Urban and environmental issues are interconnected. Urbanization, climate change, habitat loss, pollution, food and energy needs, and issues of social justice and economic stability are among the most pressing issues facing contemporary societies. Environmental and urban processes operate at multiple scales, involving natural and human consequences that cannot be addressed solely from within a single discipline. Students will gain an understanding of the interconnected natural and urban realms, building their understanding of what sustainable development means and how opportunities and challenges can be met. The major motivates a deeper theoretical understanding of urbanism and nature, as well as practical strength in addressing urban and environmental challenges. It brings a spatial and place-based perspective to the study of these challenges, using built form and environmental context as key, conceptual lenses to investigate the social, cultural, economic, and humanistic dimensions of urbanism.

Program of Study

The Environmental and Urban Studies program encourages interdisciplinary approaches to the complex interactions and intersections of urbanism, environment, and society by incorporating frameworks, theories, models, and methods from the humanities, social sciences, natural sciences, urban planning and design, and urban science. Students can choose to focus on either the Environmental Track or the Urban Track. A student interested in urban environmental topics can design a program of study through either track.

- **The Environmental Track** of the major emphasizes critical thinking and rigorous applications to the study of the environment through the social sciences and humanities. Central concepts to this track include human behavior and its relationship to the environment, moral and ethical dimensions of environmental preservation and conservation, the evolution of environmental discourse, communications, and media, and cultural and historical constructions of nature and the human. The track provides emphases in environmental economics and policy, law and politics, sustainable development, human ecology, environmental ethics and justice, and the social and humanistic study of climate change.

- **The Urban Track** of the major emphasizes perspectives on human interaction with the urban, built 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, dynamics, and human experience of cities by capitalizing on the growth of interest in urban design, urban planning, and emerging urban science.

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: Students who have questions about Environmental and Urban Studies courses that they have already taken or plan to take should contact the program director, Sabina Shaikh (773.834.4405, sabina@uchicago.edu), to devise their program of study.

Environmental and Urban Studies Major Requirements

Students who declared their Environmental and Urban Studies major with the College in Autumn Quarter 2019 or later will follow the requirements for the major as described below. Students who declared their major with the College before Autumn Quarter 2019 may continue under the previous requirements appropriate to their chosen track, but they may also choose to complete the updated major requirements, provided that they fit within the student’s graduation plan. The requirements for students who declared prior to Autumn Quarter 2019 can be found here (https://environmentalstudies.uchicago.edu/major-requirements-fall-2019/).

Students in the major must complete thirteen courses as outlined below.

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 Global Environment and ENST 20150 Sustainable Urban Development. These courses provide an overview of contemporary environmental issues and the theoretical and empirical approaches used to understand and address them.

Quantitative Requirements

Students in both tracks of the major will take ENST 28702 Introduction to GIS and Spatial Analysis (or equivalent), which provides the conceptual and analytics tools for space-based approaches to environmental and urban study. The course is designed to incorporate applications from the social sciences and humanities. Other GIS courses may satisfy this requirement by petition. Students in the major also have a statistics requirement of STAT 22000 Statistical Methods and Applications or an equivalent course, approved by petition to the program director.
Summary of Requirements for All Majors
(13 total courses: 4 common courses, 8 in the chosen track, and BA Colloquium)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 21201</td>
<td>Human Impact on the Global Environment</td>
<td>100</td>
</tr>
<tr>
<td>ENST 20150</td>
<td>Sustainable Urban Development</td>
<td>100</td>
</tr>
<tr>
<td>ENST 28702</td>
<td>Introduction to GIS and Spatial Analysis</td>
<td>100</td>
</tr>
<tr>
<td>STAT 22000</td>
<td>Statistical Methods and Applications (or equivalent)</td>
<td>100</td>
</tr>
<tr>
<td>Eight Chosen Track Courses</td>
<td></td>
<td>800</td>
</tr>
<tr>
<td>ENST 29801</td>
<td>BA Colloquium I</td>
<td>100</td>
</tr>
<tr>
<td>Internship/field studies experience</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 1300

Thematic Tracks in Environmental and Urban Studies

Environmental Track

Students in the Environmental Track will take ENST 21301 Making the Natural World: Foundations of Human Ecology, a course which considers the conceptual underpinnings of contemporary notions of ecology, environment, and balance through the examination of historical trajectories of anthropogenic landscape modification and human society.

The Environmental Track requires completion of three elective courses from an approved list of Environmental Track courses and one elective course from an approved list of Urban Track courses. There is significant overlap in the tracks and many approved courses will be counted towards either track.

Students in the Environmental Track will also complete an experiential learning, practicum, or studio course from an approved list or through petition to the program director. The remaining two courses required for the Environmental Track must come from an approved list of Environmental Science courses, which are focused on physical and natural sciences.

Please visit the ENST Approved Courses spreadsheet (https://docs.google.com/spreadsheets/d/1WDErGwY498DXKgzNihqfr-W95pGVpDG3_Mvr4VuLDCK/edit?#gid=0) to find out which courses qualify for credit in the major.

Environmental Track Requirements
(8 additional courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 21301</td>
<td>Making the Natural World: Foundations of Human Ecology</td>
<td>100</td>
</tr>
<tr>
<td>Three Environmental Track elective courses from approved list*</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>One Urban Track elective course from approved list*</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>One experiential learning course from approved list*</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Two Environmental Science courses from approved list*</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Internship/field studies experience</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 800

* Must come from approved lists, found on the program’s website (http://environmentalstudies.uchicago.edu/courses-offered/).

Urban Track

Students in the Urban Track are required to take either ENST 24600 Introduction to Urban Sciences a course that provides a grand tour of conceptual frameworks, general phenomena, emerging data and policy applications that define a growing scientific integrated understanding of cities and urbanization OR ENST 20506 Cities, Space, Power: Introduction to urban social science, a lecture course that provides a broad, multidisciplinary introduction to the study of urbanization in the social sciences.

The Urban Track requires completion of four elective courses from an approved list of Urban Track courses and one elective course from an approved list of Environmental Track courses. There is significant overlap in the tracks and many approved courses will be counted towards either track.

Students in the Urban Track will choose one elective course from an approved list of courses in urban social science. The Urban Track also requires the completion of an experiential learning, practicum, or studio course from an approved list or through petition to the program director.

Please visit the ENST Approved Courses spreadsheet (https://docs.google.com/spreadsheets/d/1WDErGwY498DXKgzNihqfr-W95pGVpDG3_Mvr4VuLDCK/edit?#gid=0) to find out which courses qualify for credit in the major.
Urban Track Requirements
(8 additional courses)

One of the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 24600</td>
<td>Introduction to Urban Sciences</td>
</tr>
<tr>
<td>ENST 20506</td>
<td>Cities, Space, Power: Introduction to urban social science</td>
</tr>
</tbody>
</table>

Four Urban Track elective courses from approved list*  
One urban social science course from approved list*  
One Environmental Track elective course from approved list*  
One experiential learning course from approved list*  
Internship/field studies experience  

Total Units: 800

*Must come from approved lists, found on the program’s website (http://environmentalstudies.uchicago.edu/courses-offered/).

BA Thesis

All students in the major are expected to develop significant independent research projects in close consultation with their preceptor and faculty adviser. In their third year, students must meet with an Environmental and Urban Studies preceptor by fourth week of Spring Quarter and submit a detailed topic page by eighth week of Spring Quarter. 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 (http://environmentalstudies.uchicago.edu/people/?group=Faculty and Staff), members of the Program on Global Environment faculty advisory committee (https://environmentalstudies.uchicago.edu/faculty-advisory-committee/), or from relevant outside departments. An assigned preceptor will serve 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 their fourth year, students register for ENST 29801 BA Colloquium I (Autumn) or ENST 29802 BA Colloquium II (Winter), which are designed to teach research skills and more generally to aid the research and writing process. Students interested in dedicating more time to the BA process can register for both the Autumn and Winter sections. The final version of the BA thesis is due by the second Friday of the quarter in which the student plans to graduate. Students who have a BA thesis requirement for another major may petition to the program director for approval. The thesis adviser about potentially taking ENST 29900 B. A. Thesis (Reading and Research).

All students graduating in Spring Quarter are required to participate in the BA presentation session during reading period following Spring Quarter of the year they plan to graduate.

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 and on the program website. It must be completed and returned to the College adviser by the end of Autumn Quarter of the student’s year of graduation.

Required BA Timeline

Third years:
- Attend third year BA meeting at the end of week 7 of Winter Quarter
- Meet with BA preceptor by the end of week 4 of Spring Quarter
- Submit BA Topic Form by the end of week 8 of Spring Quarter

Fourth years:
- Register for either ENST 29801 in Autumn Quarter or ENST 29802 in Winter Quarter
- Submit final BA thesis to preceptor and faculty adviser by the end of week 2 of Spring Quarter
- Submit bound copy of final thesis to the department by the end of week 7 of Spring Quarter
- Attend BA Thesis Poster Presentation during reading period of Spring Quarter

All program forms can be found on the program’s website under Major/Minor > Program Forms (https://environmentalstudies-uat.uchicago.edu/program-forms/).

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. Activities that fulfill the internship requirement
include summer or academic year internships of varying lengths, research assistantships, fellowships or field studies with faculty or other academic staff, participation in working groups, completion of the Chicago Studies Certificate Program, or other sustained engagements relating to environmental and urban studies. Participation in recognized student organizations, while encouraged, does not count towards the internship requirement. Students must complete the internship evaluation form available on the program website before week 2 of Spring Quarter in the year they plan to graduate. See below for more on the Chicago Studies Certificate Program.

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 environmentalstudies.uchicago.edu (https://environmentalstudies.uchicago.edu/).

Environmental and Urban Studies majors and minors must submit the Intent to Graduate form no later than the first week of the quarter in which they intend to graduate. The form is available online (https://registrar.uchicago.edu/graduation/application-to-graduate/) and must be submitted electronically.

Students will need to formalize their declaration of the major on my.uchicago.edu (https://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 six courses be taken according to the following guidelines:

Tracks
• Environmental
• Urban

Requirements for Both Minor Tracks (2 courses)

<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 Global Environment</td>
<td>100</td>
</tr>
<tr>
<td>ENST 20150</td>
<td>Sustainable Urban Development</td>
<td>100</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>

Additional Requirements for Minor Environmental Track (4 additional courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 21301</td>
<td>Making the Natural World: Foundations of Human Ecology</td>
<td>100</td>
</tr>
<tr>
<td>Three courses in the Environmental Track*</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>400</td>
</tr>
</tbody>
</table>

Additional Requirements for Minor Urban Track (4 additional courses)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENST 24600</td>
<td>Introduction to Urban Sciences</td>
<td>100</td>
</tr>
<tr>
<td>ENST 20506</td>
<td>Cities, Space, Power: Introduction to urban social science</td>
<td>100</td>
</tr>
<tr>
<td>One course in urban social sciences*</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Two Urban Track elective courses*</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>400</td>
</tr>
</tbody>
</table>

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 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 (http://collegecatalog.uchicago.edu/thecollege/chicagostudies/) or visit chicagostudies.uchicago.edu (http://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 2022. 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, and creative expression. The certificate is overseen by the University Community Service Center in collaboration with the Environmental and Urban Studies program, which supervises the program's academic requirements.

Completion of the Chicago Studies Certificate will satisfy the internship/field study requirement for the Environmental and Urban Studies major.

ENVIRONMENTAL STUDIES COURSES

ENST 10050. Pathways in Urban Studies. 100 Units.
The world is urbanizing at an increasing rate, and the idea of the city remains a potent one for community builders, policy makers, and researchers of all kinds. This course explores the work of city-building through public policy, placemaking, and urban planning and design. Students will read from fundamental writings in urbanism and policy, and then hear directly from practitioners in the field - community organizers, social entrepreneurs, and other urban actors - to understand how theory meets practice in the form and function of the city, as well as visit local organizations and sites of urban intervention. While the course will focus on American cities, students will also have an opportunity to read and think globally about urbanism, and to learn from guest speakers who work in the field of international urban development. Many consider Chicago a paradigmatic American city, and there is much to learn simply from experiencing the boundaries of our campus and the ways in which our campus touches and changes the city. Students in this course will join the university's long history of urban research that continues to this day, across disciplines.

Terms Offered: Summer

ENST 10550. Pathways in City Planning and Politics. 100 Units.
The world is urbanizing at an increasing rate, and the idea of the city remains a potent one for community builders, policy makers, and researchers of all kinds. This course explores the work of city-building through public policy, placemaking, and urban planning. Students will read from fundamental writings in urbanism and policy, and then hear directly from practitioners in the field - community organizers, elected officials, real estate developers, and other urban actors - to understand how theory meets practice in the form and function of the city, as well as visit local organizations and sites of urban intervention. While the course will focus on American cities, students will also have an opportunity to read and think globally about urbanism, and to learn from guest speakers who work in the field of international urban development. Many consider Chicago a paradigmatic American city, and there is much to learn simply from experiencing the boundaries of our campus and the ways in which our campus touches and changes the city. Students in this course will join the university's long history of urban research that continues to this day, across disciplines.

Terms Offered: Summer
ENST 12105. Sex and Gender in The City. 100 Units.
This course is designed to introduce students to some of the key concerns at the intersection of gender studies and urban studies. In this course, we will take gender relations and sexuality as our primary concern and as a constitutive aspect of social relations that vitally shape cities and urban life. We will examine how gender is inscribed in city landscapes, how it is lived and embodied in relation to race, class, and sexuality, and how it is (re)produced through violence, inequality, and resistance. Over the course of the quarter, we will draw on an interdisciplinary scholarship that approaches the central question of how and why thinking about urban life in relation to gender and sex matters.
Instructor(s): Sneha Annavarapu Terms Offered: Spring
Note(s): This course counts as a Foundations course for GNSE majors
Equivalent Course(s): SOCI 28088, GLST 22105, GNSE 12105, ARCH 22105

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 Terms Offered: PHSC 13400 is no longer offered; PHSC 13410 is the replacement
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): GEOS 13400, ENSC 13400, PHSC 13400

ENST 12302. 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 or BIOS 10140. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.
Equivalent Course(s): BIOS 11125

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): T. Shaw Terms Offered: Spring
Prerequisite(s): MATH 13100-MATH 13200
Equivalent Course(s): ENSC 13300, GEOS 13300

ENST 13410. Global Warming: Understanding the Forecast (Flipped Class) 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; 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. This course covers the same material as PHSC 13400, but is organized using a flipped classroom approach in order to increase student engagement and learning.
Instructor(s): D. Abbot Terms Offered: Autumn Spring
Prerequisite(s): Some knowledge of chemistry or physics helpful.
Equivalent Course(s): PHSC 13410, ENSC 13410, GEOS 13410

ENST 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): M. Garrido Terms Offered: Spring. Not Offered in 2021/22
Equivalent Course(s): SOCI 20104, GEOG 22700, SOCI 30104, ARCH 20104, CHST 20104, GEOG 32700, CRES 20104, SOSC 25100

ENST 20150. Sustainable Urban Development. 100 Units.
The course covers concepts and methods of sustainable urbanism, livable cities, resiliency, and smart growth principles from a social, environmental and economic perspective.
Instructor(s): Evan Carver Terms Offered: Spring Winter
Note(s): ENST 21201 and 20150 are required of students who are majoring in Environmental and Urban Studies and may be taken in any order.
ENST 20160. Cities on Screen. 100 Units.
How do the movies shape our collective imagination about cities? Why do we so often turn to them for visions of disaster and dystopia, on the one hand, or a futuristic utopia on the other? How has film responded to cities in the past, and how can it help us understand our present urban condition? How can film be understood as a tool for exploring what a city is? In this seminar, we will watch and discuss feature films in which the built environment or urban issues play important roles. Students will improve their film literacy -- learning not just what a film does but how it does it -- and understand applications for film in the analysis of social, spatial, temporal, and immersive phenomena, as well as how it can help inspire and communicate design more effectively. For more information, contact Evan Carver (ehc@uchicago.edu).
Instructor(s): Evan Carver Terms Offered: Winter. Not offered Winter 2021
Note(s): Not offered Winter 2021
Equivalent Course(s): ARCH 20160

ENST 20170. Pandemics, Urban Space, and Public Life. 100 Units.
Much of the cultural vibrance, economic strength, and social innovation that characterizes cities can be credited to their density. Put simply, cities bring people together, and togetherness allows for complex and fruitful exchange. But togetherness also brings risks, notably from infectious disease. A pandemic feeds on propinquity. "Social distance," while a short-term public health imperative, is antithetical to the very idea of the urban. In this seminar, we will explore these competing tensions in light of current and past disease outbreaks in urban settings. Drawing on a range of texts from history, design theory, sociology, and anthropology, as well as cultural artifacts like film, graphic memoir, and photography, we will engage questions like: How are the risks of contagion balanced with the benefits of density? How are such risks distributed throughout society? What creative responses have architects, urban designers, and planners brought to this challenge? Most importantly, how can we respond constructively to the challenge of pandemic to create cities where the benefits of togetherness are maximized, perhaps even improved on compared with the pre-outbreak condition? Students will have the opportunity to propose design or policy interventions to help their own communities cope with the present coronavirus/COVID-19 crisis as it is unfolding and to return to post-pandemic life more vibrant than ever.
Instructor(s): Evan Carver Terms Offered: Autumn Spring
Equivalent Course(s): ARCH 20170, HLTH 20170, GEOG 20170, PBPL 20170

ENST 20180. Writing the City. 100 Units.
How do great writers convey sense-of-place in their writing? What are the best ways to communicate scientific and social complexity in an engaging, accessible way? How can we combine academic rigor with journalistic verve and literary creativity to drive the public conversation about urgent environmental and urban issues? These are just some of the questions explored in WRITING THE CITY, an intensive course dedicated to honing our skills of verbal communication about issues related to the built and natural environments. Students will research, outline, draft, revise, and ultimately produce a well-crafted piece of journalistic writing for publication in the program’s new annual magazine. Throughout the quarter we will engage intensely with a range of authors of place-based writing exploring various literary and journalistic techniques, narrative devices, rhetorical approaches and stylistic strategies.
Instructor(s): Evan Carver Terms Offered: Autumn
Prerequisite(s): At least one ENST, GEOG, or ARCH course; or one PBPL, ARTH, ANTH, or SOCI course with an urban focus; or instructor permission. Please contact ehc@uchicago.edu with questions.
Equivalent Course(s): ARCH 20180

ENST 20185. Visualizing the City. 100 Units.
An underlying principle of all modern inquiry is to "make the unseen seen." But all too often, the phrase is thrown about as a meaningless cliche or, even worse, is used as an excuse for obfuscation. In VISUALIZING THE CITY, we reclaim the mandate to "make the unseen seen" by taking the cliche literally: we will restore the potential of excellent visual communication in the context of urban and environmental studies, culminating in the production of a print and online magazine for the program. Throughout this hands-on course, students will explore theories of visuality and visual communication and then apply various visualization tools to document, analyze, and communicate aspects of the built environment. Students will learn the fundamentals of software applications (such as Illustrator, InDesign, and Photoshop), web design, image editing, drawing, graphic advertising, layout, and page design. Special attention will be given to representing 2- and 3-dimensional space (i.e., cartography and drafting). Small exercises will build toward the final publication, with students acting as the production team, thereby coordinating technical skills with organization, management, communication, ethics, and teamwork.
Instructor(s): Evan Carver Terms Offered: Winter
Equivalent Course(s): ARCH 20185

ENST 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, desiccation, 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 lead 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

ENST 20250. Introduction to Statistical Concepts and Methods. 100 Units.
Statistical techniques offer psychologists a way to build scientific theories from observations we make in the laboratory or in the world at large. As such, the ability to apply and interpret statistics in psychological research represents a foundational and necessary skill. This course will survey statistical techniques commonly used in psychological research. Attention will be given to both descriptive and inferential statistical methodology.

Instructor(s): TBD
Terms Offered: Winter

Prerequisite(s): It is recommended that students complete MATH 13100 and MATH 13200 (or higher) before taking this course.

Equivalent Course(s): PSYC 20250, EDSO 20250

ENST 20252. Urban Innovation: Cultural Place Making and Scenescapes. 100 Units.
Activists from Balzac, Jane Jacobs, and others today seek to change the world using the arts. Ignored by most social science theories, these new cultural initiatives and policies are increasing globally. Urban planning and architecture policies, walking and parades, posters and demonstrations, new coffee shops and storefront churches reinforce selective development of specific cities and neighborhoods. These transform our everyday social environments into new types of scenes. They factor into crucial decisions, about where to work, to open a business, to found a political activist group, to live, what political causes to support, and more. The course reviews new case studies and comparative analyses from China to Chicago to Poland that detail these processes. Students are encouraged to explore one type of project.

Instructor(s): T. Clark
Terms Offered: Spring

Equivalent Course(s): ARCH 20252, SOCI 20252, SOCI 30252

ENST 20300. The Science, History, Policy, and Future of Water. 100 Units.
Water is shockingly bizarre in its properties and of unsurpassed importance throughout human history, yet so mundane as to often be invisible in our daily lives. In this course, we will traverse diverse perspectives on water. The journey begins with an exploration of the mysteries of water’s properties on the molecular level, zooming out through its central role at biological and geological scales. Next, we travel through the history of human civilization, highlighting the fundamental part water has played throughout, including the complexities of water policy, privatization, and pricing in today’s world. Attention then turns to technology and innovation, emphasizing the daunting challenges dictated by increasing water stress and a changing climate as well as the enticing opportunities to achieve a secure global water future.

Instructor(s): Seth Darling
Terms Offered: Winter

Prerequisite(s): None

Equivalent Course(s): HIPS 20301, GLST 26807, MENG 20300, HIST 25426, ANTH 22131

ENST 20335. Writing Chicago’s Histories. 100 Units.
Narrative history and biography persist as vital and culturally resonant forms of popular writing in a period of shifting habits of media consumption. Works of popular nonfiction-like Isabel Wilkerson’s The Warmth of Other Suns, Erik Larson’s The Devil in the White City, and Doris Goodwin’s Team of Rivals: The Political Genius of Abraham Lincoln-have the power to reach beyond academic audiences and shape a citizenry’s understanding of its past and its present. The practice of narrative history and biography, accordingly, is a fertile way to participate in the civic life of a metropolis. Anyone researching and writing about Chicago necessarily grapples with its complex history, engages with its deep problems and explores its great opportunities. This course invites students to dive into the city’s vast archives to bring to light hidden stories and forgotten lives, and to practice the related crafts of narrative history and biography. Students will explore the collections of numerous libraries and museums, including the Newberry Library, the Chicago History Museum, the Art Institute and the SCRC.

After surveying primary sources-oral histories, newspapers, letters, diaries, photographs and maps-students will devise a research project inspired by a specific set of archival materials. They may investigate a person, a historical event, a building, an artwork, a social movement or a neighborhood associated with any period in Chicago’s history from 1833 to the present.

Instructor(s): Nora Titone
Terms Offered: Spring

Equivalent Course(s): CHST 20335

ENST 20500. Introduction to Population. 100 Units.
This course provides an introduction to the field of demography, which examines the growth and characteristics of human populations. It also provides an overview of our knowledge of three fundamental population processes: fertility, mortality, and migration. We cover marriage, cohabitation, marital disruption, aging, and population and environment. In each case we examine historical trends. We also discuss causes and
ENST 21201. Human Impact on the Global Environment. 100 Units.

The goal of this survey course is to analyze the impact of the human enterprise on the world that sustains it. This class explores the possibilities and perils of continued human existence on Earth. Taking climate change as a launching point, the class investigates the features of collective human life that make its prolonged existence a perennial challenge. The texts include those on challenges unique to the environment, like Stephen Gardiner’s A Perfect Moral Storm and Jared Diamond’s Collapse, as well as philosophical and religious theories of progress and their skeptics, centering class discussions on sources of hope and reasons for doubt about the human future. Perfect Moral Storm and Jared Diamond’s Collapse, as well as philosophical and religious theories of progress and their skeptics, centering class discussions on sources of hope and reasons for doubt about the human future.

ENST 21020. Is Humanity Doomed? 100 Units.

This course provides an overview of methods to identify interesting patterns in geographic data, so-called spatial clusters. Cluster concepts come in many different forms and can generally be differentiated between the search for interesting locations and the grouping of similar locations. The first category consists of the identification of extreme concentrations of observations with similar values for one or more variables, such as areas with elevated disease incidence. The second group consists of the combination of spatial observations into larger (aggregate) areas such that internal similarity is maximized (regionalization). The methods covered come from the fields of spatial statistics as well as machine learning (unsupervised learning) and operations research. Topics include point pattern analysis, spatial scan statistics, local spatial autocorrelation, dimension reduction, as well as spatially explicit hierarchical, agglomerative and density-based clustering. Applications range from criminology and public health to politics and marketing. An important aspect of the course is the analysis of actual data sets by means of open source software, such as GeoDa, R or Python.

ENST 20519. Spatial Cluster Analysis. 100 Units.

This course provides a high-intensity introduction to the sociology of urban planning practice under modern capitalism. Building upon urban sociology, planning theory and history as well as urban social science and environmental studies, we explore the emergence, development and transformation of urban planning in relation to changing configurations of capitalist urbanization, modern state power, sociopolitical insurgency and environmental crisis. Following an initial exploration of divergent conceptualizations of “planning” and “urbanization,” we investigate the changing sites and targets of planning; struggles regarding the instruments, goals and constituencies of planning; the contradictory connections between planning and diverse configurations of power in modern society (including class, race, gender and sexuality); and the possibility that new forms of planning might help produce more socially just and environmentally sane forms of urbanization in the future.

ENST 20521. Sociology of urban planning: cities, territories, environments. 100 Units.

This course provides an overview of methods to identify interesting patterns in geographic data, so-called spatial clusters. Cluster concepts come in many different forms and can generally be differentiated between the search for interesting locations and the grouping of similar locations. The first category consists of the identification of extreme concentrations of observations with similar values for one or more variables, such as areas with elevated disease incidence. The second group consists of the combination of spatial observations into larger (aggregate) areas such that internal similarity is maximized (regionalization). The methods covered come from the fields of spatial statistics as well as machine learning (unsupervised learning) and operations research. Topics include point pattern analysis, spatial scan statistics, local spatial autocorrelation, dimension reduction, as well as spatially explicit hierarchical, agglomerative and density-based clustering. Applications range from criminology and public health to politics and marketing. An important aspect of the course is the analysis of actual data sets by means of open source software, such as GeoDa, R or Python.

ENST 20520. Is Humanity Doomed? 100 Units.

This course provides an overview of methods to identify interesting patterns in geographic data, so-called spatial clusters. Cluster concepts come in many different forms and can generally be differentiated between the search for interesting locations and the grouping of similar locations. The first category consists of the identification of extreme concentrations of observations with similar values for one or more variables, such as areas with elevated disease incidence. The second group consists of the combination of spatial observations into larger (aggregate) areas such that internal similarity is maximized (regionalization). The methods covered come from the fields of spatial statistics as well as machine learning (unsupervised learning) and operations research. Topics include point pattern analysis, spatial scan statistics, local spatial autocorrelation, dimension reduction, as well as spatially explicit hierarchical, agglomerative and density-based clustering. Applications range from criminology and public health to politics and marketing. An important aspect of the course is the analysis of actual data sets by means of open source software, such as GeoDa, R or Python.

ENST 21201. Human Impact on the Global Environment. 100 Units.

The goal of this survey course is to analyze the impact of the human enterprise on the world that sustains it. Topics include human population dynamics and historical trends in global impact, with most of the course focusing on how humans have altered the Earth system through a variety of processes (including climate change, air, water, nutrient cycling, pollution/novel entities, biodiversity, and land use). We read and discuss diverse sources, write short analytical papers, and a final argument based research paper.

Instructor(s): Alison Anastasio
Terms Offered: Autumn

ENST 20510. 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): MACS 54000, GEOG 20500, GEOG 30500, SOCI 30253, SOCI 20253

ENST 20519. Spatial Cluster Analysis. 100 Units.

This course provides an overview of methods to identify interesting patterns in geographic data, so-called spatial clusters. Cluster concepts come in many different forms and can generally be differentiated between the search for interesting locations and the grouping of similar locations. The first category consists of the identification of extreme concentrations of observations with similar values for one or more variables, such as areas with elevated disease incidence. The second group consists of the combination of spatial observations into larger (aggregate) areas such that internal similarity is maximized (regionalization). The methods covered come from the fields of spatial statistics as well as machine learning (unsupervised learning) and operations research. Topics include point pattern analysis, spatial scan statistics, local spatial autocorrelation, dimension reduction, as well as spatially explicit hierarchical, agglomerative and density-based clustering. Applications range from criminology and public health to politics and marketing. An important aspect of the course is the analysis of actual data sets by means of open source software, such as GeoDa, R or Python.

Instructor(s): L. Anselin
Terms Offered: Spring

Prerequisite(s): STAT 22000 or equivalent; SOCI 20253/30253 (or equivalent) Introduction to Spatial Data Science required.
Equivalent Course(s): SOCI 30519, GEOG 30519, GEOG 20519, SOCI 20519, MACS 30519

ENST 20521. Sociology of urban planning: cities, territories, environments. 100 Units.

This course provides an high-intensity introduction to the sociology of urban planning practice under modern capitalism. Building upon urban sociology, planning theory and history as well as urban social science and environmental studies, we explore the emergence, development and transformation of urban planning in relation to changing configurations of capitalist urbanization, modern state power, sociopolitical insurgency and environmental crisis. Following an initial exploration of divergent conceptualizations of “planning” and “urbanization,” we investigate the changing sites and targets of planning; struggles regarding the instruments, goals and constituencies of planning; the contradictory connections between planning and diverse configurations of power in modern society (including class, race, gender and sexuality); and the possibility that new forms of planning might help produce more socially just and environmentally sane forms of urbanization in the future.

Instructor(s): N. Brenner
Terms Offered: Winter

Equivalent Course(s): SOCI 20521, SOCI 30521, GEOG 20521
ENST 21207. Ecocentrism and Environmental Racism. 100 Units.
The aim of this course is to explore the tensions and convergences between two of the most profoundly important areas of environmental philosophy. "Ecocentrism" is the view that holistic systems such as ecosystems can be ethically considerable or "count" in a way somewhat comparable to human persons, and such a philosophical perspective has been shared by many prominent forms of environmentalism, from Aldo Leopold's Land Ethic to Deep Ecology to the worldviews of many Native American and Indigenous peoples. For some prominent environmental philosophers, a commitment to ecocentrism is the defining test of whether one is truly an environmental philosopher. "Environmental Racism" is one of the defining elements of environmental injustice, the way in which environmental crises and existential threats often reflect systemic discrimination, oppression, and domination in their disproportionate adverse impact on peoples of color, women, the global poor, LGBTQ populations, and Indigenous Peoples. Although historically, some have claimed that ecocentric organizations such as Greenpeace have neglected the problems of environmental injustice and racism in their quest to, e.g., "save the whales," a deeper analysis reveals a far more complicated picture, with many affinities and alliances between ecocentrists and activists seeking environmental justice. (A)
Instructor(s): B. Schultz Terms Offered: Autumn
Equivalent Course(s): HMR 21207, MAPH 31207, PHIL 21207, PLSC 21207, CRES 21207

ENST 21220. Cities Through Space and Time. 100 Units.
This course introduces you to cities. What are cities? Where do they come from? How do they work? In Calvino's words, what are the "invisible reasons that make cities live"? And, crucially, how can cities be better than they are today? In investigating these questions, we will explore the spatial, economic, cultural, political, and social aspects of cities, including topics like industrialization, transportation technologies, social movements, gentrification, and environmental design. We will examine case studies drawn from both the Global North and South that will help us see how the ideas we explore are being worked out in actual practice in cities, and we will also explore the qualitative, quantitative, and spatial tools used for studying cities. Class sessions will involve a mix of (interactive) lectures, discussion, and exercises. Outside class, the primary work will be reading selected texts and writing responses. There will also be a midterm and a final exam.
Instructor(s): Evan Carver Terms Offered: Autumn
Note(s): Not offered during the 2020-21 academic year.
Equivalent Course(s): GEOG 21221, PBPL 21220

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. In this course we will consider the conceptual underpinnings of contemporary Western notions of nature, environment, and balance, through the examination of specific historical trajectories of anthropogenic landscape modification and human society. Taking examples from current events we will evaluate the extent and character of human entanglement with the environment. ENST 21201 and 21301 are required of students who are majoring in Environmental and Urban Studies and may be taken in any order.
Instructor(s): Alison Anastasio Terms Offered: Winter
Equivalent Course(s): ANTH 21303

ENST 21310. Water: Economics, Policy and Society. 100 Units.
Water is inextricably linked to human society. While modern advances in technology and new economic and policy mechanisms have emerged to address water stressors from overconsumption, development pressures, land use changes and urbanization, challenges continue to evolve across the globe. These problems, while rooted in scarcity, continue to become more complex due to myriad human and natural forces. In addition to water quality impairments, droughts and water shortages persist, putting pressure on agricultural production and urban water use, while the increased frequency and severity of rainfall and tropical storms, already being experienced globally, are only projected to grow in intensity and duration under climate change. Students will explore water from the perspective of the social sciences and public policy, with attention on behavioral dimensions of water use and water conservation. Qualitative and quantitative approaches to examining how humans use and affect water will be considered, with particular applications to Chicago and the Great Lakes region.
Instructor(s): Sabina Shaikh Terms Offered: Spring
Prerequisite(s): One economics course (ECON 19800, PBPL 20000, ENST 21800 or equivalent)
Note(s): The following courses are recommended prior to enrollment in ENST 21310: ENST/MENG 20300: The Science, History, Policy, and Future of Water
Equivalent Course(s): ECON 16510, GLST 21310, PBPL 21310, LLSO 21310, CHST 21310

ENST 21404. Britain in the Age of Steam 1783-1914. 100 Units.
In the Victorian era, Britain rose to global dominance by pioneering a new fossil-fuel economy. This course explores the profound impact of coal and steam on every aspect of Victorian society, from politics and religion to industrial capitalism and the pursuit of empire. Such historical investigation also serves a second purpose by helping us see our own fossil-fuel economy with fresh eyes through direct comparison with Victorian energy use. Assignments include short essays based on energy "field work" and explorations in past and present material culture.
Instructor(s): F. Albritton Jonsson Terms Offered: Winter
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.

Instructor(s): Alison Anastasio
Terms Offered: Winter
Equivalent Course(s): CHST 21440

ENST 21700. Applied Research in Environment, Development and Health. 100 Units.

This course engages students in collaborative research on topics that connect the environment, health, agriculture and development. After identifying a shared theme, students will design and commence a plan of research with the goal of producing content including reading lists, research and policy briefs, data visualizations, maps, blog posts and web content, as well as creative media such as podcasts. Students will also apply their findings to programming surrounding the Frizzell Speaker and Learning Series for 2020-21 by identifying possible keynote speakers and curating other events. Students are strongly encouraged but not required to enroll in both the autumn and winter courses to gain the full benefit of a sustained research experience.

Instructor(s): Shaikh, Sabina
Terms Offered: Autumn
Prerequisite(s): This course is open to 3rd and 4th years only; Open to 2nd years with instructor consent.
Equivalent Course(s): ECON 16530, PBPL 21700, GLST 21700, GEOG 21710

ENST 21750. Urban Spaces and Unnatural Disasters: Humans-Nature Connections in Cities. 100 Units.

A natural disaster is thought of an event or series of events caused by the Earth's natural forces and processes. These include hurricanes, floods, droughts, wildfires, earthquakes, and other events provoked by the earth's processes. But what about the outcomes of such disasters? How do social, economic and spatial conditions affect the impact of natural disasters on the population? What role do humans play in these events and the outcomes? How does human activity and public policy lead to or mitigate large one-time events like oil spills, as well as chronic conditions like deforestation, pollution, and climate change? Are humans part of the natural system in this context or is the human influence considered "unnatural"? This course explores the human relationship to such disasters, including humans as contributors to the severity and extent of such disasters through energy consumption, land use, public policy and other behaviors, and the response by humans to disasters including mitigation, adaptation, and policy formation and implementation. Students will explore how historic policies both created and mitigated environmental vulnerabilities, and how these risks are distributed across the population. Students will study the role of contemporary human behavior in outcomes related to the environment and natural resources through a series of seminal and current readings, and an independent yet collaborative research project using mixed methods from the social sciences.

Instructor(s): Sabina Shaikh
Terms Offered: Winter
Prerequisite(s): Must be 3rd or 4th year to enroll
Equivalent Course(s): CHST 21750, ECON 16540, GLST 21750, PBPL 21750

ENST 21800. Economics and Environmental Policy. 100 Units.

This course combines basic microeconomic theory and tools with contemporary environmental and resources issues and controversies to examine and analyze public policy decisions. Theoretical points include externalities, public goods, common-property resources, valuing resources, benefit/cost analysis, and risk assessment. Topics include pollution, global climate change, energy use and conservation, recycling and waste management, endangered species and biodiversity, nonrenewable resources, congestion, economic growth and the environment, and equity impacts of public policies.

Instructor(s): S. Shaikh
Terms Offered: Autumn
Prerequisite(s): ECON 19800 or higher, or PBPL 20000
Note(s): Not offered in Autumn of the 2020-21 academic year.
Equivalent Course(s): LLSO 26201, PBPL 21800, ECON 16520

ENST 21822. Creative Ecologies: Environmental and Multispecies Storytelling. 100 Units.

Literature plays a pivotal role in addressing environmental issues: it can perpetuate damaging narratives or offer creative solutions for sustainable living. What is then the role of literature in an era of ecological crisis? How does literature forward environmental change? How do writers represent the natural world and imagine innovative ways of living ecologically? To answer these questions, we will turn to the field of ecocriticism informed by queer ecology, decolonial thought and critical animal studies. We will explore the themes of migration, extinction, displacement, hegemony, and biodiversity in texts of various genres, from poetry to speculative fiction, particularly in relation to imperial, colonial and capitalist ecologies. Besides questioning troublesome dichotomies within our corpus, such as domestic/wilderness and nature/culture, we will also examine the links between environmental concerns and gender, race, class, and species. While we will be attentive to the specificities of the Italian local environment to fully unravel the role of Italy in aggravating or lessening environmental problems, our approach will remain comparative and global in scope. We will also revisit the literary canon and privilege the stories of historically disenfranchised voices that narrativize ethical and sociopolitical issues related to ecology. The course will include visits to Special Collections and the Map Collection to further enrich our engagement with the literary sources.
ENST 22147. Intro to Genres: The River’s Running Course. 100 Units.
Rivers move—over land, through history, among peoples—and they make: landscapes and civilizations. They are the boundaries on our maps, the dividers of nations, of families, of the living and the dead, but they are also the arteries that connect us. They are meditative, meandering journeys and implacable, surging power. They are metaphors but also so plainly, corporeally themselves. In this course, we will encounter creative work about rivers, real and imaginary, from the Styx to the Chicago River and the Amazon. Through poetry, fiction, nonfiction, and film, we will consider what rivers are, what they mean to us, and how they are represented in art and literature. Rivers will also be the topic and inspiration for our own forays into creative writing. Students will be asked to keep a reading notebook as well as to produce weekly creative and critical responses for class discussion.
Instructor(s): Stephanie Soileau Terms Offered: Spring
Prerequisite(s): Prerequisite: This class can be taken independently, OR as part of the Spring 2021 Chicago Studies Quarter on Water. For more information and to apply, visit the Chicago Studies website.
Equivalent Course(s): CHST 12147, CRWR 12147

ENST 22300. South Side Ecologies. 100 Units.
South Side Ecologies is a project based course offered every other spring on an environmental topic of concern to communities on the South Side of Chicago. During the first half of the class we will use scholarly and popular sources to understand the background and extent of the issue, while the second half will engage with expert partners to execute a project in their area of need. Due to the experiential nature of this course, while we will strive to have class meetings in the official time and place, students should expect they may need to attend meetings, interviews, guest lectures, or other activities at other times and locations during the week. Every effort will be made to accommodate the needs and schedules of students in the course. In 2019, we will focus on the confluence of history, culture, industry, nature, recreation, and the narratives that weave them together, on the South East Side of Chicago. In particular, we will be collaborating with the Chicago Park District and community stakeholders to research and develop interpretive materials for parks in the Calumet region, including Steelworkers Park and Big Marsh.
Instructor(s): Alison Anastasio Terms Offered: Spring. Every other spring. Not offered in Spring 2021.

ENST 22310. The Commons: Environment and Economy in Early Modern Europe. 100 Units.
Drawing on case studies from Europe and the Atlantic world, this course will track changes in land use and property rights over the early modern period (ca. 1500-1800), inviting students to reflect on the relationship between natural environments (woodlands, waterways, pasture) and histories of state formation, economic growth, rebellion, and colonialism. Organizing concepts and debates will include the tragedy of the commons, moral economies, sustainability and scarcity, the “organic economy” of the old regime, primitive accumulation, and economic takeoff. Readings will encompass classic works in agrarian, environmental, and social history (i.e., Marc Bloch, E. P. Thompson, Silvia Federici, James Scott, Carolyn Merchant) as well as primary documents and contemporary texts (i.e., More, Bacon, Smith, Paine, Babeuf). We will also reflect on how these histories bear on debates about land use and natural resources in the present day.
Instructor(s): O. Cussen Terms Offered: Winter
Equivalent Course(s): HIPS 22310, LLSO 22310, HIST 22310

ENST 22320. The Integrated Garden: A Design Course. 100 Units.
Looking to the long and flourishing history of community gardens and greenscapes across Woodlawn, this design course looks to historical habits and imagined futures as we work together to design a garden within walking distance from Logan Center for the Arts. The design will include water harvesting, composting, insect interactions, land rituals, lived and archived knowledge of plants, sun patterns and human patterns of engagements across the site and outward into the community.
Instructor(s): A. Ginsburg Terms Offered: Spring
Equivalent Course(s): ARTV 22320, CHST 22320, ARCH 22320, ARTV 32320

ENST 22330. Flooding the World: Creation and Restoration in the Levant, Mesopotamia, and India. 100 Units.
From Genesis to the Epic of Gilgamesh and the Rig Veda to modern novels like Geraldine McCaughrean’s Not the End of the World (2004) and Jeanette Winterson’s Boating for Beginners (1997), humans have repeatedly accounted for, imagined, and ironized civilizational collapse and restoration through stories of catastrophic floods. These texts, modern and ancient, are fraught with political, religious, and historical background. In this course, we will compare these texts, focusing on literary issues like narrative plot, the construction of characters, the literary devices used, and the role of the narrator in telling the story of the flood. We will attempt to ascertain why imaginings of a deluge are generative, while being attuned to the complex differences between the ancient narratives and their significantly different afterlives. Through sustained inquiry, we will both challenge notion of sacred exceptionalism even while confronting the enduring presence of this trope in the post-modern novel.
Instructor(s): Cathleen Chopra-McGowan Terms Offered: Winter
Equivalent Course(s): SALC 22330, RLST 22330, JWSC 26030
ENST 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: Winter
Prerequisite(s): Students taking FREN 22619 must read French texts in French.
Equivalent Course(s): HIST 32610, FREN 22619
ENST 22611. Paris from "Les Misérables" to the Liberation, c. 1830-1950. 100 Units.
Starting with the grim and dysfunctional city described in Victor Hugo's "Les Misérables," the course will examine the history of Paris over the period in which it became viewed as the city par excellence of urban modernity through to the testing times of Nazi occupation and then liberation (c. 1830-1950). As well as focussing on architecture and the built environment, we will examine the political, social, and especially cultural history of the city. A particular feature of the course will be representations of the city-literary (Victor Hugo, Baudelaire, Zola, etc.) and artistic (impressionism and postimpressionism, cubism, surrealism). We will also examine the city's own view of itself through the prism of successive world fairs (expositions universelles).

Instructor(s): C. Jones
Terms Offered: Spring
Prerequisite(s): Students taking FREN 22620/32620 must read texts in French.
Equivalent Course(s): ARCH 22610, FREN 22619, HIST 32610, HIST 22610, FREN 32619
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): HIST 22708, KNOW 22708, KNOW 32808, HIPS 22708, HIST 32708, CHSS 32708
ENST 23100. Environmental Law. 100 Units.
This course will examine the bases and assumptions that have driven the development of environmental law, as well as the intersection of this body of law and foundational legal principles (including standing, liability, and the Commerce Clause). Each form of lawmaking (statutes, regulations, and court decisions) will be examined, with emphasis on reading and understanding primary sources such as court cases and the laws themselves. The course also analyzes the judicial selection process in order to understand the importance of how the individuals who decide cases that determine the shape of environmental law and regulations are chosen.

Instructor(s): R. Lodato
Terms Offered: Winter
Prerequisite(s): Third- or fourth-year standing, or consent of instructor
Equivalent Course(s): LLSS 23100, PBPL 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 23321. Writing and Reading Space(s) in the Italian Renaissance. 100 Units.
This course offers an introduction to the study of the Renaissance in Italian literature. A defining movement in the history of European culture and civilization, the Renaissance is best known for its rediscovery of classical antiquity, its achievements in the arts, literature, philosophy, exploration etc., as well as for the rise of a modern concept of self. Italy represents the gateway to the study of the Renaissance as it was the birthplace of many of its key protagonists. In this course, students will become familiar with some of the major male and female representatives of the Italian Renaissance. From Petrarch to Alberti, from Lorenzo de' Medici to Ficino, from Machiavelli to Michelangelo, from Vittoria Colonna to Moderata Fonte, we will situate their writings against the discrete geographical, political, and cultural backdrops that engendered them. Thematically, the class will focus on the issue of space and the relationship between authors and the built environment. We will compare/contrast the physical milieus in which texts were produced (city/countryside, courts etc.), as well as look at how real and
imaginary spaces were represented in literary form in order to examine how location both informs and affects the production of literary works. Lastly, we will engage with manuscripts and early printed editions of these texts during our in-and-off campus visits to the Special Collections at The University of Chicago Library and the Newberry Library.

Instructor(s): E. Baldassarre
Terms Offered: Winter
Note(s): Taught in Italian.
Equivalent Course(s): ARCH 23321, ARTH 23321, ITAL 23321

ENST 23500. Political Sociology. 100 Units.
Political sociology explores how social processes shape outcomes within formal political institutions as well as the politics that occur in the family, civic associations, social networks, and social movements. This course surveys the emergence of the most historically significant forms of political ordering (particularly nation-states and empires); explores the patterns of participation, mobilization, and policy feedback’s within nation-states, both democratic and non-democratic; and considers how transnational politics and globalization may reorder political relations.

Instructor(s): E. Clemens
Terms Offered: Winter
Prerequisite(s): Completion of the general education requirement in the social sciences
Equivalent Course(s): PBPL 23600, SOCI 30106, SOCI 20106

ENST 23505. Environmental Ethics. 100 Units.
This course examines foundational issues of environmental ethics. What kind of values (economic, aesthetic, 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. Not offered Winter 2021
Note(s): Not offered Winter 2021
Equivalent Course(s): PBPL 23550

ENST 23655. Humans and the Sea: A Global Maritime History of the Anthropocene. 100 Units.
Humans live on land, but most of the Earth is covered in water. This has presented both challenges and opportunities for peoples and civilizations around the world. In this course, we examine the changing ways in which humans have interacted with oceanic environments over the past three hundred years. How have people conceptualized and engaged with the sea? How have port cities developed in response to the unique urban challenges and opportunities presented by their coastal geography? What have been the environmental and societal effects of human industries such as fishing and whaling? Using firsthand accounts including sailors’ diaries and memoirs, government documents, and representative examples of nautical literature, students will come to situate the history of the sea in a new critical perspective as they reflect on the way human agency has shaped and been shaped by the natural world.

Instructor(s): Carl Kubler
Terms Offered: Winter. Prize Lecture for Winter 2021
Equivalent Course(s): GLST 23655

ENST 23807. Toxic Body Burdens and Environmental Exposures. 100 Units.
Toxicity is a pervasive and often elusive presence in our lives today. In this seminar class, we begin to address this condition by asking: what exactly is toxic? Who bears the burden of this classification? And, how then, are these understandings of toxicity defined and deployed in broader historical, political, and scientific contexts? From these preliminary questions, we explore the pathways through which toxic exposure, contamination, and fallout accumulates in disproportionate and uneven ways, especially for minoritized populations and upon Indigenous territories. Drawing upon a variety of social science literature and community-based research we trace these challenges through overlapping structures of race, class, gender, citizenship, and coloniality. This transnational and interdisciplinary orientation will acquaint students with case studies of exposure across different scales and geographies, from Chernobyl to Chicago. Through mixed approaches of ethnography and media curation, students will also have the opportunity to research and document their own cases studies of body burdens and environmental exposure.

Instructor(s): Teresa Montoya
Terms Offered: Might be offered 2021-22
Equivalent Course(s): CRES 23807, ANTH 23807, HLTH 23807

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.
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): D. Archer

Prerequisite(s): CHEM 11100-11200 or equivalent, and prior calculus course

Equivalent Course(s): GEOS 33900, GEOS 23900, ENSC 23900

ENST 24020. The Place of the Intellectual: Civic Life in Italian Literature and Theory. 100 Units.

This course offers a survey of the notion of civic life in Italian literature and theory, from its beginning(s) to contemporary authors. The topic will be explored through some of the major representatives in Italian intellectual history, actively concerned with the life of the community at the urban, national and transnational level. From Dante to Petrarch, from Renaissance Civic Humanism to Machiavelli, from Vico to Gramsci, from Esposito to Agamben, the focus of the class will be on human sociability and on the forces that enhance or hinder the constitution of communities and collective life. Italy offers a privileged entry point into the issue of civic life due to its belated national unification and richness in local cultural varieties, traits that makes Italy unique in the European cultural and political landscape. Thematicaly, the class will look at the relationship between Church and Empire; at forms of community beyond political institutions, such as friendship and family; at the imagination of ideal cities and utopias; at the effects of disruptive natural and human events on the making/unmaking of human sociability; at literature and popular culture in the constitution of regional and national identities.

Instructor(s): M. Muccioni

Terms Offered: Spring

Note(s): Taught in English.

Equivalent Course(s): ITAL 24020

ENST 24102. Environmental Politics. 100 Units.

Politics determines not only which particular faction holds power, but the parameters upon which contests for power are conducted. At present, the desirability of economic growth is the universal consensus principle that actors across the political spectrum and national borders agree upon despite their disagreement on the shape that this should take and the beneficiaries of it. This principle overrides any other consideration, including environmental protection and restoration, regardless of the political beliefs of the leader or party in question. This course undertakes a term-long discussion of how the assumptions and practices of politics, policy, and activism would be changed if the protection of the environment was the central organizing principle of the international system, with particular attention to theories that challenge conventional ways of organizing society, economics, and politics.

Instructor(s): R. Lodato

Terms Offered: Spring

Equivalent Course(s): PBPL 24102, LLSO 24102

ENST 24106. Introduction to Environmental Ethics. 100 Units.

This course will examine answers to four questions that have been foundational to environmental ethics: Are religious traditions responsible for environmental crises? To what degree can religions address environmental crises? Does the natural world have intrinsic value in addition to instrumental value to humans, and does the type of value the world has imply anything about human responsibility? What point of view (anthropocentrism, biocentrism, theoecentrism) should ground an environmental ethic? Since all four of the above questions are highly contested questions, we will examine a constellation of responses to each question. During the quarter we will read texts from a wide variety of religious and philosophical perspectives, though I note that the questions we are studying arose out of the western response to environmental crises and so often use that language. Some emphasis will be given to particularly influential texts, thinkers, and points of view in the scholarship of environmental ethics. As the questions above indicate, the course prioritizes theoretical issues in environmental ethics that can relate to many different applied subjects (e.g. energy, water, animals, climate change) rather than emphasizing these applied issues themselves. Taking this focus will give you the background necessary to work on such issues.

Instructor(s): Sarah Fredericks

Terms Offered: Autumn

Equivalent Course(s): PBPL 20702, KNOW 20702, RETH 30702, KNOW 30702, RLST 24106, LLSO 24106

ENST 24196. Second Nature: New Models for the Chicago Park District. 100 Units.

The Chicago Park District seems to preserve “first nature” within the metropolitan field. But the motive for establishing this sovereign territory was hardly natural. Today, cultural change raises questions about the significance and operation of this immense network of civic spaces. What opportunities emerge as we rethink them? While this design studio focuses on the development of new model parks for Chicago, it can support the imagination of ideal cities and utopias; at the effects of disruptive natural and human events on the making/unmaking of human sociability; at literature and popular culture in the constitution of regional and national identities.

Instructor(s): A. Schachman

Terms Offered: Spring

Note(s): Students must attend first class to confirm enrollment.

Equivalent Course(s): ARVT 20206, GEOG 24196, ARTH 24196, ARCH 24196

ENST 24233. Food Politics in a Global World. 100 Units.

Food Politics means so many things: Trust, risk, danger. Safety, regulation, retail, and consumption across wildly different scales: global, (trans)national, urban, regional, local, distant, foreign. Diets, fasts, binges. Canning, refrigeration, cafeterias, farmers’ markets, and the cold aisles of supermarkets. Educated consumers, mass panics,
and the "distant" bodies of humanitarian aid. In this class, ethnographic and comparative approaches to food politics will be our lens into recognizing, discussing, and thinking about food as a critical site of global politics. We will examine articulations of social differences, performances and performativities of bodies (gendered, migrant, public, private, clandestine, hungry, satiated, healthy, and criminal), transnational battles over regional and local "purity," and sensibilities that do or do not trust sites of economic and/or political authority positioned far away. Indeed, food politics are just as much a window into the investigative and critical potentials of ethnography in a global world as they are a way to recognize the moral, popular, imaginary, and experiential processes at work and constitutive of taken-for-granted political actor-abstractions such as "the state" "the economy" and "the public."

Instructor(s): Czarnecki, Natalja Terms Offered: TBD
Equivalent Course(s): ANTH 25322, GLST 24233

ENST 24267. Architecture of Memory. 100 Units.

This architecture studio course asks students to design a memorial. By imagining spaces that evoke emotion and incite action, and examining relationships and meaning between architecture and place, students will explore concepts for spaces created for the purpose of holding, preserving or honoring aspects of culture and history. The South Side of Chicago will be the primary focus. Students will reflect on readings about the South Side and 2020 events. Guest presentations and Arts + Public Life media and archives will be key resources. To form a basis for understanding and analyzing space and form, students will research and critique precedents. The class will visit spaces around the city either in-person or via virtual tours. As a beginning point for inquiry about space and emotions, students will reflect on readings about phenomenology in architecture. Seminars and discussions about architecture practice today will also be presented. Students will generate an analog portfolio of drawings and models throughout the quarter. For final design projects, students will choose real sites and will create a design for a memorial for an aspect of social history of the South Side of Chicago.

Instructor(s): N. Bharani Terms Offered: Winter
Prerequisite(s): Consent is required to enroll in this course. Interested students should email the instructor (Nootan Bharani, nbharani@uchicago.edu) to briefly explain their interest and any previous experience with the course topics, however no previous experience is necessary. Students are required to attend the first class session to enroll in the course.
Equivalent Course(s): ARTH 34267, ARTH 24267, ARCH 24267, ARTV 34267, ARTV 24267, CHST 24267, ARCH 34267

ENST 24340. Political Ecologies of Colonialism: Local and Global. 100 Units.

The rapidly warming planet makes it clear that the natural and human worlds are inseparable and that local ecologies are inextricable from global political and economic processes. While resulting devastation has more recently emerged as global crisis, the assimilation of local landscapes and ecologies into global social processes has a deep history. This class considers the development and intensification of such global connections through the lens of political ecology. It contextualizes local ecological changes wrought by expansive colonial powers - poisoned mountains, mono-cropped landscapes, and disappeared forests - within the emergence of a global economy in the early modern era. he course is roughly divided into two parts. First, it examines the political ecology of colonialism, considering links between extractive practices of land management and the imbalances of power typical of colonial contexts. Secondly, it assesses how the extraction and expansion inherent to colonial projects provided impetus to the emerging global economy from the 16th to 20th centuries, and considers how those historical processes continue to reverberate into the present. While historicizing contemporary environmental issues, students will be introduced to political ecology, environmental history, 'the Anthropocene' concept, theories of commodification and value, and world systems analysis.

Instructor(s): Raymond Hunter Terms Offered: Autumn. Autumn 2021
Equivalent Course(s): GLST 24340, ANTH 28505

ENST 24550. Urban Ecology in the Great Nearby. 100 Units.

Places like the Great Barrier Reef, Great Smoky Mountains, or Great Outdoors elicit ideas of a nature that is far away and often presumed to be "pristine." Not only are these presumptions worthy of interrogation, but they may limit our understanding of the natural world that is in close proximity to humans. In this course students will use our restricted geographical movement during a pandemic as an opportunity to focus on hyperlocal urban ecology: that of the Great Nearby. What can we learn about our neighborhood and its human and non-human residents through close observation in a finite geographic area? What are the benefits, scientifically and socially, of understanding the Great Nearby? What are the challenges of place-based ecology, especially in scaling up to make regional and global connections? Using an ecological lens to investigate the urban landscape up close, students will learn the importance of observation as it relates to forming hypotheses to understand the world, as well as revealing the urban natural world that we may not have noticed before. Grounded in the rigor of urban ecology, place-based research, long-term monitoring, and their application, students are expected to be actively outdoors in their local urban environment throughout the quarter.

Instructor(s): Alison Anastasio Terms Offered: Autumn
Note(s): Remote course with an expectation that students will be able to make multiple observations weekly in a ~2 block radius of their urban location. If students are in Chicago, some activities/assignments may take place outside (safely, with masks and physical distance) close to campus. Alternative assignments/methods of participation will be available to those who are not in Chicago. This course is intended to be complementary to ENST 23550 and does not require it as a prerequisite.
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): GEOS 24550

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 2021-22
Note(s): This course offered in even years.
Equivalent Course(s): GEOG 23500, ARCH 24660, GEOG 33500

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
Prerequisite(s): Knowledge of physics or consent of instructor.
Note(s): See GEOS 24750/ENSC 21150.
Equivalent Course(s): GEOS 24705, GEOG 34705, ENSC 21100

ENST 24706. Edo/Tokyo: Society and the City in Japan. 100 Units.
This course explores the history of one of the world’s largest cities from its origins as the castle town of the Tokugawa shoguns in the early seventeenth century, to its transformation into a national capital and imperial center, and concludes in the postwar era as Tokyo emerged from the ashes of World War II to become a center of global capital and culture. Our focus will be on the complex and evolving interactions between the natural and built environments of the city and politics, culture, and social relations.
Instructor(s): S. Burns Terms Offered: Winter
Equivalent Course(s): HIST 24706, EALC 34706, HIST 34706, CRES 24706, EALC 24706, CRES 34706, ARCH 24706

ENST 24750. Humans in the Earth System. 100 Units.
Human activities now have global-scale impact on the Earth, affecting many major biogeochemical cycles. One third of the Earth’s surface is now used for production of food for humans, and CO₂, the waste product of human energy use, now substantially 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 cycles of water, carbon, and nitrogen; their interactions; and the role that humans now 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 human appropriations have become globally significant. 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.
Equivalent Course(s): GEOG 24550
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: Course was not offered 2019-2020
Equivalent Course(s): PBPL 24756

ENST 24776. International Environmental Policy. 100 Units.
Environmental issues have become a prominent part of the work of international organizations and their member nations. The international community has recognized the efficacy of multi-national agreements as a method for comprehensive solutions to problems that were once dealt with on a nation-by-nation basis. This course will address such topics as the Montreal Protocol, climate change agreements, and the Law of the Sea treaty, as well as the efforts being undertaken by some leading nations to address present-time environmental challenges.
Instructor(s): R. Lodato Terms Offered: Spring
Equivalent Course(s): PBPL 24776

ENST 24902. The Politics of Plant Life: Edens, Plots, and Ruins. 100 Units.
How do plant ecologies materialize conflicted and incommensurate political formations? How are political ideals, collectivities, or anxieties reflected in the matter and meaning of plant life across its many social guises (as food, magic, medicine, drugs, industrial commodities, mortal enemies, alien invaders, and more)? How might radical attention to the complexities of our lives with plants help us to formulate ethical and political possibilities in the wake of conflicted histories and in midst of uncertain planetary futures? This course explores possibilities for understanding political imaginaries through the lens of plant life. We will attend to the history of social and natural scientific understandings of plant life as these shaped foundational concepts in social and political theory (including concepts of culture, race, gender and sexuality, economy, and history). We will examine how the scientific, military, and commercial transformation of plant natures was central to political projects from 18th century imperialism to 21st century counter-insurgency, from World War to the ‘War on Drugs,’ from colonization to climate crisis. This seminar brings together historical sources, classical theoretical texts, and contemporary ethnographic projects with experimental and multi-media materials to explore the history of plant life's entanglement with imagined political histories and futures—apocalyptic, utopian and revolutionary.
Instructor(s): Amy McLachlan Terms Offered: TBD
Equivalent Course(s): ANTH 33809, ANTH 23806, GLST 24901

ENST 24922. Archival Practice for Environmental Studies: Policy, Science, and Economics. 100 Units.
This course will introduce students to the use of historical records for environmental research. Through virtual and site visits to archives, we will explore best practices for locating and surveying digitized and physical historical materials. Our practicums will engage critically with peer-review publications to examine the diverse uses of historical sources for qualitative and quantitative research. We will use archival theories to question collection-management strategies that select some works over others for preservation and explore the role of historical sources in reproducing environmental narratives. Final assignment: A project in digital humanities, data mining with R or ArcGIS for spatial analysis using primary sources (manuscripts, rare books, data, and surveys).
Instructor(s): A. Coombs Terms Offered: Spring
Equivalent Course(s): HIPS 24922, HIST 24922

ENST 25000. The Amazon: Literature, Culture, Environment. 100 Units.
This course proposes a cultural history of the Amazonian region. Through films, novels, visual arts, essays, manifestos, and works on cultural and environmental history, we will explore the history of Amazon from a range of perspectives. We will examine indigenous cultures and epistemologies, extractivist activities, environmental policies, contemporary literature and film, and a global imagination of the Amazon. Authors and projects may include Claudia Andujar, Gaspar de Carvajal, Milton Hatoum, Euclides da Cunha, Ciro Guerra, Susanna Hecht, Davi Kopenawa, Ailton Krenak, Chico Mendes, Daniel Muduruku, Lúcia Sá, Silvino Santos, Candance Slater, Mario Vargas Llosa, Eduardo Viveiros de Castro, Video in the Villages, among others.
Instructor(s): Victoria Saramago Terms Offered: Autumn
Note(s): Taught in English. Materials available in English, Portuguese and Spanish.
Equivalent Course(s): SPAN 35555, LACS 35005, PORT 25000, SPAN 25555, LACS 25005, SIGN 26059, PORT 35000
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 the social and political dynamics that undergird possible avenues for creating social change in cities, including interest representation, decision-making, and inclusion/exclusion. We will draw insights from multiple disciplines and explore a variety of substantive areas, such as housing, public safety, economic development, education, and the provision of social welfare. This course is part of the College Course Cluster program: Urban Design.
Terms Offered: TBD
Equivalent Course(s): PBPL 25006, SSAD 21100, LLSO 21100, SOCI 20294

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, etc. 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.
Instructor(s): F. Albritton Jonsson Terms Offered: Winter
Equivalent Course(s): CHSS 35014, HIST 25014, HIST 35014, HIPS 25014

ENST 25025. Environmental Histories of the Global South. 100 Units.
Drawing on cases from Africa, Latin America, and especially Asia, this course explores key themes in the modern environmental history of the world beyond the rich industrialized North. Our investigations will focus on the ecological impacts of colonialism, war, and development, and how environmental management has helped to construct modern states and capitalist practices in turn. Ranging from the malarial plantations of the Caribbean to the forests of southeast Asia, we will analyze not-so-natural disasters like floods and chemical spills as well as the slow violence of deforestation and droughts. Combining primary sources with classic scholarship, we will encounter pioneering green activists like the original "tree huggers" of the Himalayas and environmental advocates for brutal population control. The course will conclude by examining the emergence of a newly assertive Global South in international climate negotiations, and its implications for the environmental history of our planet at large. The course is open to all, but may be of particular interest to students who have taken "Introduction to Environmental History."
Instructor(s): L. Chatterjee Terms Offered: Spring
Equivalent Course(s): HIPS 25225, SALC 25025, HIST 25025, HIST 35024, CHSS 35525, SALC 35025

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 sparked 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 patterns of collecting and cabinets of curiosities; Linnaeus and the origins of Instructur(s): J. Niermeier-Dohoney Terms Offered: Autumn
Equivalent Course(s): HIST 25114, HIPS 25114

ENST 25115. Francis Bacon’s Philosophy of Nature. 100 Units.
Historians of science have traditionally regarded Francis Bacon (1561-1626) as one of the most prominent seventeenth-century champions of induction, empiricism, and experimental methodology. While these are perhaps his most important contributions to natural philosophy, Bacon and his adherents also exerted a profound influence on Western notions of power over nature and of the possibilities of alteration, manipulation, and exploitation of the natural world. This course will examine some of Bacon’s principal works ("The New Organon", "The Advancement of Learning", "The New Atlantis", and "The Great Instauration") in order to first develop an understanding of Bacon’s philosophical positions and the changing landscape of natural philosophy in the seventeenth century: Then, we will examine the implications of Bacon’s philosophy from his lifetime to the present, focusing particularly on the rise of artisanal and craft knowledge; the emergence of civil institutions
for cooperative knowledge making; utopian and cornucopian conceptions of the natural economy; science as the manipulation of nature; the competing and complementary notions of dominion over nature versus environmental stewardship; the practical uses of natural materials during European imperial expansion; the origins of industrialization and technological development; and his influence on modern science, politics, economics, and environmentalism.

Instructor(s): J. Niermeier-Dohoney Terms Offered: Winter
Equivalent Course(s): HIST 25115, HIPS 25115

ENST 25116. Utopia, Dystopia, and the Apocalypse in Western Culture. 100 Units.
This course will examine how Western society has asked and answered questions about potential futures throughout its history. We will look especially at ways in which these questions have been explored through utopian, dystopian, and apocalyptic scenarios within religious, scientific, and political cultures. These narratives have denoted moral righteousness, critiqued the hubris of science and industrialization, and advocated or denounced systems of governance and social organization. They also reveal historical assumptions about human nature, progress, and the relationship between rationality and irrationality. Topics will include Biblical apocalypticism and its influence in the medieval and modern worlds; medieval and early modern millenarianism or the active pursuit of the apocalypse; early modern utopianism and its influence on later utopian writing; modern economic prognostication; modern utopian and dystopian science fiction in literature, film, and television; nineteenth- and twentieth-century socialist and nationalist utopianism and totalitarianism; global catastrophic risks such as asteroid impacts, pandemics, climate change, ecological degradation, and nuclear war; and the increasing importance of science in “futurology” or “future studies,” a burgeoning field in the postwar era.

Instructor(s): J. Niermeier-Dohoney Terms Offered: Spring
Equivalent Course(s): HIPS 25116, HIST 25116, RLST 25116

ENST 25117. Natural History of Humans/Human History of Nature. 100 Units.
In this course we will think broadly about human history as a type of natural history and the recent history of nature as a part of the human narrative. Students will be introduced to the concept of “deep time,” its discovery by geologists and biologists in the 18th and 19th centuries, and its impact on human history. Topics will include 16th- and 17th-century historiography and Biblical exegesis, geological theories of Hutton, Cuvier, and Lyell, and biological theories of Lamarck and Darwin. We will examine how certain modern sciences have affected historians’ approaches. Topics will include how the structure and function of the brain affected kinship development, language acquisition, and social bonding; interpretations of “human nature” by theology, philosophy, anthropology, and psychology; massive time scales and intergenerational governing, justice, and ethics; and geography’s role in shaping civilizational development. Finally, we will consider how the rising human impact over natural earth systems may change the way human and civilizational history will be studied going forward. Topics include anthropogenic changes to the biosphere through hunting and agriculture in the ancient world and the globalization of communicable diseases and invasive plant and animal species after 1492; the impact of climate change on modern civilization; the potential that humans are responsible for a new geological epoch; and what “history” looks like without humans.

Instructor(s): J. Niermeier-Dohoney Terms Offered: Spring
Equivalent Course(s): HIPS 25117, HIST 25117

ENST 25218. American Epidemics, Past and Present. 100 Units.
This course explores how disease epidemics have shaped watershed periods in US history from the late eighteenth century to the present. Through readings, lectures, and in-class discussions, we will employ different categories of analysis (e.g., race, gender, class, and citizenship) to answer a range of historical questions focused on disease, health, and medicine. For instance, to what extent did smallpox alter the trajectory of the American Revolution? How did cholera and typhoid affect the lived experiences of slaves and soldiers during the Civil War? In what ways did the US government capitalize on fears over yellow fever and bubonic plague to justify continued interventions across the Caribbean and the Pacific? What do these episodes from the American past reveal about contemporary encounters with modern diseases like HIV/AIDS, Ebola, and COVID-19? Course readings will be drawn from book chapters and scholarly articles, as well as primary sources ranging from public-health reports, medical correspondence, and scientific journals to newspapers, political cartoons, maps, and personal diaries. Grades will be based on participation, weekly Canvas posts, peer review, and a series of written assignments (a proposal and an annotated bibliography, primary source analysis, book review, and rough draft) all of which will culminate in a ten-page final research paper.

Instructor(s): C. Kindell Terms Offered: Winter
Equivalent Course(s): CRES 25218, HIST 25218, AMER 25218, GNSE 25210, GLST 25218, HIPS 25218, HLTH 25218

ENST 25320. Poverty and Urban Development: the Right to Housing in Latin America. 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 that which they share with the Global South and the world at large.
Instructor(s): Gonzalez, Ines Escobar Terms Offered: Winter Equivalent Course(s): GLST 25320, ANTH 23097, LACS 25320

ENST 25422. Struggle and Solidarity: The Politics of Chicago Labor in the 19th and 20th Centuries. 100 Units.
In this course we will question how and why Chicago was important to the way we think about "work." Employment, equity, wages, and security are certainly of debate throughout the nation today, but Chicago has been at the forefront of this contentious conversation for the last two hundred years. In order to better understand the relationship between advancing capitalism, labor politics, the workers' body, exploitation, and resistance we will analyze the Haymarket Massacre, the Chicago Stockyards, and the African-American Pullman Porters. To be sure, laborers built this city with broad shoulders, but also with a commitment to struggle and solidarity that changed the social, political, and economic landscape of the United States and the world forever. What about the confluence of labor and capital sparked these events? How does union organization work on a pragmatic level as well in regards to ideological (re)formation? In what other ways can populations resist oppression? How do class, race, capital, and labor intersect in society over time and why do those relationships shift? What are the differences or similarities regarding labor issues between Chicago and other parts of the world?
Instructor(s): K. Bryce Lowry Terms Offered: Winter. Winter 2022 Equivalent Course(s): HIST 28812, CHST 25422, ANTH 25422

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): Staff, offered in even years 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 25704. Environmental Justice in Chicago. 100 Units.
This course will examine the development of environmental justice theory and practice through social scientific and ethical literature about the subject as well as primary source accounts of environmental injustices. We will focus on environmental justice issues in Chicago including, but not limited to waste disposal, toxic air and water, the Chicago heat wave, and climate change. Particular attention will be paid to environmental racism and the often understudied role of religion in environmental justice theory and practice. Throughout the course we will explore how normative commitments are expressed in different types of literature as well as the basis for normative judgments and the types of authorities authors utilize and claim as they consider environmental justice.
Instructor(s): Sarah Fredericks Terms Offered: Spring Equivalent Course(s): CHST 25704, AMER 25704, PBPL 25704, KNOW 25704, RLST 25704

ENST 25705. Climate Ethics. 100 Units.
Anthropogenic climate change is the largest challenge facing human civilization. Its physical and temporal scale and unprecedented complexity at minimum require extensions of existing ethical systems, if not new ethical tools. In this course we will examine how religious and philosophical ethical systems respond to the vast temporal and spatial scales of climate change. For instance, common principles of environmental ethics such as justice and responsibility are often reimagined in climate ethics even as they are central to the ethical analysis of its effects. In the course, we will take a comparative approach to environmental ethics, examining perspectives from secular Western philosophy, Christianity (Catholic and Protestant), Buddhist, and Indigenous thought. We will also look at a variety of ethical methods. Throughout the course we will focus on communication about climate change as well as articulating rigorous ethical arguments about its causes and implications.
Instructor(s): Sarah Fredericks Terms Offered: Spring Equivalent Course(s): RLST 25703

ENST 25715. The Bible and Ecology. 100 Units.
In 2010, HarperCollins published The Green Bible, which claims to help readers "understand the Bible’s powerful message for the earth." What precisely is the Bible’s "message for the earth"? Does the Bible even contain one unified message about the relationship between God, human beings, and the natural world? For many, the question of "what the Bible says" about the environment has become urgent in the midst of the intersecting environmental crises of our day, from global warming to the sixth mass extinction. Nevertheless, contemporary
What does this mean? What do we know about Mars, and what's at stake when we make knowledge about it? Mars is more than a physical object located millions of miles from Earth. Through centuries of knowledge-making we have made the "Red Planet" into a place that looms large in cultural and scientific imagination. Mars has 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): Christine Trotter Terms Offered: Spring
Equivalent Course(s): RLST 25705

ENST 25910. 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 will analyze the 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): Christine Trotter Terms Offered: Spring. Offered 2020-21
Equivalent Course(s): GEOG 25900, GEOG 35900

ENST 26001. Urban Design Practicum: Revitalizing South/West Retail Corridors. 100 Units.
This course is a hands-on, applied learning experience in which students will translate principles of good urban design to two retail corridors on the South Side. We will be working alongside the National Main Street Center, which is headquartered in Chicago, and in support of Chicago's INVEST South/West community improvement initiative. Our specific task will be to produce a set of design guidelines for selected retail corridors. There are no pre-requisites, but students with interest or ability in graphic design and/or 3D modeling are especially encouraged to register.

Instructor(s): Emily Talen Terms Offered: Autumn

ENST 26003. Chicago by Design. 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. This course is part of the College Course Cluster, Urban Design.

Instructor(s): Emily Talen Terms Offered: Spring. Not offered in Spring 2021
Equivalent Course(s): PBPL 26003, SOSC 26003, GEOG 24300

ENST 26005. Cities by Design. 100 Units.
This course examines the theory and practice of city design-how, throughout history, people have sought to mold and shape cities in pre-determined ways. The form of the city is the result of myriad factors, but in this course we will hone in on the purposeful act of designing cities according to normative thinking-ideas about how cities ought to be. Using examples from all time periods and places around the globe, we will examine how cities are purposefully designed and what impact those designs have had. Where and when has city design been successful, and where has it resulted in more harm than good?

Instructor(s): Emily Talen Terms Offered: Autumn
Equivalent Course(s): PBPL 26005, GEOG 26005, ARCH 26005

ENST 26006. Sustainable Cities Lab. 100 Units.
The Sustainable Cities Lab will provide the opportunity to learn and utilize urban design tools while competing in a global sustainability competition to design green and thriving city neighborhoods that work to reduce greenhouse gas emissions, and improve quality of life for local communities. Students will apply their skills to create an entry for the Students Reinventing Cities competition (https://www.c40reinventingcities.org/en/students/). The course will support student development of knowledge and skills related to this competition, focusing on applications of urban design and sustainable urbanism concepts and principles. Various workshops will be utilized for training in design tools, graphics, data visualization, and other methods necessary to create a winning entry. Basic knowledge of GIS or comparable skill in graphic design or illustration is required.

Instructor(s): Emily Talen Terms Offered: Spring
Note(s): Pre-reqs include ENST 28702 or ENST 20185 or ARCH 24205 or equivalent experience in QGIS, graphic or other design tools. Course content will be taught remotely but there will be (3) required site visits throughout the quarter, so students must be located in Chicago.
Equivalent Course(s): CHST 26006, GEOG 26006

ENST 26070. Explorations of Mars. 100 Units.
Mars is more than a physical object located millions of miles from Earth. Through centuries of knowledge-making we have made the "Red Planet" into a place that looms large in cultural and scientific imagination. Mars is now the primary target for human exploration and colonization in the Solar System. How did this happen? What does this mean? What do we know about Mars, and what's at stake when we make knowledge about it?
Combining perspectives from history, anthropology, and sociology, this course investigates how knowledge about Mars is created and communicated in science and technology fields. A major focus will be learning how Mars has been embedded within wider social and political projects including theological debates, Manifest Destiny, The Cold War, and the commercialization of spaceflight. Through reading-inspired group discussions and instructor-led experiential projects, the course will move from the earliest visual observations of Mars to recent robotic missions on the planet’s surface. In doing so, this dynamic research group will critically grapple with problems posed by the potential discovery of extraterrestrial life, the organization of future Mars colonies, and evolving human efforts to make Mars usable.

Instructor(s): Jordan Bimm Terms Offered: Autumn
Equivalent Course(s): PBPL 26255

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. Offered 2021-22
Note(s): This course offered in odd years.
Equivalent Course(s): HIST 38900, ÁRCH 26100, HIST 28900, GEOG 36100, GEOG 26100

ENST 26170. Why Do Animals Talk? Beastly Worlds in South Asian Literature. 100 Units.
Comprised of a diverse set of languages covering a disparate set of regions, South Asian literatures share a deep investment in the figure of the animal. Whether imagined through the genre of political advice, in narrative tellings of the past lives of the Buddha, or simply as characters in an expanded continuum of life, animals serve as important literary devices to reflect on human beings as well as autonomous subjects bound up with humans with their own distinct emotional and spiritual lives. Drawing particularly from the Sanskrit tradition among others, this course will introduce students to a broad survey of animal literature in South Asia alongside more recent scholarship in Animal Studies. By the end of the course, students can expect to have a myriad of answers to the question: why do animals talk?
Instructor(s): Sarah Pierce Taylor Terms Offered: Spring
Equivalent Course(s): SALC 26170, RLST 26170

ENST 26225. Ethnographic Methods: Triangulating Fieldwork, Interviews, and Data in a Global World. 100 Units.
Ethnography has always seen big issues in small places, illuminating the ways in which vast structures come to shape, and be shaped by, local dynamics and specific cases. Motivating students to move from the study of particular sites and objects towards the comprehension of global connections and conditions, this course emphasizes the empirical and inferential strengths of ethnographic methods. The course is both a reading and a research workshop. As a reading workshop, it enables 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 underlying ethnography. The course encourages and guides students in the construction of an ethnographic research project that operates across scales, connecting that which we can empirically observe at ground level with systems, structures, and currents that cross borders and constitute world orders. Examples of this include mapping international migration histories in a particular Chicago neighborhood; tracing the relations of ownership, trade, and use in the real estate of a given area of Chicago, or understanding the culture, organization, and funding of a Chicago-based non-governmental organization.
Instructor(s): Gonzalez, Ines Escobar Terms Offered: Winter
Equivalent Course(s): GLST 26225

ENST 26255. Environmental Justice Field Research Project I. 100 Units.
This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies to design an environmentally based research project, collect data, conduct analyses, 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 26255 and PBPL 26355 satisfy the Public Policy practicum Windows and Methods requirements.
Instructor(s): Lodato, R. Terms Offered: Autumn
Prerequisite(s): Students taking this course to meet the Public Policy practicum requirement must take both courses.
Equivalent Course(s): PBPL 26255

ENST 26260. Environmental Justice in Principle and Practice. 100 Units.
This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies to design an environmentally based research project, collect data, conduct analyses, 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. Completion of the two-quarter sequence will satisfy the Public Policy practicum Windows and Methods requirements.

Terms Offered: Autumn
Note(s): This course will cover the same content as ENST 26255.
Equivalent Course(s): PBPL 26260

ENST 26322. A History of Public Spaces in Mexico, 1520-2020. 100 Units.

This two-quarter sequence will expose students to real-world policy-making questions and field-based research methodologies to design an environmentally based 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 2655 and PBPL 26355 satisfy the Public Policy practicum Windows and Methods requirements.

Instructor(s): C. Rocha Terms Offered: Winter
Equivalent Course(s): ARCH 26322, HIST 26322, LACS 25322

ENST 26355. Environmental Justice Field Research Project II. 100 Units.

This course will consider the relationship between development and the environment in Latin America and the Caribbean. We will consider the social, political, and economic effects of natural resource extraction, the quest to improve places and peoples, and attendant ecological transformations, from the onset of European colonialism in the fifteenth century, to state- and private-led improvement policies in the twentieth. Some questions we will consider are: How have policies affected the sustainability of land use in the last five centuries? In what ways has the modern impetus for development, beginning in the nineteenth century and reaching its current intensity in the mid-twentieth, shifted ideas and practices of sustainability in both environmental and social terms? And, more broadly, to what extent does the notion of development help us explain the historical relationship between humans and the environment?

Instructor(s): Diana Schwartz Francisco Terms Offered: Winter
Equivalent Course(s): ANTH 23094, HIST 26317, HIST 36317, GEOG 26382, LACS 26382, LACS 36382, HIPS 26382, GLST 26382

ENST 26382. Development and Environment in Latin America. 100 Units.

This course will consider the relationship between development and the environment in Latin America and the Caribbean. We will consider the social, political, and economic effects of natural resource extraction, the quest to improve places and peoples, and attendant ecological transformations, from the onset of European colonialism in the fifteenth century, to state- and private-led improvement policies in the twentieth. Some questions we will consider are: How have policies affected the sustainability of land use in the last five centuries? In what ways has the modern impetus for development, beginning in the nineteenth century and reaching its current intensity in the mid-twentieth, shifted ideas and practices of sustainability in both environmental and social terms? And, more broadly, to what extent does the notion of development help us explain the historical relationship between humans and the environment?

Instructor(s): Diana Schwartz Francisco Terms Offered: Winter
Equivalent Course(s): ANTH 23094, HIST 26317, HIST 36317, GEOG 26382, LACS 26382, LACS 36382, HIPS 26382, GLST 26382

ENST 26388. Food Justice and Biodiversity in Latin America. 100 Units.

This course asks how the relationships between food production and consumption, economic justice, and biodiversity have changed over the last century in Latin America. As a region known both for its ecological diversity and as a producer of tropical foods regularly consumed in the United States, Latin America is also a site in which plantation style agriculture has often undermined such celebrated biodiversity. In centering the role of workers and consumers, it considers the layered relationships- ecological, social, political, economic and cultural-between the production and consumption of food from Latin America.

Instructor(s): Diana Schwartz Francisco Terms Offered: Spring
Note(s): Preferred: some background in Latin American history, geography and/or contemporary issues
Equivalent Course(s): GLST 26388, HIST 26323, LACS 26388

ENST 26511. Cities from Scratch: The History of Urban Latin America. 100 Units.

Latin America is one of the world’s most urbanized regions and its urban heritage long predates European conquest. Yet the region’s urban experience has generally been understood through North Atlantic models, which often treat Latin American cities as disjunctive, distorted knockoffs of idealized US or European cities. This class interrogates and expands those North Atlantic visions by emphasizing the history of vital urban issues such as informality, inequality, intimacy, race, gender, violence, plural regulatory regimes, the urban environment, and rights to the city. Interdisciplinary course materials include anthropology, sociology, history, fiction, film, photography, and journalism produced from the late nineteenth to the early twenty-first centuries.

Instructor(s): B. Fischer Terms Offered: Winter
Prerequisite(s): Some coursework in Latin American studies, urban studies, and/or history
Equivalent Course(s): HIST 36511, LACS 36510, ARCH 26511, LACS 26510, HIST 26511
ENST 26624. Extractivism in Latin America. 100 Units.
From the elusive search for El Dorado to the growing transition to renewable energy, extractivism has defined and continues to produce effects on the everyday lives, economic possibilities, and political horizons of Latin Americans in different historic and geographic settings. This course critically explores the social and material worlds built around resource extraction in Latin America. By focusing on key episodes of 20th and 21st century energy development, the course will examine how extractivism has enabled and foreclosed certain configurations of political power, especially in relation to the state, (anti-)imperialism, the left, and indigenous social movements. We will also explore the rise of anti-extractivist struggles and critiques, with a particular emphasis on indigenous peoples' mobilization of human rights discourse. Course readings will be interdisciplinary (from anthropology and economics to history and film), drawing on cases from Venezuela, Paraguay, Brazil, Mexico, and Bolivia.
Instructor(s): Steven Schwartz Terms Offered: Spring
Equivalent Course(s): ANTH 23024, LACS 26624, HMRT 26624

ENST 26801. The Global Urban. 100 Units.
This course was conceived with the aim of “globalizing” urban scholarship. To this end, we will highlight different urban trajectories and forms and different ways of being urban around the world. We will focus on urban experiences in the Global South and in Southeast Asia particularly. We will spend the first week of the course discussing how and why Southern cities are different. We will talk about their explosive growth in the twentieth century, the precarious nature of urban employment, informal settlement as a major urban form, the housing divide as a social structure distinct to such cities, class formation, economic and spatial restructuring under neoliberalism, and the nature of urban citizenship. We will spend the second week examining two very different cases: Manila and Phnom Penh. In the third week, we will focus exclusively on Hong Kong, and students will be tasked with conducting their own urban fieldwork.
Instructor(s): Marco Garrido Terms Offered: Summer
Equivalent Course(s): GLST 26801

ENST 27002. Compiling and Mediating Environmental History. 100 Units.
How do audiovisual media archives inform both the research and presentation of environmental history? Social media posts, fiction film, photographs from geological surveys, and urban field recordings all index historical environmental conditions. Artists and scholars enlist such archives to reanimate lost and changed landscapes for contemporary audiences, raising historiographical questions about how research excavates, extracts, and assembles both image and sound. This course looks at a series of documentary films and online media projects that enlist media to narrate histories of socio-ecological interaction. These projects explore site-specific environmental crises as they were deliberately or inadvertently recorded by media, including the toxic legacies of U.S. Imperialism, the extraction economy of South African apartheid, or how Hollywood films unconsciously document the long-term impacts of climate change. Students will analyze these media objects alongside readings in media historiographical theory, environmental history, and documentary theory. The goal of this engagement is to guide students toward a final project that employs both research and creative practice to compile a report about an environmental historical case study that utilizes a media archive to make the argument. This course shows how humanistic inquiry into documentary media and the material conditions of media production can inform the assembly and presentation of environmental historical knowledge.
Instructor(s): Thomas Fringle Terms Offered: Spring
Note(s): No production experience is required This course partially fulfills the research seminar requirement for the IRHUM major.
Equivalent Course(s): IRHU 27002, KNOW 26072

ENST 27125. Voices of Alterity and the Languages of Immigration. 100 Units.
This course investigates the individual experience of immigration: how do immigrants recreate themselves in this alien world in which they seem to lose part of themselves? How do they find their voice and make a place for themselves in their adoptive homes? If in the new world the immigrant becomes a new person, what meanings are still carried in traditional values and culture? How do they remember their origins and record new experiences?
Instructor(s): Angelina Ilieva Terms Offered: Spring. Not offered in Spring 2021
Note(s): Enrollment is based on acceptance into the Chicago Studies Quarter Program.
Equivalent Course(s): ENGL 27125, REES 29025, HIST 27710, PBPL 27125, CMLT 27125

ENST 27155. Urban Design with Nature. 100 Units.
This course will use the Chicago region as the setting to evaluate the social, environmental, and economic effects of alternative forms of human settlement. Students will examine the history, theory and practice of designing cities in sustainable ways - i.e., human settlements that are socially just, economically viable, and environmentally sound. Students will explore the literature on sustainable urban design from a variety of perspectives, and then focus on how sustainability theories play out in the Chicago region. How can Chicago’s neighborhoods be designed to promote environmental, social, and economic sustainability goals? This course is part of the College Course Cluster program: Urban Design.
Instructor(s): Sabina Shaikh and Emily Talen Terms Offered: Autumn
Prerequisite(s): Third or fourth-year standing
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.
ENST 27210. Where We Come From: Methods & Materials in the Study of Immigration. 100 Units.
This course provides an interactive survey of methodologies that engage the experiences of immigrants in Chicago. Exploring practices ranging from history to fiction, activism to memorialization, this course will introduce students to a variety of the ways that immigrants and scholars have approached the Second City. Instructor(s): William Nickell Terms Offered: Spring. Not offered in Spring 2021
Note(s): Enrollment is based on acceptance into the Chicago Studies Quarter Program.
Equivalent Course(s): PBPL 27210, HIST 27712, REES 24417

ENST 27330. Spaces of Hope: The City and Its Immigrants. 100 Units.
The city is the site where people of all origins and classes mingle, however reluctantly and agonistically, to produce a common if perpetually changing and transitory life.” (David Harvey) This course will use the urban studies lens to explore the complex history of immigration to Chicago, with close attention to communities of East European origin. Drawing on anthropological theory and ethnographic materials, we will study the ways in which the city and its new citizens transform one another. Instructor(s): Nada Petkovic Terms Offered: Spring. Not offered in Spring 2021
Note(s): Enrollment is based on acceptance into the Chicago Studies Quarter Program.
Equivalent Course(s): HIST 27713, PBPL 27330, REES 21500

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): D. Lauderdale Terms Offered: Autumn
Prerequisite(s): STAT 22000 or other introductory statistics highly desirable. For BIOS students-completion of the first three quarters of a Biological Sciences Fundamentals sequence.
Equivalent Course(s): HLTH 20910, STAT 22810, PBHS 30910, PPHA 36410

ENST 27521. Energy and Society I. 100 Units.
This two-quarter course explores the historical roots of climate change and other global environmental problems with a special attention to how energy use shapes human societies over time. Part I covers energy systems across the world from prehistory to the end of the nineteenth century. Instructor(s): F. Albritton Jonsson Terms Offered: Autumn
Prerequisite(s): Parts I and II should be taken in sequence.
Equivalent Course(s): HIPS 17521, HIST 17521

ENST 27522. Energy and Society II. 100 Units.
This two-quarter course explores the historical roots of climate change and other global environmental problems with a special attention to how energy use shapes human societies over time. Part II covers energy systems across the world from the early twentieth century to the present, examining themes such as the uneven globalization of energy-intensive lifestyles, the changing geopolitics of energy, and possible futures beyond fossil-fuel dependence.
Instructor(s): E. Chatterjee Terms Offered: Winter
Prerequisite(s): Parts I and II should be taken in sequence.
Equivalent Course(s): HIST 17522, HIPS 17522

ENST 27534. The Aspirational City: Chicago's Multicultural Communities. 100 Units.
No city has meant more to the hopes and dreams of more divergent groups of Americans than Chicago. The Aspirational City: Chicago's Multicultural Communities will explore the histories of Chicago's various racial, ethnic and marginalized communities and the ways in which they have sought to fashion the destinies of themselves, their communities, and the city of Chicago. The course is a weekly seminar open to both undergraduate and graduate students. Terms Offered: Spring
Equivalent Course(s): CRES 27534, HIST 27308

ENST 27700. Sensing the Anthropocene. 100 Units.
In this co-taught 3-week and in-person course between the departments of English (Jennifer Scappettone) and Visual Arts (Amber Ginsburg), we will deploy those senses most overlooked in academic discourse surrounding aesthetics and urbanism-hearing, taste, touch, and smell—to explore the history and actuality of Chicago as a site of anthropogenic changes. Holding our classes entirely out of doors, we will move through the city seeking out and documenting traces of the city’s foundations in phenomena such as the colonization of the ancestral homelands of the Three Fires Confederacy and trade routes of many other indigenous groups; the filling in of swamp; the redirection of the river; and the creation of transportation and industrial infrastructure—all with uneven effects on human and nonhuman inhabitants. Coursework will combine readings in history and theory of the Anthropocene together with examples of how artists and activists have made the Anthropocene visible and audible, providing forums for experimental documentation and annotations as we draw, score, map, narrate, sing, curate and collate our sensory experience of the Anthropocene.
Instructor(s): A. Ginsburg, J. Scappettone Terms Offered: Autumn
Prerequisite(s): Third or fourth-year standing.

Note(s): This intensive three-week course meets out of doors from September 27 through October 15. Graduate registration by Consent Only.

Equivalent Course(s): ARCH 22322, ARTV 32322, BPRO 27200, ARTV 22322, CHST 27200, ENGL 47700, ENGL 27700

**ENST 28702. Introduction to GIS and Spatial Analysis. 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 Summer 2021-22

Equivalent Course(s): SOCI 20283, ARCH 28702, GEOG 38702, GEOG 28702, SOCI 30283

**ENST 28728. Climate Change and Society: Human Impacts, Adaptation, and Policy Solutions. 100 Units.**

Anthropogenic climate change is one of the most difficult challenges faced by modern society. A revolution in socioeconomic and environmental data, along with new and old insights from economics, can inform how we face this global challenge. During the course, our focus will be on the impacts of climate change upon society, and the necessity of solutions that deal with the global scope, local scales, and often unequal nature of the impacts. This interdisciplinary course covers the tools and insights from economic analysis, environmental science, and statistics that inform our understanding of climate change impacts, the design of mitigation and adaptation policies, and the implementation of these policies. Students will develop a mastery of key conceptual ideas from environmental economics relevant for climate change and acquire tools, both theoretical and empirical, for conducting analyses of climate impacts and policies. The latter part of the course will hone students’ ability in applying these insights and tools through policy debates and presentations. The goal is to help students become informed and critically-minded practitioners of evidence-based, climate-informed policy making.

Instructor(s): Jina, A.

Terms Offered: Winter

Prerequisite(s): PBPL 20000 or ECON 20000 or consent of instructor

Equivalent Course(s): PBPL 28728

**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): M. Kolak

Terms Offered: Autumn Spring Winter 2021-22

Note(s): This course is consent-only. Students are required to submit the College Reading and Research Course Form. Available for either quality grades or for P/F grading.

Equivalent Course(s): GEOG 38700, GEOG 28700

**ENST 28925. Health Impacts of Transportation Policies. 100 Units.**

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 well-being. 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 well-being 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.

Instructor(s): Bhalla, Kavi

Terms Offered: Spring

Equivalent Course(s): ARCH 28925, HLTH 28925, PBPL 28925

**ENST 28980. 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, GEOG 28900
Environmental and Urban Studies

ENST 29155. From Chekhov to Chernobyl: Russian Literature of Environmental Catastrophe. 100 Units.
What is it that made the fact of anthropogenic climate change “unthinkable” in the 20th century, and what ideas might allow us to think past what Amitav Ghosh calls this “great derangement”? Environmental degradation and disaster provide a steady backdrop to the 20th century in Russia and the Soviet Union. With control over one sixth of the world’s land mass, the Russian and Soviet Empires exploited the seemingly inexhaustible natural resources of the country’s territory via industrialization, collectivization, forced migration and a vast system of prison camps and internal exile. While the Soviet regime promised mastery over nature, and Russian culture valorized the harmonization of humans with the natural world, environmental catastrophe, both sudden and cumulative, proved the folly of those dreams. Though the Soviet narrative of unflagging progress towards an industrialized utopia rendered these follies unmentionable, imaginative literature provides an indelible record of their costs. We will read works by authors who have grappled with this ongoing catastrophe and its implications for relations between human beings and the world. How might the cultural legacies of communism reframe some of the most vital questions for our shared planetary future? We will examine the ecological thinking of writers and filmmakers including Anton Chekhov, Vladimir Vernadsky, Andrey Platonov, Valentin Rasputin, Larisa Shepitko, Andrei Tarkovsky, and Svetlana Alexievich.
Instructor(s): Anne Eakin Moss Terms Offered: Autumn
Equivalent Course(s): REES 39155, REES 29155

ENST 29252. The Global Life of Things. 100 Units.
We are often told that the market has taken over all aspects of our social lives. The effects of this process can be seen in the financialization of the economy, the deregulation of labor, and the exploitation of natural resources. Goods are produced on one side of the world and consumed in another. Even college students are seen as investments that accrue value. How did this happen? This course will examine the deep history of how so much of the world became commodities. Focussing primarily on the seventeenth to the nineteenth centuries, we will ask how work, time, land, money, and people were commodified. We will also consider how historians and anthropologists have told the history of global capitalism through particular commodities, including sugar, cotton, meat, grain and mushrooms. Readings will span western Europe, India, the Atlantic World, Chicago, and contemporary Japan. Periodically, we will reflect on how these histories bear on questions of labor, gender, and the environment in the present day.
Instructor(s): O. Cussen Terms Offered: Spring
Equivalent Course(s): HIST 29525, GLST 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 29704. Readings and Research: Humans and Built Environments. 100 Units.
This course is a readings and research course for independent study in Environmental and Urban Studies. Instructor(s): Sabina Shaikh Terms Offered: Spring
Note(s): Enrollment by instructor consent only

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): Graduate preceptor 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 and Urban Studies. Equivalent Course(s): GEOG 29801

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.