processes. The course, based on orienting lectures and intensive class discussion of core texts, focuses on the sustainability problems of both highly industrialized countries as well as of developing nations. Previous exposure to environmental or development issues, although useful, is not required.

Instructor(s): A. Kolata
Terms Offered: Not offered in 2018-2019
Note(s): This course qualifies as a “Discovering Anthropology” selection for Anthropology Majors.
Equivalent Course(s): ANTH 22015, HIPS 23400, PBPL 24400, ENST 24400

BPRO 23500. The Organization of Knowledge. 100 Units.

This course explores several structures of knowledge that students may have encountered in their core and specialized education, with the goal of enabling students to identify and explore the implications of these different structures. We ask whether all knowledge is relative, and if so, to what? When things are structured differently, does that mean that knowledge is lost? Or are there several diverse ways of structuring knowledge, each of which may be viable? We read a wide range of classical and modern thinkers in various disciplines.

Instructor(s): W. Sterner, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing.
Equivalent Course(s): HIPS 23000, HUMA 23502

BPRO 23600. Social Context, Biology, and Health. 100 Units.

We take for granted our relationships with other people as fundamental. Yet when these connections are absent or disrupted, our minds and biology are likewise disrupted. Epidemiological studies have now clearly established a relationship between social isolation and both mental and physical health. This course adopts an integrative interdisciplinary approach that spans the biological to sociological levels of analysis to explore the interactions involved and possible mechanisms by which the social world gets under the skin to affect the mind, brain, biology, and health.

Instructor(s): J. Cacioppo, M. McClintock, L. Waite
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): PSYC 25300
BPRO 23760. The Social Brain: Social Isolation and Loneliness. 100 Units.
The past two decades have witnessed a remarkable rise in the number of investigations published on the social brain. The discoveries conveyed by the titles of many of these reports (e.g., the neural basis of love, altruism, morality, generosity, trust) have piqued the interest of young investigators, funding agencies, the media, and laypeople alike. Such attention is a double-edged sword, however, as errors are exaggerated in importance, and oversimplifications create false expectations and, ultimately, disillusionment in what the field can contribute. It is, of course, one thing to assume that neural processes underlie all psychological phenomenon, it is another to claim that a given brain region is the biological instantiation of complex psychological functions like the self, empathy or loneliness. The purpose of this course is to examine opportunities and challenges in this field primarily through research on two of the most important topics in the field: social isolation and empathy.
Instructor(s): J. Cacioppo, L. Hawkley Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.
Equivalent Course(s): PSYC 23760, BIOS 29324

BPRO 23800. The Affect System. 100 Units.
The term "affect" typically refers to feelings beyond those of the traditional senses, with an emphasis on the experience of emotions and variations in hedonic tone. The structure and processes underlying mental contents are not readily apparent, however, and most cognitive processes occur unconsciously with only selected outcomes reaching awareness. Over millions of years of evolution, efficient and manifold mechanisms have evolved for differentiating hostile from hospitable stimuli and for organizing adaptive responses to these stimuli. These are critically important functions for the evolution of mammals, and the integrated set of mechanisms that serve these functions can be thought of as an "affect system." It is this affect system-its architecture and operating characteristics, as viewed from neural, psychological, social, and political perspectives-that is the focus of the course.
Instructor(s): J. Cacioppo, E. Oliver, S. Cacioppo Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): PLSC 23810, PSYC 23880

BPRO 23900. Biological and Cultural Evolution. 100 Units.
This course draws on readings in and case studies of language evolution, biological evolution, cognitive development and scaffolding, processes of socialization and formation of groups and institutions, and the history and philosophy of science and technology. We seek primarily to elaborate theory to understand and model processes of cultural evolution, while exploring analogies, differences, and relations to biological evolution. This has been a highly contentious area, and we examine why. We seek to evaluate what such a theory could reasonably cover and what it cannot.
Instructor(s): W. Wimsatt, S. Mufwene Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing or consent of instructor required; core background in evolution and genetics strongly recommended.
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): NCDV 27400, PHIL 32500, CHDV 23930, HIPS 23900, ANTH 28615, PHIL 22500, CHSS 37900, CHDV 33930, BIOS 29286, LING 11100, ANTH 38615, LING 39286

BPRO 24000. Understanding Wisdom. 100 Units.
Thinking about the nature of wisdom goes back to the Greek philosophers and the classical religious sages, but the concept of wisdom has changed in many ways over the history of thought. While wisdom has received less scholarly attention in modern times, it has recently re-emerged in popular discourse with a growing recognition of its potential importance for addressing complex issues in many domains. But what is wisdom? It’s often used with a meaning more akin to “smart” or “clever.” Is it just vast knowledge? This course will examine the nature of wisdom-how it has been defined, how its meaning has changed, and what its essential components might be. We will examine how current psychological theories conceptualize wisdom and consider whether, and how, wisdom can be studied scientifically; that is, can wisdom be measured and experimentally manipulated to illuminate its underlying mechanisms and understand its functions? Finally, we will explore how concepts of wisdom can be applied in business, education, medicine, the law, and in the course of our everyday lives. Readings will be drawn from a wide array of disciplines including philosophy, classics, history, psychology, behavioral economics, medicine, and public policy.
Instructor(s): A. Henly, H. Nusbaum Terms Offered: Not offered in 2018-2019
Note(s): See PSYC 24055 The Psychological Foundations of Wisdom.
Equivalent Course(s): HUMA 24005, RLST 24050, PSYC 24050

BPRO 24100. Science and Religion. 100 Units.
In this course, we explore some aspects of the relations between science and religion in Western culture (e.g., Christian, Jewish, Islamic). Questions include: What are science and religion? Are they competing intellectual systems for making sense of the world? What are social institutions? Can they be in conflict with one another? Can they support one another? Each of the instructors treats these questions by examining certain historical episodes and texts to add different perspectives to the material.
Instructor(s): Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
BPRO 24150. Romantic Love: Cultural, Philosophical, and Psychological Aspects. 100 Units.
This double-credit course combines humanistic and social scientific disciplines to examine the phenomenon of romantic love—a "big problem" in practical, theoretical, and cultural senses. The course starts by comparing representations of romantic love experiences in visual, musical and literary arts and myths. After exploring what may be specific to this form of love, we address two further issues: the role and sources of non-rational experience in romantic love, and the role of romantic love in modern marriage. Illumination of these topics is sought through the discussion of humanistic and social scientific texts and cinematic presentations.
Instructor(s): D. Orlinsky, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Note(s): The class meets for six hours a week.
Equivalent Course(s): HUMA 24150, CHDV 24150, GNSE 24150

BPRO 24160. Love and Tragedy in Tolstoy's Anna Karenina. 100 Units.
Tolstoy’s great novel Anna Karenina may be the finest and most compelling depiction in literature of the diverse aspects and outcomes of romantic love. Combining humanistic and social scientific perspectives, this course undertakes an intensive study of the novel to examine the joys and sorrows of romantic love, and the successes and tragedies that follow from it, as well as the aesthetic achievement of the novel as a major work of art. Resources for understanding the development of the novel’s characters and the fate of their relationships are drawn from Freud's Introductory Lectures on Psychoanalysis and other works. Bases for a critical appreciation of the novel are drawn from Aristotle’s Poetics and Nietzsche’s The Birth of Tragedy.
Instructor(s): D. Orlinsky, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): GNSE 24160, HUMA 24160, CHDV 24160

BPRO 24200. Psychoneuroimmunology. 100 Units.
This course covers all aspects of neuroimmunoendocrinology at the molecular, cellular, and organismal and social levels.
Instructor(s): M. McClintock, J. Quintans Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): PSYC 34100, BPRO 44140, PSYC 24150, BIOS 02370

BPRO 24300. Globalization and Neo-Liberalism. 100 Units.
Developments over the past decade have led a number of former leading enthusiasts of globalization to raise basic criticisms of the neo-liberal paradigm. In doing this, they have echoed and drawn attention to the results of economists and historians whose work undercuts the basic premises of neo-liberalism. This course explicates a varied collection of this work, viewed as a critique and alternative to neo-liberalism, by economic historians (e.g., Hobsbawn, Williams, Arrighi, Polanyi) and economists (e.g., Palley, Taylor, Streton, Marglin, Eatwell, MacEwan, Blecker, Brenner).
Instructor(s): M. Rothenberg, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): INST 24300

BPRO 24400. Concepts of the Self from Antiquity to the Present. 100 Units.
This seminar explores the evolution of ideas about the nature and formation of selfhood from classical antiquity to the present. Along the way, we look at Greek tragedy, Stoic philosophy, early Christian texts, and the conceptual models of selfhood and self-understanding behind Descartes, Kant, Freud, Foucault, and others. Students should be prepared to deal extensively with scholarship on self, ethics, and community across the fields of philosophy, anthropology, psychology, and social history.
Instructor(s): S. Bartsch, J. Goldstein Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HIST 20400, CLCV 28100

BPRO 24500. Language and Globalization. 100 Units.
Globalization has been a buzz word in our lives over the past few decades. It is also one of those terms whose varying meanings have become more and more challenging to characterize in a uniform way. The phenomena it names have been associated with important transformations in our cultures, including the languages we speak. Distinguishing myths from facts, this course articulates the different meanings of globalization, anchors them in a long history of socioeconomic colonization, and highlights the specific ways in which the phenomena it names have affected the structures and vitalities of languages around the world. We learn about the dynamics of population contact in class and their impact on the evolution of languages.
Instructor(s): S. Mufwene Terms Offered: Not offered in 2018-2019
Note(s): Not offered in 2018-2019
Equivalent Course(s): LING 37500, ANTH 27705, LING 27500, ANTH 47905, CRES 37500, CRES 27500
BPRO 24600. Moments in Atheism. 100 Units.
Atheism is as old as religion. As religion and its place in society have evolved throughout history, so has the standing and philosophical justification for non-belief. This course examines the intellectual and cultural history of atheism in Western thought from antiquity to the present. We are concerned with the evolution of arguments for a non-religious worldview, as well as with the attitude of society toward atheism and atheists.
Instructor(s): S. Bartsch, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Note(s): Not offered in 2018-2019
Equivalent Course(s): RLST 25200, HIST 29402, CLCV 22400

BPRO 24700. From Neo-Liberalism to Neo-Imperialism. 100 Units.
This course examines the thesis advanced by a number of recent thinkers on the organic ties between neo-liberal doctrine and the rise of a new imperialism. In False Dawn, noted conservative political theorist John Gray gives a critique of the global free market. In Capital Resurgent: Roots of the NeoLiberal Revolution, two important left critics, economists Gerard Dumenil and Dominique Levy, investigate the economic roots of neo-liberalism. Finally, in reading two recent works by the economic geographer David Harvey (A Brief History of Neo-Liberalism and The New Imperialism) we consider in depth the link between neo-liberalism and imperialism.
Instructor(s): M. Rothenberg, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): INST 24700

BPRO 24800. Complex Problem: World Hunger. 100 Units.
Few of our policymakers are experts in economics, agronomy, food science, and molecular biology, yet all of these disciplines are essential for developing strategies to end world hunger. Choosing one country as a test case, we look at the history, politics, governmental structure, population demographics, and agricultural challenges. We then study the theory of world markets, global trade, and microeconomics of developing nations, as well as the promise and limitation of traditional breeding and biotechnology.
Instructor(s): J. Malamy, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): SOSC 26900, BIOS 02810, ENST 24800

BPRO 24900. Biology and Sociology of AIDS. 100 Units.
This interdisciplinary course deals with current issues of the AIDS epidemic.
Instructor(s): H. Pollack, J. Schneider
Terms Offered: Not offered in 2018-2019; May be offered in 2019-2020
Prerequisite(s): Third- or fourth-year standing
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): SSAD 65100, BIOS 02490

BPRO 25000. Images of Time: Japanese History Through Film. 100 Units.
Focusing attention on the emerging nexus between audio-visual media and historical studies, this course deals with theories of time, history, and representation while making those ideas and problems concrete through a study of the way in which history in Japan has been mediated by the cinema. A close reading of a wide range of films produced in and about Japan in tandem with primary and secondary materials on theories of time, images, and national history highlights the historicity and history of both film and Japan. All work in English.
Instructor(s): J. Ketelaar, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HIST 24603, EALC 24601, CMST 24906

BPRO 25100. Evolutionary Theory and Its Role in the Human Sciences. 100 Units.
The course’s aim is two-fold: (1) an examination of the origins and development of Darwin’s theory from the early nineteenth century to the present; and (2) a selective investigation of the ways various disciplines of the human sciences (i.e., sociology, psychology, anthropology, ethics, politics, economics) have used evolutionary ideas.
Instructor(s): R. Richards, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HIPS 25801, PHIL 25123, HIST 25004

BPRO 25200. Body and Soul: Approaches to Prayer. 100 Units.
Why do we pray? Why do we experience prayer practice as reaching out towards an intentional being whom we cannot (except in representation) touch, see, or hear? This course approaches an answer to that question by looking at the way we pray, particularly in a Christian context. What kinds of bodily engagement do we find in prayer; what impact might prayer practice have upon our bodies; what bodily features of prayer might help to explain why its practice has been so compelling to so many for so many years?
Instructor(s): Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): RLST 28800
BPRO 25400. Jews and Christians in the Middle East. 100 Units.
Minorities around the world today invite questions about the prospects of pluralism and tolerance in modern societies. This course will explore these long-studied questions by examining the case of Jews and Christians in the Middle East, as well as its tangled histories with Muslims and Jews in Mediterranean Europe. Co-taught by a historian of Jews in Iraq and an anthropologist of Copts in Egypt, we will explore histories and ethnographies to consider the political, social, and religious dimensions of minority communities. Our syllabus also blends various literary genres and forms of media with academic scholarship to explore various voices in the conversation about Jews and Christians in the Middle East from novels, films, and poetry to theological tracts and political treatises. We raise the following questions throughout our course: What terms for coexistence have governed Jews, Christians, and Muslims in the Mediterranean? How are religious practices and traditions linked to histories of rule? How do ideologies (e.g., nationalism, secularism, communism) shape the way minorities understand themselves and how society understands them?
Instructor(s): O. Bashkin, A. Heo
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): NEHC 20585, JWSC 26215, RLST 20231

BPRO 25500. Art and Human Rights. 100 Units.
This seminar-style course will explore historical and contemporary interventions in visual and performative artistic practices with human rights. Co-taught by a historian and theater-maker, the course will consider various paradigms for looking at how artists work on human rights. Course work will include critical readings, viewings of artistic work, and direct conversations with artists. Students will also participate in a multi-day summit on campus (April 29-May 2) that will bring distinguished artists from throughout the world to address the question "What is an artistic practice of human rights, conceptually, aesthetically and pragmatically?" Students will be given the option to produce either an academic or artistic final project.
Instructor(s): M. Bradley, L. Buxbaum Danzig
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ARTV 20009, HMRT 25502, HIST 29906, TAPS 25510

BPRO 26030. The Nuclear Age. 100 Units.
Seventy-five years ago a group of scientists launched the first sustained nuclear chain reaction, commonly known as CP-1, at the University of Chicago under Stagg Field. This course will be part of the commemoration and reflection taking place across the University this fall. Its goal will be to explore the ensuing Nuclear Age from different disciplinary perspectives by organizing a ring-lecture. Each week’s lecture, delivered by faculty from fields across the university (for instance, Physics, Biomedicine, Anthropology, and English), will be followed by a discussion section to synthesize and integrate not only the material from the weekly lectures, but the many events happening at the University this fall. CP-1 was not only a scientific achievement of the highest magnitude, but also a civilization-changing event that remains at the boundary of the thinkable.
Instructor(s): D. L. Nelson
Terms Offered: TBD. Not offered in 2018-2019
Prerequisite(s): Second, third, or fourth-year standing.
Equivalent Course(s): ENGL 26030, SIGN 26031, HIST 25424

BPRO 26050. Memory, Commemoration & Mourning. 100 Units.
This course focuses on the manner in which we make use of the past, the personal past, the collective past, and the place of social and historical change in retelling and rewriting life-history and history. The course begins with a discussion of memory, conceptions of the personal and historic past, and such related issues as nostalgia, mourning, and the significance of commemoration in monument and ritual. These issues are explored in a number of topics such as twentieth-century war memorials, high school and college reunions, and the Holocaust and its representation in contemporary European society.
Instructor(s): Staff
Terms Offered: Not offered in 2018-2019
Equivalent Course(s): CHDV 27102, PSYC 25450, FNDL 23312, AASR 30001, RLST 28102

BPRO 26102. War. 100 Units.
In this course, we ask such questions as: Why do humans go to war? What is the experience of war like? How does war affect the individual and his society? What is a just war? An unjust war? Can we conceive of a world without war? We read and discuss texts such as Homer’s The Iliad, Thucydides’ History of the Peloponnesian War, Tolstoy’s War and Peace, Jonathan Shay’s Achilles in Vietnam, and Glen Gray’s The Warriors. The readings serve primarily as a starting point for the discussion of the above questions and any other issues raised by the class that are related to war.
Instructor(s): Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HUMA 26300
BPRO 26300. Globalization: History and Theory. 100 Units.
This course makes sense of globalization as a historical phenomenon focusing primarily on the long twentieth
century, but with a look back into the "deep history" of the making of the contemporary world. While the course
has a theoretical bent, it should be taken as an introduction into modern history. It has three goals in particular:
(1) It introduces the main concepts and theories of globalization. (2) It explores key moments, processes, and
events in the annals of globalization. (3) It highlights the nature of contentions over the terms of global order.
Instructor(s): M. Geyer, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HIST 29901

BPRO 26400. Movies and Madness. 100 Units.
We propose to investigate representations of madness in fictional, dramatic, and experimental film. We
divide the topic this way to emphasize the different dimensions of cinematic address to questions of
mental illness, and the ways that film genres imply distinct formal and epistemological conventions for the
representation of insanity. Documentary ranges from instructional and neutral reportage, to polemical, essayistic
interventions in the politics of psychiatry and the asylum, the actual conditions of mental illness in real historical
moments. Documentary also includes the tendency in new media for "the mad" to represent themselves in a
variety of media. With experimental film, our aim will be to explore the ways that the cinematic medium can
simulate experiences of mania, delirium, hallucination, obsession, depression, etc., inserting the spectator into
the subject position of madness. We will explore the ways that film techniques such as shot-matching, voice-over,
montage, and special effects of audio-visual manipulation function to convey dream sequences, altered states of
consciousness, ideational or perceptual paradoxes, and extreme emotional states. Finally, narrative film we think
of as potentially synthesizing these two strands of cinematic practice, weaving representations of actual, possible,
or probable situations with the special effects of mad subjectivity. Our emphasis with narrative film will be to
focus not simply on the mentally ill subject as hero.
Instructor(s): W. J. T. Mitchell, J. Hoffman Terms Offered: Not offered in 2018-2019. See ENGL course on
"Cinematics: Movies and Madness" (Spring, 2019).
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): ARTH 36905, ARTH 26905, CMST 25550, CMST 35550, ENGL 38703, ARTV 26411

BPRO 26500. Picturing Words/Writing Images (Studio) 100 Units.
What is the relationship between reading and looking? Images in mind and images on paper-words in mind and
on the page-we will explore the intersection of these different ways to think, read, and look, as we make poems,
drawings, paintings, etc., in class. We will investigate the problem of representing language as it is expressed in
the work produced in class. Studying works by contemporary visual artists like Jenny Holzer and Ann Hamilton,
and practicing poets such as Susan Howe and Tom Phillips will inform our investigation. The course will feature
visits to our studio by contemporary poets and visual artists, who will provide critiques of student work and
discussion of their own ongoing projects. These visitors will help to frame our artistic and literary practice within
the ongoing conversation between word and image in modern culture. We will ask, what are the cognitive,
phenomenological, social, and aesthetic consequences of foregrounding the pictorial/visual aspect of alphabetical
characters? (C, H)
Instructor(s): J. Stockholder, S. Reddy Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing. Previous experience in an arts studio or creative writing course
recommended, but not required.
Equivalent Course(s): ARTV 36901, ARTV 26901, ENGL 24319, ENGL 34319, CRWR 26341, CRWR 46341

BPRO 26600. Antonioni’s Films: Reality and Ambiguity. 100 Units.
In this in-depth study of several Antonioni films, our eye is on understanding his view of reality and the
elements of ambiguity that pervade all of his films. Together, as a film scholar and physicist, we bring out these
aspects of his work together with his unique cinematic contributions. This course introduces students to this poet
of the cinema and the relevance of Antonioni’s themes to their own studies and their own lives.
Instructor(s): Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ARTH 28904, CMST 26801, HUMA 26600

BPRO 26700. Mythical History, Paradigmatic Figures: Caesar, Augustus, Charlemagne, Napoleon. 100 Units.
What is the process by which some historical figures take on mythical proportions? This course examines four
case studies of conquerors who attained sovereign power in times of war (conquest, civil war, revolution), who
had a foundational role in empire-building, and who consciously strove to link themselves to the divine and
transcendent. Their immense but ambiguous legacies persist to this day. Although each is distinct as a historical
individual, taken together they merge to form a paradigm of the exceptional leader of epic proportions. Each
models himself on exemplary predecessors: each invokes and reinvents myths of origin and projects himself as a
model for the future. Basic themes entail mythic history, empire, the exceptional figure, modernity’s fascination
with antiquity, and the paradox of the imitability of the inimitable.
Instructor(s): M. Lowrie, R. Morrissey Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): CLCV 26713, FNDL 22912, FREN 36701, CLAS 36713, FREN 26701, SCTH 30411
BPRO 26750. Anxiety. 100 Units.
The phenomenon of anxiety emerged as one of the leading psychological disorders of the 20th and 21st centuries. Worrying ourselves into the realm of the pathological, we now have a requisite measure of anxiety for every prescribed stage of life. But why are we so anxious? Considering its prevalence in everyday life, the concept and theories of anxiety have been employed surprisingly seldom as a way into film, fiction, and art. In this course we examine the modern origin of contemporary discourses specific to anxiety and their unique manifestation in cultural artifacts. To understand the complex of anxiety in the so-called Western world, we rely on the theories of Søren Kierkegaard, Martin Heidegger, Sigmund Freud, Jacques Lacan, and Alenka Zupančič; fiction by Stoker, Schnitzler, Kafka, and Sebald; and film by Haneke, Kubrick, Ophuls, and Hitchcock. We will also have guest speakers from the fields of clinical psychiatry, geriatric medicine, philosophy, and comparative anthropology.
Instructor(s): M. Sternstein, A. Flannery Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Note(s): English majors: This course fulfills the Theory (H) distribution requirement.
Equivalent Course(s): ENGL 24260, GRMN 26715, MAPH 36750

BPRO 27000. Perspectives on Imaging. 100 Units.
Taught by an imaging scientist and an art historian, this course explores scientific, artistic, and cultural aspects of imaging from the earliest attempts to enhance and capture visual stimuli through the emergence of virtual reality systems in the late twentieth century. Topics include the development of early optical instruments (e.g., microscopes, telescopes), the invention of linear perspective, the discovery of means to visualize the invisible within the body, and the recent emergence of new media. We also consider the problem of instrumentally mediated seeing in the arts and sciences and its social implications for our image-saturated contemporary world.
Instructor(s): P. La Riviere, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Note(s): This course does not meet requirements for the biological sciences major.
Equivalent Course(s): BIOS 02927, ARTH 26900, ARTH 36900, CMST 27300, CMST 37300, HIPS 24801

BPRO 27600. Creation and Creativity. 100 Units.
This seminar explores several creation stories from anthropological, literary, philosophical, and psychological perspectives. We compare the accounts of the beginning in Genesis, Hesiod's Theogony, Ovid's Metamorphoses, Bhagavad Gita, the Maya's Popol Vuh, and other sources, including Native American ones. We explore the ways cosmic creation has been imagined in world culture. We also delineate human literary creativity and ask about the relationship between individual creativity and the cultural myths of creation. We consider at least one modern theory of the beginning of the universe.
Instructor(s): Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third or fourth-year standing
Equivalent Course(s): ANTH 27610

BPRO 28000. Terror, Religion, and Aesthetics. 100 Units.
Through our contemporary experiences of terrorist acts, we apprehend the no-citizens' land of life without a social contract, of the violent "state of nature" among people. In varied genres (e.g., poems, plays, novels, memoirs, essays), we engage with the transformative powers of diverse aesthetics (e.g., catharsis, the sublime, theatre of cruelty, realism, fable, satire) and of religious faiths (e.g., deism, Hinduism, Judaism, Islam, Sufism, Buddhism) to counteract terror and redeploy our civil status in society.
Instructor(s): M. Browning, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): HMRT 28801, RLST 23401

BPRO 28100. What is Enlightenment? 100 Units.
What is enlightenment? How does one become enlightened, and who is enlightened? In Euro-American civilization, the eighteenth-century Age of Enlightenment championed the powers of human reason against religion and superstition to achieve scientific progress. Buddhism in the nineteenth century was represented by the heirs of Enlightenment as a religion for the Enlightenment to the point of not being a religion at all. Both traditions offer pathways to freedom (or liberation?) that draw on our rational capabilities, and both sponsor the production of knowledge that re-visions our place in the world. But they seem to be opposed: how could reason reject "religious" beliefs but also take part in "religious" traditions that aim to bring certain kinds of persons into being? We compare the mental models, discourses, methods of analysis, world-images, and practices of these traditions of enlightenment to assess the kinds of disciplines that their theoreticians and practitioners acquire and use.
Instructor(s): M. Browning, Staff Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): RLST 23403, HUMA 28109, SALC 27601
**BPRO 28500. Sex and Ethics. 100 Units.**

Sex is a big problem. How do we think about sex in proximity to considering the ethics of risk, harm, and the potential for good? Developing an account specifically of an ethics of sex requires thinking about the place of sex and sexual vulnerability in social life with an eye toward understanding what's good and what might count as abuses, violations, disruptions, or deprivations of specifically good things about sex. In popular discussion, for example, "consent" often demarcates ethically good sex from bad sex. This course inquires whether consent is an adequate metric for sexual ethics; if it is necessary or sufficient; if certain factors (e.g., age, gender, violence) vitiate its normative force; and whether its legal definition conflicts, coheres with, or contributes to its general cultural reception. These issues require us to think about the ways people do, do not, and cannot know what they're doing in sex, and complicate the aspiration to have an ethics in proximity to sex. This year's version of the course focuses on political theory/policy/popular scandal in relation to aesthetics and sex theory archives. We talk about sex in proximity to modes of comportment in love, scandal, prostitution, stranger intimacy, political freedom and discipline, impersonality, and experimentality.

Instructor(s): L. Berlant, Staff
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Third- or fourth-year standing
Equivalent Course(s): PLSC 21901, GNSE 28502, ENGL 28500

**BPRO 28600. Health Care and the Limits of State Action. 100 Units.**

In a time of great human mobility and weakening state frontiers, epidemic disease is able to travel fast and far, mutate in response to treatment, and defy the institutions invented to keep it under control: quarantine, the cordon sanitaire, immunization, and the management of populations. Public health services in many countries find themselves at a loss in dealing with these outbreaks of disease, a deficiency to which NGOs emerge as a response (an imperfect one to be sure). Through a series of readings in anthropology, sociology, ethics, medicine, and political science, we will attempt to reach an understanding of this crisis of both epidemiological technique and state legitimacy, and to sketch out options.

Instructor(s): E. Lyon, H. Saussy
Terms Offered: Not offered in 2018-2019; may be offered in 2019-2020
Prerequisite(s): Third- or fourth-year standing. This course does not meet requirements for the biological sciences major.
Equivalent Course(s): CMLT 28900, BIOS 29323, HMRT 28602

**BPRO 29100. What Genomes Teach About Evolution. 100 Units.**

This course does not meet requirements for the biological sciences major. The twenty-first century opened with publication of the draft human genome sequence, and there are currently over 3,000 species whose genomes have been sequenced. This rapidly growing database constitutes a test of nineteenth- and twentieth-century theories about evolution and a source of insights for new theories. We discuss what genome sequences have to teach us about the relatedness of living organisms, the diversity of cellular life, mechanisms of genome change over evolutionary time, and the nature of key events in the history of life on earth. The scientific issues are related to the history of evolutionary thought and current public controversies about evolution.

Instructor(s): J. A. Shapiro, M. Long
Terms Offered: Not offered in 2018-2019
Prerequisite(s): Consent of instructor. This course does not meet requirements for the biological sciences major.
Equivalent Course(s): BIOS 29319

**BPRO 29200. Global Energy & Climate Challenge: Economics, Science & Policy. 100 Units.**

The global energy and climate challenge is one of the most important and urgent problems society faces. Progress requires identifying approaches to ensure people have access to the inexpensive and reliable energy critical for human development, without causing disruptive climate change or unduly compromising health and the environment. The course pairs technical and economic analysis to develop an understanding of policy challenges in this area. Lecture topics will include the past, present, and future of energy supply and demand, global climate change, air pollution and its health consequences, selected energy technologies such as solar photovoltaics, nuclear power, unconventional oil and gas, and an analysis of theoretical and practical policy solutions in developed and emerging economies.

Instructor(s): M. Greenstone, J. Deutch
Terms Offered: Not offered in 2018-2019
Prerequisite(s): PQ: Third- or fourth-year standing in the College.
Equivalent Course(s): ECON 26730, PBPL 29200, PPHA 39905, ENST 28220
BPRI 29660. Colloquium: Digital Humanities/Digital History. 100 Units.
This course will be an interdisciplinary introduction to digital humanities broadly writ with an emphasis on literary and historical developments over long periods of time (longue durée), and across large textual, cultural, and archival databases. Questions we will address include how do we constitute and navigate these collections? How do we conceive of digital tools in ways that speak to humanists and humanistic social scientists? How do we incorporate these tools and approaches into discursive argumentation and other traditional humanistic and historical modes of inquiry. No technical background is required, but basic computer skills and reading knowledge of French would be welcome. History concentrators may direct their coursework in this class toward the completion of a pre-BA essay for the major using primary sources.
Instructor(s): C. Gladstone, R. Morrissey, J. Sparrow Terms Offered: Not offered in 2018-2019
Prerequisite(s): History majors must take a History colloquium in their third year.
Equivalent Course(s): HIST 39661, FREN 39661, FREN 29661, HIST 29661
CHICAGO STUDIES

Department Website: http://chicagostudies.uchicago.edu

Chicago Studies (http://chicagostudies.uchicago.edu) engages the intellectual, creative, and civic energies of University of Chicago undergraduates in the life of the diverse communities that make up this city. A partnership between the College via the Program on the Global Environment (PGE) (http://environmentalstudies.uchicago.edu) and the Office of Civic Engagement (OCE) (http://civicengagement.uchicago.edu), Chicago Studies provides opportunities for students and faculty to engage with and learn from the people and institutions of Chicago, encouraging integration of these experiences with their academic interests and reciprocal collaborations between the campus and the city. Through Chicago Studies, the College seeks to make possible intensive, place-based academic encounters, while also helping students critically think about cities through urban-focused course offerings.

Chicago Studies sponsors a regular workshops and seminars series (co-sponsored with UChicago Urban (http://urban.uchicago.edu)) on Chicago-focused research and social issues that introduces College students to potential mentors and research topics. This workshop is complemented by a one-day symposium on Chicago-engaged research (including capstone projects executed as part of the Chicago Studies Certificate Program (http://chicagostudies.uchicago.edu/certificate/capstone)). The “Engage Chicago through Research” data portal (http://chicagostudies.uchicago.edu/research) collects and promotes Chicago-focused datasets and research, including student research, to further promote the study of the city. And each year, the Chicago Studies Annual also collects the best essays written by University of Chicago undergraduates on the history, politics, and cultural life of Chicago for publication in a professionally edited and designed journal. A committee of College faculty considers submissions, which may be from any discipline, each spring.

As a partnership with the University’s Office of Civic Engagement (http://civicengagement.uchicago.edu), Chicago Studies offers and curates co-curricular experiences (http://chicagostudies.uchicago.edu/events) that introduce students and faculty to events, resources, and organizations throughout the Chicago region. Students in the College can also obtain advising and resources to connect their programs of study with partners and communities across the city. Chicago Studies works closely with Career Advancement (http://careeradvancement.uchicago.edu), the Institute of Politics (http://politics.uchicago.edu), the Pozen Family Center for Human Rights (http://humanrights.uchicago.edu), and other Civic Engagement– and University Community Service Center–sponsored programs such as Summer Links (https://ucsc.uchicago.edu/page/summer-links-2018) to connect students with substantive internship and research fellowship opportunities with organizations engaged in the life of the city.

CHICAGO STUDIES QUARTERS

The Chicago Studies Quarters offer a cohesive set of courses that join classroom instruction with experiential learning opportunities, using the city and the region as a laboratory. The Chicago Studies Quarter (CSQ) (http://chicagostudies.uchicago.edu/quarter) is a selective, quarter-long academic program that allows a small cohort of students to devote an entire term to the intensive study and exploration of the distinctive folkways and civic codes that distinguish Chicago as a world city. Admitted students enroll in three interrelated courses with a common theme, taught by distinguished scholars in various disciplines. Like Study Abroad courses, CSQ courses utilize excursions within the city, guest speakers, and engagement with civic groups and leaders to enrich class readings and assignments. Participants in the CSQ are required to take all three course offerings, but may register for a fourth course of their choosing provided it does not conflict with the required classes or the mandatory excursions held on Fridays.

Chicago Studies Quarter: Calumet (http://chicagostudies.uchicago.edu/calumet) focuses on topics of human land use in the Calumet Region just south and east of the city. It is a full-time, one-quarter experience intended to help students bridge theory and practice in environmental studies. The program features four integrated courses, projects, field trips, guest lectures, and presentations.

The Chicago Studies Quarters are designed for undergraduates in good academic standing who have completed at least two quarters of study in the College. While the program stipulates no minimum grade-point average, an applicant’s transcript should demonstrate that the applicant is a serious student who will make the most of this opportunity. The Chicago Studies Quarters are open to University of Chicago undergraduate students only; applications from outside the University are not accepted. For more information, please contact Sabina Shaikh (sabina@uchicago.edu) or Emily Talen (talen@uchicago.edu), faculty directors for Chicago Studies.

COURSES ABOUT CHICAGO

In addition to the Chicago Studies Quarter, the College offers other courses that explore aspects of Chicago’s ecology, culture, politics, history, social structure, and economic life. Many of these courses are cross-listed between departments, meaning many of them may fulfill requirements in multiple academic programs; most are integrated into the Urban Environments track of the Environmental and Urban Studies major. Some of them may also contribute to students’ completion of the academic requirements of the Chicago Studies Certificate Program (http://chicagostudies.uchicago.edu/certificate/courses). The courses listed here represent a sample of what is
often available, depending on departmental offerings. Current, thematic listings of such courses are also available on the Chicago Studies website (http://chicagostudies.uchicago.edu/courses).

Historical, literary, artistic, or social scientific explorations of Chicago

Courses using Chicago as a focus or a significant example

- ANTH 25325 History and Culture of Baseball
- CRES 27501 Urban Indians: Native Americans and the City
- ECON 26600 Urban Economics
- ENGL 22903 Literature of the City: Between Utopia and Dystopia
- SOCI 20215 Urban Health
- TAPS 23600 Improv and Sketch

Courses involving active or community-engaged learning in Chicago

- ENST 27420 Urban Gardens: Therapeutic, Educational, and Community Building Practicum
- PBPL 26200-26300 Field Research Project in Public Policy I-II

CHICAGO STUDIES CERTIFICATE PROGRAM

Undergraduate students who wish to integrate their academic inquiry with positive impact in Chicago through sustained community engagement, urban scholarship, and creative expression, now have the opportunity pursue a certificate in Chicago Studies.

Students may begin pursuing the Chicago Studies Certificate Program (CSCP) at any time during their College careers. This will require an initial (and highly preliminary) proposal for how one hopes to fulfill the requirements and an advising session to discuss the plan and resources available to support it. That mandatory advising is provided by the Chicago Studies staff within the Office of Civic Engagement (http://chicagostudies.uchicago.edu/about), with a second required meeting before proposal of the capstone project.

Students who complete the certificate will have that designated on their transcript. The transcript designation and the certificate itself are standalone recognitions, conferred by the College and the Office of Civic Engagement without reference to students' formal degree programs. However, completion of the Chicago Studies Certificate does fulfill the internship/field study requirement of the Environmental and Urban Studies major.

The Chicago Studies Certificate Program includes the following components:

1. Introductory Civic Impact Training Experiences (at least 3)
2. Chicago-Focused Courses (at least 3)
3. High-Impact Community Engagement
4. Capstone Project

1. Introductory Civic Impact Training Experiences (at least 3)

These not-for-credit, non-curricular introductory experiences—some of which are facilitated by external organizations—expose students to local civic actors, civic leadership skills, and Chicago social issues, and are open to all University of Chicago students. As a first stage of the certificate, students must participate in three of these to help them frame, focus, and reflect on the kind of impact they hope to have as engaged scholars. At the end of this, students declare a focus for their certificate work: an issue, an organization, a neighborhood, a population.

A list of currently available civic impact trainings (“modules”) may be found on the Chicago Studies Certificate Program website (http://chicagostudies.uchicago.edu/certificate/modules). A number of existing programs sponsored by the Office of Civic Engagement and its partners (both internal and external) may also fulfill one or more of these requirements; students should discuss this during their initial advising appointment with Civic Engagement's Chicago Studies team (http://chicagostudies.uchicago.edu/certificate/enroll).

2. Chicago-Focused Courses (at least 3)

Each academic year, the University offers a wide range of courses that study Chicago in some capacity (see Courses about Chicago above for examples and the Chicago Studies Certificate Program website (http://chicagostudies.uchicago.edu/certificate/courses) for details).

The Chicago Studies Certificate requires completion of three such courses with a C– or above. Successful completion of any of the Chicago Studies Quarters will satisfy this requirement. Otherwise, students will need to propose and receive faculty approval for a specific theme and receive subsequent approvals for each course chosen along the way.

Petitions should be made in advance of enrollment and will be evaluated on a case-by-case basis, in relation to the petitioner’s stated rationale for including specific courses in their program of study and
engagement. The General Petition Form ([https://college.uchicago.edu/sites/college.uchicago.edu/files/GenerallPetition.pdf](https://college.uchicago.edu/sites/college.uchicago.edu/files/GenerallPetition.pdf)) is available on the College website and should be directed to Dr. Sabina Shaikh (sabina@uchicago.edu)), faculty director for Chicago Studies. Advising on this academic component and selection of appropriate courses is available through the Program on the Global Environment ([https://pge.uchicago.edu](https://pge.uchicago.edu)) and accessible via the Chicago Studies Certificate Program website ([http://chicagostudies.uchicago.edu/certificate/courses](http://chicagostudies.uchicago.edu/certificate/courses)).

3. High-Impact Community Engagement

Program participants must demonstrate a sustained, impactful engagement with Chicago’s diverse communities in the following ways:

- complete at least 200 hours of community-benefiting engagement in Chicago; AND
- receive a positive recommendation from a community-based supervisor of or partner in their engagement; AND
- articulate both academic learning and skills development from this experience and its relevance to the student’s capstone project in a significant way.

Advising on the selection of appropriate engagement opportunities is available through UCSC. Some examples of existing opportunities that could fulfill this program requirement include:

- 200+ hours of documented volunteer engagement on a single community issue through leadership in a community service recognized student organization
- 200+ hours of student employment with a single community organization or on a single issue through community-based Federal Work-Study
- completion of the University Community Service Center’s Summer Links ([https://ucsc.uchicago.edu/page/summer-links-2017](https://ucsc.uchicago.edu/page/summer-links-2017)) internship and social justice education program
- completion of the Institute of Politics ([http://politics.uchicago.edu](http://politics.uchicago.edu)) Summer Political Internship (in Chicago)
- completion of a Pozen Family Center ([http://humanrights.uchicago.edu](http://humanrights.uchicago.edu)) Human Rights Internship (in Chicago)

Program participants may also petition the University Community Service Center to use an experience not listed here toward the certificate requirements. Information about available and forthcoming engagement opportunities, as well as the mechanisms for their approval and documentation, can be found on the Chicago Studies Certificate Program website ([http://chicagostudies.uchicago.edu/certificate/engagement](http://chicagostudies.uchicago.edu/certificate/engagement)).

4. Capstone Project

A Capstone Project is a high-impact learning practice that requires students to integrate, apply, and articulate their learning across a sequence of experiences. Many capstones will be completed during the fourth year of study, but it is possible to complete a capstone earlier.

To receive the Chicago Studies Certificate and transcript designation, program participants must successfully produce a major paper, project, or product (e.g., a discipline-based research project, investigative journalism series, creative production, action research product, etc.) that:

- integrates aspects of the student’s academic and community-based learning throughout the student’s fulfillment of previous certificate components; AND
- takes Chicago either as its focus OR uses it as a significant example (for works focused on broader urban themes); AND
- responds to a community-defined priority or question, including being presented as such to one or more relevant publics.

Advising on and approval of capstone project proposals is run by the Chicago Studies team within the Office of Civic Engagement ([http://civicengagement.uchicago.edu](http://civicengagement.uchicago.edu)), which can assist students in identifying appropriate community partners, issues, and audiences for capstones from Civic Engagement’s citywide network of collaborators. Completed capstone projects are adjudicated and validated by a small committee of faculty, staff, and community partner readers. Students are required to present their capstones at the annual Chicago Studies Symposium.

In the case of capstone projects based on or closely related to a student’s formal academic work (e.g., a BA thesis), the adjudication committee will assess only the capstone’s successful integration of the student’s academic and community-based learning, as required for the certificate. Such evaluations should not be taken as direction of the student’s formal discipline-based academic research.

In addition to the required participation in the Chicago Studies Symposium, students should also, whenever possible, directly present their capstones to relevant publics in the broader community as an expression of reciprocal benefit to those whose community-based knowledge has helped to inform their completion. Where
appropriate, capstone projects may also be submitted for potential inclusion in the Chicago Studies Annual (http://chicagostudies.uchicago.edu/annual).

Questions about the Chicago Studies Certificate Program may be directed to Chris Skrable (cskrable@uchicago.edu), associate director for community-based research and experiential learning in the Office of Civic Engagement. Additional information is also available on the Chicago Studies website (http://chicagostudies.uchicago.edu).

**PRIMARY CONTACTS**

**General Information and Programming**

Chris Skrable  
Associate Director, University Community Service Center  
Office of Civic Engagement  
5525 S. Ellis 162  
773.834.1159  
cskrable@uchicago.edu

**Chicago Studies Quarter**

Sabina Shaikh  
Faculty Director, Chicago Studies Quarter  
Director, Program on the Global Environment  
773.834.4405  
sabina@uchicago.edu

**Faculty Director, Chicago Studies Quarter**

Emily Talen  
1126 E. 59th St.  
talen@uchicago.edu

**Chicago Studies Certificate Program**

Christopher Skrable  
Associate Director, University Community Service Center  
Office of Civic Engagement  
5525 S. Ellis 162  
773.834.1159  
cskrable@uchicago.edu

**Administrative Contact**

Daniel Koehler  
Assistant Dean of the College  
Harper Memorial Library 244  
773.702.0121  
dkoehler@uchicago.edu
THE COMMITTEE ON CLINICAL AND TRANSLATIONAL SCIENCE

Department Website: http://chess.uchicago.edu/CCTS

The Committee on Clinical and Translational Science (CCTS) is a freestanding academic unit housed within the Biological Sciences Division. Our mission is to enhance multidisciplinary training in clinical and translational science at the University of Chicago. We seek to offer high-quality curriculum and mentorship to a new generation of researchers who will synthesize social and biological science to significantly advance medical science and practice.

With joint input from the Center for Health and the Social Sciences (http://chess.bsd.uchicago.edu) (CHeSS) and the Institute for Translational Medicine (http://itm.uchicago.edu), the CCTS mobilizes faculty from across the University to enhance course offerings in clinical and translational science. While most courses offered in CCTS are designed for graduate-level trainees, postdoctoral fellows, and junior faculty, there are also specific courses designed for undergraduate students interested in health and social sciences. For more information contact Kelsey Bogue, Committee Administrator, at kbogue@bsd.uchicago.edu.

Current areas of concentration include:

- Comparative Effectiveness Research
- Translational Informatics
- Health Services Research
- Quality and Safety
- Clinical Research
- Community-Based Research
- Global Health
- Pharmacogenomics

Below is a list of undergraduate courses that have been offered in the past. Refer to the CCTS section of the CHeSS website at http://chess.uchicago.edu/CCTS for current course offerings and prerequisites for each course.

EXAMPLES OF PREVIOUSLY OFFERED UNDERGRADUATE COURSES

CCTS 21003. Topics in Clinical Research. 100 Units.

This course provides an overview of clinical research subject matter from the history and ethics of clinical research to the types and practice of contemporary clinical research. How does clinical research differ from other research traditions? What is special about clinical research? What types of questions can be answered by clinical research (what questions not)? What types of ethical oversight over the responsible conduct of research have arisen over the years? We will learn how to read and critique clinical research, survey the major types of clinical research designs, and the differences between hypothesis generation and hypothesis testing. Finally, we provide an overview of the mechanics of developing and implementing clinical research, including grant writing, regulatory issues, and quality assurance. Along the way, we will be teaching core statistical concepts including prevalence, risk ratios, and sensitivity and validation techniques. The objectives are for students to obtain an understanding of how and why to perform clinical research and to do so in an ethical and responsible manner.

Instructor(s): Valerie Press Terms Offered: Spring. Last offered 2017

Prerequisite(s): Completed general education requirement in the social sciences. This course does not meet requirements for the Biological Sciences major.

Equivalent Course(s): BIOS 29327
CCTS 21004. Christian Traditions and Medicine in the Late Modern World. 100 Units.
The course rests on the assumption that contemporary challenges in medicine stem from a moral pluralism reflecting the cultural conditions of late modernity, as well as from a growing inability to maintain clinical excellence in an increasingly complex and bureaucratic health care system. Throughout American history, Christians have often worked toward cultural change in various vocational spheres in order to align their practices in the world toward a religious and spiritual ideal. This course will explore a theological foundation for a different paradigm of active cultural engagement in medicine and bioethics. First, students will examine traditional Christian accounts both of medicine and of moral formation, to consider how they might inform answer to the question, How does one become (and remain) a good physician? Students will study sacred texts, traditions, and practices of Christianity to search for moral, spiritual, conceptual and practical resources within the tradition that physicians might draw upon to recover ways of practicing medicine as a vocation, as a sacred calling. Second, students will examine the empirical literature from vocational psychology on work motivation, focusing particularly on the construct of calling and its application to the pursuit of clinical excellence in medicine. Third, students will also examine recent research in the field of moral psychology that is shaping contemporary views regarding moral and professional formation and identity. Lastly, after surveying the contemporary challenges in medicine through the above interdisciplinary analyses, students will explore various Christian theological perspectives that attempt to re-imagine what “faithful presence” might entail in the current vocational sphere of medicine. Students will explore the diverse theological perspectives of Catholicism, Protestantism, and Eastern Orthodoxy and bring them to bear on the following questions: “What religious and spiritual resources does their Christian tradition bring to bear on the challenges and opportunities in the vocational sphere of medicine and bioethics? What would it mean to exhibit a “faithful presence” in medicine”? What it might mean for the institutions that shape medicine to truly enhance the communities in which they live?”

Instructor(s): John Yoon
Terms Offered: Winter
Equivalent Course(s): RLST 26315
Examples of Previously Offered Co-Undergraduate/Graduate Courses

CCTS 20400. Health Disparities in Breast Cancer. 100 Units.
Across the globe, breast cancer is the most common women's cancer. In the last two decades, there have been significant advances in breast cancer detection and treatment that have resulted in improved survival rates. Yet, not all populations have benefited equally from these improvements, and there continues to be a disproportionate burden of breast cancer felt by different populations. In the U.S., for example, white women have the highest incidence of breast cancer but African-American women have the highest breast cancer mortality overall. The socioeconomic, environmental, biological, and cultural factors that collectively contribute to these disparities are being identified with a growing emphasis on health disparities research efforts. In this 10-week discussion-based course students will meet twice weekly and cover major aspects of breast cancer disparities.
Instructor(s): Eileen Dolan, Suzanne Conzen Terms Offered: Winter
Prerequisite(s): BIOS 25108
Equivalent Course(s): CCTS 40400, BIOS 25327

CCTS 21005. The Making of the 'Good Physician': Virtue Ethics and the Development of Moral Character in Medicine. 50 Units.
This multi-disciplinary course draws insights from medicine, sociology, moral psychology, philosophy, ethics and theology to explore answers to the unique challenges that medicine faces in the context of late modernity: How does one become a 'good physician' in an era of growing moral pluralism and health care complexity? Students will engage relevant literature from across these disciplines to address issues regarding the legitimate goals of medicine, medical professionalism, the doctor-patient relationship, vocation and calling, the role of religion in medicine, and character development in medical education. The course will first introduce the challenges that moral pluralism in contemporary society presents to the profession of medicine along with the subsequent calls for a renewed pursuit of clinical excellence in today's complex health care system. It will then survey the resurgence of a philosophical discipline (virtue ethics) that has begun to shape contemporary debate regarding what types of 'excellences' are needed for a good medical practice dominated by medical science and technology.
Instructor(s): John Yoon Terms Offered: Spring
Note(s): This course is limited to those who have been accepted into the Emerging Scholars Cohort in Bioethics (Hyde Park Institute, https://hydeparkinstitute.org/esc). Depending on space availability, other students interested in enrolling will need prior approval from Course instructor(s).
Equivalent Course(s): CCTS 41005

CCTS 40006. Pharmacogenomics: Discovery and Implementation. 100 Units.
Pharmacogenomics is aimed at advancing our knowledge of the genetic basis for variable drug response. Advances in genetic knowledge gained through sequencing have been applied to drug response, and identifying heritable genetic variants that predict response and toxicity is an area of great interest to researchers. The ultimate goal is to identify clinically significant variations to predict the right choice and dose of medications for individuals—"personalizing medicine." The study of pharmacogenomics is complicated by the fact that response and toxicity are multigenic traits and are often confounded by nongenetic factors (e.g., age, co-morbidities, drug-drug interactions, environment, diet). Using knowledge of an individual's DNA sequence as an integral determinant of drug therapy has not yet become standard clinical practice; however, several genetics-guided recommendations for physicians have been developed and are highlighted. The ethics and economics of pharmacogenomics are also discussed.
Instructor(s): R. S. Huang, B. Stranger Terms Offered: Spring
Prerequisite(s): Undergraduates (third- and fourth-years only) must have taken BIOS 20187 and are required to email instructors for approval (bstranger@medicine.bsd.uchicago.edu and rhuang@medicine.bsd.uchicago.edu) prior to registering.
Equivalent Course(s): CABI 47510

CCTS 43100. Topics in Global Health. 100 Units.
This course is a continuation of Introduction to Global Health (CCTS 43000). It is designed to address specific medical issues of global significance including maternal and child health, communicable and non-communicable diseases, and emerging diseases; the course will also address the impact of population growth, migration, environmental decay, and humanitarian disasters on health. Finally, the course will discuss research and career opportunities within the field of global health.
Instructor(s): C. S. Olopade Terms Offered: Winter
Prerequisite(s): This course does not meet the requirements for the Biological Sciences major.
Equivalent Course(s): BIOS 29279
The College is launching a new, innovative curricular initiative. The Course Cluster Initiative (https://college.uchicago.edu/academics/college-course-clusters) is designed to continue the thematic focus and multidisciplinary perspective of the general education curriculum; to expose students to ideas from the vantage point of different disciplines across the humanities and the social, physical, and biological sciences; to stimulate and cultivate the student's intellectual curiosity and sense of academic adventure; and to help students structure their electives without imposing programmatic strictures and limiting the freedom of intellectual exploration.

Course clusters consist of three or more courses on a common topic or issue that are offered over a span of two to three years. Course clusters can be made up of existing courses or encourage the creation of new courses. Courses within a cluster can have different formats. They can be smaller seminars or larger lecture courses. The only prerequisite is that they have no prerequisites and not be designed primarily for minors/majors (even though they can count towards major requirements).

Please review the College Course Clusters page (https://college.uchicago.edu/academics/college-course-clusters) for updated information regarding the Course Cluster Initiative, including courses belonging to each cluster.

The following are examples of course clusters currently offered:

**Climate Change, Culture, and Society**

The planetary scale of anthropogenic climate change challenges us to reassess many central questions in the humanities and social sciences from justice and power to truth and art. This course cluster encourages students to explore the problem of climate change from a variety of disciplinary perspectives. Courses in history, political science, classics, English, philosophy, and other disciplines from the social sciences and the humanities complement courses in the physical and biological sciences. In addition to learning about the science of climate change in the latter, the former will ask a host of questions: What were the historical roots of fossil fuel use? What can the human past teach us about our ability to cope with climate change? How will we ensure justice and human rights in the face of a threat that affects poor people and future generations disproportionately? In what ways might literature and art help understand and communicate climate change, and shape our sense of agency and hope in facing an uncertain future?

**Economic History, from Sumer to the Global World**

The course cluster "Economic History, from Sumer to the Global World" will propose every year up to three courses in economic history. We wish to cover a broad time span and a wide range of cultures. The courses will put a special emphasis on the methodology of economic history. The students will thus also be able to acquire a deep knowledge of the questions that are currently debated in this field.

**History of the Law**

The development of law and legal systems is one of the defining hallmarks of societies from antiquity to the present. Abundant written evidence survives from the societies of the ancient Mediterranean, the Near East, South Asia, and East Asia. This cluster of courses will include deep dives into individual legal systems known from ancient societies in Greece, Rome, Babylonia, Assyria, Israel, Egypt, China, and India, as well as comparative investigations informed by historical and anthropological literatures.

**Inequality**

The problem of inequality has been an abiding concern in the social sciences and humanities. In recent years it has attracted heightened attention and inspired scholarly innovation, fostering real ferment among those seeking to understand the mainsprings of the modern world. To understand such an abiding aspect of social and cultural organization requires a broad set of analytical resources and intellectual perspectives. Drawing on a range of methodologies, students will trace and examine the sources and challenges of inequality and mobility in many of their dimensions, selecting from courses in economics, history, political science, gender and sexuality studies, public policy, and other disciplines across the divisions. The broad, considered lens offered by this approach will allow students in the cluster to understand more fully the dynamics and consequences of inequality in modern culture and society, and its roots in persistent patterns of distribution of wealth, income, education, and social and other kinds of capital.

**Urban Design**

Urban design concerns the proactive effort to create human settlements of a particular character and quality. The study of urban design is an opportunity to evaluate the difference between ideal and actuality, gaining an understanding of what urban designers are trying to do and why and evaluating the reasons behind apparent successes and failures. Students will explore the history, theory, and practice of urban design from multiple perspectives, from historical surveys to more contemporary investigations of urban interventions and their effect on social change, in courses offered through art history, geographical studies, history, anthropology, sociology, comparative human development, and other disciplines from the social sciences and humanities. Whether urban design is capable of balancing social equity, aesthetic achievement, economic growth, and
environmental stewardship is of key interest within the field, practice, and study of urban design. How do we leverage meaningful public engagement in the urban design process? How do we balance individual expression and a sense of the collective? Students will engage with these fundamental problems in diverse contexts across the cluster.
Signature Courses in the College

Signature Courses are intended to introduce College students to exciting themes, ideas, and materials in the humanities and social sciences. They afford unique and memorable learning experiences, exemplary of humanistic inquiry.

They are designed as gateway courses that open up fields and disciplines for further exploration. Thus, Signature Courses have no prerequisites and are open to all College students. While they are conceived as general elective courses, they may count towards departmental major and minor requirements.

Please refer to the College Signature Courses page (https://college.uchicago.edu/academics/college-signature-courses) on the College website for the most up-to-date information about Signature Courses being offered.
Stevanovich Institute on the Formation of Knowledge

Department Website: https://sifk.uchicago.edu/courses

The Stevanovich Institute on the Formation of Knowledge unites scholars from a variety of fields to study the process of knowledge formation and transmittal from antiquity to the present day and, in correlation, to explore how this history shapes the modern world. By rigorously exploring the underlying influences on what is accepted as true, the institute aims to understand the basis of human values and provide insights into contemporary issues.

The institute’s Faculty and External Faculty Group are committed to investigating all aspects of the processes by which cultures claim to know what they know. Where are the boundaries between knowledge and belief? What techniques do cultures deploy to encode and verify information, and how do technological developments—in forensics and measurement, for example—impinge on these areas? What awareness do societies show regarding what is contingent about their deepest commitments? These questions may be put historically and cross-culturally. They also need urgently to be posed about those who work in notionally rational modern institutions, such as the university and the lab.

The Stevanovich Institute joins these faculty with fellows at every stage of the career from graduate and post-graduate to senior visiting scholars, in the context of the extraordinary resources of the University of Chicago, to question and enrich each other, in conversation about the past, present, and future of human knowledge.

KNOW courses are offered by the faculty (https://sifk.uchicago.edu/directory-page) and fellows (https://sifk.uchicago.edu/directory-page/postdoctoral-fellows) of the Stevanovich Institute on the Formation of Knowledge at both the graduate and the advanced undergraduate levels. Courses are cross-listed with a variety of departments, so students can enroll in them as a major course with their department’s course number or as an elective with the KNOW course number.

For undergraduate funding opportunities, events, and up-to-date course listings, visit sifk.uchicago.edu.

XCAP: The Experimental Capstone

In addition to its regular KNOW courses, and as an unprecedented experience in undergraduate teaching, the Stevanovich Institute on the Formation of Knowledge will be offering, XCAP: The Experimental Capstone, with one new class debuting each quarter of 2018–19. These team-taught courses are for fourth-year students only and will challenge them to build upon their University of Chicago educational experience by adding practice, impact, and influence as important dimensions for undergraduate education.

XCAP courses will incorporate a variety of topics and frameworks, but inherent in each of these courses are the following three elements:

1. an element of practice, a result in a product, or a measurable impact;
2. an appeal to students from all the College divisions for maximal interaction of different points of view; and
3. a part of the college experience with particular relevance to post-college life.

All XCAP courses will be team-taught by faculty from different divisions or schools and will involve two or three faculty or postdoctoral fellows. Students may take one, two, or all three courses as they wish. Admission will be by application, and a cohort of no more than 15 will be selected. For details see the Stevanovich Institute website: https://sifk.uchicago.edu/courses/xcap/.

Stevanovich Institute on the Formation of Knowledge Courses

KNOW 12203. Italian Renaissance: Dante, Machiavelli, and the Wars of Popes and Kings. 100 Units.

This course will consider Florence, Rome, and the Italian city-states in the age of plagues and cathedrals, Dante and Machiavelli, Medici and Borgia (1250-1600), with a focus on literature, philosophy, primary sources, the revival of antiquity, and the papacy’s entanglement with pan-European politics. We will examine humanism, patronage, politics, corruption, assassination, feuds, art, music, magic, censorship, education, science, heresy, and the roots of the Reformation. Writing assignments focus on higher-level writing skills, with a creative writing component linked to our in-class live-action-role-played (LARP) reenactment of a Renaissance papal election. This is a Department of History Gateway course.

Instructor(s): A. Palmer
Terms Offered: Spring
Prerequisite(s): Graduate students by consent only; register for the course as HIST 90000 (sect 53) Reading and Research: History.

Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages

Equivalent Course(s): CLCV 22216, RLST 22203, SIGN 26034, ITAL 16000, HIST 12203
KNOW 15013. Medicine and Society in America. 100 Units.
The course provides an introduction to central questions in American medicine from the early colonial period to the present day. Topics covered include epidemics in the early colonies; frontier medicine and alternative healers; urbanization, hygiene and the state; race, empire, and medicine; sexual health and reproductive rights; the politics of addiction; and the rise of biomedicine, genetics, and genomics, among others. Students will gain from this course both an understanding of major trends and transformations in American medicine, as well as a more nuanced feel for present-day debates about health-care rights and policies in America. Requirements will include short weekly responses to class readings and a final paper of six to eight pages.

Instructor(s): M. Rossi

Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.

Equivalent Course(s): HIPS 15013, HIST 15003

KNOW 17403. Science, Culture, and Society in Western Civilization II: Early Modern Period. 100 Units.
Section 1, offered by Robert J. Richards - "Renaissance & Enlightenment." This lecture-discussion course examines the development science and scientific philosophy from the mid-fifteenth to the mid-nineteenth centuries. The considerations begin with the recovery of an ancient knowledge in the works of Leonardo, Vesalius, Harvey, and Copernicus. Thereafter the course will focus on Enlightenment science, as represented by Galileo, Descartes, Newton, and Hume. The course will culminate with the work of Darwin, who utilized traditional concepts to inaugurate modern science. For each class, the instructor will provide a short introductory lecture on the texts, and then open discussion to pursue with students the unexpected accomplishments of the authors under scrutiny. Section 2, offered by Margaret Carlyle - "Revolutions in Astronomy & Anatomy." This course explores scientific developments in Western Europe from the sixteenth-century Scientific Revolution to the eighteenth-century Enlightenment. During this period, European understandings of the natural world-and ways of achieving such understandings-underwent a series of radical and far-reaching transformations that are often called the Scientific Revolution.

Instructor(s): Robert J. Richards, Margaret Carlyle Terms Offered: Autumn Winter

Note(s): Offered by Robert J. Richards in Fall 2018, and by Margaret Carlyle in Winter 2019.

Equivalent Course(s): HIPS 17403, HIST 17403

KNOW 21415. Evolution Before Darwin. 100 Units.
This course will explore the emergence and development of evolutionary thought prior to Charles Darwin’s On the Origin of Species (1859). We will pay particular attention to the way in which transformism was a feature of nineteenth-century thought more generally, connecting natural history to astronomy, theology, and the study of humanity. Natural philosophers and later scientists who wished to make arguments concerning nature’s deep past and hidden or obscured processes (such as the long-term transformations of stars, strata, and organic species) faced an essential problem: the power of observation and experiment was limited. Our class will interrogate this problem, and examine the way in which the development of evolutionary thought prior to Darwin was intimately connected to contentious debates regarding speculation and scientific method. We will conclude by contemplating the ways in which the ideas and challenges raised by transformism and evolution influenced the reception of Darwin’s work, and the way in which these ideas and challenges remain embedded within seemingly disparate fields of study today.

Instructor(s): J. Daly Terms Offered: Winter

Equivalent Course(s): HIST 25316, ORGB 30415, ECEV 30415, HIPS 21415

KNOW 21416. Reproduction and Motherhood in Multimedia (1800-present) 100 Units.
What do artificial wombs, monstrous creations, and dystopian medical landscapes have in common? Answers to these questions are the subject of this interdisciplinary course in which we explore the many ways in which human reproduction has entered multimedia from the eighteenth century through present. In our course, the concept of ‘reproduction’ will be problematized through film, advertising, texts, literature, and objects. Through these sources, we will critically explore how popular representations of human reproduction have shaped the status of the female body and notions of motherhood over time. We will also see how the liberating potential of new forms of multimedia have often served to reinforce—rather than resist or re-imagine—longstanding motifs and beliefs surrounding the maternal body and womanhood, from the image of the hysterical woman to that of the monstrous mother. Themes covered include the science of reproduction, hysteria, monstrosities, maternal imagination, artificial life, race, contraception, in/fertility, and sex education.

Instructor(s): Margaret Carlyle Terms Offered: Autumn

Equivalent Course(s): GNSE 21416, HIPS 21416, CRES 21416
KNOW 22709. Introduction to Quantum Mechanics, Introduction to Philosophy of Quantum Mechanics. 100 Units.
In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. (B)
Instructor(s): T. Pashby Terms Offered: Winter
Prerequisite(s): Prior knowledge of quantum mechanics is not required since we begin with an introduction to the formalism, but familiarity with matrices, freshman calculus and high school geometry will be presupposed.
Equivalent Course(s): HIPS 22709, PHIL 22709, PHIL 22709, HIPS 22709

KNOW 24112. Screening India: Bollywood and Beyond. 100 Units.
Cinema is, unarguably, the medium most apposite for thinking through the complexities of democratic politics, especially so in a place like India. While Indian cinema has recently gained international currency through the song and dance ensembles of Bollywood, there remains much more to be said about that body of films. Moreover, Bollywood is a small (though very important) part of Indian cinema. Through a close analysis of a wide range of films in Hindi, Bengali, Kannada, and Urdu, this course will ask if Indian cinema can be thought of as a form of knowledge of the twentieth century.
Instructor(s): R. Majumdar Terms Offered: Spring
Equivalent Course(s): CMST 34112, CMST 24112, HIST 26808, SALT 20511, SALT 30511, HIST 36808, KNOW 34112

KNOW 25308. Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences. 100 Units.
In this course we will examine the ways in which different groups of people—in different times and places—have understood the nature of life and living things, bodies and bodily processes, and health and disease, among other notions. We will address these issues principally, though not exclusively, through the lens of the changing sets of methods and practices commonly recognizable as science and medicine. We will also pay close attention to the methods through which scholars in history and anthropology have written about these topics, and how current scientific and medical practices affect historical and anthropological studies of science and medicine.
Instructor(s): M. Rossi Terms Offered: Winter
Note(s): This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40202 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): ANTH 24307, ANTH 34307, HIST 35308, KNOW 40202, CHSS 35308, HIPS 25808, HIST 25308

KNOW 25425. Censorship, Info Control, & Revolutions in Info Technology from the Printing Press to the Internet. 100 Units.
The digital revolution is triggering a wave of new information control efforts and censorship attempts, ranging from monopolistic copyright laws to the “Great Firewall” of China. The print revolution after 1450 was a moment like our own, when the explosive dissemination of a new information technology triggered a wave of information control efforts. Many of today’s attempts at information control closely parallel early responses to the printing press, so the premodern case gives us centuries of data showing how diverse attempts to control or censors information variously incentivized, discouraged, curated, silenced, commodified, or nurtured art, thought, and science. This unique course is part of a collaborative research project funded by the Neubauer Collegium for Culture and Society and is co-organized with digital information expert Cory Doctorow. The course will bring pairs of experts working on the print and digital revolutions to campus to discuss parallels between their research with the class. Classes will be open to the public, filmed, and shared on the Internet to create an international public conversation. This is also a Department of History “Making History” course: rather than writing traditional papers, students will create web resources and publications (print and digital) to contribute to the ongoing collaborative research project.
Instructor(s): A. Johns & A. Palmer Terms Offered: Autumn
Note(s): Making History courses forgo traditional paper assignments for innovative projects that develop new skills with professional applications in the working world. Open to students at all levels, but especially recommended for 3rd- and 4th-yr students. This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40103 to be eligible to apply for the SIFK dissertation fellowship.
Equivalent Course(s): SIGN 26035, HIPS 25425, KNOW 40103, BPRO 25425, HIST 35425, HREL 35425, CHSS 35425, HIST 25425
KNOW 27004. Babylon and the Origins of Knowledge. 100 Units.
In 1946 the famed economist John Maynard Keynes declared that Isaac Newton “was the last of the magicians, the last of the Babylonians.” We find throughout history, in the writings of Galileo, Jorge Luis Borges, Ibn Khaldun, Herodotus, and the Hebrew Bible, a city of Babylon full of contradictions. At once sinful and reverential, a site of magic and science, rational and irrational, Babylon seemed destined to resound in the historical imagination as the birthplace of knowledge itself. But how does the myth compare to history? How did the Babylonians themselves envisage their own knowledge? And is it reasonable to draw, as Keynes did, a line that begins with Babylon and ends with Newton? In this course we will take a cross comparative approach, investigating the history of the ancient city and its continuity in the scientific imagination.
Instructor(s): E. Escobar Terms Offered: Autumn
Equivalent Course(s): HIST 25617, NEHC 20215, HIPS 27004

KNOW 27860. History of Evolutionary Behavioral Sciences. 100 Units.
This course will consist in lectures and discussion sessions about the historical and conceptual foundations of evolutionary behavioral sciences (evolutionary anthropology, evolutionary psychology, ethology, comparative behavioral biology), covering the period from the publication of Charles Darwin’s The Origin of Species up to the present day. Topics will include new theoretical developments, controversies, interdisciplinary expansions, and the relationships between evolutionary behavioral sciences and other disciplines in the sciences and the humanities.
Instructor(s): D. Maestripieri Terms Offered: Autumn 2018
Prerequisite(s): N/A
Equivalent Course(s): CHDV 37860, CHDV 27860, HIPS 27860, CHSS 37860

KNOW 28900. Magic, Science, and Religion. 100 Units.
The relationship between the categories of magic, science, and religion has been a problem for modern social science since its inception in the nineteenth century. In the first half of this course, we will critically examine some of the classical and contemporary approaches to these concepts. In the second half, we will explore a number of detailed historical and ethnographic studies about modern phenomena that call some of the fundamental assumptions behind these categories into question.
Instructor(s): A. Doostdar Terms Offered: Winter
Equivalent Course(s): RLST 28900, ANTH 23906

KNOW 29629. Tutorial: Romantic Bodies: Theater in the History of Science and Medicine. 100 Units.
It seems that science and theater have longed shared an ambiguous treatment as amoral yet bordering the ethically suspect. Scientific, medical, and technological advancements alter our everyday lives in profound ways and theater can play with the development and repercussions of these advancements, altering our memories of history. This stimulates a line of questioning for historians who view “science plays,” or plays that use science as the basis of their content and often also their form. In this tutorial, we will explore how these plays can (or cannot) fit into intellectual history as well as social and cultural histories of science. We will investigate how these plays can act as vehicles for remembering (or reconstructing) histories of science, reminding ourselves that the moral quandaries and ethical dilemmas that we juggle in science and medicine are as recurring as the theatrical productions are.
Instructor(s): Ashley Clark Terms Offered: Autumn. Autumn 2018
Equivalent Course(s): HIPS 29629, HIST 24920

KNOW 29630. Tutorial: History and Philosophy of Social Science. 100 Units.
Sociology and anthropology are highly self-reflexive disciplines. Their own contested histories have been taught and critiqued as a matter of course in the majority of sociology and anthropology departments in the US and Europe since their inception—hardly a surprise, given how dense, kaleidoscopic, and political they are. Meanwhile, the philosophy of social science has been gaining popularity in philosophy departments, apparently independently of the centuries-old reflection on social scientific methodologies that can be found within sociological and anthropological texts. In true interdisciplinary fashion, this course seeks to marry these areas of scholarship, bringing together readings in philosophy, sociology, anthropology, and classical social theory, under the common themes that unite (and divide) them. We will cover debates on the epistemological priority of the individual or of society, the priority of naturalist or humanist perspectives, and the generalisability or spatio-temporal specificity of social scientific explanations.
Instructor(s): Parysa Mostajir Terms Offered: Autumn. Autumn 2018
Equivalent Course(s): HIPS 29630
KNOW 35000. Winckelmann: Enlightenment Art Historian and Philosopher. 100 Units.
We approach the first great modern art historian through reading his classic early and mature writings and through the art and criticism of his time (and at the end, our own). Reading-intensive, with a field trip to the Art Institute.
Instructor(s): Andrei Pop
Terms Offered: Autumn
Prerequisite(s): German reading competence helpful, but NOT required.
Equivalent Course(s): SCTR 35000, ARTH 25115, GRMN 25015, ARTH 35115, GRMN 35015, CLAS 35014
JOINT DEGREE PROGRAMS

The University offers a number of joint degrees to students in the College. Joint BA-MA/MS programs permit qualified students to enter upon a course of graduate study while also completing their work in the College. Applicants must have completed a significant portion of their undergraduate program before they can apply to master's level programs. Generally this means that students are admitted to candidacy for the master's degree during their fourth year in the College. During this year of graduate work, students will be billed for tuition at the graduate rate.

Interested students should discuss their plans with their College adviser and aim to complete all of their general education requirements by the end of their second year. All applicants to joint degree programs must meet with their College adviser in the Autumn Quarter of their third year.

Any department may initiate a joint program by submitting a program proposal to the College Curriculum Committee.

FIVE-YEAR JOINT BACHELOR’S/MASTER’S PROGRAMS

Five-year joint bachelor’s/master’s programs permit undergraduate students to begin a master’s degree program during their fourth year in the College. Successful students earn a bachelor’s degree at the end of their fourth year and a master’s degree at the end of their fifth year.

Students begin the application process in the Autumn Quarter of their third year by meeting with their College adviser. By the end of the third year, all joint degree candidates will need to complete at least 39 of the required 42 credits for the undergraduate degree, including all general education requirements (students should consult the individual five-year programs to determine the exact number of credits that need to be completed).

Students pursuing joint degrees should be aware that they will be charged at the graduate tuition rate in their fourth year of study. College aid can be applied toward tuition charges in the fourth year of study but will not extend into the fifth year. Students should check with individual graduate programs to pursue the possibility of supplemental aid.

- Joint BA/MA in Computational Social Science
- Joint BA/MAT in Education and Teaching Certificate
- Joint BA/MA in the Humanities (Two-Year Language Option)
- Joint BA/MA in Middle Eastern Studies
- Joint BA/MPP in Public Policy Studies (Harris)
- Joint BA/MS in Computational Analysis and Public Policy (Harris)
- Joint BA/MA in Social Service Administration
- Professional Option: Medicine

FOUR-YEAR JOINT BACHELOR’S/MASTER’S PROGRAMS

Four-year joint bachelor’s/master’s programs permit successful undergraduate students to complete a master’s degree program over their fourth year in the College. Though their admissions criteria vary, they are all highly selective programs. Interested students should discuss their plans with their College adviser and aim to complete all of their general education requirements by the end of their second year. Students planning to pursue a joint degree in the physical sciences should consult closely with their individual departments regarding course selection in their major.

Students apply to four-year joint bachelor’s/master’s programs during their third year in the College. They begin the process before the end of the Autumn Quarter by meeting with both their College Adviser and the joint degree program coordinator in their department of interest. They are also required to meet with the dean of students in their prospective graduate division. By the end of the third year, all joint degree candidates will need to complete at least 39 of the required 42 credits for the undergraduate degree; this should include all general education requirements.

Students pursuing joint degrees typically register for nine courses in their fourth and final year of study. In the humanities and social sciences programs, all course work will be graduate level. In the physical sciences, students will work with program advisers to develop an individualized program of course work. All students will be allowed to use up to three credits from their graduate course work to fulfill the remaining credits for the undergraduate degree. (Candidates may petition the director of undergraduate studies to apply the three graduate courses toward their major; otherwise the courses will be applied toward general electives).

Students should be aware that they will be charged at the graduate tuition rate in their fourth year of study. College aid can be applied toward tuition charges in the fourth year of study but will not cover the additional expenses associated with graduate tuition rates and fees. Students should check with individual graduate programs to pursue the possibility of supplemental aid.
• Joint BS/MS in Chemistry
• Joint BA/MS or BS/MS in Computer Science
• Joint BA/MA in the Humanities
• Joint BA/MA in International Relations
• Joint BA/MA in Latin American and Caribbean Studies
• Joint BA/MS or BS/MS in Mathematics
• Joint BA/MA in the Social Sciences
• Joint BA/MS or BS/MS in Statistics

Notes
* Courses in a minor cannot be double-counted anywhere in a student's program, including in the graduate portion of the degree.
† Students pursuing a BA project are typically expected to register for one or two BA workshops in their fourth year. These workshops count as courses in the undergraduate program and are in addition to the nine graduate courses associated with most joint degree fourth-year curricula. Joint degree candidates should be aware that registration for a fourth course in any term may result in higher tuition. Students are encouraged to complete their BA project before beginning their graduate course work.
JOINT BS/MS IN CHEMISTRY

Students who achieve advanced standing through their performance on placement examinations or accreditation examinations may consider the formulation of a four-year degree program that leads to the concurrent award of the BS and MS degrees in chemistry. For more information, consult Ka Yee Lee at kayeelee@uchicago.edu and Vera Dragisich at vdragis@uchicago.edu in the Department of Chemistry.
The Master of Arts in Computational Social Science is a two-year program of graduate study. It has a structured curriculum, with a total of 18 required and elective courses tailored to the disciplinary track a student follows. Students submit an article-length MA thesis in their second year, after completing a three-quarter research commitment working directly with a member of our executive or affiliated faculty.

The program aims to produce leading social scientists in each of our core social science fields—economics, sociology, political science, psychology, history, and anthropology—producing competitive PhD applicants, well-trained in computational approaches, who have mastered the research and analytical skills necessary to make important contributions.

Students receive close mentorship from the program’s faculty director, academic staff, and members of our executive and affiliated faculty. They receive full professional support from our director of career services, with biweekly workshops, career planning, and employer recruitment.

Finally, all MA students may participate in an optional summer practicum between their first and second years, with internships drawn from academic and professional organizations. International students have three years of STEM work eligibility after they graduate.

PROGRAM REQUIREMENTS AND COURSE WORK

All MA students complete the equivalent of 18 graduate seminars and write an article-length MA thesis.

The courses are selected with the advice of our academic staff and follow different disciplinary tracks, tailored to the research commitments of each student.

In their first year, all students take a three-course core in Perspectives: Perspectives on Computational Analysis, Perspectives on Computational Modeling, and Perspectives on Advanced Computational Topics.

Most take a three-course sequence on Computer Science with Applications (with more advanced courses for students with prior exposure and an optional sequence in Computational Neuroscience for psychology concentrators).

The remaining three courses vary and depend on the student’s prior training and disciplinary path. Priority will go to any needed courses in statistics, linear algebra, or advanced math in particular disciplines (e.g., real analysis in economics). If those requirements are met, the student will take up to three social science electives in their area of research.

In their second year, all students complete a three-course “research commitment,” working directly with a member of our computational faculty, producing an MA thesis modeled on a professional journal article. They take three advanced courses in computational methods, tailored to their disciplinary interest. And they complete three social science electives in their area of research.

If students desire, they can petition to replace any portion of the three-quarter research commitment with social science electives or other courses in computational methods.

Outside of their course work, all MA students are expected to attend our weekly Computation Workshop, where advanced scholars and invited guests present drafts of their research for critique and discussion.

ADMISSION

Students who wish to pursue a joint BA/MA degree should consult first with their College adviser and then with the associate dean of students (Kelly Pollock, kpollock@uchicago.edu) in the Autumn Quarter of their third year.

Any questions about the Master of Arts in Computational Social Science can be directed to our managing director (Chad Cyrenne, c-cyrenne@uchicago.edu).

APPLICATION REQUIREMENTS

- Applicants are expected to have a GPA of 3.55 or higher.
- Applications are due by February 1.
- The application (https://apply-ssd.uchicago.edu/apply) is submitted online to the dean of students of the Division of the Social Sciences. (See apply-ssd.uchicago.edu/apply.)
- BA/MA applicants should not pay the application fee. Email admissions@ssd.uchicago.edu (admissions@ssd.uchicago.edu?subject=Fee Waiver BA/MA Dual Degree Program) to ask how to receive the fee waiver.
• GRE scores are not required.
• Prospective BA/MA students are expected to complete all of their general education requirements and all but three of their BA requirements before they begin the BA/MA program in the Autumn Quarter of their fourth year.
• Up to three graduate courses can be used as electives in the undergraduate program or can be applied to the undergraduate major, by petition to the director of undergraduate studies.
• Students in the BA/MA program are charged tuition at graduate rates in their fourth year. They retain whatever aid has been provided in the College. In their fifth year, students are eligible for an award of two-thirds tuition if they achieve a 3.4 GPA over their first nine courses.
• Students may walk and receive the BA in June of their fourth year if they wish to graduate with other members of their College class.
• All other requirements for the MA degree are identical.

HOW TO APPLY
The Application for Admission and Financial Aid, with instructions and deadlines, is available online at: https://apply-ssd.uchicago.edu/apply.
For additional information about our program, please contact E. G. Enbar, our student affairs administrator, at 773.702.8312 or egenbar@uchicago.edu.
Please also visit our website: https://macss.uchicago.edu
OUTSTANDING UNDERGRADUATES MAY APPLY TO COMPLETE AN MS IN COMPUTER SCIENCE ALONG WITH A BA OR BS (GENERALIZED TO "BX") DURING THEIR FOUR YEARS AT THE COLLEGE. STUDENTS MUST BE ADMITTED TO THE JOINT MS PROGRAM. THERE ARE THREE DIFFERENT PATHS TO A BX/MS: A RESEARCH-ORIENTED PROGRAM FOR COMPUTER SCIENCE MAJORS (OPTION 1 BELOW), A PROFESSIONALLY ORIENTED PROGRAM FOR COMPUTER SCIENCE MAJORS (OPTION 2), AND A PROFESSIONALLY ORIENTED PROGRAM FOR NON-MAJORS (OPTION 3).

Participants in the BX/MS program must meet the requirements for the BA or BS, complete nine courses for the MS, and, if applicable, a master’s project. Students may double-count up to two courses toward both their BX and MS degrees. By the conclusion of their third year, students must have completed 3900 of the 4200 units of credit required by the College, including all general education requirements.

See https://www.cs.uchicago.edu/page/department-computer-science-bxms-program-admissions-requirements for details about the BX/MS application process.

To be considered for the program, students need to have earned a 3.5 GPA and have completed one of the following:

- one of CMSC 12100, CMSC 15100, or CMSC 16100 and one of CMSC 12200, CMSC 15200, or CMSC 16200 with at least a B+ average in the two, or
- one of CMSC 12100, CMSC 15100, or CMSC 16100 and one of CMSC 27100, CMSC 27130, or CMSC 37110 with at least a B+ average in the two.

The detailed requirements of the three program options follow.

BX/MS OPTION 1: RESEARCH-ORIENTED COMPUTER SCIENCE MAJORS

Option 1 is designed for computer science majors who are interested in research. Students pursuing a BX with a computer science major currently have to take at least fourteen courses chosen from an approved program, while obtaining an MS requires nine courses. The research-oriented option requires students to take a total of twenty-one courses: twelve that count only toward the BX degree, seven that count only toward the MS, and two that count toward both the BX and MS degrees.

The nine courses required for the MS degree under Option 1 are as follows: Discrete Mathematics (CMSC 27100, CMSC 27130, or CMSC 37100); Algorithms (CMSC 27200, CMSC 27230, or CMSC 37000); one systems core course (see Allowed Courses below); Machine Learning (CMSC 25400, CMSC 35400, or TTIC 31020); Research Practicum (Autumn); Research Practicum (Winter); and three electives.

At most two courses can be drawn from the CMSC 20000-level course list, and at most two courses can be counted towards a student’s computer science major and MS degree. Option 1 students are expected to take their electives from the Computer Science Department’s CMSC 30000-level offerings and selected TTIC (Toyota Technological Institute at Chicago) offerings.

Students in this option are required to complete a master’s project, write a report describing the project, and give a public presentation. Master’s projects are overseen by a faculty member and evaluated by a committee of three faculty members, including the student’s project adviser. The two required practicums are intended to help students get started on their projects early in their fourth year and to complete their projects in a timely fashion.

BX/MS OPTION 2: PROFESSIONALLY ORIENTED COMPUTER SCIENCE MAJORS

Option 2 is designed for computer science majors who are seeking the opportunity to build upon their foundational skills and take some industry-oriented electives. As with Option 1, computer science majors who are pursuing a joint BX/MS are required to take a total of twenty-one courses: twelve that count only toward the BX degree, seven that count only toward the MS, and two that count toward both the BX and MS degrees.

The nine courses required for the MS degree under Option 2 are as follows: Discrete Mathematics (CMSC 27100, CMSC 27130, or CMSC 37100); Algorithms (CMSC 27200, CMSC 27230, or CMSC 37000); two Systems core courses (see Allowed Courses below); and five electives.

At most two courses can be drawn from the CMSC 20000-level offerings, and at most two courses can be counted toward both a student’s computer science major and MS degree.

Option 2 allows students to take electives from the Computer Science Department’s CMSC 30000-level and MPCS 50000-level offerings and selected TTIC offerings. With prior approval, Option 2 also allows one course from a graduate program outside of the Computer Science Department.

BX/MS OPTION 3: PROFESSIONALLY ORIENTED NON-COMPUTER SCIENCE MAJORS

Option 3 is designed for students who are not computer science majors and wish to combine a professionally oriented MS in computer science with their undergraduate major. Students in this option are expected to complete nine courses, two of which can be also counted as electives toward a student’s BA or BS.
The nine courses required for the MS degree under Option 3 are as follows: Discrete Mathematics (CMSC 27100, CMSC 27130, CMSC 37100, or MPCS 50103) or Core Programming (MPCS 51036, MPCS 51040, or MPCS 51100); Algorithms (CMSC 27200, CMSC 27230, CMSC 37000, or MPCS 55001); three Systems core courses (see *Allowed Courses* below); and four electives.

Students in the option are allowed to take electives from the department’s CMSC 20000-level, CMSC 30000-level, and MPCS 50000-level offerings or selected TTIC offerings (see *Allowed Courses* below for more details). At most two courses can be drawn from the department’s CMSC 20000-level offerings. At most two courses can be counted toward both a student’s Bx and MS degrees, with the following constraints:

- A CMSC/MPCS/TTIC course that counts toward the MS degree can always be double-counted as a College elective.
- A CMSC/MPCS/TTIC course that counts toward the MS degree may be double-counted toward the student’s major, as long as it is a course that is already routinely counted toward that major. If not, the adviser for the major would have to approve this course.
- Students can double-count, with prior approval, at most one non-CMSC/MPCS/TTIC course (which, on the BA/BS side, can count toward any College or major requirement).

**ALLOWED COURSES**

The following guidelines are used when deciding whether a course can be counted toward the Bx/MS requirements:

- In all options, courses that can be counted as Systems courses in the computer science major (http://collegecatalog.uchicago.edu/thecollege/computerscience) or the PhD program (https://www.cs.uchicago.edu/page/degree-requirements-masters-degree-within-phd-program) can be counted as Systems courses in the Bx/MS program.
- In Option 2, a course that can be counted as a Systems course in the Master’s Program in Computer Science (MPCS) (https://csmasters.uchicago.edu/page/9-course-ms-program) can only be counted as a Systems course in the Bx/MS program if an equivalent course does not exist in the computer science major.
- In Option 3, any MPCS Systems course can be counted as a Systems course in the Bx/MS program.
- In all options, CMSC 20000-level, CMSC 30000-level, and TTIC courses can generally be counted as electives.
- In Options 2 and 3, MPCS courses can generally be counted as electives.
- In all options, students may not count two courses with different course codes that have significant overlap (e.g., CMSC 11710 Networks and MPCS 54001 Networks).
JOINT BA/MAT IN EDUCATION AND TEACHING CERTIFICATION

Program Website: https://utep.uchicago.edu

The University of Chicago Urban Teacher Education Program (UChicago UTEP) is a five-year experience that includes a two-year master’s degree program and three years of post-graduation supports. Through UChicago UTEP, candidates receive a master of arts in teaching (MAT) degree and Illinois teaching certification. There are two certification pathways, Elementary (grades 1–6) and Middle Grades (5–8).

The two pathways meet Illinois’s new licensure structure and standards for teaching: (1) all core subjects in self-contained elementary grades 1–6; and (2) specific core subjects in departmentalized middle grades 5–8.

UChicago UTEP offers a joint BA/MAT program for qualified fourth-year College students. All BA/MAT students participate in all aspects of UChicago UTEP alongside MAT students throughout the two years of the program. Through the BA/MAT program, fourth-year undergraduate students complete their BA while also completing the first year (Foundations Year) of the MAT program. Upon completion of the BA degree and the first year of the MAT program (Foundations Year), students enter the Residency Year of the program as full MAT students.

For more information about the two-year course sequence and practicum-related experiences, please visit the UChicago UTEP (https://utep.uchicago.edu) website.

WHERE TO BEGIN

Undergraduate students interested in the BA/MAT program should begin by discussing this option with their College adviser as well as speaking with Diane New-Hardy, UChicago UTEP recruiting and admissions coordinator. The purposes of these discussions are to ensure that interested students are far enough along in their undergraduate program to complete the major requirements for the BA (with the exception of a BA thesis, if required) by the end of the third year in the College and to ensure that core course requirements for UTEP have also been met.

Interested students are advised to begin these discussions with their College adviser in the Spring Quarter of their second year in the College to determine feasibility of the program before applying to the joint program in the Autumn Quarter of the third year. Prior to application, students must meet with the College adviser again to fill out the eligibility worksheet provided by the College as part of the application process.

ELIGIBILITY AND PROGRAM REQUIREMENTS

- UChicago UTEP is open to all College majors.
- Students should have a 3.0 GPA or higher in their undergraduate major at time of application to UTEP.
- By the end of the third year in the College, students are expected to have completed 36 of the required 42 courses to matriculate into the BA/MAT program, including all general education requirements before entering the BA/MAT program as a fourth-year dual degree student. Up to six courses can be double counted between the BA and MAT programs.
- For Illinois teaching certification, the following general education requirements must be met prior to entering the BA/MAT program. These requirements can be met through the general education requirements for all College students.
  - One science course (in any of the following areas: life, physical/chemistry, earth science, space science)
  - Two social science courses (in any of the following areas: history, geography, civics and government, economics, anthropology)
  - One mathematics course (in any of the following areas: college-level math, number sense, geometry, probability and statistics, calculus)
  - One fine arts course (in any of the following areas: music, art, dance, etc.)
- BA Thesis Requirements
  - As a part of fitting the required components of the College and the UChicago UTEP program into the fourth year, UTEP will provide the equivalent of the BA Seminar to College students who complete the BA/MAT program. This will be offered to BA/MAT participants who do not enroll in the BA Seminar in the Spring Quarter of their third year. As such, UTEP BA/MAT program enrollees in majors such as sociology and comparative human development will continue to register for the BA Seminar within their department. For UTEP BA/MAT program enrollees who are in majors such as public policy studies, which have the BA Seminar in the Autumn Quarter of the fourth year, UTEP will offer a replacement BA Seminar. Students must seek and receive approval from their major departments for this exception.
• The UTEP BA Seminar will mirror the approach and content that is included in the BA Seminar in other departments, including instruction and advising in identifying a thesis topic, data collection, research methods, constructing a literature review, and creating a final thesis.

• For UTEP BA/MAT students, a BA focused on an approved education-related topic will fulfill the final paper requirements for the Autumn and Winter Quarter Foundations of Education courses.

• Students enter joint residency status during the three quarters prior to the anticipated date of College graduation, during which time they will be charged tuition at the UTEP master’s rates. Students will carry over their undergraduate financial aid for the joint fourth year. Students may qualify for graduate-level financial assistance during the fifth (full year) of UTEP.

APPLICATION PROCESS

Application for admission to UChicago UTEP should be completed during Autumn Quarter of the student’s third year in the College.

Applicants must submit the following items:

• Online application (including three letters of recommendation)

• Official transcripts

• A Composite ACT Plus Writing score of 22 or higher with a minimum score of 19 on the Combined English/Writing or a Composite SAT score of 1030 or higher on Critical Reading plus Mathematics, with a minimum score of 450 on Writing if taken before March 5, 2016, or a Composite SAT score of 1110 (Evidence-based Reading and Writing plus Mathematics) or higher, and a minimum score of 26 on the Writing and Language Test for the Redesigned SAT taken on or after March 5, 2016, in lieu of the Illinois Certification Testing System (http://www.icts.nesinc.com) (ICTS/Illinois Licensure Testing System or ILTS) Basic Skills or Test of Academic Proficiency (TAP) exams. If the SAT score is submitted, it must include the writing subtest.

• The GRE exam is not required for admission.

• If the application meets the criteria, students will be invited to an in-person interview during the Winter Quarter of their third year in the College.

For more information, please email Diane New-Hardy, student services administrator and recruiting/admissions coordinator, at dianenew@uchicago.edu.
JOINT BA/MA IN THE HUMANITIES

Department Website: http://maph.uchicago.edu

Students in the College may pursue the master of arts degree in the Humanities while working toward an undergraduate degree. Undergraduate students admitted to this program pursue a specific course of study depending on their specific research and professional interests. Students may design their own course of study in any of the departments within the Humanities Division, such as Philosophy, English Language and Literature, or Art History, specializing in a single field or moving across disciplines. Alternatively, they may choose a more directed course of study in a number of fields with specific Master of Arts Program in the Humanities (MAPH) program options, like Gender and Sexuality Studies, Theater and Performance Studies, Digital Humanities, Cinema and Media Studies, Classics, Cultural Policy, or Creative Writing.

Undergraduate students who wish to complete an MA in the Humanities concurrently with a bachelor’s degree should begin by discussing this option with their College adviser in the Autumn Quarter of their third year and with the director of undergraduate studies in their major, followed by a conversation with the associate director of the MAPH Program and the dean of students in the Division of the Humanities.

Undergraduate students pursuing this option are in “concurrent residence” beginning in the Autumn Quarter of their fourth year at the University and remain in this status for three contiguous quarters.

QUALIFICATIONS AND ELIGIBILITY

Permission to receive concurrent BA and MA in the Humanities degrees is granted only to those undergraduate students who have demonstrated, in their undergraduate work, a record of uncommon excellence and who are sufficiently advanced in the fulfillment of the undergraduate degree requirements. The academic demands on these students are significant and applicants are carefully reviewed in the context of both the undergraduate major and the MA in the Humanities degree requirements.

Applicants should have a minimum GPA for their undergraduate work comparable to that required for honors in the major and have completed the College general education requirements as well as 39 courses.

In addition to a distinguished record of achievement during their time in the College, applicants must convincingly demonstrate that they will be able to complete all requirements for the two degrees by the end of the allotted three quarters of full-time concurrent residence. For this purpose, potential applicants should meet with the BA/MA adviser in the College and fill out a BA/MA Worksheet. The BA/MA adviser’s signature certifies that prospective applicants are far enough along in their College program to complete the course requirements for both degrees within four years.

TWO-YEAR LANGUAGE OPTION

Year 1

During the first year, students participating in the Two-Year Language Option (TLO) move through the MAPH year in the traditional manner—a required core course in the Autumn Quarter, seven elective courses, and completion of a thesis in the Spring Quarter. However, BA/MA TLO students must devote at least one of their electives to language study every quarter. Students are eligible for College aid in the first year.

Year 2

In the second year, BA/MA TLO students take nine courses—three electives and any outstanding language study courses for a minimum of nine language courses over the two years. Students are no longer eligible for College aid, but, in the second year, TLO students receive a scholarship that covers 90 percent of that year’s tuition. To receive this scholarship, students must have completed all nine first-year courses by the start of Autumn Quarter and maintained a 3.5 GPA in those courses.

For more information, please email ma-humanities@uchicago.edu or contact Maren Robinson (marenr@uchicago.edu), associate director, at 773.834.1201.

TIME LIMITS

This course of study is not intended to prolong registration beyond four undergraduate years for those completing the standard BA/MA option or five years for the Two-Year Language Option. All course registrations for both degrees must be completed in three quarters after enrollment into the MAPH Program for the standard BA/MA option or six quarters after enrollment for the Two-Year Language Option. Students who have finished all requirements for the BA and the MA in the Humanities in the Spring Quarter may take both the BA and the MA in the Humanities degrees at Convocation in June. Students in the TLO may take the BA in the fourth year and the MA in the fifth year at Spring Convocation.

REGISTRATION, TUITION, AND FINANCIAL AID

To receive at the same time both the BA degree and the MA in the Humanities degree requires that the last three quarters of the undergraduate course of study be spent in full-time (three courses per quarter) registration status in MAPH. Students are to register for a minimum of nine graduate courses. Three graduate-level courses
may be double counted, that is, applied to both the College and the MAPH requirements. (Students may petition their director of undergraduate studies to apply the three graduate-level courses to their undergraduate major; otherwise the courses will be applied to general electives). For each of the three quarters in which the students are registered in MAPH, they pay tuition at the graduate tuition rate, which is somewhat higher than the undergraduate tuition rate.*

Students are not eligible for financial assistance from the Humanities Division. However, any awards a student receives from College Aid will continue in the MA year. Students in the TLO may be eligible for funding in the fifth year.

* Students pursuing a BA project are typically expected to register for one or two BA workshops in their fourth year. These workshops count as courses in the undergraduate program and are in addition to the nine graduate courses associated with the MAPH curriculum. Joint degree candidates should be aware that registration for a fourth course in any term may result in higher tuition.

**Course Requirements**

Students will be required to take MAPH 30100 Foundations of Interpretive Theory (the MAPH core course). The core starts two weeks prior to the beginning of Autumn Quarter and is only offered in the autumn. In addition to the core, students take eight courses, three per quarter, over the course of the year. One of these courses is MAPH 30200 Thesis Writing Workshop A/MAPH 30400 Thesis Writing Workshop B.

Students prepare their theses under the supervision of faculty members and their preceptors. During the winter, students participate in a non-credit thesis workshop (MAPH 30200 Thesis Writing Workshop A) with their precept groups. Students exchange drafts with their peers and workshop their writing in biweekly to weekly sessions. In addition, preceptors are available for individual consultations as the thesis workshop progresses. During the spring, students participate in a for-credit workshop (MAPH 30400 Thesis Writing Workshop B). Preceptors divide their group into subgroups for weekly or biweekly meetings, supplementing this with individual meetings.

For courses counting toward the MA in the Humanities degree, including any courses that are double counted, students must earn a B- or better in the core, must maintain a B average with no grade lower than B-, and must earn a B or better on their thesis.

**Application Procedures**

Students interested in obtaining both the BA degree and the MA in the Humanities degree should submit an online application (https://humanities.uchicago.edu/students/admissions/apply-now). The application should be submitted by February 15, but applications are accepted and reviewed starting January 1.

The following documents must be on file with the Humanities Dean of Students office before the application will be reviewed:

1. the application
2. three letters of recommendation
3. official transcript(s)
4. BA/MA Worksheet filled out and signed by the College adviser
5. Joint BA/MA in the Humanities Form: top portion filled out
6. Applicants interested in the Two-Year Language Option (TLO) (https://maph.uchicago.edu/study/two-year-language-option) must submit the above materials and a supplemental document. In the supplement, applicants should indicate why they are interested in the TLO and what language(s) they plan to study.

Applicants are not required to pay the application fee nor are they required to sit for the Graduate Record Examination.

Applicants will be interviewed by the MAPH program director. These conversations will focus on the program’s requirements and the applicant’s qualifications and objectives.

For more information, please email ma-humanities@uchicago.edu or contact Maren Robinson (marenr@uchicago.edu), associate director, at 773.834.1201.

**General Guidelines**

- Students who begin work towards the MA in the Humanities degree and then leave the University without completing the program will not be allowed to complete the MA in the Humanities at a later date.

- Once a student has begun to pursue both the BA degree and the MA in the Humanities degree, a leave of absence is not normally possible. Students who find that they must take a leave of absence for a medical or family emergency during this period must obtain the approval of the dean of students in the Humanities as well as the dean of students in the College.
Admissions decisions are usually not released before College preregistration for the following year takes place. Admissions committees often wish to see Winter Quarter grades before making decisions. Thus, applicants should preregister for the coming academic year as usual.
JOINT BA/MA IN INTERNATIONAL RELATIONS

Department Website: http://cir.uchicago.edu

The special strength of the Committee on International Relations (CIR), the first graduate program of its kind in the nation, lies in its interdisciplinary approach to a wide range of questions relating to international issues. The Committee's faculty includes members of the various departments in the Division of the Social Sciences, as well as the University of Chicago Booth School of Business, the Irving B. Harris Graduate School of Public Policy Studies, the Divinity School, and the Law School. Their expertise extends over a broad range of subjects: international relations theory, security studies, international political economy, international history, history and conduct of U.S. foreign policy, human rights, international law and organization, international development, and regional international relations.

JOINT BA/MA PROGRAM

Qualified students in the College who wish to pursue a joint MA degree in international relations should consult with their College adviser, the Associate Dean of Students in the Social Sciences (Kelly Pollock (kpollock@uchicago.edu)), and a CIR preceptor. These meetings should happen in the Autumn Quarter of the student's third year and are a mandatory component of the application process. Students are expected to have a GPA of 3.55 or higher, and at that time they are also expected to have met most of their general education requirements and to have chosen their major.

APPLICATION

Interested students should submit their formal application to the program by the February 1 deadline for regular graduate admissions. Applications should be submitted to the Dean of Students of the Division of the Social Sciences online at apply-ssd.uchicago.edu/apply. Please note that BA/MA applicants should not pay the application fee. Please email admissions@ssd.uchicago.edu to ask about a fee waiver.

Based on the available course list, applicants to the CIR BA/MA program must also submit a Proposed Curriculum document that identifies (1) up to three courses completed as part of the BA degree that will be petitioned to count toward the MA degree distribution requirements (NOTE: These courses cannot be counted as part of the required nine graduate-level courses—see Program Requirements below) and (2) the graduate-level courses they intend to take during their year in the program. CIR preceptors are available for consultation and guidance on a student's preparation of the document. NOTE: A student admitted to the CIR BA/MA program must submit changes to the CIR Program Chair.

Space in the CIR BA/MA program is limited, and admission is very competitive. The application is evaluated by the CIR Admissions Committee on the basis of the student's academic record, letters of recommendation, GRE scores if available, a 10- to 20-page term or research paper, and a personal statement of intellectual and academic goals. Admission to the MA program is also subject to approval by the College. BA/MA students are expected to complete all but three of their BA requirements before entering joint residence status for the three quarters preceding the anticipated quarter of graduation (up to three graduate courses can be used as electives in the undergraduate program or they can be applied to the undergraduate major by petition to the Director of Undergraduate Studies). Students in joint residence status are charged tuition at graduate rates.

PROGRAM REQUIREMENTS

Students selected to participate in the joint degree program must meet all the normal BA requirements for their particular field of study, as well as all the general education requirements. In addition, joint degree students in international relations must meet the following requirements:

1. Completion of nine graduate-level courses for quality grades, including seven CIR-approved courses. NOTE: The total number of CIR-approved credits required for the joint degree is 48, assuming that three courses taken at the graduate level in the fourth year may be double counted toward both degrees.

2. Fulfillment of the CIR distribution requirement. This is designed to ensure that, within the nine required courses for the MA degree, students achieve sufficient depth and breadth in the study of international relations. Students may petition the CIR to count toward their MA distribution requirements up to three appropriate courses taken for their BA degree. Currently, each student must pass three courses each in two of four fields of international relations:

a. Security, International History, and International Relations Theory
b. International Political Economy and Development
c. Regional Studies and Nationalism
d. Human Rights, Environment, and Law

3. A passing grade in the Committee’s noncredit Perspectives on International Relations (INRE 30000) course in Autumn Quarter.

4. A passing grade in the Committee’s MA paper workshop (INRE 46500) in Winter and Spring Quarters.
5. Completion of an MA paper that is approved by a faculty adviser and a preceptor.
6. Completion of both BA and MA degrees within a quarter of each other.
Details are available in the Committee office (5730 S. Woodlawn Ave.).
JOINT BA/MA IN LATIN AMERICAN
AND CARIBBEAN STUDIES

Department Website: http://clas.uchicago.edu

The master of arts program in Latin American and Caribbean Studies (LACS) makes it possible for highly qualified students in the College to combine a BA program in an undergraduate major with an interdisciplinary MA program in Latin American and Caribbean Studies, which provides students with a thorough knowledge of the cultures, history, politics, and languages of the region. Students are enabled to augment their undergraduate studies by placing their knowledge of a particular field in an interdisciplinary context and by continuing specialized work on the graduate level.

BA/MA students participate with MA students in all aspects of the Latin American and Caribbean Studies program and pursue a specific course of study depending on their research and professional interests. Students with interests across the humanities and social sciences can take advantage of the MA in Latin American and Caribbean Studies. Undergraduate students pursuing this option are in “concurrent residence” beginning in the Autumn Quarter of their fourth year at the University and remain in this status for three contiguous quarters.

For more information about course offerings and the MA program, please visit the Center for Latin American Studies (http://clas.uchicago.edu) website.

WHERE TO BEGIN

Undergraduate students interested in the BA/MA program should begin by discussing this option with the director of undergraduate studies in their major and the College BA/MA adviser (Pete Segall (psegall@uchicago.edu)), followed by conversations with the student affairs coordinator of the Latin American and Caribbean Studies program and the Dean of Students Office in either the Division of the Humanities or the Division of the Social Sciences. Interested students are advised to begin these discussions in the spring of their second year in the College.

Potential applicants should meet with the BA/MA adviser in the College in the autumn of their third year and fill out a BA/MA Worksheet. The BA/MA adviser’s signature certifies that prospective applicants are far enough along in their College program to complete the course requirements for both degrees within four years.

ELIGIBILITY

Permission to receive concurrent BA/MA degrees in Latin American and Caribbean Studies is a privilege extended only to those undergraduate students who have demonstrated a record of uncommon excellence and who are sufficiently advanced in the fulfillment of the undergraduate degree requirements. The academic demands on these students are significant, and applicants are carefully reviewed in the context of both their undergraduate major and the Latin American and Caribbean Studies degree requirements.

- Applicants should have a GPA of 3.55 or higher for their undergraduate work and are expected to have entered their major.
- Applicants are expected to have completed 39 of the 42 courses required for graduation, including all general education requirements (exceptions must be approved by the program coordinator), before entering concurrent residence status for the three quarters preceding the anticipated quarter of graduation.

HOW TO APPLY

Interested students should apply through the online graduate application from the division in which they intend to focus their MA studies, either Humanities or Social Sciences. Consultation with the Latin American and Caribbean Studies student affairs coordinator will clarify the appropriate division for students who are uncertain. The application should be completed by February 1.

Applicants must submit the following items:

- MA application
- Three letters of recommendation
- Official transcript(s)
- BA/MA Worksheet, signed by the student’s College adviser

Applicants are not required to pay the application fee nor are they required to sit for the Graduate Record Examination (GRE).

Applicants will be interviewed by the LACS program director. These conversations will focus on the program's requirements and the applicant's qualifications and objectives.

The application is evaluated by the admissions committee of the MA program on the basis of the student’s academic record, letters of recommendation, and personal statement of intellectual and academic goals. Admission to the MA program is highly competitive and subject to approval by the College.
TIME LIMITS
This course of study is not intended to prolong registration beyond four undergraduate years. All courses for both degrees must be completed in three quarters after enrollment into the LACS MA program. Students who have finished all requirements for the BA and the MA in the Spring Quarter may take both the BA and MA degrees at Spring Convocation.

The MA degree must be received no later than the Summer Quarter convocation after Autumn Quarter admission to concurrent residency.

COURSE REQUIREMENTS
Students selected to participate in the joint degree program fulfill all general education, elective, and major requirements for the BA.

Students will be required to take nine courses, three per quarter, over the course of the year. Students are required to enroll in the Latin American and Caribbean Studies core course (LACS 40501 MA Proseminar). The proseminar is only offered in the Autumn Quarter. Among the remaining eight courses, five must be Latin American content courses. Students must complete an MA paper that is approved by a faculty adviser and the LACS postdoctoral lecturer.

The program is worked out by the student in consultation with the student affairs coordinator and the LACS program director. Students should note that they must have a B average in their graduate work, including the MA thesis.

THESIS REQUIREMENTS
Students prepare their theses under the supervision of faculty members and the Latin American and Caribbean Studies postdoctoral lecturer. During the Winter and Spring Quarters, students consult with their faculty adviser as well as the LACS postdoctoral lecturer as they develop and write their theses. The lecturer will schedule biweekly individual and group meetings.

Students in a major in which a BA paper is required may (subject to the approval of their BA paper adviser, MA paper adviser, undergraduate adviser, and the director of the MA program, and with the understanding that it is based on substantial additional research and analysis) submit an MA paper proposal related to their BA essay. Undergraduate LACS majors who pursue the BA/MA option should consult with the director of the MA program about how to proceed with their theses.

ADDITIONAL GUIDELINES
• Students who begin work towards the Latin American and Caribbean Studies MA degree and then leave the University without completing the program will not be allowed to complete the LACS MA degree at a later date.
• Once a student has begun to pursue both the BA degree and the MA in Latin American and Caribbean Studies degree, a leave of absence is not normally possible. Students who find that they must take a leave of absence for a medical or family emergency during this period must obtain the approval of the dean of students in the Humanities or Social Sciences as well as the dean of students in the College.
• Admissions decisions are usually not released before College pre-registration for the following year takes place. The admissions committee often wishes to see Winter Quarter grades before making decisions. Thus, applicants should pre-register for the coming academic year as usual.
JOINT BA/MS OR BS/MS IN MATHEMATICS

Qualified College students may receive both a bachelor's and a master's degree in mathematics concurrently at the end of their studies in the College. Qualification consists of satisfying all requirements of each degree in mathematics. To be eligible for the joint program, a student must begin MATH 20700 Honors Analysis in Rn I in the Autumn Quarter of the student's first year. By following a program of prescribed undergraduate course sequences in mathematics and succeeding in all courses with grades no lower than A-, the student becomes eligible to enroll in graduate courses in mathematics in the student's third year. While only a few students complete the joint BA/MS program, many undergraduates enroll in graduate-level mathematics courses. Admission to all mathematics graduate courses requires prior written consent of the director or co-director of undergraduate studies.

Students should submit their application for the joint program to one of the departmental counselors as soon as possible, but no later than the Winter Quarter of their third year. For more information, contact John Boller, Departmental Counselor, at 773.702.5754 or boller@math.uchicago.edu.
Students in the College may pursue the master of arts degree in Middle Eastern Studies leading to the award of a four-year undergraduate degree in their declared major and a two-year graduate degree in Middle Eastern Studies after five years of studies at the University of Chicago.

Undergraduate students who wish to complete both degrees in five years should begin by discussing this option in the Autumn Quarter of their third year with their College adviser and with the BA adviser in their major, followed by a conversation with the deputy director for academic programs of the Middle Eastern Studies program (Paul Walker, 773.702.4619, pwalker@uchicago.edu) and the dean of students representative of the Social Sciences or Humanities Division, depending on the student's undergraduate major.

Undergraduate students pursuing this option are in “concurrent residence” beginning in the Autumn Quarter of their fourth year at the University and remain in this status for three contiguous quarters. Upon completion of the BA at the end of the fourth year, the students continue to be registered as graduate students for three contiguous quarters in the second year of the Middle Eastern Studies program.

**Qualifications and Eligibility**

Permission to receive both the BA in a major field and the MA in Middle Eastern Studies is not an automatic perquisite of undergraduate study at Chicago. It is a privilege extended only to those undergraduate students who have demonstrated, in their undergraduate work, a record of uncommon excellence and who are sufficiently advanced in the fulfillment of the undergraduate degree requirements. The academic demands on these students are significant, and applicants are carefully reviewed in the context of both their undergraduate major and the master’s degree requirements.

Applicants should have a minimum GPA for their undergraduate work comparable to that required for honors in their major and have completed the College general education requirements as well as 39 courses, including some graduate-level courses.

Furthermore, applicants are required to have completed by the end of their third year:

- one year (three courses) of a Middle Eastern language, and
- three courses related to Middle Eastern studies

Applicants who are pursuing an undergraduate major that requires a BA thesis will be permitted to register for the BA thesis workshop as a fourth course during the fourth year of undergraduate studies.

In addition to a distinguished record of achievement during their time in the College, applicants must convincingly demonstrate that they will be able to complete all requirements for the two degrees by the end of the allotted six quarters of full-time residence. For this purpose, potential applicants should meet with their adviser in the College and fill out a BA/MA Worksheet. The adviser’s signature certifies that prospective applicants are far enough along in their College program to complete the course requirements for both degrees within five years.

**Time Limits**

This course of study prolongs registration at the University to five years. Students are expected to complete the BA requirements at the end of the fourth year in the College to be allowed to continue into the second year of the MA program and receive their BA at the end of the fourth year in the College.

Students enrolled in the second year of the Middle Eastern Studies program as part of this BA/MA program will be enrolled as any other students in the second year of the Middle Eastern Studies program and subject to the same rules and requirements for graduation.

**Registration, Tuition, and Financial Aid**

To receive both the BA in an undergraduate discipline and MA in Middle Eastern Studies requires that the last three quarters of the regular undergraduate course of study be spent in full-time (three courses per quarter) registration status in the Middle Eastern Studies program and an additional three quarters of registration in the Middle Eastern Studies program. For each of the six quarters in which students are registered in the MA program, the students are charged the graduate tuition rate, which is somewhat higher than the undergraduate tuition rate.

Students are not eligible for financial assistance from the Social Sciences or Humanities Division in the first year of the MA program (their fourth year in the College). Therefore, students admitted to this program should consult the College Aid Office to determine if their financial aid will be affected. In the second year of the MA program, students are eligible for financial aid from the Social Sciences or Humanities Division on the same terms as any other second-year graduate student in the Middle Eastern Studies program.

A minimum of six quarters of undergraduate residence in the College is required, including the three quarters of registration of the first year in the Middle Eastern Studies program.
Courses and Requirements

No more than three graduate-level courses taken in the fourth year in the College may be double-counted; that is, applied to both the College requirements and the MA requirements. Graduate courses taken during the second or third year in the College may not be counted toward the BA/MA in Middle Eastern Studies. Once admitted to the BA/MA program, students will be required to complete the core course requirements of the MA degree.

During their fourth year in the College (first year of the MA program), students retain their undergraduate privilege of registering for four courses per quarter. However, students are encouraged to take no more than three, if possible. During the second year of the MA program, students must follow MA rules, which restrict enrollment to three courses per quarter. The MA program requires a master’s thesis which must be planned, researched, and written, and this requires a significant amount of time.

Application Procedures

Third-year students in the College who have been certified by the BA/MA adviser that they are prepared to pursue both the BA and MA degrees in Middle Eastern Studies in five years should obtain a graduate program application. Depending on the undergraduate major of the student, the graduate application should be obtained from either the Dean of Students Office in the Social Sciences (Foster 103) or Dean of Students office in the Humanities (Walker 111). The application should be completed, signed, and returned to the same office with all the necessary supporting documents by February 1.

The following documents must be on file with the divisional Dean of Students Office before the application will be reviewed:

1. the application
2. two letters of recommendation
3. a writing sample
4. official transcript(s)
5. BA/MA Worksheet: Filled out and signed by the College adviser
6. BA/MA Form: Top portion filled out

Applicants are not required to pay the application fee nor are they required to sit for the Graduate Record Examination. Applicants will be interviewed by the Center for Middle Eastern Studies deputy director for academic programs. These conversations will focus on the program’s requirements and the applicant’s qualifications and objectives.

Admissions decisions are usually not released before College preregistration for the following year takes place. Admissions committees often wish to see Winter Quarter grades before making decisions. Thus, applicants should preregister for the coming academic year as any other undergraduate student.

Other Guidelines

• Students who begin work towards the MA degree in Middle Eastern Studies and then leave the University without completing the program will not be allowed to complete the MA at a later date.

• Once a student has begun to pursue both the BA and the MA degree, a leave of absence is not normally possible. Students who find that they must take a leave of absence for a medical or family emergency during this period must obtain the approval of the dean of students of the applicable graduate division as well as the dean of students in the College.

Contact

For more information, please contact Paul Walker, Deputy Director for Academic Programs (pwalker@uchicago.edu; 773.702.4619).
The University of Chicago Harris School of Public Policy offers students an opportunity to begin their professional training in public policy while still in the College, leading to the awarding of a four-year undergraduate degree in their declared major and a two-year master of public policy (MPP) degree after five years of studies at the University of Chicago.

The MPP is a professional degree program designed for students who wish to gain rigorous training in public policy skills and issues. The core curriculum draws on a variety of disciplines and fields, including economics, statistics, sociology, political science, political economy, organizational theory, and program evaluation. These areas provide a foundation in critical analysis, reflecting Harris Public Policy’s belief that mastering quantitative and analytical skills prepares students to be effective public policy leaders.

Program Requirements

1. Students are encouraged to complete all general education and BA requirements in their third year in the College before beginning the MPP degree in the fourth year. Students with two or fewer courses remaining in the BA, excluding any thesis, research, or final paper requirements, are eligible for admission with approval from the Harris Department of Academic and Student Affairs. The remaining courses can be double-counted toward the BA and MPP, but courses must be graduate level courses (courses numbered 30000 or above). Students must complete all BA requirements before beginning the fifth year.

2. Applicants are expected to have a GPA of 3.25 or higher.

3. All majors are strongly encouraged to apply.

4. Students must have completed at least one course, at any level, in at least two of the following three areas at the College: microeconomics, statistics, or calculus. Examination credit will not be accepted for this requirement, i.e., AP course work.

5. Students must register for at least nine courses (900 units of credit) in their fifth year.

6. PPHA courses taken prior to entering the BA/MPP program will not count toward the MPP. If the courses taken prior to matriculation are required for the MPP, the student will substitute them with approved electives.

7. Students enter joint residence status during the three quarters prior to the anticipated date of College graduation, during which time they will be charged tuition at Harris's master's rates. Students will still be eligible for financial aid from the College while in joint residence.

8. Students must complete all requirements of the MPP, as stated in the Graduate Announcements (http://registrar.uchicago.edu/page/catalogs-and-announcements), to receive the BA/MPP degree.

Application Procedures

Before beginning the application process with Harris, students are encouraged to first meet with their College adviser. Students should make appointments during their second year to ensure that all College requirements are met. After reviewing with their College adviser, students should speak with Jenny Erikson, associate director of student recruitment at Harris (jerickson1@uchicago.edu), early in the third year. Interested students should submit their formal application to the program by April 15 of their third year in the College: https://apply-harris.uchicago.edu/apply. Please note that BA/MPP applicants are exempt from the application fee and do not have to submit a GRE score.

For more information, please email Jenny Erikson, associate director of student recruitment at Harris at jerickson1@uchicago.edu.
The University of Chicago Harris School of Public Policy in conjunction with the Department of Computer Science offers students an opportunity to begin their professional training in the growing field of civic technology and data science in public policy while still in the College, leading to the awarding of a four-year undergraduate degree in their declared major and a two-year master of science degree in computational analysis and public policy (MSCAPP) after five years of study at the University of Chicago.

The BA/MSCAPP is a professional degree program for students in the College who wish to gain rigorous training in the emerging and critical role of technologists fluent in public policy skills and issues. The policy piece of the core curriculum draws on a variety of disciplines and fields, including economics, statistics, sociology, political science, political economy, organizational theory, and program evaluation. These areas provide a foundation in critical analysis, reflecting Harris Public Policy’s belief that mastering quantitative and analytical skills prepares students to be effective public policy leaders.

The computer science core curriculum augments the core policy training with courses in computer programming, data analytics and machine learning, and database management. The unique combination equips students with technical expertise that is useful for many aspects of society but increasingly in demand in the public sector. By combining the strengths of the two faculties, the program builds on the tradition of interdisciplinary teaching and research at the University.

**Program Requirements**

Students selected to participate in the joint degree program must meet all BA requirements for their particular field of study, as well as all general education requirements. In addition, joint degree students in the BA/MSCAPP program must satisfy the following criteria:

1. Admission to the BA/MSCAPP program assumes no prior computer science course work or coding experience. Candidates are evaluated on the strength of their application, similar to the metrics used for admission to the BA/MPP program.
2. Students are encouraged to complete all BA requirements in their third year before beginning the MSCAPP degree program in the fourth year. Students with two or fewer courses remaining in the BA, excluding any thesis, research, or final paper requirements, are eligible for admission with approval from the MSCAPP program director. The final two courses can be double-counted toward the BA and the MS, but these courses must be graduate-level courses (course number 30000 or above). Students who wish to count these courses toward their undergraduate major must receive permission from their major’s director of undergraduate studies. Students must complete all BA requirements before beginning the fifth year.
3. Applicants are expected to have an overall GPA of 3.25 or higher.
4. All majors are strongly encouraged to apply.
5. Students must have completed at least one course, at any level, in at least two of the following three areas in the College: microeconomics, statistics, or calculus. Examination credit will not be accepted for this requirement, i.e., AP credit.
6. Students must register for at least nine courses (900 units of credit) in their fifth year.
7. No courses taken in CMSC (Computer Science) or PPHA (Public Policy/Harris) prior to entering the BA/MSCAPP program will be allowed to count toward the requirements for the MSCAPP. If the courses taken before entering the program would have fulfilled MSCAPP requirements, students will be permitted to replace those courses with approved electives.
8. Students enter joint residence status during the three quarters prior to the anticipated date of College graduation, during which time they will be charged tuition at Harris’s master’s rates. During their fourth year of study students will still be eligible for College aid.
9. Students must complete all requirements of the MSCAPP program, as stated in the Graduate Announcements (http://registrar.uchicago.edu/page/catalogs-and-announcements), to receive the BA/MSCAPP degree.
10. The GRE is not required for admission to the BA/MSCAPP program for students who have taken at least two MATH (Mathematics) courses and received a B grade or higher. Applicants who have not taken MATH courses should submit a GRE as part of their application.

**Application Procedures**

Before beginning the application process with Harris Public Policy, students should make appointments during their second year to ensure that all College requirements are met. After reviewing with their College adviser, students should speak with Jenny Erikson, associate director of student recruitment at Harris.
(jerickson1@uchicago.edu) (harrisadmissions@uchicago.edu), early in the third year. Interested students should submit their formal application to the program by April 15 of their third year in the College: https://apply-harris.uchicago.edu/apply. Please note that BA/MSCAPP program applicants are exempt from the application fee.

For more information, please email Jenny Erikson, associate director of student recruitment at Harris at jerickson1@uchicago.edu. (jerickson1@uchicago.edu)
The Master of Arts Program in the Social Sciences (MAPSS) is a one-year program of graduate study, with nine courses over three academic quarters, culminating in an article-length MA thesis. It gives students the opportunity to specialize in doctoral-level study in anthropology, economics, history, political science, psychology, or sociology, or to pursue a highly individualized and interdisciplinary curriculum, with our mentorship and support. MAPSS students take the same classes as UChicago doctoral students, they work with the same faculty on their MA thesis, and they come away with professional-grade research methods that will advance their academic and professional careers.

All students must take MAPS 30000 Perspectives in Social Science Analysis, our core course, in the Autumn Quarter. In addition, students must satisfy a methods requirement by selecting among dozens of graduate alternatives in ethnography, historical methods, involved interviewing, network analysis, survey analysis, content analysis, game theory, rational choice, causal inference, statistics, interpretive methods, comparative case study, and others. Outside of MAPS 30000 and the methods requirement, students select seven graduate courses, in consultation with their preceptor, from all departments and professional schools. Finally, all students complete an MA thesis under the direction of a faculty advisor and their MAPSS preceptor.

MAPSS has an international reputation for the quality of students it admits and the placement outcomes they achieve. Ninety-one percent of those who elect to go on for funded PhD study are successful in doing so, and in very large numbers (55 to 70 students each year). Those who opt for non-academic paths go on for managerial-level positions in consulting, government, education, and other for-profit and non-profit careers. We have an in-house director of career services and a stable of experienced PhD advisers, who work tirelessly to achieve our placement outcomes. We provide close academic mentorship, to help all students learn how to make original, persuasive contributions for a professional readership at the graduate level.

JOINT BA/MA PROGRAM

Qualified students in the College who wish to pursue a joint BA/MA degree in the Master of Arts Program in the Social Sciences should consult with their College adviser, the associate dean of students in the social sciences (Kelly Pollock, kpollock@uchicago.edu), and Chad Cyrenne (c-cyrenne@uchicago.edu), managing director of MAPSS, as early as possible in their third year, during the Autumn Quarter. They are expected to have a GPA of 3.55 or higher and to have chosen their major. Students will also be expected to have completed all of their general education requirements prior to entering the program; any exceptions must be approved in advance by the College and the Social Sciences Division.

APPLICATION

Interested students should submit their formal application to the program by February 1. Applications should be submitted to the dean of students of the Division of the Social Sciences online at apply.ssd.uchicago.edu/apply. Please note that BA/MA applicants should not pay the application fee. Please email admissions@ssd.uchicago.edu to ask how to receive the fee waiver.

Space in the MAPSS BA/MA program is limited, and admission is very competitive. The application is evaluated by the MAPSS Admissions Committee on the basis of the student's academic record, letters of recommendation, and a personal statement of intellectual and academic goals. Admission to the MA program is also subject to approval by the College. Prospective BA/MA students are expected to complete all but three of their BA requirements before entering joint residence status for the three quarters preceding the anticipated quarter of graduation. Up to three graduate courses can be used as electives in the undergraduate program or they can be applied to the undergraduate major by petition to the director of undergraduate studies. Students in joint residence status are charged tuition at graduate rates.

PROGRAM REQUIREMENTS

Students selected to participate in the joint degree program must meet all normal BA requirements for their particular field of study, as well as all general education requirements. In addition, joint degree students in MAPSS must satisfy the following criteria:

1. Completion of nine MAPSS-approved graduate-level courses for quality grades, including MAPS 30000 Perspectives in Social Science Analysis in the Autumn Quarter and a course that satisfies the graduate methods requirement.

2. Completion of 48 total credits for the joint degree. Up to three courses taken at the graduate level in the fourth year may be double-counted toward both the BA and the MA degree, with permission from the College.

3. Completion of an MA paper that is approved by the faculty adviser.

4. Completion of both the BA and MA degrees, the second awarded no later than the August convocation following a September matriculation.
PRECEPTORS/GRADUATE ADVISORS

Please contact E. G. Enbar (egenbar@uchicago.edu) to be put in touch with a preceptor who shares your disciplinary or research interests.
The School of Social Service Administration (SSA) offers students an opportunity to begin their professional training in social work and social welfare administration and policy while still in the College. Qualified students who wish to pursue a joint MA degree at SSA should consult with the BA/MA adviser in the College and with the director of admissions at SSA as soon as their second year, but no later than early in their third year.

Students will need a GPA of 3.25 or higher and to have completed both their general education requirements and the requirements for their College major by the end of their third year.

BA/MA students take nine courses in their fourth College year: seven SSA Core courses and two electives. Students will also complete two field placements (an evaluated internship): one in the first year (College year four) and one in the second year of joint residence. The nine graduate-level courses together with field work constitute a demanding curriculum; therefore students are encouraged to complete their BA projects before beginning their graduate course work.

BA/MA students enter joint residence status during the three quarters prior to the anticipated date of College graduation, during which time they will be charged tuition at SSA’s graduate rates.

For more information, contact Ron Martin, director of admissions for SSA, at 773.702.1492 or admissions@ssa.uchicago.edu, or visit http://www.ssa.uchicago.edu/ab-am-program.
This program enables unusually well-qualified undergraduate students to complete an MS in Statistics along with a BA or BS during their four years at the College. Although a student may receive a BA or BS in any field, a program of study other than Statistics is recommended.

Only a small number of students will be selected for the program through a competitive admissions process. Participants must apply to the MS program in Statistics by June 1 of their third year for admission to candidacy for an MS in Statistics during their fourth year. To be considered, students should have completed almost all of their undergraduate requirements, including all of their general education and language competence requirements, by the end of their third year. They should also have completed, at a minimum, both STAT 24400-24500 Statistical Theory and Methods I-II (or STAT 24410-24510 Statistical Theory and Methods Ia-IIa) with A or A- grades and all the mathematics requirements for the Statistics major with very high grades. While these are the minimum criteria, admission is competitive, and additional qualifications may be needed. Interested students are strongly encouraged to consult both the departmental adviser for majors and their College adviser early in their third year.

Participants in the joint BA/MS or BS/MS program must meet the same requirements as students in the MS program in Statistics. Of the nine courses that are required at the appropriate level, up to three may also meet the requirements of an undergraduate program. For example, STAT 24410-24510 Statistical Theory and Methods Ia-IIa and STAT 34300 Applied Linear Stat Methods, which satisfy requirements for the MS in Statistics, could also be used to satisfy requirements of a BA or BS program in Statistics.

Other requirements include a master’s paper and participation in the Consulting Program of the Department of Statistics. For details, visit the Department of Statistics Admissions page (http://www.stat.uchicago.edu/admissions/featured).
The University of Chicago Pritzker School of Medicine's Professional Option Program in Medicine permits undergraduate students who have demonstrated outstanding potential for success in medicine to begin medical school during their fourth year in the College. This is a highly competitive, merit-award program.

Due to the accelerated nature of the curriculum, applicants must have outstanding academic credentials as evidenced by a combination of GPA and MCAT scores that place them among the top candidates nationwide for medical school. The academic requirements for eligibility include a minimum GPA of 3.7 and an MCAT score not less than the 93rd percentile, with no individual section score less than the 85th percentile. Additionally, eligible students have a clear understanding of their motivation for medicine and can provide evidence of analytical thinking, effective communication skills, leadership, and meaningful engagement in the various communities in which they participate, in addition to compelling reasons to attend Pritzker.

Candidates will apply to this program during their third year in the College. Eligible students must have completed 33 credits (of the 42 required for a degree in the College) by the end of their third year. These 33 credits must include all 15 general education requirements and one-half of the requirements for their major.

Through this program, students will, upon completion of the first year of medical school at Pritzker, be allowed to use credit from their medical school courses to fulfill the remaining nine credits for the undergraduate degree. At the successful conclusion of their first year of medical school, students completing their degree in this fashion will receive the Bachelor of Arts in Professional Option: Medicine. Because students pursuing a professional option program do not complete the requirements for a College major, they are not eligible for departmental honors upon receiving their bachelor’s degree.

Interested students should schedule an appointment with their UChicago Careers in Health Professions (https://careeradvancement.uchicago.edu/uchicago-careers-in/health-professions) (UCIHP) adviser early in their second year, and in the Autumn Quarter of their third year will need to meet with their College adviser to evaluate their curricular progress. Following those meetings, students should schedule an appointment with their UCIHP adviser to further solidify their plans and intent to apply. The deadline for applications is February 28.

Students with questions or who would like more information, please contact UChicago Careers in Health Professions (uchi@uchicago.edu).
STUDY ABROAD

Department Website: http://study-abroad.uchicago.edu

STUDY ABROAD PROGRAMS

UChicago Study Abroad encourages students to expand their education through diverse intellectual perspectives, active participation in a new culture, and critical, firsthand engagement with local and global challenges. Chicago’s distinctive range of faculty-led programming blends the academic rigor and spirit of intellectual curiosity that is central to the College curriculum with the University’s wide-reaching international mission.

The College sponsors 60 study abroad programs in 21 countries (32 cities) around the world. These include faculty-led, direct enrollment, and language-intensive programs.

CIVILIZATION ABROAD PROGRAMS

The following programs allow students to fulfill their civilization studies requirement in a single quarter. Courses are taught primarily by University of Chicago faculty and carry no language prerequisite, other than for the civilization sequences taught in French and Spanish. Students also study a local language.

- Athens (Spring Quarter)
- Barcelona (Winter Quarter taught in English, Spring Quarter taught in Spanish)
- Beijing (Autumn Quarter)
- Dakar (Winter Quarter, offered in alternating years)
- Hong Kong (Spring Quarter)
- Jerusalem (Spring Quarter)
- Oaxaca (Winter Quarter)
- Paris (Autumn, Winter, Spring, and Summer Quarters: European Civilization taught in English)
- Paris (Autumn Quarter: European Civilization taught in French)
- Paris (Autumn Quarter: African Civilizations, offered in alternating years)
- Paris (Spring Quarter: Russian Civilization)
- Pune (Autumn Quarter)
- Rabat (Winter Quarter)
- Rome (Autumn Quarter)
- Vienna (Autumn Quarter)

THEMATIC PROGRAMS

Thematic programs are also taught primarily by University of Chicago faculty and offer a range of courses across disciplines, some of which meet major, minor, or general education requirements.

- Barcelona: Public Policy (Spring Quarter)
- London: British Literature and History (Autumn Quarter)
- Paris: Astronomy (Spring Quarter)
- Paris: Cinema and Media Studies (Winter Quarter)
- Paris: Classics of Social and Political Thought (Autumn Quarter, offered in alternating years)
- Paris: Humanities (Spring Quarter)
- Paris: Global Health (Winter Quarter)
- Paris: Mathematics (Spring Quarter)
- Paris: Neuroscience (Autumn Quarter)
- Paris: Social Sciences (Winter Quarter)
- Vienna: Human Rights (Spring Quarter)

DIRECT ENROLLMENT PROGRAMS

Direct enrollment programs are available at partner universities in the following cities:

- Barcelona: Universitat Pompeu Fabra
- Beijing: Peking University, Renmin University
- Berlin: Freie Universität Berlin
- Bologna: University of Bologna
- Great Britain and Ireland
• King’s College (London)
• London School of Economics and Political Science
• St. Catherine’s College (Oxford) (Note: Autumn Quarter only)
• Trinity College (Cambridge)
• Trinity College (Dublin)
• University College (London)
• University of Bristol
• University of Edinburgh
• Kyoto: Kyoto Consortium for Japanese Studies
• Menton: Sciences Po
• Milan: Bocconi University
• Paris: various universities, including Sciences Po
• Santiago: Catholic University of Chile
• Seoul: Yonsei University
• Shanghai: Fudan University
• St. Petersburg: Smolny College
• Tokyo: Waseda University

LANGUAGE PROGRAMS
Quarter-long intensive language programs offer intermediate and advanced level instruction. After completing one additional course on campus, students qualify to take the University of Chicago advanced foreign language proficiency certificate exam.
• Beijing (Summer Quarter)
• Paris (Summer Quarter)
• Toledo (Autumn Quarter)

AFFILIATED PROGRAMS
The University of Chicago partners with the Associated Colleges of the Midwest (ACM) to offer the following two programs in Africa:
• Arusha: Ecology and Evolution (Autumn Quarter)
• Gaborone: Development in Southern Africa (Winter and Spring Quarters)

ADDITIONAL DETAILS
Students who wish to study abroad should attend the Autumn Quarter information meetings organized by the Study Abroad Office. Students should discuss their plans with their College adviser to determine the implications of study abroad for their degree program in Chicago and should make an appointment with the relevant Study Abroad staff member to discuss the application process. Visit the College Scheduling site (https://collegescheduling.uchicago.edu/samonline/BookAppt?C=C&T=P&P=88) to make an appointment. For more information, including the most current list of program locations, visit study-abroad.uchicago.edu.

Participants in University of Chicago Study Abroad programs pay the same tuition as if they were on campus, plus a non-refundable study abroad administrative fee and, in most cases, a program fee set by the College. Each program fee includes housing and subsidizes the cost of excursions and instruction; please visit the specific program pages (http://study-abroad.uchicago.edu/programs) for precise fees. Financial Aid (http://study-abroad.uchicago.edu/financial-aid) and Scholarship and Grant (http://study-abroad.uchicago.edu/scholarships-grants) opportunities are available.

Students participating in some study abroad programs (e.g., direct enrollment programs) are not eligible for the Dean’s List for that year. Please note that more than half of the requirements for a major must be met by registering for courses bearing University of Chicago course numbers.

SUMMER INTERNATIONAL TRAVEL GRANTS
Each year the College awards approximately 100 Summer International Travel Grants to support outstanding undergraduates for intensive language study or research abroad. Funding begins at $4,000. Applications are submitted online (see the Study Abroad website (http://study-abroad.uchicago.edu/sitg) for details) and are normally due mid-February.

FOREIGN LANGUAGE ACQUISITION GRANTS (FLAG)
The FLAG Program offers awards of $4,000 to defray the costs of intermediate or advanced language study abroad. Study programs must be at least eight weeks in duration of intensive language study (at least 15 hours per week) and located in a setting where the target language is predominantly spoken. Applicants must have completed or placed out of the first year of the target language by the program start date. If a language is not
offered on campus, applicants may apply at any level. For French and Spanish language applications, preference will be given to students who have completed some intermediate language study.

Research Grants
Research grants provide $4,000 to support students conducting summer research outside the United States. In most cases these awards support research leading to a BA paper; however, other academic research projects may also be considered.
PREPARATION FOR PROFESSIONAL STUDY

Department Website: http://careeradvancement.uchicago.edu

BUSINESS

The College general education curriculum provides excellent preparation in the critical thinking skills needed for graduate-level study in business administration. Along with the course work required to complete their major, it is advisable for interested students to pursue courses that hone their quantitative, verbal, and written skills. In addition, after their first year, students may enroll in up to six graduate-level courses at the University of Chicago Booth School of Business, with four of those courses counting toward the degree requirement. While many sections allow undergraduate enrollment, Chicago Booth also offers undergraduate versions of many classes with 20000-level numbers. BUSN 20000-level (undergraduate-only) courses will follow some College policies regarding registration, scheduling, grading, etc. The BUSF 30000-level versions will be subject to Chicago Booth’s academic and administrative policies. Consult the Booth website for details.

Additional support for students considering graduate study in business is provided through the Dougan Scholars Certificate Program, Trott Business Program, Financial Markets Program, and Business Career Services.

The Dougan Scholars Certificate Program is a selective program managed by Chicago Booth, while the Trott Business Program and Financial Market Program are selective programs managed by the College through Career Advancement. Applications are accepted from all students, regardless of their major, during the first and second year for the Dougan Scholars Certificate Program, and during the first year for the Trott Business Program and Financial Markets Program. While the specific focus and requirements of the selective programs vary, each includes course work requirements at Chicago Booth, opportunities to build additional business understanding through special events with industry and academic professionals, and mentoring opportunities with upper-level College students and MBA students.

Business Career Services is an open enrollment option available to all students in the College offering industry-experienced advising and a menu of optional workshops and experiential opportunities.

Most graduate business schools require applicants to take the Graduate Management Admissions Test (GMAT). A GMAT score is currently valid for five years. Students planning to apply to graduate studies in business administration within five years of graduation should take the GMAT in their final year in the College; students can learn more and register at http://www.mba.com/us. Graduate business schools typically expect matriculating students to have acquired, on average, five years of work experience.

EDUCATION PROFESSIONS

To strengthen the University of Chicago’s reputation as a “teacher of teachers,” the College and Career Advancement launched UChicago Careers in Education Professions (https://careeradvancement.uchicago.edu/učhicago-careers-in/education-professions) in the fall of 2012. UChicago Careers in Education Professions provides specialized preparation for students in pursuing careers in teaching as well as educational administration, research, and policy.

UChicago Careers in Education Professions is a selective program that provides a variety of resources for students, including advising, workshops, guest speakers, teacher-training programs, partnerships with public and private local schools, internship opportunities, and treks to various education institutions.

Advising: Students have access to one-on-one advising with the program director of UChicago Careers in Education Professions, an expert with extensive experience in education. The program director provides students with personalized assistance in career planning, finding job and internship opportunities that match their interests, and preparing application materials.

Workshops and Events: Workshops are held throughout the academic term and cover an array of issues in the education field. Events have included, for example, talks with former U.S. Secretary of Education Arne Duncan, education technology entrepreneurs, local principals in community schools, and researchers investigating promising best practices in teaching, learning, and child development.

Metcalf Internship Opportunities and Career Treks: Education Professions is committed to offering students valuable internship opportunities at a wide range of education-focused organizations. In addition, the program offers career treks to Chicago area schools, non-profits, and leading policy and research institutes. During these treks, students have the opportunity to experience firsthand myriad work environments and career roles in these organizations.

Partnership with the Urban Education Institute: Through a close partnership with the Urban Education Institute (http://uei.uchicago.edu) (UEI) and numerous academic departments, the College offers over 30 education-related courses. These include: ECON 26700 Economics of Education, SOCI 20105 Bidwell’s Educ Organization/Social Inequality, and PBPL 25405 Child Poverty and Chicago Schools.

Gap Year Support: Increasingly, College students wait to apply for graduate programs until after they graduate, giving them time to make sure they are making the right decision and are able to assemble a
competitive application. Education Professions supports students who choose to take time between college and their graduate programs in several ways. We continue to work with alumni who may need assistance with their applications or decision-making process. We also help students and alumni find appropriate gap year experiences in the field of education.

**Entrepreneurship**

Students with an interest in starting a business, working at a start-up, or exploring entrepreneurial finance will find a wide range of resources available to them through UChicago Careers in Entrepreneurship (https://careeradvancement.uchicago.edu/uchicago-careers-in/entrepreneurship). The goal of this pre-professional program is not to have every student start a business, but rather for every student to have the opportunity to be exposed to an entrepreneurial way of thinking through experiential learning opportunities that complement the general education curriculum.

In addition to organizing College-specific workshops and opportunities, this Career Advancement program also works closely with the Polsky Center for Entrepreneurship and Innovation (http://research.chicagobooth.edu/polsky). College students are able to take advantage of world-class opportunities and resources available through the Polsky Center, including attending industry conferences, attending workshops organized by the MBA student-run Entrepreneurship and Venture Capital Club, and attending office hours with Entrepreneurs-in-Residence. Students are also able to take courses at Chicago Booth, notably an undergraduate-only section of Building the New Venture, an undergraduate-only section of Application Development, and the College New Venture Challenge course.

Programming highlights for UChicago Careers in Entrepreneurship include:

- The College New Venture Challenge is an undergraduate-only business plan competition that enables students to go through the progression of discovering an idea, building a team, creating a proof of concept, and pitching to investors. Throughout the competition, students are engaged with mentors drawn from alumni and local entrepreneurs.
- Many student teams also enter competitions that are not sponsored by the University. Examples include competitions sponsored by Clinton Global Initiative, Clean Energy Trust, Net Impact, Microsoft, Google, and Wal-Mart, as well as competitions sponsored by other universities like Stanford and MIT.
- Social entrepreneurship is a popular topic on campus with many student organizations, including GlobeMed, Campus Catalyst, and Envision Do, supporting students who want to solve social and environmental issues through new innovations.
- Start-up careers and internships are another area of student interest. Many local companies participate in the Metcalf Internship program, and local start-up companies are encouraged to hire UChicago students through subsidies and other promotions. Of note, UChicago Careers in Entrepreneurship has strong partnerships with the University's Polsky Exchange in Hyde Park, the 1871 incubator at the Merchandise Mart, and the health care incubator Matter.
- In addition to bringing in alumni and local entrepreneurs as speakers, the program also engages with local angel investors and venture capital firms. Students have worked in associate roles while in school with such local groups as Chicago Ventures, OCA Ventures, and Hyde Park Angels.
- Career treks are an outstanding way for students to meet with companies in various industries as well as learn about different regions of the country or the world. In addition to treks to Silicon Valley, UChicago Careers in Entrepreneurship looks to engage with other regional hubs of entrepreneurial opportunity, including New York City, Boston, Austin, and Chicago.

**Health Professions**

UChicago Careers in Health Professions (https://careeradvancement.uchicago.edu/uchicago-careers-in/health-professions) (UCHIP) provides students with the resources and support to develop the knowledge, skills, competencies, and experiences required for advanced study in the health professions. The College’s broad and intellectually expansive liberal arts education, coupled with pre-health courses and support from UChicago Careers in Health Professions, is exceptional preparation for a career in health and medicine. Students develop the competencies required by graduate schools of the health professions, including: in-depth experience with the process of scientific inquiry; a facility in drawing linkages among scientific disciplines; strong critical thinking and communication skills; the ability to use mathematics to explain the natural world; mastery of basic principles of physics and chemistry; an understanding of the diversity of subject matter and methods of investigation in the biological sciences; and a sophisticated appreciation of the social context of health and medicine.

Upon meeting the College’s general education requirements, students are encouraged to major in any discipline in which they have a strong interest, while fulfilling the following common entry requirements for advanced study in the field:

- 3 quarters of general chemistry with labs
- 3 quarters of organic chemistry with labs
- 3 quarters of biology with labs
• 3 quarters of physics with labs
• 1 quarter of biochemistry
• 3 quarters of a general education humanities sequence (recommended)
• 3 quarters of calculus (recommended)
• 1 quarter of statistics (recommended)

The Biological Sciences Collegiate Division (BSCD) offers several course sequences that prepare students for advanced study in the health professions. Students should consult the Biological Sciences page in this catalog and work closely with their College advisers to determine which sequence is most appropriate.

Students should be aware that the MCAT has expanded to include a section on Behavioral and Psychological Sciences; for more information, visit students-residents.aamc.org/applying-medical-school/article/whats-mcat-exam. Students are encouraged to consider SOSC 18100 Topics in Behavioral and Social Sciences Relevant to Medicine or other course work within the Social Sciences Collegiate Division to assist in preparing for this section.

Students who are unable to complete three quarters of a general education humanities sequence in their first year should plan to take a writing-intensive English course when their schedule allows. They should understand however, that this English course cannot be applied to the general education humanities requirement.

It is recommended that students work closely with their College advisers to choose courses appropriate to their level of preparation and interest. Although the College offers course sequences that fulfill all of the above requirements, some schools of the health professions have additional requirements. To ensure all requirements are met, students are also encouraged to check directly with the schools to which they intend to apply.

UChicago Careers in Health Professions supports students and alumni as they explore the health professions, among them allopathic (MD) and osteopathic (DO) medicine, nursing (PhD), dental (DDS) and pediatric (DPM) medicine, veterinary medicine (DVM), pharmacy (PharmD), and health services research (PhD). In addition to curricular assistance, UChicago Careers in Health Professions offers a wide range of cocurricular support that empowers students to achieve a high level of academic, professional, and personal success.

Students interested in the health professions should consult first with their College adviser and then with UChicago Careers in Health Professions. Appointments may be made with UCIHP via AdviseStream.

JOURNALISM, ARTS, AND MEDIA

Journalism, arts, and media converge and flourish at the University of Chicago. Through the College's strong liberal arts curriculum and the Reva and David Logan Center for the Arts, students pursue multiple interdisciplinary areas, even as they become experts in specific areas of interest. As part of Career Advancement, UChicago Careers in Journalism, Arts, and Media (UCIJAM) provides essential professional development opportunities to help students launch successful careers in these fields. Internships, fellowships, employment opportunities, and alumni networks take University students across the country and around the globe, allowing them to grow outside the classroom, develop as professionals, and pursue opportunities in a wide variety of disciplines.

UChicago Careers in Journalism, Arts, and Media complements the College's emphasis on academics with one-on-one career advising and programming designed to connect students with emerging and established professionals in the fields of journalism, publishing, visual art, music, film, television, theater, architecture, design, and more. Internships, mentorships, apprenticeships, and collaborations with working professionals provide students with the hands-on experience and deep networking needed to launch successful careers.

The program is organized and managed by Career Advancement. The components include:
• Individual advising to help students win internships and jobs in their particular areas of interest
• Workshops with leading practitioners to develop practical skills and networking opportunities
• UChicago Careers in Journalism, Arts, and Media--wide emphasis on building a body of work, including an emphasis on personal entrepreneurship
• Grants and apprenticeships to help support students working in unpaid internships and student-initiated projects
• Advising of registered student organizations

LAW

The College curriculum provides excellent preparation for the study of law. More important than a specific major is the acquisition of certain skills necessary for the intelligent practice of law: the ability to communicate effectively in oral and written expression, a critical understanding of human institutions and values, and
Preparation for Professional Study

the ability to reason closely from given premises and propositions to tenable conclusions. Such skills can be developed in any major and by taking courses in English language and literature, philosophy, public policy, American history, political science, mathematics, and economics.

Students interested in a career in law should use the resources provided by the UChicago Careers in Law (https://careeradvancement.uchicago.edu/uchicago-careers-in-law) program, which is organized and managed by the Career Advancement office. UChicago Careers in Law supports students as they explore their interest in law through programming, internships, treks, and advising.

**Advising:** Students have access to one-on-one advising with the program director and assistant director of UChicago Careers in Law, experts with extensive experience in the legal field. The directors provide students with personalized assistance in career exploration and planning, finding job and internship opportunities that match their interests, and preparing application materials for those positions. UChicago Careers in Law also assists students and College alumni in targeting law schools, preparing successful applications, and choosing the most appropriate law school.

**Workshops and Guest Speakers:** UChicago Careers in Law workshops are held throughout the academic year and cover an array of current topics and issues in the field of law, including an introduction to legal research and writing. These programs include alumni lawyers practicing in private, public, and nonprofit sectors who give students an accurate picture of professional experiences across a broad range of fields, including international law, corporate law, public interest, and government services.

**Metcalf Internship Opportunities:** Internships in law-related organizations provide students with on-the-job experience—which can be extremely useful in determining whether or not law is the correct path to take—and allow them to explore different areas of legal practice. The Metcalf Internship Program provides paid, substantive internships exclusively available to UChicago students.

**Treks:** UChicago Careers in Law students visit public and private institutions in order to gain exposure to a wide range of legal careers and workplaces. Local Treks are available to students throughout the academic year and also include opportunities to meet with attorneys in such major legal markets as New York and Washington, DC.

**Mentor Program:** With nearly 100 students participating each year, the Mentor Program creates a community between University of Chicago law students and undergraduates, providing students from the College with guidance and helpful insights into the law school experience. The Law School and the College have sustained a very close relationship over the years, and the College is consistently one of the largest feeder undergraduate schools to the Law School.

**PUBLIC POLICY AND SERVICE**

The public and social service sectors cover a wide range of opportunities in government and nonprofits, including domestic and international policy, direct social service, philanthropy and development, and nonprofit consulting and administration, among many others. The Fried Public Policy and Service Program (https://careeradvancement.uchicago.edu/uchicago-careers-in/public-social-service) engages with students interested in the diverse range of government and nonprofit careers. Employers in these arenas look for individuals with deep commitment to their organization’s mission. Through their rigorous academic studies, University of Chicago students learn the essential skills necessary to contribute meaningfully in service fields, including qualitative and quantitative research skills, the ability to analyze complex problems and to develop creative and effective solutions, exemplary written and oral communication skills, and an aptitude for managing and prioritizing numerous projects and commitments.

Fried programs and advising hours are open to students of all levels, and students may participate in the program at any point during their College years. Students interested in public policy and service are encouraged to meet with Fried Public Policy and Service Program advisers to explore specific areas of interest. Numerous resources are offered to educate students about specific areas within public and social service and to connect them with alumni and employers in their chosen fields. Resources include:

- **Paid internship opportunities with government agencies and nonprofit organizations**
- **Skill-building workshops to educate students about how to navigate job searches and careers in the public and social service sectors**
- **Information sessions with industry experts to help students learn about different organizations and agencies and the types of opportunities available**
- **Panels with alumni from a variety of fields to offer students networking opportunities and the opportunity to learn how University of Chicago graduates have translated their educations into careers in these sectors**
- **Treks to such locations as Washington, DC, and New York City, as well as in Chicago, to visit a variety of organizations and agencies to learn about public and social service work in the field**
SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH

UChicago Careers in Science, Technology, Engineering, and Math (https://careeradvancement.uchicago.edu/uchicago-careers-in/science-technology) (UCISTEM) helps students explore, prepare for, and obtain careers or professional school placement in STEM fields. Students of any major may join UChicago Careers in Science, Technology, Engineering, and Math, in which they have the opportunity to participate in an elective workshop curriculum as well as such experiential learning options as research assistantships, internships, externships, and innovation competitions. Opportunities for mentorship, alumni networking, and one-on-one advising are readily available as well. UChicago Careers in Science, Technology, Engineering, and Math students have successfully gone on to graduate school programs and careers in a variety of fields, including alternative energy, biotechnology, entrepreneurship, and national laboratory research.

Components of the program include advising, workshops, and expert speakers, the Annual Undergraduate Research Symposium, research and internship opportunities, career treks, the Facilitating UChicago Students in Engineering (FUSE) cohort, and connections with such University partners as the Institute for Molecular Engineering (http://ime.uchicago.edu), the Marine Biological Laboratory (http://www.uchicago.edu/mbl), and Fermi National Accelerator Laboratory (http://www.fnal.gov). Benefits may include:

• Exploration of the diverse career options in STEM fields through workshops led by alumni, industry treks, and facility tours to such Chicagoland organizations as Argonne National Laboratory (http://www.anl.gov)
• Exposure to industry information, workplace cultures, and networks of alumni mentors and student peers on diverse industry treks such as the Houston Energy Trek or the San Francisco Tech Trek
• Opportunities to hone skill sets for graduate school applications and employers such as GRE preparation and programming skill sets
• Finding laboratory positions on campus or off campus through the Metcalf Internship Program
Scholarly Advancement


The CCSA also provides guidance for students interested in undergraduate research (http://ccsa.uchicago.edu/undergraduate-research-uchicago), graduate school, or other postgraduate funding opportunities. CCSA staff members provide general support to students by identifying relevant opportunities and assisting in strategically planning for those opportunities, closely mentor students through rigorous application processes, and facilitate campus endorsement procedures when relevant.

Undergraduates can access a searchable database (http://ccsa.uchicago.edu/search) of funding opportunities—which also includes UChicago funding—and guidance about nationally competitive opportunities and undergraduate research on the CCSA website (http://ccsa.uchicago.edu). They are also encouraged to sign up for a weekly listserv (https://app.e2ma.net/app2/audience/signup/1809156/1768427) to stay up to date about opportunities, deadlines, and relevant information sessions. Individual advising appointments are strongly recommended for any student interested in applying to national scholarships, fellowships, or postgraduate opportunities and can be made through Appointment Manager via the CCSA website (http://ccsa.uchicago.edu/contact-us).
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