

# HISTORY, PHILOSOPHY, AND SOCIAL STUDIES OF SCIENCE AND MEDICINE (HIPS)

---

Department Website: <https://fishbein.uchicago.edu/>

## PROGRAM OF STUDY

The BA program in the History, Philosophy, and Social Studies of Science and Medicine (HIPS) is designed for College students interested in studying science in terms of its historical development, conceptual structure, and social role. Students in the program must do sufficient work in one or more sciences to acquire a sound foundation for studying the nature of science. After securing this basis, they are expected to gain an understanding of how science arose, as well as how the content of scientific thought has changed and is changing, because of both its own internal dynamic and its interaction with the larger society in which it is embedded.

The HIPS program is designed to make possible the study of a wide range of social, historical, and conceptual issues relating to science. Students completing the program follow a number of different careers. Some pursue graduate study in the history and philosophy of science or in some field of science. Others find the program valuable preparation for the study of medicine, law, public policy, or science journalism. More generally, the goal of the program is to provide students with a sound basis on which to interpret and evaluate science and science policy. Some students choose to construct a degree program combining the requirements for the HIPS major with those for a major in the physical or biological sciences. Others, having met the HIPS program requirements, use electives to broaden their liberal arts education.

Students in other fields of study may also complete a minor in HIPS. Information follows the description of the major.

## HIPS Sponsor

The Morris Fishbein Center for the History of Science and Medicine sponsors the HIPS program. Further information can be obtained in the center's office (SS 207) and at <https://fishbein.uchicago.edu/>

## PROGRAM REQUIREMENTS

**Elements of the Curriculum.** The curriculum of the program contains five principal elements:

### 1. The Foundation.

All students must:

- complete an approved sequence that fulfills the biological sciences general education requirement;
- complete the general education requirement in the physical sciences with a physics sequence (PHYS 12100-12200 General Physics I-II or equivalent) or a chemistry sequence (CHEM 11100-11200 Comprehensive General Chemistry I-II, CHEM 10100 Introductory General Chemistry I and CHEM 10200 Introductory General Chemistry II, or equivalent), or have earned a score of 5 on the AP Chemistry or Physics test or a score of 4 or 5 on the AP Physics C Mechanics and E&M test;
- complete a calculus sequence (MATH 13100-13200 Elementary Functions and Calculus I-II or higher), or have earned a score of 5 on the AP Calculus BC test;
- complete three courses on the origins and development of science in the West: one course in each of the following three chronological periods: ancient, early modern, and modern.

**2. Advanced Science.** In addition to the science courses typically taken as part of the general education requirements, students are expected to take three courses in science, social sciences, or mathematics beyond the introductory level. They select these advanced courses according to their special aims, their area of concentration, and the subject of their bachelor's thesis.

**3. Areas of Concentration.** All students in the program determine an area of concentration in the anthropology, ethics, history, philosophy, or sociology of science and medicine. In consultation with the program director and their program adviser, students select five courses to constitute this concentration area. For example, some students may be particularly interested in the intellectual and social interactions between changing scientific knowledge and institutions, on the one hand, and evolving social institutions, on the other; a second group may be concerned with either epistemological issues related to the growth of science or moral and political problems attending the employment of technology; and a third group may wish to emphasize the study of science as a social or cultural activity.

**4. Tutorials.** Students are required to take two tutorial courses; this is typically done early in their program. With a specific focus that changes each year, these tutorials are small classes (from three to ten students) that emphasize discussion and writing. An updated list of courses is available on the Fishbein Center website

(<https://chss.uchicago.edu/content/fishbein-center/current-courses/>) or at registrar.uchicago.edu/classes (<http://registrar.uchicago.edu/classes/>).

**5. Bachelor's Thesis and Junior Seminar.** Third-year students enroll in a designated one-quarter seminar (HIPS 29800 Junior Seminar: My Favorite Readings in the History and Philosophy of Science) that deals with general aspects of history, philosophy, and social studies of science and medicine. In Spring Quarter of their third year, students must discuss their proposal for their bachelor's thesis with the program director. In consultation with the program director, students then sign up for a reading and research course (HIPS 29700 Readings and Research in History, Philosophy, and Social Studies of Science and Medicine) with an appropriate faculty member. In their fourth year, this research course should lead to a bachelor's thesis (HIPS 29900 Bachelor's Thesis) that integrates each student's academic studies, bringing them to bear on a significant question related to some historical, conceptual, ethical, or social aspect of science. Fourth-year students also enroll in a two-quarter HIPS 29810 Bachelor's Thesis Workshop, which is comprised of meetings that focus on organizing, researching, writing, and revising the thesis.

SUMMARY OF REQUIREMENTS

GENERAL EDUCATION

Three courses: one from each of the following chronological periods:		300
Ancient: HIPS 18301		
Early Modern: HIPS 18400-18403		
Modern: HIPS 18500-18507		
An approved sequence that fulfills the biological sciences general education requirement		200
One of the following sequences:		200
CHEM 10100 & CHEM 10200	Introductory General Chemistry I and Introductory General Chemistry II (or equivalent) *	
CHEM 11100-11200	Comprehensive General Chemistry I-II (or equivalent) *	
PHYS 12100-12200	General Physics I-II (or higher) *	
MATH 13100-13200	Elementary Functions and Calculus I-II (or higher) *	200
Total Units		900

MAJOR

Three courses in science, social sciences, or mathematics beyond the introductory level		300
Five courses in an area of concentration		500
Two tutorials		200
HIPS 29700	Readings and Research in History, Philosophy, and Social Studies of Science and Medicine	100
HIPS 29800	Junior Seminar: My Favorite Readings in the History and Philosophy of Science	100
HIPS 29900	Bachelor's Thesis	100
HIPS 29810	Bachelor's Thesis Workshop	100
Total Units		1400

\* Credit may be granted by examination.

EXAMPLES OF CONCENTRATIONS

The following are meant to illustrate areas of concentration. They are not prescriptive, only suggestive. For the particular courses that might constitute their area of concentration, students should consult with the director of the program, examine this course catalog, and visit registrar.uchicago.edu/classes (<http://registrar.uchicago.edu/classes/>).

History and Philosophy of Biological Science

HIPS 23600	History and Theory of Human Evolution	100
BIOS 29321	Problem of Evil: Disease?	100
HIPS 23900	Biological and Cultural Evolution	100
HIPS 25801	Evolutionary Theory and Its Role in the Human Sciences	100
HIPS 27860	History of Evolutionary Behavioral Sciences	100
Total Units		500

Philosophy of Science

HIPS 22000	Introduction to the Philosophy of Science	100
HIPS 25104	History and Philosophy of Biology	100

HIPS 22708	Planetary Britain, 1600-1900	100
HIPS 24901	Darwin's "On the Origin of Species" and "The Descent of Man"	100
HIPS 27515	Scientific and Humanistic Contributions to Knowledge Formation	100
Total Units		500

### History of Medicine and Medical Ethics

HIPS 12103	Treating Trans-: Practices of Medicine, Practices of Theory	100
HIPS 21609	Topics in Medical Ethics	100
HIPS 24103	Bioethics	100
HIPS 25900	Darwinian Medicine	100
HIPS 27300	Medicine and Culture	100
Total Units		500

### ADMISSION

To be eligible for admission, students should have completed at least two of the four foundation course sequences listed in the preceding section and should have maintained a 3.2 GPA or higher in previous course work. Students should apply for admission no later than Autumn Quarter of their third year to the director of the program. The director advises students about the requirements, arranges a preliminary plan of study, and discusses scheduling conflicts and special cases. Thereafter, a student chooses, in consultation with the director, a BA adviser from the staff.

### HONORS

Students who meet the following criteria are considered for graduation with honors: (1) overall GPA of 3.3 or higher, (2) completion of a bachelor's thesis of A quality, and (3) a majority vote by the faculty in favor of honors.

### GRADING

Students majoring in HIPS must receive quality grades in all courses meeting the requirements of the degree program, except HIPS 29810 Bachelor's Thesis Workshop, which must be taken for Pass/Fail grading. Nonmajors may take courses for Pass/Fail grading with consent of instructor.

### ADVISERS

Drawn from many parts of the University, those listed in the Faculty Section of the HIPS program have direct responsibility for admitting students, formulating curriculum, and advising students.

### MINOR PROGRAM IN HISTORY, PHILOSOPHY, AND SOCIAL STUDIES OF SCIENCE AND MEDICINE

Students in other fields of study may complete a minor in HIPS, which offers students who are majoring in science the opportunity to gain an understanding of the conceptual, historical, and social contexts in which their disciplines are situated.

The minor requires a total of six courses. Courses in the minor (1) may not be double counted with the student's major(s) or with other minors and (2) may not be counted toward general education requirements. Courses in the minor must be taken for quality grades, and more than half of the requirements for the minor must be met by registering for courses bearing University of Chicago course numbers.

Students should take at least two courses focusing on the origins and development of science in the West (one course in each of two of the following chronological periods: ancient, early modern, and modern) to meet the general education requirement in civilization studies. Additional courses in these sequences that are not used to meet the general education requirement can count toward courses required for the minor.

Students must complete one tutorial course.

The remaining five courses for the minor program should constitute an area of concentration in the anthropology, ethics, history, philosophy, or sociology of science and medicine. Students select the courses that constitute this concentration in consultation with the program director and their program adviser.

Students who elect the minor program in HIPS should meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the program. The director's approval for the minor program should be submitted to the student's College adviser by the deadline above on the Consent to Complete a Minor Program ([https://humanities-web.s3.us-east-2.amazonaws.com/college-prod/s3fs-public/documents/Consent\\_Minor\\_Program.pdf](https://humanities-web.s3.us-east-2.amazonaws.com/college-prod/s3fs-public/documents/Consent_Minor_Program.pdf)) form obtained from the College adviser or online.

The following groups of courses would satisfy the requirements for a minor in HIPS. They are only meant to illustrate possible plans of study; they are not prescriptive.

Group 1		
Tutorial:		100
HIPS 29641	Tutorial: Medical Ethics in the Hospital and Clinic	
Concentration in History and Philosophy of Biology:		500
HIPS 22700	Philosophical Problems in the Biological Sciences	
HIPS 23600	History and Theory of Human Evolution	
HIPS 23900	Biological and Cultural Evolution	
HIPS 25801	Evolutionary Theory and Its Role in the Human Sciences	
BIOS 29321	Problem of Evil: Disease?	
Total Units		600
Group 2		
Tutorial:		100
HIPS 29642	Tutorial: The Science and Philosophy of Artificial Intelligence	
Concentration in History of Medicine and Medical Ethics:		500
HIPS 12103	Treating Trans-: Practices of Medicine, Practices of Theory	
HIPS 21400	Intro To Medical Ethics	
HIPS 24103	Bioethics	
HIPS 25900	Darwinian Medicine	
HIPS 27300	Medicine and Culture	
Total Units		600

HISTORY, PHILOSOPHY, AND SOCIAL STUDIES OF SCIENCE AND MEDICINE COURSES

Please visit this page (<https://fishbein.uchicago.edu/courses/>) for a list of currently offered courses.

**HIPS 18301, HIPS 18400–18403, and HIPS 18500–18507 Science, Culture, and Society in Western Civilization**

These courses focus on the origins and development of science in the West. They aim to trace the evolution of the biological, psychological, natural, and mathematical sciences as they emerge from the culture and social matrix of their periods and, in turn, affect culture and social. In order to satisfy the general education requirement in civilization studies, students must take a course in two or three of the following chronological periods: ancient (numbered HIPS 18300), early modern (HIPS 18400–18403), and modern (HIPS 18500–18503). Taking these courses in sequence is recommended but not required. Only one course per category may count toward the requirement unless special approval is granted.

**HIPS 18301. Science, Culture, and Society in Western Civilization I: Ancient Science and Medicine. 100 Units.** This undergraduate course represents the first quarter of the Science, Culture, and Society in Western Civilization general education sequence. Taking these courses in sequence is recommended but not required. This quarter will focus on science and medicine in societies across the ancient world. Students will gain an introduction to methods of healing and knowing practiced in Africa, Asia, Europe, and North and South America before 1500. Students will also acquire an understanding of the many questions that historical research raises for our own understanding of contemporary medicine and science, and some of the methods that historians use to bring the past to light. Topics include ancient surgery and pharmacology; the manifold meanings of "disease;" the function and recognition of "the body," of "mind," and of perception; how to acquire "good" and "true" knowledge; continuity and discontinuity of beliefs and practices over time and place; and exchange of ideas and materials across cultures, among other subjects.  
Instructor(s): Michael Rossi Terms Offered: Autumn. Offered in Autumn 2023  
Equivalent Course(s): HIST 17311

**HIPS 18401. Science, Culture, and Society in Western Civilization II: History of Medicine 1500 to 1900. 100 Units.** This course examines the theory and practice of medicine between 1500 and 1900. Topics include traditional early modern medicine; novel understandings of anatomy, physiology, and disease from the Renaissance on; and new forms of medical practice, training, and knowledge-making that developed in the eighteenth and nineteenth centuries.  
Instructor(s): M. Rossi Terms Offered: Winter. Course is offered in Winter 2024.  
Equivalent Course(s): HIST 17411

**HIPS 18505. Science, Culture, and Society in Western Civilization III: Histories of the Bomb. 100 Units.** In the long history of the planet, the years since 1945 have a remarkable and unique geological signature: one left by the creation and testing of atomic weapons, medicine, and energy. This class explores the intellectual, social, economic, and political histories of nuclear research, including topics such as transnational scientific migrations; the Manhattan Project; weapons testing and development; the rise of "Big Science"; postcolonial histories of

nuclear development; domestic and international anti-nuclear activism; and ecological and environmental impacts of fallout, waste, and nuclear accidents. Drawing on both primary and secondary sources, we will consider how the story we tell about the history of the nuclear age and the rise of science came to be, and how that story has transformed at different points in the twentieth century.

Instructor(s): E. Kern Terms Offered: Spring. Offered in Spring 2024

Equivalent Course(s): HIST 17515

#### **HIPS 12103. Treating Trans-: Practices of Medicine, Practices of Theory. 100 Units.**

Medical disciplines from psychiatry to surgery have all attempted to identify and to treat gendered misalignment, while queer theory and feminisms have simultaneously tried to understand if and how trans-theories should be integrated into their respective intellectual projects. This course looks at the logics of the medical treatment of transgender (and trans- more broadly) in order to consider the mutual entanglement of clinical processes with theoretical ones. Over the quarter we will read ethnographic accounts and theoretical essays, listen to oral histories, discuss the intersections of race and ability with gender, and interrogate concepts like "material bodies" and "objective science". Primary course questions include: 1.

Instructor(s): Paula Martin Terms Offered: Winter

Note(s): This course counts as a Foundations Course for GNSE majors

Equivalent Course(s): HMRT 12103, CHDV 22100, ANTH 25212, HLTH 12103, GNSE 12103

#### **HIPS 15005. Engineered Environments in East Asia. 100 Units.**

Environments in East Asia have drastically changed in the twentieth century. Seawalls and cities rose in coastal areas that were previously untouched along Japan's coast; cement-dams replaced dirt dikes that divided the Han river in the Korean Peninsula; and railroads expanded into far-off regions in China, redefining both cities and hinterlands. These are three archetypal examples of technically complex projects that this course will explore. These industrial and technological projects of a national, regional, or global scale connect past to present and pose questions to our future about climate change, public health crises, and energy anxieties. This class asks what engineered environments are and how they shape our everyday life. We will visit three types of archetypal megaprojects-the railway system, the transformation of ocean space, and the building of dams--in China, Japan, and Korea that have shaped and continue to shape the environments of East Asia, an economically vibrant, politically challenging, and ecologically diverse region, with a deep history and vibrant technological innovations even today. We will discuss the politics and science behind the building of each megaproject, the interconnected history among them, and more importantly, how each project generated its environment, shaped the relationship between human societies and nature, and influences our current understanding of the region.

Instructor(s): Y. Dong Terms Offered: Autumn

Note(s): All the course materials are in English. In this course, we will engage with primary documents that are translated into English and other scholarship on specific sites, including newspaper reports, journal articles, and documentaries. Primary sources include literature, memoirs, and visual images. For students who do not have background knowledge on the political and social history of East Asia, this course also assigns readings from historical textbooks to help students place megaprojects in each's historical context. There are no prerequisites for this course. There will be a component of short lectures in some meetings.

Equivalent Course(s): HIST 15005

#### **HIPS 18301. Science, Culture, and Society in Western Civilization I: Ancient Science and Medicine. 100 Units.**

This undergraduate course represents the first quarter of the Science, Culture, and Society in Western Civilization general education sequence. Taking these courses in sequence is recommended but not required. This quarter will focus on science and medicine in societies across the ancient world. Students will gain an introduction to methods of healing and knowing practiced in Africa, Asia, Europe, and North and South America before 1500. Students will also acquire an understanding of the many questions that historical research raises for our own understanding of contemporary medicine and science, and some of the methods that historians use to bring the past to light. Topics include ancient surgery and pharmacology; the manifold meanings of "disease;" the function and recognition of "the body," of "mind," and of perception; how to acquire "good" and "true" knowledge; continuity and discontinuity of beliefs and practices over time and place; and exchange of ideas and materials across cultures, among other subjects.

Instructor(s): Michael Rossi Terms Offered: Autumn. Offered in Autumn 2023

Equivalent Course(s): HIST 17311

#### **HIPS 18401. Science, Culture, and Society in Western Civilization II: History of Medicine 1500 to 1900. 100 Units.**

This course examines the theory and practice of medicine between 1500 and 1900. Topics include traditional early modern medicine; novel understandings of anatomy, physiology, and disease from the Renaissance on; and new forms of medical practice, training, and knowledge-making that developed in the eighteenth and nineteenth centuries.

Instructor(s): M. Rossi Terms Offered: Winter. Course is offered in Winter 2024.

Equivalent Course(s): HIST 17411

#### **HIPS 18504. Science, Culture, and Society in Western Civilization III: the Computational Life. 100 Units.**

In SC5III: The Computational Life, we consider the rise of computation and computers from ancient, analog efforts through state calculations and steampunk computers of the 19th Century to the emergence of digital computers, programming languages, screens and personal devices, artificial intelligence and neural networks,

the Internet and the web. Along the way, we explore how the fantasy and reality of computation historically reflected human and organizational capacities, designed as prosthetics to extend calculation and control. We further consider how computers and computational models have come to influence and transform 20th and 21st Century politics, economics, science, and society. Finally, we examine the influence of computers and AI on imagination, structuring the utopias and dystopias through which we view the future. Students will read original texts and commentary, manipulate analog and digital hardware, software, networks and AI, and contribute to Wikipedia on the history and the social and cultural implications of computing.

Instructor(s): J. Evans Terms Offered: TBD. Not offered in the 2023-2024 Academic Year.

Equivalent Course(s): SOCI 20526, HIST 17514

**HIPS 18505. Science, Culture, and Society in Western Civilization III: Histories of the Bomb. 100 Units.**

In the long history of the planet, the years since 1945 have a remarkable and unique geological signature: one left by the creation and testing of atomic weapons, medicine, and energy. This class explores the intellectual, social, economic, and political histories of nuclear research, including topics such as transnational scientific migrations; the Manhattan Project; weapons testing and development; the rise of "Big Science"; postcolonial histories of nuclear development; domestic and international anti-nuclear activism; and ecological and environmental impacts of fallout, waste, and nuclear accidents. Drawing on both primary and secondary sources, we will consider how the story we tell about the history of the nuclear age and the rise of science came to be, and how that story has transformed at different points in the twentieth century.

Instructor(s): E. Kern Terms Offered: Spring. Offered in Spring 2024

Equivalent Course(s): HIST 17515

**HIPS 20107. Nature and Technology in the Capitalist Mode of Production. 100 Units.**

The crisis of nature and technology is at the heart of the 21st century mode of production as unprecedented planetary scale ecological destruction, climate change, and exhaustion of fossil fuels undercut the dynamics of capitalist accumulation. At the same time, novel techno-natural fixes are being designed to contain the crises immanent to the life process of capital. However, these movements are far from seamless; new tensions, contradictions, and horizons of struggles emerge making a critical inquiry of these concepts urgent to Anthropological thinking. In this course, the students will be introduced to foundational approaches to these problems. The first half of the course will intensively engage with dialectical materialist frameworks to understand the interrelationship between nature, technology, and consciousness in the capitalist mode of production. From this engagement, we will derive critical concepts that will be used to engage with the pertinent questions of planetary scale appropriation of human, non-human and more-than-human life in emergent anthropological theory and ethnographic literature. In doing so, our goal is to reflect on a series of questions: What is the place of nature and technology in the capitalist mode of production? How and if they embody limits to the workings of capital? How does anthropology allow us to develop new political and theoretical horizons that emerge in the wake of these developments?

Equivalent Course(s): CEGU 20107, ANTH 10107

**HIPS 20205. Race in African History. 100 Units.**

This course examines the category of race in African history from the nineteenth century to the contemporary era. It references the legacies of earlier identity constructions in the creation of these categories, as well as analyzing its transnational and trans-imperial dimensions. The class combines intellectual, cultural, and social history to illuminate the actors, encounters, and debates animating this dynamic field of study-moving beyond assumptions of African societies as spaces of ethnic-and not racialized-identities to examine the construction of difference through transnational history of science, gender and sexuality studies, histories of slavery, Middle Eastern colonial projects, as well as the invention of the category of "native" in European colonial discourse. Are categories of differences primarily due to European colonialism, as many claim? Or are they embedded in a more complex configuration coming from settler colonial projects, national liberation struggles, and postcolonial nativist discourses? Students examine case studies from across the continent-from Ghana to Sudan to South Africa-paying close attention to experiences of Asian, Arab, and mixed-race peoples navigating colonial and postcolonial African states; while keeping an eye on how debates about difference, diaspora, and nationalism in North America and Europe inform discussions of race in Africa, and how Africans shape discourses of race in colonial metropolises and the United States.

Instructor(s): K. Hickerson Terms Offered: Autumn

Note(s): Students who have not take African Civilizations I, II, and III are asked to read African History: A Very Short Introduction (Oxford, 2007) in preparation for this course.

Equivalent Course(s): GNSE 22225, HIST 20205, CRES 20205

**HIPS 20223. Magic, Miracles, and Medicine: Healthcare in the Bible and the Ancient World. 100 Units.**

This course examines the complex issues surrounding the body, disability, and medical care in antiquity. It will be guided by a variety of questions, such as what was the root cause of bodily infirmity and disease in antiquity? How did cultural views of sex, gender, and race influence perceptions of the body and what it meant to be able bodied? Such questions are significant when considering what kind of access to healthcare marginalized groups had. In order to explore these questions, we will examine ancient Mediterranean views of medical care through material remains (e.g., magical amulets and healing shrines) and textual evidence (e.g., Galen and Hippocrates). After considering this wider cultural context, we will examine treatments in the Hebrew Bible, New Testament, and early Christianity. We will also explore how Christian concepts of medical care evolved in light of accounts of Jesus as a divine healer. In addition to this ancient evidence, we will engage with modern disability studies and



sociological analyses to better orient our readings. At the end of the course, students will be better acquainted with the complex relationship between religion and medicine and how that affects modern healthcare decisions.

Instructor(s): Richard Zaleski Terms Offered: Spring

Equivalent Course(s): RLST 20223, CCTS 21021, KNOW 20223, HLTH 20223, JWSC 20923, HIST 25305

#### **HIPS 20401. Philosophy of Mind. 100 Units.**

This is a survey of some of the central questions in the philosophy of mind. These questions include: What is consciousness? How can mental states represent things in the world? How do our minds relate to our bodies? Do we have free will? Can we blame someone for the beliefs or desires she has? What are the emotions? To help us with these questions, we will focus on 20th-century analytic work (by Putnam, Nagel, Searle, Jackson, Dennett, Chalmers, Block, Dretske, and others), but we will also read important historical texts on the nature of the mind by Aristotle, Descartes, and Hume.

Instructor(s): B. Callard Terms Offered: Autumn

Equivalent Course(s): PHIL 23501

#### **HIPS 20567. Introduction to Computational Sociology. 100 Units.**

Advances in machine learning, high performance computing, and big data are opening exciting new ways of doing social science. This course introduces students to the burgeoning field of computational sociology, emphasizing both conceptual understanding and hands-on training. The course does not require any prior experience with coding, computer science, or statistics. The only requirement is that students have fluency in high-school mathematics (pre-calculus) and an interest in acquiring computational skills. Students will learn the basics of R and Python, and will gain practical experience with simulation modeling, computational text analysis, and neural networks. This course will pair a practical training in computational methods with a critical examination of how these technologies are being deployed in the real world and their roles in reproducing systems of power and inequality. This class is recommended for students who want a basic introduction to "data science" and who are seeking the conceptual knowledge necessary to participate in current debates over information technology in contemporary society.

Instructor(s): A. Kozlowski Terms Offered: Winter

Equivalent Course(s): MAAD 10567, SOCI 20567

#### **HIPS 20574. Sociology Structure and Agency. 100 Units.**

The course will unpack two fundamental concepts in sociology-social structure and agency-and examine how they relate to one another. In this endeavor, we will consult both classical and contemporary sources and discuss theoretical elaborations as well as empirical applications. We will pay particular attention to what may be the three most powerful social structures in America: gender, class, and race. The aim of the course is to impart a distinctly sociological perspective and equip students with sociological modes of explanation (as opposed to, say, economic or biological/evolutionary modes) in the belief that such a framework will enrich their understanding of the world. To this end, students majoring in other disciplines-in economics, STEM fields, and the humanities-are encouraged to enroll. While the readings will include dense social theory, every effort will be made to make the ideas at stake accessible to a non-specialized audience.

Instructor(s): M. Garrido Terms Offered: Winter

Equivalent Course(s): SOCI 20574, SOCI 30574, CHSS 30574

#### **HIPS 20576. Social Theory for the Digital Age. 100 Units.**

Society rearranges itself, though we don't always know where it is heading. When the postmodern moment had arrived in the 1980s it perplexed social theorists, hence its characterization as simply a "post"-stage of modernity. Digitization is one answer to the question of direction of change in the last decades. In this class, we take the ongoing transformations that we attribute to digital media as a starting point to ask what challenges they provide to social theory that may force us to reconsider some of our most basic concepts and premises. We will understand the term digital age broadly to refer to the rise of algorithms, sensors, (big) data, machine learning, and computational methods, all developments that swirl in and around the Artificial Intelligence scene and intersect with and replace purely human relations. The class gives particular attention to concepts such as action and interaction, embodiment, social situations, subjectivity and autonomy, as well as society as communication.

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

Equivalent Course(s): SOCI 20576, CHSS 30576, SOCI 30576

#### **HIPS 20608. Remaking the Prairie: The Cultural Politics of Ecological Restoration. 100 Units.**

This course uses the Midewin National Tallgrass Prairie as a case study to understand the environmental and cultural challenges of ecological restoration. In essence, we will look at the Midewin as an environmental humanities problem, asking the questions: What does it mean to restore a landscape or an ecosystem? What values or biases are in place in ecological restoration and how do we overcome them? The Midewin National Tallgrass Prairie, managed by the US Forest Service, is a restored prairie on the former site of the WWII era Joliet Army Ammunition Plant. Throughout the September Term, we will visit the site several times to meet with Forest Service employees, participate in environmental restoration work, collect data for ecological studies, and learn more about the complicated history of the prairie and efforts to restore it. Analysis of the Midewin National Tallgrass Prairie and ecological restoration more broadly will be done from an interdisciplinary lens that takes seriously the sometimes-competing stakes of indigeneity, agriculture, settler colonialism, ecology, history, militarism, and recreation, among others.

Instructor(s): Jessica Landau Terms Offered: Summer

Equivalent Course(s): ENST 20806, CEGU 20806, CHST 20806

**HIPS 20700. Introduction to Logic. 100 Units.**

An introduction to the concepts and principles of symbolic logic. We learn the syntax and semantics of truth-functional and first-order quantificational logic, and apply the resultant conceptual framework to the analysis of valid and invalid arguments, the structure of formal languages, and logical relations among sentences of ordinary discourse. Occasionally we will venture into topics in philosophy of language and philosophical logic, but our primary focus is on acquiring a facility with symbolic logic as such.

Instructor(s): Winter 2024: Molly Brown (200/300); Ryan Simonelli (200/300) Terms Offered: Winter

Note(s): Students may count either PHIL 20100 or PHIL 20012, but not both, toward the credits required for graduation.

Equivalent Course(s): PHIL 20100, PHIL 30000, CHSS 33500

**HIPS 20962. Nature's Authority. 100 Units.**

From ancient times to the present, nature's authority has been invoked by revolutionaries and reactionaries alike to justify social, political, and economic arrangements made by humans. Despite much trenchant philosophical criticism, nature seems to an irresistible resource in very human debates about power, work, sex, money, and much else. This seminar asks why this tradition has been so persistent and pervasive and where nature's authority comes from. Readings will emphasize primary sources, from Aristotle to contemporary environmentalists. This course will meet two times per week for 3 hours, during the 1st five weeks of the quarter, March 28 - April 27.

Terms Offered: Spring. Course will be taught Spring 2022

Note(s): Instructor consent required. Primarily aimed at graduate students, but also open to well-qualified undergraduates.

Equivalent Course(s): HIST 45005, CHSS 30962, SETH 30962

**HIPS 21000. Introduction To Ethics. 100 Units.**

In this course, we will read, write, think, and talk about moral philosophy, focusing on Immanuel Kant's Groundwork of the Metaphysics of Morals and work by John Stuart Mill. We will work through our texts with care. Neo-Kantianism is a prominent contemporary form of moral theory. We will use Kant to develop a critique of neo-Kantianism as we go along. We will look at influential criticisms of utilitarianism in the concluding weeks of the term, and we will need to ask ourselves whether either of them applies to the version of utilitarianism developed by John Stuart Mill. (A)

Instructor(s): Candace Vogler Terms Offered: Spring

Equivalent Course(s): PHIL 21000, FNLD 23107

**HIPS 21100. Celebrity and Science in Paleoanthropology. 100 Units.**

This seminar explores the balance among research, "showbiz" big business, and politics in the careers of Louis, Mary, and Richard Leakey; Alan Walker; Donald Johanson; Jane Goodall; Dian Fossey; and Birutė Galdikas. Information is gathered from films, taped interviews, autobiographies, biographies, pop publications, instructor's anecdotes, and samples of scientific writings.

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

Prerequisite(s): This course qualifies as a Discovering Anthropology selection for Anthropology majors.

Equivalent Course(s): ANTH 21406, ANTH 38300

**HIPS 21302. Radicals in Early Modern Britain. 100 Units.**

Throughout the 1640s and 1650s it seemed to many in England that the world they had grown up in—a world characterized by patriarchy and hierarchy, by inequality and privilege, by an established church and a monarchical state—was being turned upside down. Against a backdrop of conflict between Parliament and Crown, a power vacuum had opened, and in this vacuum both organized radical groups and individual visionaries saw the opportunity to make a revolution. The goals of these radicals were diverse, and often in contradiction. Some wanted the creation of a strict republic, even a democracy; some sought the elimination of private property; others the abolition of marriage; still others the creation of a millenarian Fifth Monarchy led by King Jesus himself. What they shared was a common desire to remake England into a fundamentally different society, and a failure to achieve their goals. Or was it a failure? Today the voices of these radicals have disappeared from most histories of modern political thought. And yet this forgotten corpus of writing reveals a very different early modern world, with strains of communism, proto-feminism, and dissent that fed the imaginations of radicals for centuries, including many well beyond England. This seminar introduces students directly to the ideas of the seventeenth-century English radicals. They will engage with the history and historiography of the English Revolution, read a variety of primary sources, and complete a research paper.

Instructor(s): A. Johns Terms Offered: Spring

Equivalent Course(s): CHSS 31302, HIST 21302, HIST 31302

**HIPS 21406. Britain 1760-1880: The Origins of Fossil Capitalism. 100 Units.**

Britain rose to global dominance after 1760 by pioneering the first fossil-fuel economy. This course explores the profound impact of coal and steam on every aspect of British 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. How much does the modern world owe to the fossil capitalism of the Victorians? Assignments include short essays that



introduces students to primary sources (texts, artifacts, and images) and a longer paper that examines in greater depth a specific aspect of the age of steam.

Instructor(s): F. Albritton Jonsson Terms Offered: Winter

Equivalent Course(s): HIST 31406, CEGU 21406, CEGU 31406, CHSS 31406, HIST 21406

#### **HIPS 21407. The Vocation of a Scientist. 100 Units.**

Max Weber wrote that to be a scientist one needed a "strange intoxication" with scientific work and a "passionate devotion" to research as a calling. And yet, such passion seemed to conflict with the ideal of value-neutral inquiry. This class considers the vocation of science since the turn of the twentieth century. What political, economic, and cultural forces have shaped scientific professions in the United States? How are scientists represented in public culture? How was American science experienced during the colonization of the Philippines? By exploring these questions, this class will examine the values and norms that make science into a meaningful vocation.

Terms Offered: TBD

Equivalent Course(s): ANTH 22129, KNOW 21407

#### **HIPS 21408. History of Medicine. 100 Units.**

This course surveys the history of medicine from the medieval period to the present. How did medicine emerge as a defined body of knowledge? To what extent do diseases and disorders have an independent existence, and to what extent are they cultural constructs? How have social mores—particularly those related to religion, class, nationality, race, and gender—influenced the ways in which health was and is understood and maintained, and illness treated? What does it mean to practice medicine ethically, and how has that changed over time? Topics include the emergence and evolution of the medical profession, the history of medical research and method, the interpretation and treatment of the unhealthy and healthy alike, eugenics, euthanasia, the quest for immortality, and the changing relationship between technology and disease.

Equivalent Course(s): HIST 25314, CCTS 21408, KNOW 21408

#### **HIPS 21409. History of Extraterrestrial Life. 100 Units.**

In 2014, the Vatican Radio made a splash when it reported that the pontiff, Pope Francis, condoned the baptism of extraterrestrials—if they so desired it. "Who are we to close doors?" he asked rhetorically. It was both a metaphor for spiritual inclusion and an accurate representation of the modern Vatican's position on the possibilities of modern astrobiology and the search for extrasolar planets, fields whose rapid growth over the past two decades make serious consideration of extraterrestrial life seem like a uniquely modern phenomena. Its history, however, is in fact many centuries old. In this course we will examine the development of beliefs concerning life in the universe from the sixteenth century to the present. How did historical actors understand the nature, abilities, and location of extraterrestrial life, and its relationship to man and god? We will analyze connections between these beliefs and contemporary political, social, scientific, and religious developments. These include the role of the plurality of worlds in the debates over heliocentrism, its impact and application in the context of deism and social and political freethought, its literary and artistic depictions and use as a tool of satire and social commentary, its influence on natural philosophy, its decline and the subsequent rise of alien conspiracists and their critics, and how and why conceptions of the extraplanetary other took a dark and sinister turn toward the early-to-mid twentieth century.

Equivalent Course(s): KNOW 21409, HIST 24917, ECEV 31409

#### **HIPS 21410. Politics of Technoscience in Africa. 100 Units.**

Euro-American discourse has often portrayed Africa as either a place without science and technology or as the home of deep and ancient wisdom. European imperialists used the alleged absence of science and technology as a justification for colonialism while pharmaceutical companies sought out African knowledge about healing plants. In addition to their practical applications, science and technology carry significant symbolic weight in discussions about Africa. In this class, we examine the politics of scientific and technical knowledge in Africa with a focus on colonialism and its aftermath. How have different people produced and used knowledge about the environment, medicine, and technology? What kinds of knowledge count as indigenous and who gets credit for innovation? How have independent African governments dealt with the imperial legacies of science? From the interpretation of archaeological ruins to the design of new medical technologies, this class will examine science and technology as political practice in Africa.

Equivalent Course(s): ANTH 22165, KNOW 21410, CRES 21410

#### **HIPS 21411. Sex, Race, and Empire. 100 Units.**

This course surveys how science, race, and gender interacted in the early modern Atlantic world from 1500-1800. We will critically examine how new modes of scientific inquiry brought Africans, Americans, and Europeans into contact and conflict. Along the way, we will ask how, why, and with consequences imperial science created new knowledge claims about human inequality, especially racial and sexual difference. We will draw primarily on British, Iberian, and French imperial agendas in order to track the experiences of men and women from all corners of the Atlantic world, including indigenous peoples, enslaved black Africans, free people of color, and white Europeans. Through a variety of primary and secondary sources, we will uncover European aspirations to curate, control, and exploit the natural world and the agency of subjugated peoples in responding to and resisting these designs. Topics covered include natural history collecting and classification; the invention of racial theory; slavery and maroons; women, gender, and reproduction; consumption; and violence, resistance, and revolution.

Equivalent Course(s): CRES 21411, KNOW 21411, GNSE 21411, HIST 25315

**HIPS 21413. Sex and Enlightenment Science. 100 Units.**

What do a lifelike wax woman, a birthing dummy, and a hermaphrodite have in common? This interdisciplinary course seeks answers to this question by exploring how eighteenth-century scientific and medical ideas, technologies, and practices interacted with and influenced contemporary notions of sex, sexuality, and gender. In our course, the terms "sex," "Enlightenment," and "science" will be problematized in their historic contexts using a variety of primary and secondary sources. Through these texts, as well as images and objects, we will see how emerging scientific theories about sex, sexuality, and gender contributed to new understandings of the human, especially female, body. We will also see how the liberating potential of Enlightenment thought gave way to sexual and racial theories that insisted on fundamental human difference. Topics to be covered include theories of generation, childbirth, homosexuality, monstrosities, race and procreation, and hermaphrodites and questions about the "sex" of the enlightened scientist and the gendering of scientific practices.

Equivalent Course(s): KNOW 21413, HIST 22218, CHSS 31413, GNSE 21413

**HIPS 21414. What is Technology? 100 Units.**

In the nineteenth century, the word "technology" referred to the science of the useful and industrial arts. While the term is today synonymous with machinery and other material tools, this contemporary usage dates only to the 1930s. A word once used to describe a specialist mode of writing about applied knowledge has come to refer to tools and their use.

Equivalent Course(s): KNOW 21414

**HIPS 21419. Indigenous Knowledge and the Foundations of Modern Social Theory. 100 Units.**

Indigenous people are often seen as "objects" of social theory; this course considers their role as subjects of social theory-makers of modern knowledge who made foundational contributions to basic ideas about humanity. We will take up three case studies, each of which highlights an indigenous people who unleashed a cascade of fresh thinking: the Australian Aborigines who influenced the ideas of Émile Durkheim and Sigmund Freud; the Native peoples of the Northwest Coast of America who stimulated Franz Boas to reconstruct the concept of culture; and the indigenous peoples of the Trobriand Islands who shaped Bronisław Malinowski's ideas about gifts, hospitality, and reciprocity. As we will see, much of what we call social theory turns out to rely on a vast archive of nonstate knowledge generated by indigenous intellectuals.

Instructor(s): Isaiah Lorado Wilner Terms Offered: Spring

Equivalent Course(s): KNOW 21419, CRES 21419

**HIPS 22000. Introduction to the Philosophy of Science. 100 Units.**

We will begin by trying to explicate the manner in which science is a rational response to observational facts. This will involve a discussion of inductivism, Popper's deductivism, Lakatos and Kuhn. After this, we will briefly survey some other important topics in the philosophy of science, including underdetermination, theories of evidence, Bayesianism, the problem of induction, explanation, and laws of nature. (B) (II)

Instructor(s): Thomas Pashby Terms Offered: Spring

Equivalent Course(s): PHIL 22000, HIST 25109

**HIPS 22100. Space and Time. 100 Units.**

This course is an introduction to some traditional philosophical problems about space and time. The course will begin with a discussion of Zeno's paradoxes. We will then look at the debate between Newton and Leibniz concerning the ontological status of space and time, and will examine reactions to this debate by physicists such as Mach. We will then go on to discuss the question of what sense is to be made of the claim that space is curved, looking at the work of Einstein. Students will be introduced to the basics of the special and general theories of relativity at a qualitative level. If time permits, we will also look at questions about the multiverse, and/or Boltzmann's conception of the arrow of time. (B) (II)

Instructor(s): Kevin Davey Terms Offered: Winter

Equivalent Course(s): PHIL 22100, PHIL 32100, CHSS 32100

**HIPS 22001. Introduction to Science Studies. 100 Units.**

This course provides an introduction to the interdisciplinary study of science, medicine, and technology. During the twentieth century, sociologists, historians, philosophers, and anthropologists raised original, interesting, and consequential questions about the sciences. Often their work drew on and responded to each other, and, taken together, their various approaches came to constitute a field, "science studies." The course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches and findings, but will also get a chance to apply science-studies perspectives themselves by performing a fieldwork project. Among the topics we may examine are: the sociology of scientific knowledge and its applications; actor-network theories of science; constructivism and the history of science; and efforts to apply science studies approaches beyond the sciences themselves.

Instructor(s): Michael Paul Rossi Terms Offered: Winter. Offered in Winter 2024

Equivalent Course(s): CHSS 32000, ANTH 32305, HIST 44906, SOCI 40137, HLTH 22001, KNOW 31408

**HIPS 22202. We Other Victorians. 100 Units.**

This course examines the construction of otherness, difference, and belonging in England during the long Nineteenth Century from a historical perspective. Each week students will study a different "other" by drawing on a variety of primary sources, including novels, autobiographies, government reports, legal documents,

private correspondence, newspapers, and scientific publications. Special attention will be paid to how and why emerging social sciences such as anthropology, sociology, and psychology both contributed to and were themselves informed by, (1) broader discussions about cultural ethnicity, biological race, national identity, and modern society; as well as (2) changing conceptions of class, gender, race, religion, and illness. By working historically, students in this course will also develop a conceptual framework for studying otherness that transcends geographic and temporal boundaries. Students will learn about the socio-political, cultural, legal, scientific, and ideological construction of otherness in Victorian Britain while also developing a conceptual framework for studying otherness that transcends geographic and temporal boundaries. This course relies almost entirely on primary sources and is designed to help students develop the skills needed to complete an original research project independently.

Instructor(s): Kristine Palmieri Terms Offered: Autumn

Equivalent Course(s): CHSS 35202, HIST 31103, KNOW 32201

#### **HIPS 22204. Science, Governance, and the Crisis of Liberalism. 100 Units.**

In the era of "post-truth" it has become common to link a crisis of scientific authority with a crisis of liberalism. Democracies around the world are under threat, this reasoning goes, in part because of an attack on scientific truth. But what does liberalism - as political culture and as a form of governance - need (or want) from science? Depending where you look, the answer might appear to be facts, truth, a model 'public sphere,' an ethic of objectivity, tactics for managing risk and uncertainty, or technologies of population management (to name a few). In addition to exploring the complex historical relationship between science and liberalism in the modern era, this course will critically assess how the history of science and the history of political thought have theorized truth and governance. We will examine what models of "coproduction" and "social construction" - nearly ubiquitous in the historiography of modern science - fail to capture about the histories of science and state power. We will also think about how political and intellectual historians' theories of truth and mendacity in politics might be enriched by more attention to scientific knowledge in both its technical and epistemological forms. This course focuses on 19th- and 20th-century Europe and the United States in global perspective, and readings will draw from political theory, history, economic thought, the natural and human sciences, and critical theory.

Instructor(s): Isabel Gabel Terms Offered: Autumn

Equivalent Course(s): HIST 28308, CHSS 32504, HIST 38308, KNOW 32204

#### **HIPS 22207. The Social History of Alcohol in Early Modern Europe. 100 Units.**

This course will examine the multifaceted role that beer, wine, cider, and spirits played in European society and will challenge students to consider how a seemingly familiar commodity was a key component in shaping early modern social relations. It will focus on several major themes that have guided historical inquiry and show how hard drink intersects with and entangles these histories. Major themes will include alcohol and gender relations; state legality and taxation; moral policing; environmental projects and crises; labor and technology; and colonialism. Using both primary and secondary sources will push students to look below the surface to see how drink alternately challenged or reinforced social hierarchies, much as it continues to do in the present time.

Instructor(s): C. Rydell

Equivalent Course(s): HLTH 22207, HIST 22207

#### **HIPS 22210. Disease, Health, and the Environment in Global Context. 100 Units.**

Recent concerns about monkeypox, COVID-19, Zika virus, and Ebola have attracted renewed attention to previous disease outbreaks that have significantly shaped human political, social, economic, and environmental history. Such diseases include: smallpox during the 16th-century Columbian exchange; syphilis during the 18th-century exploration and settlement of the Pacific; bubonic plague in the late-19th-century colonization and urbanization of South and East Asia; and yellow fever during America's 20th-century imperial projects across the Caribbean. Through readings, discussions, library visits, and written assignments that culminate in a final project, students in this course will explore how natural and human-induced environmental changes have altered our past experiences with disease and future prospects for health. First, we will examine how early writers understood the relationship between geography, environment, hereditary constitution, race, gender, and human health. We will then analyze the symbiotic relationship among pathogens, human hosts, and their environments. Finally, we will explore how social factors (e.g. migration, gendered divisions of labor, poverty, and segregation) and human interventions (e.g. epidemiology, medical technology, and sanitary engineering) have influenced the distribution of infectious diseases and environmental risks.

Equivalent Course(s): GLST 22101, CEGU 22100, RDIN 22100, HIST 25033, HLTH 22100

#### **HIPS 22277. The Philosophy of Thomas Kuhn. 100 Units.**

Thomas Kuhn was both an historian and a philosopher of science, with broader interests in philosophical issues pertaining to the nature of language, truth and knowledge - and, in particular, pertaining to questions concerning the possibility of communicability, commensurability, and inter-translatability across radically divergent conceptual schemes, theoretical frameworks, or grammatical/ linguistic structures. This course will be devoted to a close examination of the treatment of these topics in Kuhn's work. For purposes of orientation, we will begin with several class meetings in which we read his classic work *The Structure of Scientific Revolutions*, first published in 1962, along with some of the central texts which figured in the controversies that book ignited in connection with the aforementioned topics. We will then examine some of the second thoughts Kuhn himself expressed concerning that work in scattered essays written between 1969 and 1977 (some of which are collected in *The Essential Tension*). The second half of the course will be on Kuhn's work from 1978 until his death in 1996,

starting with the essays collected in *The Road Since "Structure"*, and further developed in *The Presence of Science Past* (his 1987 Shearman Lectures) and *The Plurality of Worlds* (his final unfinished magnum opus). (B) (II)

Instructor(s): James Conant Terms Offered: Winter

Equivalent Course(s): PHIL 22277, PHIL 32277, CHSS 32277

### **HIPS 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): ENST 22310, HIST 22310

### **HIPS 22701. Abortion: Morality, Politics, Philosophy. 100 Units.**

Abortion is a complex and fraught topic. Morally, a very wide range of individual, familial, and social concerns converge upon it. Politically, longstanding controversies have been given new salience and urgency by the Dobbs decision and the ongoing moves by state legislatures to restrict access to abortion. In terms of moral philosophy, deep issues in ethics merge with equally deep questions about the nature of life, action, and the body. In terms of political philosophy, basic questions are raised about the relationship of religious and moral beliefs to the criminal law of a liberal state. We will seek to understand the topic in all of this complexity. Our approach will be thoroughly intra- and inter-disciplinary, drawing not only on our separate areas of philosophical expertise but on the contributions of a series of guest instructors in law, history, and medicine. (A)

Instructor(s): Jason Bridges, Dan Brudney Terms Offered: Autumn

Prerequisite(s): PQ: Third or fourth-year standing. Students should opt into a discussion section that fits their schedule.

Note(s): Philosophy majors: this course fulfills the practical philosophy (A) requirement.

Equivalent Course(s): HLTH 22700, HMRT 22702, GNSE 22705, BPRO 22700, PHIL 22702

### **HIPS 22708. Planetary Britain, 1600-1900. 100 Units.**

What were the causes behind Britain's Industrial Revolution? In the vast scholarship on this problem, one particularly heated debate has focused on the imperial origins of industrialization. How much did colonial resources and markets contribute to economic growth and technological innovation in the metropole? The second part of the course will consider the global effects of British industrialization. To what extent can we trace anthropogenic climate change and other planetary crises back to the environmental transformation wrought by the British Empire? Topics include ecological imperialism, metabolic rift, the sugar revolution, the slave trade, naval construction and forestry, the East India Company, free trade and agriculture, energy use and climate change.

Equivalent Course(s): CHSS 32708, KNOW 22708, KNOW 32808, HIST 22708, ENST 22708, HIST 32708

### **HIPS 22709. Introduction to Philosophy of Quantum Mechanics. 100 Units.**

In this class we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality and realism. (B) (II)

Instructor(s): Thomas Pashby Terms Offered: Autumn

Prerequisite(s): Prior knowledge of quantum mechanics is not required since we begin with an introduction to the formalism. Only familiarity with high school geometry is presupposed but expect to be introduced to other mathematical tools as needed.

Equivalent Course(s): PHIL 22709, KNOW 22709, CHSS 32709, PHIL 32709

### **HIPS 22800. Experiencing Madness: Empathic Methods in Cultural Psychiatry. 100 Units.**

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

Equivalent Course(s): MAPS 32800, ANTH 24355, ANTH 35135, CHSS 32800, CHDV 32822

**HIPS 23900. Biological and Cultural Evolution. 100 Units.**

This course draws on readings in and case studies of language evolution, biological evolution, cognitive development and scaffolding, processes of socialization and formation of groups and institutions, and the history and philosophy of science and technology. We seek primarily to elaborate theory to understand and model processes of cultural evolution, while exploring analogies, differences, and relations to biological evolution. This has been a highly contentious area, and we examine why. We seek to evaluate what such a theory could reasonably cover and what it cannot.

Instructor(s): W. Wimsatt, S. Mufwene Terms Offered: Not offered in 2022-2023

Prerequisite(s): Third- or fourth-year standing or consent of instructor required; core background in evolution and genetics strongly recommended.

Equivalent Course(s): CHSS 37900, CHDV 23930, ANTH 38615, PHIL 32500, ANTH 28615, LING 11100, CHDV 33930, NCDV 27400, PHIL 22500, BPRO 23900, LING 39286

**HIPS 24100. Is It Ethical to Have Children in the Climate Crisis? 100 Units.**

Climate change is not just an urgent environmental crisis for scientists, engineers, and policy makers: it is a moral problem that also informs individual and intimate aspects of human life, including choices about reproduction and parenting. For example, a 2018 survey published in the New York Times found that young adults in the U.S. are having fewer children than they would otherwise prefer, in part due to concerns about climate change and overpopulation. In this course, we examine the moral dimensions of having and raising children in an era shaped by climate change, looking closely at two main questions: 1) Is it ethical to have children in light of the world that the next generation will inherit, which may include more extreme weather events, involuntary human migrations, diminished access to resources, and heightened insecurity? 2) Is it ethical to have children in the context of the affluent West, where consumptive human populations disproportionately contribute to the effects of climate change that impact the world's most vulnerable? We will examine various points of view on these questions, engaging material from the disciplines of environmental studies and ethics, science and technology studies, and religious and philosophical ethics. Responses from feminist, queer, Indigenous, Black, and religiously diverse authors (and intersections therein) will shape our course readings and discussions.

Equivalent Course(s): ENST 24000, CCTS 21023, RLST 24000, CEGU 24000, GNSE 23154, HLTH 24000

**HIPS 24103. Bioethics. 100 Units.**

This is a lecture and discussion class that will explore how a variety of philosophic and religious thinkers approach the issues and problems of modern dilemmas in medicine and science in a field called bioethics. We will consider a general argument for your consideration: that the arguments and the practices from faith traditions and from philosophy offer significant contributions that underlie policies and practices in bioethics. We will use a case-based method to study how different traditions describe and defend differences in moral choices in contemporary bioethics. This class is based on the understanding that case narratives serve as another core text for the discipline of bioethics and that complex ethical issues are best considered by a careful examination of the competing theories as work themselves out in specific cases. We will examine both classic cases that have shaped our understanding of the field of bioethics and cases that are newly emerging, including the case of research done at our University. Through these cases, we will ask how religious traditions both collide and cohere over such topics as embryo research, health care reform, terminal illness, issues in epidemics and public health, and our central research question, synthetic biology research. This class will also explore how the discipline of bioethics has emerged to reflect upon such dilemmas, with particular attention to the role that theology and philosophy have played in such reflection.

Instructor(s): Laurie Zoloth

Note(s): Graduate students will meet in a separate section. This course meets the CS or LMCS Committee distribution requirement for Divinity students.

Equivalent Course(s): HLTH 24103, SIGN 26069, RETH 30600, RLST 24103

**HIPS 24215. The History of the Book in East Asia: From Bamboo to Webtoon. 100 Units.**

This seminar offers an overview of the development and history of the "book" and its physical forms, broadly conceived, in East Asia from ancient times to the present. Drawing on recent scholarship, selected primary sources, and rare books housed within the library system, this course familiarizes students with the evolution of the book and methods of book production in China, Korea, and Japan, the principles and practices of material bibliography and the application of such to physical and digital objects, and selected topics salient to the social and cultural meanings of books: authorship, the book trade, reading, censorship, and more. Assignments include a short paper, a short presentation, and a longer final paper. All readings in English, but knowledge of East Asian history or languages helpful.

Instructor(s): G. Reynolds

Equivalent Course(s): HIST 34215, CHSS 34215, EALC 34225, HIST 24215, EALC 24225

**HIPS 24240. Buddhism and Science: A Critical Introduction. 100 Units.**

Buddhism is the only religion able to cope with modern scientific needs." This quotation, often erroneously attributed to Albert Einstein, prompts the question: Why are such statements about Buddhism so easily taken nowadays as credible and plausible? Currently, it seems no other religion is held as compatible with science as Buddhism: From the recent 'mindfulness' craze in psychology and medicine, to the 'Emptiness' of quantum physics, Buddhism is uniquely hailed as a 'rational religion' whose insights anticipated modern science by millennia. Some even suggest it is not a 'religion' at all, but rather a sort of 'mind-science.' This course functions as both an introduction to Buddhism and a critical survey of its modern scientific reception. As we explore



Buddhism's relationship to contemporary scientific theories in psychology and physics, we will be guided by questions such as: What methodological principles distinguish the practices of religion and science? What are the different ways they can be brought into relation? Why is Buddhism, in particular, singled out as uniquely scientific? What modern historical factors, like colonialism and secularization, contribute to this contemporary meme? Why does it matter whether Buddhism is compatible with science or not? What, exactly, is at stake in this relationship? And for whom? No prior study of Buddhism or the philosophy of science is expected.

Instructor(s): Jesse Berger Terms Offered: Spring

Note(s): This course counts as a Cognitive Science extra-disciplinary course.

Equivalent Course(s): KNOW 24240, CCTS 21018, RLST 24240

#### **HIPS 24352. Health, Value, Politics. 100 Units.**

TBD

Instructor(s): Kaushik Sunder Rajan Terms Offered: TBD

Equivalent Course(s): HLTH 24352, ANTH 24352

#### **HIPS 24706. Science in the South: Decolonizing the Study of Knowledge in Latin America & the Caribbean. 100 Units.**

This seminar will bridge anthropologies and histories of science, technology, and medicine to Latin American decolonial thought. Throughout Latin America, techno-scientific objects and practices, with their presumed origin in the Euro-Atlantic North, are often complexly entangled with neo-imperial projects of development and modernization that elongate social forms of colonization into the present. Technoscience and its objects, however, can also generate new creative, political, and life-enhancing potentials beyond or despite their colonial resonances, or even provide tools to ongoing struggles for decolonization. Together, seminar participants will explore what a decolonial approach to the study of science, technology, and medicine in the Global South, particularly in Latin America, has been and could become and how decolonial theory can inflict our own disciplinary, conceptual, and political commitments as anthropologists of technoscience.

Instructor(s): S. Graeter Terms Offered: TBD

Equivalent Course(s): LACS 24706, ANTH 23026

#### **HIPS 24803. History of Sexuality and Sin. 100 Units.**

Since Foucault's groundbreaking work on the History of Sexuality, we have become attuned to the effects of power and the political implications of the science of sexuality. While Foucault's text has offered a critical avenue to examine the secular state's administrations of sexuality, it begins with Christianity's techniques of power based on the confession of one's sex. The Christian formulation of the relationship between 'sex' and 'sin' is essential to understanding the techniques of power that connect sexuality, legality, criminality, normality, and transgression in modern secular contexts. In this class, we will begin with the critical questions of the History of Sexuality, then turn to primary texts in order to examine the way 'sex' and 'sin' became conceptually connected in Christianity, and finally interrogate the effects of this relation for medieval and modern politics. Over the course of these readings, we will trace the relation between the concepts and their effects to discern the histories of sexuality that lie at the root of contemporary debates on freedom, power, resistance, and desire. No prerequisites.

Instructor(s): Maureen Kelly Terms Offered: Spring

Equivalent Course(s): FNDL 24806, RLST 24803, GNSE 23152, MDVL 24803

#### **HIPS 24921. Darwinism and Literature. 100 Units.**

In this course we will explore the notion that literary fiction can contribute to the generation of new knowledge of the human mind, human behavior, and human societies. Some novelists in the late 19th and early 20th century provided fictional portrayals of human nature that were grounded into Darwinian theory. These novelists operated within the conceptual framework of the complementarity of science and literature advanced by Goethe and the other romantics. At a time when novels became highly introspective and psychological, these writers used their literary craftsmanship to explore and illustrate universal aspects of human nature. In this course we read the work of several novelists such as George Eliot, HG Wells, Joseph Conrad, Jack London, Yvgeny Zamyatin, Leopold von Sacher-Masoch, Italo Svevo, and Elias Canetti, and discuss how these authors anticipated the discoveries made decades later by cognitive, social, and evolutionary psychology.

Instructor(s): D. Maestriperi Terms Offered: Autumn

Note(s): Distribution requirements: Undergraduate: A; Graduate: 1

Equivalent Course(s): KNOW 21418, CHDV 37861, HIST 34921, CHDV 27861, CHSS 34921, HIST 24921, KNOW 31418

#### **HIPS 25011. Debating Science: Legitimacy, Authority, and Knowledge. 100 Units.**

How can we tell what counts as science? That is, how does science make itself legible as science? Are the social sciences "as scientific" as the natural sciences? By concerning itself with practices of legitimation, this course introduces students to the social study of science and linguistic anthropological theory. Students will consider the sociopolitical dimensions of scientific activity through a theoretical lens which takes language use as a form of social action. They will consider concepts such as reliability, reproducibility, and objectivity. Case studies will likely include climate change skepticism, education research, and neurodiversity. Students will end the quarter by writing and presenting on a current or historical topic of "scientific" debate, that is, debate on the scientific status of a field or claim.C

Instructor(s): Lily Ye Terms Offered: Spring

Equivalent Course(s): CHDV 25011



**HIPS 25014. Introduction to Environmental History. 100 Units.**

How have humans interacted with the environment over time? This course introduces students to the methods and topics of environmental history by way of classic and recent works in the field: Crosby, Cronon, Worster, Russell, and McNeill, 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): ENST 25014, HIST 35014, HIST 25014, CEGU 25014, CHSS 35014

**HIPS 25104. History and Philosophy of Biology. 100 Units.**

This lecture-discussion course will consider the main figures in the history of biology, from the Hippocratics and Aristotle to Darwin and Mendel. The philosophic issues will be the kinds of explanations appropriate to biology versus the other physical sciences, the status of teleological considerations, and the moral consequences for human beings.

Instructor(s): R. Richards Terms Offered: Autumn

Note(s): For students taking PHIL 23405, the course is (B) (II).

Equivalent Course(s): PHIL 23405, PHIL 33405, CHSS 37402, KNOW 37402, HIST 25104, HIST 35104

**HIPS 25121. The Brazil-Argentina Nuclear Cooperation Agreement and Thermoelectric Transition in Brazil. 100 Units.**

In this course we present a history of Brazil-Argentina nuclear cooperation and how Brazil is planning the transition of its electric matrix from predominantly hydraulic towards a mix with increased share of nuclear power. Proliferation risks are a main concern of international community when nuclear programs expansion is considered. The Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials, created in 1991, has been fundamental in assuring the international community (via the International Atomic Energy Agency) that the nuclear materials and facilities of both countries are being used for peaceful purposes.

Domestically, the debate has been environmental in nature, and concerns topics ranging from mining to power generation, and from radioactive materials disposal to radiation effects in living organisms and major accidents. These diplomatic, environmental, social and political issues are in turn dependent on technical details of the thermoelectric generating process, and this nexus of issues provides the topics for the course.

Instructor(s): Ramos, Alexandre Terms Offered: Autumn

Note(s): Tinker Visiting Professor Autumn 2018

Equivalent Course(s): LACS 35121, CHSS 35121, LACS 25121

**HIPS 25206. Digital Culture: Artificial Intelligence, Algorithms, and the Web. 100 Units.**

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

Instructor(s): Browning, Margot Terms Offered: Course was not offered in 2019-20

Equivalent Course(s): HUMA 25206, LLSO 25206

**HIPS 25207. Mindfulness: Experience and Media. 100 Units.**

How do we experience media (of all kinds) with (or without) awareness? Methods of mindfulness offer principles and practices of awareness focusing on mind, body, and embodied mind. Mindfulness (a flexible, moment-to-moment, non-judging awareness) is an individual experience and at the same time, practices of mindfulness can be a mode of public health intervention. Mindfulness involves social epistemologies of how we know (or don't know) collectively, as we interact with immediate sensory experience as well as with mediated communication technologies generating various sorts of virtual realities (from books to VR). In addition to readings and discussions, this course teaches embodied practices of attention and awareness through the curriculum of Mindfulness-Based Stress Reduction.

Instructor(s): M. Browning Terms Offered: Spring

Equivalent Course(s): HLTH 25207, HUMA 25207, MAAD 14207, TAPS 20507

**HIPS 25219. Science, Culture, and Society in Wittgenstein's Vienna, 1867-1934. 100 Units.**

Fin de siècle Vienna is perhaps best known as the birthplace of Gustav Klimt, Egon Schiele, Arnold Schoenberg, and Otto Wagner, among other pioneering modernist artists, but it was also home to several of the most important philosophers and scientists of the early twentieth century, including Ernst Mach, Ludwig Boltzmann, and Ludwig Wittgenstein. Indeed, the city's artists drew considerable inspiration from its philosophers and scientists and vice versa. The purpose of this course is to examine these cultural entanglements in more detail, and to analyze why Vienna was integral to the development of so many of the aesthetic and intellectual trends that scholars now associate with "modernity."

Instructor(s): Zachary Barr Terms Offered: TBD. Not offered in 2023/2024 Academic Year.

Equivalent Course(s): HIST 25119, KNOW 25119

**HIPS 25309. History of Perception. 100 Units.**

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

**HIPS 25316. Global Science. 100 Units.**

Is all science global, and if so, how did it get that way? Are some sciences more global than others? What has been at stake historically in describing scientific activity as variously local, transnational, international, or global, and how have these constructions influenced the historiography of the field? In this seminar, we will explore different approaches to writing and examining scientific knowledge production as a global phenomenon, as well as considering different historiographic attempts at grappling with science's simultaneously local and global qualities, poly-vocal nature, and historical coproduction with global political and economic power.

Instructor(s): E. Kern Terms Offered: Autumn

Equivalent Course(s): CHSS 35301, HIST 35206, HIST 25206

**HIPS 25405. Feminist Political Philosophy. 100 Units.**

Feminist political philosophy has a two-fold history: both as a persistent critique of canonical political philosophy, as well as generative of new models of justice altogether. This course will be an exploration of the two sides of the history of feminist political philosophy. We will begin with a survey of feminist critiques of the canon, including from liberal feminism, Black feminist philosophy, and Marxist feminist philosophy. We will then move on to the positive accounts that have come out of this tradition, asking whether new models of the state, of the person, and of gender are required in order to construct theories that adequately represent what justice requires in a world with gender-based oppression. We will read philosophers such as Rousseau, Marx, Engels, John Rawls, Susan Okin, Mary Wollstonecraft, Catherine Mackinnon, and Christine Delphy. (A)

Instructor(s): Tyler Zimmer Terms Offered: Winter

Equivalent Course(s): GNSE 20108, PHIL 25405

**HIPS 25505. The Scientific Image. 100 Units.**

This course explores the broad field of scientific image-making, focusing in particular on problems of formalism, abstraction, and realism. What makes a "good" scientific image? What kind of work do scientific images do? What philosophical, ideological, and political constraints underwrite attempts to render the complexity of events and entities in the world in stylized visual vocabularies? And how might we approach the work of aesthetics and style in image-making? We will examine these questions through a survey of several contemporary scholarly frameworks used for thinking about problems of representation in scientific practice, and will attend to such image-making practices as graphing, diagramming, modeling, doodling, illustrating, sculpting, and photographing, among other methods.

Instructor(s): M. Rossi Terms Offered: Autumn

Equivalent Course(s): HIST 25205, CHSS 35205, HIST 35205

**HIPS 25605. Life and A Life. 100 Units.**

This course is about the aims of human life. We address the question through two contrasting conceptions of life: 1) life in the sense of an ongoing activity-and its associated values of pleasure, enlightenment, and happiness, and 2) life in the sense of a biographical story-and its associated values of achievement, glory, meaning, and purpose. We will attempt to understand how these two conceptions of life are compatible, and if one or the other is prior. Readings include: Aristotle, Nietzsche, Kierkegaard, William James, Bernard Williams, Iris Murdoch, and Jonathan Lear. (A)

Instructor(s): Arnold Brooks Terms Offered: Autumn

Equivalent Course(s): PHIL 25605, CHSS 35605, PHIL 35605

**HIPS 25808. Lab, Field, and Clinic: History and Anthropology of Medicine and the Life Sciences. 100 Units.**

In this course we will examine the ways in which different groups of people-in different times and places-have understood the nature of life and living things, bodies and bodily processes, and health and disease, among other notions. We will address these issues principally, though not exclusively, through the lens of the changing sets of methods and practices commonly recognizable as science and medicine. We will also pay close attention to the methods through which scholars in history and anthropology have written about these topics, and how current scientific and medical practices affect historical and anthropological studies of science and medicine.

Instructor(s): M. Rossi

Equivalent Course(s): KNOW 25308, KNOW 30202, ANTH 34307, HLTH 25308, HIST 25308, CHSS 35308, ANTH 24307, HIST 35308

**HIPS 25902. A History of Cell and Molecular Biology. 100 Units.**

This course will trace the parallel histories of cell and molecular biology, primarily in the 20th century, by exploring continuities and discontinuities between these fields and their precursors. Through discussion, attempts will be made to develop definitions of cell and molecular biology that are based upon their practices and explanatory strategies, and to determine to what extent these practices and strategies overlap. Finally, the

relevance of these definitions to current developments in biology will be explored. The course is not designed to be comprehensive, but will provide an overall historical and conceptual framework.

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

Prerequisite(s): This course does not meet the requirements for the Biological Sciences Major.

Equivalent Course(s): CHSS 34300, HIST 25511, HIST 35511

### **HIPS 26000. History of Philosophy II: Medieval and Early Modern Philosophy. 100 Units.**

A survey of the thought of some of the most important figures of the period from the fall of Rome to the Scottish Enlightenment. The course will begin with an examination of the medieval hylomorphism of Aquinas and Ockham and then consider its rejection and transformation in the early modern period. Three distinct early modern approaches to philosophy will be discussed in relation to their medieval antecedents: the method of doubt, the principle of sufficient reason, and empiricism. Figures covered may include Ockham, Aquinas, Descartes, Avicenna, Princess Elizabeth, Émilie du Châtelet, Spinoza, Leibniz, Abelard, Berkeley, Hume, and al-Ghazali.

Instructor(s): Thomas Pendlebury Terms Offered: Winter

Prerequisite(s): Completion of the general education requirement in humanities required; PHIL 25000 recommended.

Equivalent Course(s): PHIL 26000, MDVL 26000

### **HIPS 26021. Sense & Sensibility & Science @UChicago. 100 Units.**

In Sense & Sensibility & Science, you will learn how to better incorporate into your thinking and decision making the problem-solving techniques of science at its best. Many insights and conceptual tools from scientific thinking are of great utility for solving problems in your own day-to-day life and in a democracy. Yet, as individuals, as groups, as whole societies we fail to take full advantage of these methods. The focus in this course is on the errors humans tend to make, and the approaches scientific methodology has developed (and continues to develop) to minimize those errors. The course includes a discussion of the nature of science, what makes science such an effective way of knowing, how both non-scientific thinking and scientific thinking can go awry, and how we can reason more clearly and successfully as individuals, as members of groups, and as citizens of a democracy. The undergraduate course will be simultaneously taught at UC Berkeley, Harvard and UChicago in spring 2024, with an opportunity for students from all three courses to participate remotely in the same deliberative polling capstone experience. UChicago's spring 2024 course premiere builds on a decade of experience developing and teaching the popular course at Berkeley and Harvard's adoption of its own version in 2021.

Instructor(s): Reid Hastie; Jordan Kemp; Eamon Duede Terms Offered: Spring 2023-24

Equivalent Course(s): DIGS 26021, SOSC 26021, BPRO 26021, PBPL 26021

### **HIPS 26043. The Aesthetics of Artificial Intelligence. 100 Units.**

With the emergence of generative AI tools such as ChatGPT, DALL-E, and Midjourney, the production of computer-generated content has become accessible to a wide range of users and use cases. Knowledge institutions are particularly challenged to find adequate responses to changing notions of authorship as the mainstreaming of 'artificial' texts, audio-visual artifacts, and code is transforming our paradigms of communication in real-time. This course offers a survey of scholarship from the nascent field of critical AI studies to investigate the impact of AI, machine learning, and big data on knowledge production, representation, and consumption. In addition to theoretical discussions, we will conduct research-creation experiments aimed at documenting and evaluating emerging methods of AI-augmented content creation across text, image, and sound. Prospective students should demonstrate a substantial interest in media art and design and its connections to digital humanities, critical theory, and pedagogy. Experience with artistic and/or engineering practice is a plus. Please submit a 300 word max statement of interest to uhl@uchicago.edu by 12/22 in order to be considered for enrollment.

Instructor(s): Andre Uhl Terms Offered: Winter

Equivalent Course(s): CHSS 36043, ANTH 36043, MACS 36043, ANTH 26043, CMST 36043, MAAD 12043, KNOW 36043, KNOW 26043, CMST 26043

### **HIPS 26078. Normal People. 100 Units.**

Worrying about what's normal and what's not is an endemic feature of both our popular and scientific cultures. Is my intelligence above average? What about my height? Should I be feeling this way? Is there a pill for that? People seem to have always been concerned with fitting in, but the way of describing the general run of practices and conditions as "normal" is a rather recent phenomenon; testament to the vast influence of the modern human sciences on how we understand ourselves and others. This seminar will offer a broad historical overview of the ways that group behaviors and individual traits - bodily, moral, intellectual - were methodically described and measured in the past 200 years. We will become acquainted with the work of sociologists and anthropologists, psychiatrists and psychologists, polling experts and child development specialists, and ask about the kinds of people their efforts brought into being, from sexual perverts to the chronically depressed. The course will focus on the scientific theories and techniques used to distinguish the normal from the pathological, together with the new social institutions that translated this knowledge into forms of control. We will read Emile Durkheim on suicide rates and Cesare Lombroso on born criminals; learn about IQ tests and developmental milestones; and consider whether, with the advent of personalized medicine and self-data, we have indeed reached the "end of average."

Instructor(s): Tal Arbel Terms Offered: Winter

Equivalent Course(s): HLTH 26078, CHSS 36078, IRHU 20009, IRHU 36078, HIST 35213, CHDV 36078, HIST 25213, KNOW 36078, SOCI 40255

**HIPS 26080. Technologies of the Body. 100 Units.**

From models and measures to imaging technologies and genomic sequencing, technologies have profoundly shaped how we know and understand human bodies, health, and disease. Drawing on foundational and contemporary science and technology studies scholarship, this class will interrogate technologies of the body: how they are made, the ways in which they have changed understandings of the human condition, their impact on individual and collective identities, and the interests and values built into their very design. Course readings will examine how technologies render bodies knowable and also construct them in particular ways. We will also focus on how technologies incorporate, and reinforce, ideas about human difference. Students will conduct an independent, quarter-long research project analyzing a biomedical technology of their choice. By the end of this course, students will be able to identify and explain the social, political and economic factors that shape the design and production of biomedical technologies, as well as the impact of these technologies on biomedicine and the social world more broadly. This course provides students with an opportunity to conduct a quarter-long research project, using a biomedical technology as a case study. Students will be introduced to foundational and cutting-edge scholarship in science and technology studies, and will use this scholarship to conduct their independent research.

Instructor(s): Melanie Jeske Terms Offered: Autumn

Equivalent Course(s): SOCI 30345, KNOW 36080, GNSE 36080, HLTH 26080, CHSS 36080

**HIPS 26207. History Colloquium: Epidemics, Public Health, and Cities. 100 Units.**

The ongoing COVID-19 epidemic has brought a new awareness of the devastating impact of epidemic disease, particularly in cities where population density and other factors contribute to high rates of infection. This undergraduate colloquium aims to guide students through the research and writing of an original research paper that explores public health response to epidemic disease in cities around the world. Topics to be examined include defining an appropriate research question, identifying relevant secondary literature, finding primary sources, and constructing a compelling narrative.

Instructor(s): S. Burns Terms Offered: Winter

Prerequisite(s): Priority registration is given to History majors.

Equivalent Course(s): HIST 29607

**HIPS 26230. Death Panels: Exploring dying and death through comics. 100 Units.**

What do comics add to the discourse on dying and death? What insights do comics provide about the experience of dying, death, caregiving, grieving, and memorialization? Can comics help us better understand our own wishes about the end of life? This is an interactive course designed to introduce students to the field of graphic medicine and explore how comics can be used as a mode of scholarly investigation into issues related to dying, death, and the end of life. The framework for this course intends to balance readings and discussion with creative drawing and comics-making assignments. The work will provoke personal inquiry and self-reflection and promote understanding of a range of topics relating to the end of life, including examining how we die, defining death, euthanasia, rituals around dying and death, and grieving. The readings will primarily be drawn from a wide variety of graphic memoirs and comics, but will be supplemented with materials from a variety of multimedia sources including the biomedical literature, philosophy, cinema, podcasts, and the visual arts. Guest participants in the course may include a funeral director, chaplain, hospice and palliative care specialists, cartoonists, and authors. The course will be taught by a nurse cartoonist and a physician, both of whom are active in the graphic medicine community and scholars of the health humanities.

Instructor(s): Brian Callendar Terms Offered: Spring

Equivalent Course(s): KNOW 36230, ENGL 36230, ARTV 20018, HLTH 26230, ENGL 26230

**HIPS 26304. Religion and Abortion in the United States. 100 Units.**

In American public discourse, it is common to hear abortion referred to as a "religious issue." But is abortion a religious issue? If so, in what ways, to whom, and since when? In this course we will answer these questions by tracing the relationship between religion and abortion in American history. We will examine the kinds of claims religious groups have made about abortion; how religion has shaped the development of medical, legal, economic, and cultural perspectives on the topic; how debates over abortion have led to the rise of a certain kind of religious politics in the United States; and how issues of race, class, gender, sexuality, and the body are implicated in this conversation. Although the course will cover a range of time periods, religious traditions, and types of data (abortion records from Puritan New England, enslaved people's use of root medicine to induce miscarriage, and Jewish considerations of the personhood of the fetus, among others), we will give particular attention to the significance of Christianity in legal and political debates about abortion in the twentieth and twenty-first centuries. There are no prerequisites for this course and no background in Religious Studies is required. However, this course may be particularly well-suited to students interested in thinking about how their areas of study (medicine and medical sciences, gender and sexuality, race and ethnicity, political science) converge with religion and Religious Studies.

Instructor(s): tbd

Equivalent Course(s): CCTS 21015, HLTH 26304, RLST 26304, HMRT 26304, PBPL 25304, GNSE 12115, SOCI 20564, HIST 28008

**HIPS 26311. Aspirations of Justice. 100 Units.**

This class thinks through questions of what justice means, what justice promises, what justice betrays, and what possibilities for politics are opened by aspirations of justice at moments of radical rupture. It does so through a focus on critical conceptual terms that also become the frameworks for praxis and institutionalization after war/violence/trauma/revolution/colonialism/slavery/casteism: terms such as transition, transformation, restoration, reconstruction, and repair. The readings will be comparative but grounded out of South Africa's experience of transition from apartheid, a process that remains frictioned, fractured and far from finished. At the core of the class are two concerns. First: how does one think about non-retributive forms of justice, and what aporias of forgiveness lie at their core? Second, how do these imaginaries and forms of justice get constituted and instituted, out of different histories of foundational violence, different transitional processes, at different moments in time? How, in the process, do histories themselves get rewritten through a process of rewriting wrongs?

Instructor(s): Kaushik Sunder Rajan

Equivalent Course(s): RDIN 22311, CRES 22311, CCCT 36311, ANTH 36311, CHSS 36311, AASR 36311

**HIPS 26313. Judaism, Medicine, and the Body. 100 Units.**

For centuries the "Jewish doctor" has existed as an archetype, but is there such a thing as Jewish medicine? Does Judaism teach a distinct approach to the body, illness, and healing? And more significantly, why should religion have anything to do with one's health today? In this course we will grapple with our assumptions regarding modern Western medicine by discussing topics in Jewish medical thought and ethics. We will study how Judaism - its texts, history, laws, and traditions - intersect with issues of science, medicine, and the body. In particular we will think about how a Jewish approach to medicine, and more broadly a religious approach, might complicate contemporary assumptions about the body and healing. We will also consider how Jewish bodies have been imagined and stereotyped, and think about how that might affect Jewish approaches to disease and medical ethics. This course will thus offer students a way to think about alternatives to assumptions about medicine, the body, and ethics in the secular West, which will be explored both in class materials and in personal projects. No prior work in Jewish studies, medical ethics, or religious studies necessary.

Instructor(s): Ranana Dine Terms Offered: Autumn

Equivalent Course(s): KNOW 26313, JWSC 26313, HLTH 26313, RLST 26313, GNSE 26313, CCTS 21022

**HIPS 26316. Medical Innovation and Religious Reform in Early Modernity. 100 Units.**

Through a survey of innovative medical authorities and religious reformers, students will investigate the co-constitution of two bodies of knowledge at a historical moment (the sixteenth and seventeenth centuries) when questions of authority and epistemology are in considerable flux. This period has long been implicated in the "conflict thesis"-a hugely influential argument that portrays the centuries-long relationship between religion and science/medicine as an inherently adversarial one. This course shall scrutinize that argument through a discussion of seemingly contradictory examples where reformers that touted the all-encompassing reach of divine providence also promoted intricate public health infrastructures; where the Vatican increasingly relied on university-trained physicians to validate saints and their miracles; where theologians were viewed as authorities on Galen and responsible for medical breakthroughs; and where medicine and metaphysics were considered complementary pursuits. Ultimately, students will unveil a portrait not of conflict, but of a symbiotic relationship between religion and medicine. The goal of our course will then be to query why religious reformers were not only unthreatened by but also actively esteemed the medical arts as a valuable ally.

Instructor(s): Mark M. Lambert Terms Offered: Winter

Equivalent Course(s): HIST 24924, CCTS 21013, HLTH 26316, RLST 26316

**HIPS 26380. Indigenous Politics in Latin America. 100 Units.**

This course examines the history of Indigenous policies and politics in Latin America from the first encounters with European empires through the 21st Century. Course readings and discussions will consider several key historical moments across the region: European encounters/colonization; the rise of liberalism and capitalist expansion in the 19th century; 20th-century integration policies; and pan-Indigenous and transnational social movements in recent decades. Students will engage with primary and secondary texts that offer interpretations and perspectives both within and across imperial and national boundaries.

Instructor(s): Diana Schwartz Francisco Terms Offered: Winter

Equivalent Course(s): RDIN 26380, RDIN 36380, GLST 26380, HIST 26318, LACS 36380, ANTH 23077, LACS 26380, CRES 26380

**HIPS 26382. Development and Environment in Latin America. 100 Units.**

Description: 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): LACS 36382, CEGU 26382, LACS 26382, GEOG 26382, ENST 26382, HIST 26317, ANTH 23094, HIST 36317, GLST 26382

**HIPS 26390. Science and Society in Latin America. 100 Units.**

How have ideas about and practices of science shaped life and society in Latin America? This course explores the interconnected social and political realities of scientific theory and practice in modern Latin America. Taking a historical approach, it will focus on the scientific management of social and political life, including the construction of categories such as sex and race; the production, consumption, and policing of drugs; and public health. In this discussion-based course, students will develop their own research project that historicizes a contemporary question related to scientific knowledge and/or practice in the region.

Instructor(s): Diana Schwartz Francisco Terms Offered: Spring

Equivalent Course(s): LACS 26390, HIST 26390

**HIPS 26943. Diasporic Narratives and Memories. 100 Units.**

Of the many migrant communities in Chicago, Belarusians are the only group that does not yet have its own museum. Our course takes this lack as an opportunity to provide training for students to create a grassroots community-driven initiative that empirically develops a conceptual foundation for a new type of multi-ethnic museum of emigration, one informed by the experiences of community members themselves and their relationship to the artifacts that define their identities and memories. This course allows students to actively participate in a museum creation project which takes as its point of departure not a nation-state narrative, but the everyday life of a multi-ethnic community with the goal of informing research, policy, and public discourse about emigration. We center our course around the material heritage of Belarussia and its dispersal in emigration. We analyze how a diasporic museum's main role is to collect, protect and curate the material legacy of the Belarussian community to ensure its future stability. The course participants collaborate with the Chicago Studies Program, the NGO Belarusians in Chicago, and the Chicago History Museum to study the role of artifacts in museums. The students conduct the field work about multi-ethnic Belarussian emigration to include experiences of Belarussian Jews, Belarussian Russians, Belarussian Lithuanians, Belarussian Tatars, and other groups from Belarus.

Instructor(s): Olga Solovieva and Bozena Shallcross

Equivalent Course(s): CHST 29943, BPRO 29943, CRES 29943, KNOW 29943, MAPH 39943, CMLT 29943, REES 29950

**HIPS 27004. Babylon and the Origins of Knowledge. 100 Units.**

In 1946 the famed economist John Maynard Keynes declared that Isaac Newton "was the last of the magicians, the last of the Babylonians." We find throughout history, in the writings of Galileo, Jorge Luis Borges, Ibn Khaldun, Herodotus, and the Hebrew Bible, a city of Babylon full of contradictions. At once sinful and reverential, a site of magic and science, rational and irrational, Babylon seemed destined to resound in the historical imagination as the birthplace of knowledge itself. But how does the myth compare to history? How did the Babylonians themselves envisage their own knowledge? And is it reasonable to draw, as Keynes did, a line that begins with Babylon and ends with Newton? In this course we will take a cross comparative approach, investigating the history of the ancient city and its continuity in the scientific imagination.

Instructor(s): E. Escobar Terms Offered: Autumn

Equivalent Course(s): NEHC 20215, KNOW 27004, HIST 25617

**HIPS 27005. Secrecy and Science. 100 Units.**

This course traces the relationship between openness, secrecy, and the construction of scientific knowledge. Our sources span several millennia of intellectual history, from cuneiform tablets containing glassmaking recipes and the "secrets of the gods," to Medieval alchemical recipes, and to the first museums of natural history. We will investigate how and why science shifted from a subject intended for the elite few, to a more democratic ideal that embraced public demonstration. The role of patronage in the development of scientific knowledge, and the complex interaction between science and religion will be central to our discussions. Writing assignments will respond to thematic questions based on the readings.

Equivalent Course(s): KNOW 27005, HIST 24918, RLST 27550

**HIPS 27010. Counterhistories of Mathematics and Astronomy. 100 Units.**

Mathematics and astronomy are often taught as packaged universal truths, independent of time and context. Their history is assumed to be one of revelations and discoveries, beginning with the Greeks and reaching final maturity in modern Europe. This narrative has been roundly critiqued for decades, but the work of rewriting these histories has only just begun. This course is designed to familiarize students with a growing literature on the history of mathematics and astronomy in regions which now make up the global south. It is structured as a loosely chronological patchwork of counterexamples to colonial histories of mathematics and astronomy. Thematic questions include: How were mathematical and astronomical knowledge conjoined? How were they embedded in political contexts, cultural practices, and forms of labor? How did European scientific modernity compose itself out of the knowledges of others? Where necessary, we will engage with older historiographies of mathematics and astronomy, but for the most part we will move beyond them. No mathematics more advanced than highschool geometry and algebra will be assumed. However, those with more mathematical preparation may find the course especially useful.

Instructor(s): Prashant Kumar Terms Offered: Autumn

Equivalent Course(s): CHSS 39001, KNOW 39000, HIST 35305, ASTR 39000, SALC 39000, ASTR 29000



**HIPS 27011. Histories of Women in Science. 100 Units.**

In the mid-1980s, only two female students drew women when asked what a scientist looked like and none of the male students in the study did. Only 8% of STEM workers in 1970 were women; in 2019 that number was still only 27%. This would seem to suggest that the history of women in science is a recent one. Yet historians of science have foregrounded women's involvement in fields ranging from early modern medicine to twentieth century astrophysics. This class introduces students to these histories, investigates how and why science came to be a gendered as male, and asks to what extent gendered values continue to inform modern conceptions scientific achievement or value. In so doing, this course also introduces students to feminist science studies and challenges students to reflect upon their own (gendered) experiences of science. Students are strongly encouraged to develop final research projects that draw upon their own interests, scientific expertise, and linguistic competencies. No prior experience with history is required for this course, although an enthusiasm for history is advised.

Instructor(s): Kristine Palmieri Terms Offered: Winter

Equivalent Course(s): GNSE 37011, KNOW 37011, GNSE 23162, CHSS 37011, PHSC 27010, HIST 27806, ASTR 23700

**HIPS 27301. Medical Anthropology. 100 Units.**

This course introduces students to the central concepts and methods of medical anthropology. Drawing on a number of classic and contemporary texts, we will consider both the specificity of local medical cultures and the processes which increasingly link these systems of knowledge and practice. We will study the social and political economic shaping of illness and suffering and will examine medical and healing systems-including biomedicine-as social institutions and as sources of epistemological authority. Topics covered will include the problem of belief; local theories of disease causation and healing efficacy; the placebo effect and contextual healing; theories of embodiment; medicalization; structural violence; modernity and the distribution of risk; the meanings and effects of new medical technologies; and global health.

Instructor(s): E. Raikhel Terms Offered: Winter

Prerequisite(s): PQ: Undergraduates must have completed or currently be enrolled in a SOSC sequence. Graduate option is only open to Master's students.

Note(s): CHDV Distribution: C, D; 3, 4

Equivalent Course(s): ANTH 24330, HLTH 23204, KNOW 43204, CHDV 23204, CHDV 43204, ANTH 40330

**HIPS 27302. Culture, Mental Health, and Psychiatry. 100 Units.**

While mental illness has recently been framed in largely neurobiological terms as "brain disease," there has also been an increasing awareness of the contingency of psychiatric diagnoses. In this course, we will draw upon readings from medical and psychological anthropology, cultural psychiatry, and science studies to examine this paradox and to examine mental health and illness as a set of subjective experiences, social processes, and objects of knowledge and intervention. On a conceptual level, the course invites students to think through the complex relationships between categories of knowledge and clinical technologies (in this case, mainly psychiatric ones) and the subjectivities of persons living with mental illness. Put in slightly different terms, we will look at the multiple links between psychiatrists' professional accounts of mental illness and patients' experiences of it. Questions explored include: Does mental illness vary across social and cultural settings? How are experiences of people suffering from mental illness shaped by psychiatry's knowledge of their afflictions?

Instructor(s): E. Raikhel Terms Offered: Spring

Note(s): CHDV Distribution: 3,4; C

Equivalent Course(s): CHDV 33301, ANTH 24315, HLTH 23301, ANTH 35115, CHDV 23301, KNOW 23301, KNOW 33301

**HIPS 27515. Scientific and Humanistic Contributions to Knowledge Formation. 100 Units.**

In this course, we will explore whether the sciences and the humanities can make complementary contributions to the formation of knowledge, thus leading to the integration and unification of human knowledge. In the first part of the course we will take a historical approach to the issue; we will discuss how art and science were considered complementary for much of the 18th and 19th century (for example, in the views and work of Wolfgang Goethe), how they became separate ('the two cultures') in the middle of the 20th century with the compartmentalization of academic disciplines, and how some attempts have recently been made at a reunification under the concept of 'consilience'. In the second part of the course, we will focus on conceptual issues such as the cognitive value of literature, the role of ideas in knowledge formation in science and literature, the role of creativity in scientific and literary production, and how scientific and philosophical ideas have been incorporated into literary fiction in the genre known as 'the novel of ideas'. As an example of the latter, we will read the novel 'One, No One, and 100,000' (1926) by Luigi Pirandello and discuss how this author elaborated and articulated a view of the human persona (including issues of identity and personality) from French philosophers and psychologists such as Henri Bergson and Alfred Binet.

Instructor(s): D. Maestriperi Terms Offered: Autumn

Note(s): Satisfies CHD graduate distribution (1)

Equivalent Course(s): SETH 47015, CHDV 27015, CHDV 47015, CHSS 47015, KNOW 28015, KNOW 47015

**HIPS 27520. Indigenous Religions, Health, and Healing. 100 Units.**

This course introduces students to the dynamic, often-contested understandings of health, healing, and religion among the Indigenous peoples of the Americas. Our task will be threefold: first, to examine the drastic effects of settler colonialism upon the social determinants of health for Indigenous peoples throughout the Americas,

including the Caribbean, Mexico, United States, and Hawaii. Second, we shall attempt to understand healing practices as they are steeped in and curated by Indigenous traditions and religious beliefs. Our goal is to counteract centuries-old stereotypical images of Native peoples and challenge our preconceived notions of wellness, selfhood, and the boundaries of medicine. Third, we will reflect upon contemporary Indigenous approaches to health and healing with particular attention to the postcolonial hybridity of these practices. Throughout the course we will attend to a generative diversity of epistemologies, anthropologies, and religious worldviews with the ultimate goal that a renewed understanding of Indigenous healing traditions will augment our own approaches to global/public health and the study of religion.

Instructor(s): Mark M. Lambert Terms Offered: Winter

Equivalent Course(s): CCTS 21016, RLST 27501, CHST 27501, HLTH 27501, CRES 21501, KNOW 27501

#### **HIPS 27706. Research in Archives: Human Bodies in History. 100 Units.**

How have we come to know and experience our bodies? This undergraduate seminar develops humanities research skills necessary to study the body in history. Spanning early modern cultural practices to modern medicine, science, and technology, this course explores how ideas and practices concerning the body have changed over time and how the body itself is shaped by culture and society. A major focus will be learning how to conduct different forms of historical research to produce cutting-edge humanities scholarship about the human body. Readings will introduce key themes and recent scholarship including work on disability, reproduction, race, gender, ethics, extreme environments, and identity. This dynamic research group will grapple with issues at the heart of our corporeal existence by combining perspectives from the history of science, medicine, and technology, cultural history, anthropology, and science and technology studies (STS).

Instructor(s): J. Bimm and I. Clever Terms Offered: Winter

Note(s): This course partially fulfills the research seminar requirement for the IRHUM major.

Equivalent Course(s): GNSE 27006, HIST 25513, IRHU 27006, KNOW 26076

#### **HIPS 27901. Religion, Science, Naturalism: Is There a Problem? 100 Units.**

The idea that "religion" and "science" are basically at odds with one another - that they involve, indeed, essentially different kinds of rationality - is surely foremost among the ideas that arguably distinguish modernity. This class will consider some of the various ways in which that conclusion has been resisted by some twentieth- and twenty-first-century thinkers, drawing on a range of philosophical and religious perspectives - those, for example, of the Anglo-Austrian philosopher Ludwig Wittgenstein (who would complicate our understanding of what it means to "believe" anything); the German theologian Rudolf Bultmann (whose method precisely distinguished existential questions from scientific ones); and the 14th Dalai Lama of Tibet (who thinks it imperative that the limits of scientific understanding be acknowledged in light of a Buddhist critique). Particular attention will be given to early writings from American pragmatist philosopher-scientists (William James, C. S. Peirce, and John Dewey), who argued that it is a mistake in the first place to think religion necessarily concerns anything "supernatural"; religion, for these thinkers, can therefore be understood as wholly consistent with naturalism.

Instructor(s): Daniel A. Arnold Terms Offered: Spring

Equivalent Course(s): RLST 28901, KNOW 28901, SIGN 26072

#### **HIPS 28101. Psychoanalysis and Philosophy. 100 Units.**

An introduction to psychoanalytic thinking and its philosophical significance. A question that will concern us throughout the course is: What do we need to know about the workings of the human psyche-in particular, the Freudian unconscious-to understand what it would be for a human to live well? Readings from Plato, Aristotle, Freud, Bion, Betty Joseph, Paul Gray, Lacan, Lear, Loewald, Edna O'Shaughnessy, and others.

Equivalent Course(s): FNDL 28210, SCTH 37501, PHIL 28210, PHIL 38209

#### **HIPS 28319. Ephron course: Imagining Nature among the Greeks. 100 Units.**

The goal of this course is to gain an understanding of the historical roots of the concept of nature (Greek *physis*), while being attentive to the diversity of ancient Greek thought about nature even in its early history. In the texts we will read, numerous notions of "nature" can be discerned: for instance, nature as the physical form of an individual, nature as an underlying reality of someone or something, nature as an autonomous thing distinct from human art and from the supernatural, nature as the all-encompassing natural order, or nature as the natural environment. The conceptual and ideological work done by these conceptions also varies wildly. Furthermore, the images associated with the concepts are similarly diverse, ranging from human bodies to magical plants and cosmic spheres, and with a comparable repertory of conceptual and ideological purposes. Yet discussions of the concept of nature typically deal almost exclusively in abstractions: this is true, for instance, of the standard study of *physis* written over a century ago as a U of C dissertation, which we will read in excerpt. Throughout this class, we will consider not only the explicit and abstract conceptualization of nature, but also a number of related images-especially in the form of metaphors, analogies and personifications-that ultimately fed into the literary and philosophical depictions of nature in the long traditions that have followed.

Instructor(s): L. Wash Terms Offered: Winter

Equivalent Course(s): CLCV 28319

#### **HIPS 28882. Magic and Divination in the Islamic World. 100 Units.**

From weather forecasts to stock market speculations, our modern world is saturated with predictions for the future. In spite of this, other divinatory methods such as astrology are often portrayed as superstitious, irrational, or unreligious. This course will introduce students to the unexpected interaction of science, magic, and

religion through the exploration of divination in the Islamic world. We will ask how divination can be a part of religious practice and how methods of future-telling are said to "work" from the perspective of the philosophers and scientists who practiced them. We will also explore the arguments against divination and identify and understand religious and/or scientific objections to the practice. All readings will be in English translation.

Instructor(s): Alex Matthews Terms Offered: Winter

Equivalent Course(s): NEHC 28882, RLST 28882, CCTS 21020, KNOW 28882, MDVL 28882

**HIPS 29637. Tutorial: Evolution Beyond Darwin. 100 Units.**

One of the most identifiable images associated with evolution is the visage of Charles Darwin. Historical narratives of evolution center on Darwin's work, and scientific publications today still note whether or not Darwin pre-empted their ideas. This course aims to build a narrative of evolution that brings the story up to today, asking why so many see Darwin as a shorthand for evolution and what consequences that might have for the development and communication of the science. In addition, it will interrogate other "iconic" images and narratives in evolution, like the tree of life. We will ask where our ideas about evolution have come from, how they are perpetuated, and what consequence that might have for the discipline of evolutionary biology. The course has three aims: 1) to provide a historical understanding of evolution after Darwin; 2) to reflect on how evolution is communicated between scientists and to the broader public, and to ask how "icons" or Darwin himself suggest implicit meanings counter to the work of the scientists; and 3) to more broadly examine what is a science-a process or a body of knowledge?

Instructor(s): E. Kitchen Terms Offered: Autumn. Offered in Autumn 2023

Equivalent Course(s): HIST 25023

**HIPS 29647. Tutorial: Mathematical Knowledge: Race, Politics and Materiality. 100 Units.**

Mathematical knowledge is commonly treated as objective and neutral, even though it is produced through specific societal contexts and in turn impacts those same contexts. In this course we will take a thematic approach to studying how mathematical and quantitative knowledges are produced and used through political processes from which they cannot be separated. We will look at examples such as the connections between plantation slavery and the precise measurement of molasses barrels in the 18th century, the gendered nature of the prestigious Tripos exam in the 19th century, 20th century attempts to quantify and manage reproduction, and 21st century issues of algorithmic policing. We will consider multiple angles for approaching the study of mathematics by connecting mathematical knowledge to topics such as labor, racial sciences, pedagogy, material tools, masculinity, nation-building, and embodiment. This will allow us to move beyond simply considering representation (of women in STEM, for example) to think about how gender and race are part of the construction of mathematical knowledge. In particular, this course will encourage students to think creatively about other possibilities for how we could justly and effectively use mathematics in our lives. There are no mathematical prerequisites; students with a variety of experiences with mathematics will be able to participate fully in this course.

Instructor(s): Abigail Taylor-Roth Terms Offered: Spring. Offered in Spring 2024

Equivalent Course(s): GNSE 29647, HIST 25508

**HIPS 29648. Tutorial - Science in Horror. 100 Units.**

Does science dispel fear or enhance it? What can horror and film teach us about the visceral experiences, hopes and fears, and societal narratives around science? In this course we'll explore historical narratives of science as both a tool to remedy fear and a means to stoke or facilitate it. The course will cover texts from the genre of horror, including films and literature, in addition to academic pieces on the relation of film and science, science and myth, and knowledge and fear. Themes for our weekly discussions include science as an observational or intervening enterprise; nature and humans; science and the occult; and changing societal villains across history. Students will cultivate a facility with historical and philosophical approaches to science as well as literary and film criticism through the genre of horror.

Instructor(s): Emma L. Kitchen Terms Offered: Winter. Offered in Winter 2024

**HIPS 29700. Readings and Research in History, Philosophy, and Social Studies of Science and Medicine. 100 Units.**

Reading and Research for HIPS seniors working on their senior thesis.

Terms Offered: Autumn Spring Winter

Note(s): Students are required to submit the College Reading and Research Course Form.

**HIPS 29800. Junior Seminar: My Favorite Readings in the History and Philosophy of Science. 100 Units.**

This course introduces some of the most important and influential accounts of science to have been produced in modern times. It provides an opportunity to discover how philosophers, historians, anthropologists, and sociologists have grappled with the scientific enterprise, and to assess critically how successful their efforts have been. Authors likely include Karl Popper, Thomas Kuhn, Robert Merton, Steven Shapin, and Bruno Latour.

Instructor(s): R. Richards; E. Kern Terms Offered: Autumn

Equivalent Course(s): PHIL 25503, HIST 25503

**HIPS 29810. Bachelor's Thesis Workshop. 100 Units.**

Thesis writing workshop for HIPS seniors.

Instructor(s): Emma Kitchen Terms Offered: Autumn Spring Winter

**HIPS 29900. Bachelor's Thesis. 100 Units.**

This is a research course for independent study related to thesis preparation.

Terms Offered: Autumn,Winter,Spring  
Note(s): Students are required to submit the College Reading and Research Course Form.

