

History, Philosophy, and Social Studies of Science and Medicine (HIPS)

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 fishbein.uchicago.edu.

Program Requirements

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

1. The Foundation.

All students must:

- a. complete an approved sequence that fulfills the biological sciences general education requirement;
- b. complete the general education requirement in the physical sciences with a physics sequence (PHYS 12100-12200 General Physics I-II or equivalent) or a chemistry sequence (CHEM 11100-11200 Comprehensive General Chemistry I-II, CHEM 10100 Introductory General Chemistry I and CHEM 10200 Introductory General Chemistry II, or equivalent), or have earned a score of 5 on the AP Chemistry or Physics test or a score of 4 or 5 on the AP Physics C Mechanics and E&M test;
- c. complete a calculus sequence (MATH 13100-13200 Elementary Functions and Calculus I-II or higher), or have earned a score of 5 on the AP Calculus BC test;
- d. complete three courses on the origins and development of science in the West: one course in each of the following three chronological periods: ancient (numbered HIPS 17300-17310), early modern (HIPS 17400-17410), and modern (HIPS 17500-17510).

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

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

4. Tutorials. Students are required to take two tutorial courses; this is typically done early in their program. With a specific focus that changes each year, these tutorials are small classes (from three to ten students) that emphasize discussion and writing. An updated list of courses is available in the HIPS office (SS 207) or at registrar.uchicago.edu/classes.

5. Bachelor's Thesis and Junior Seminar. Third-year students enroll in a designated one-quarter seminar (HIPS 29800 Junior Seminar: My Favorite Readings in the History and Philosophy of Science) that deals with general aspects of history, philosophy, and social studies of science and medicine. In Spring Quarter of their third year, students must discuss their proposal for their bachelor's thesis with the program director. In consultation with the program director, students then sign up for a reading and research course (HIPS 29700 Readings and Research in History, Philosophy, and Social Studies of Science and Medicine) with an appropriate faculty member. In their fourth year, this research course should lead to a

bachelor's thesis (HIPS 29900 Bachelor's Thesis) that integrates each student's academic studies, bringing them to bear on a significant question related to some historical, conceptual, ethical, or social aspect of science. Fourth-year students also enroll in a two-quarter HIPS 29810 Bachelor's Thesis Workshop, which is comprised of meetings that focus on organizing, researching, writing, and revising the thesis.

Summary of Requirements

GENERAL EDUCATION

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| Three courses: one from each of the following chronological periods: | 300 |
| Ancient: HIPS 17300–17310 | |
| Early Modern: HIPS 17400–17410 | |
| Modern: HIPS 17500–17510 | |
| An approved sequence that fulfills the biological sciences general education requirement | 200 |
| One of the following sequences: | 200 |
| CHEM 10100 & CHEM 10200 | Introductory General Chemistry I and Introductory General Chemistry II (or equivalent) * |
| CHEM 11100-11200 | Comprehensive General Chemistry I-II (or equivalent) * |
| PHYS 12100-12200 | General Physics I-II (or higher) * |
| MATH 13100-13200 | Elementary Functions and Calculus I-II (or higher) * |
| Total Units | 900 |

MAJOR

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

* Credit may be granted by examination.

Examples of Concentrations

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

History and Philosophy of Biological Science

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|-------------|--|-----|
| HIPS 23600 | History and Theory of Human Evolution | 100 |
| BIOS 29321 | Problem of Evil: Disease? | 100 |
| HIPS 23900 | Biological and Cultural Evolution | 100 |
| HIPS 25801 | Evolutionary Theory and Its Role in the Human Sciences | 100 |
| Total Units | | 400 |

Philosophy of Science

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|-------------|--|-----|
| HIPS 20300 | Scientific/Technological Change | 100 |
| HIPS 22000 | Intro: Philosophy of Science | 100 |
| HIPS 22708 | Planetary Britain, 1600-1900 | 100 |
| HIPS 24900 | Natural Philosophy 1200-1800 | 100 |
| HIPS 25400 | Philosophy of Mind and Science Fiction | 100 |
| Total Units | | 500 |

History of Medicine and Medical Ethics

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|------------|--|-----|
| HIPS 21600 | Advanced Medical Ethics: Health Care | 100 |
| HIPS 21911 | Medical Ethics: Who Decides and on What Basis? | 100 |
| HIPS 25900 | Darwinian Medicine | 100 |
| HIPS 26901 | History and Philosophy of Psychology | 100 |

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|-------------|----------------------|-----|
| 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 must be taken for *P/F* grading. Nonmajors may take courses for *P/F* grading with consent of instructor.

Advisers

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

Minor Program in History, Philosophy, and Social Studies of Science and Medicine

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

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

Students should take at least two courses focusing on the origins and development of science in the West: one course in each of two of the following chronological periods: ancient (numbered HIPS 17300–17310), early modern (HIPS 17400–17410), and modern (HIPS 17500–17510), to meet the general education requirement in civilization studies. Additional courses in these sequences that are not used to meet the general education requirement can count toward courses required for the minor.

Students must complete one tutorial course.

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

Students who elect the minor program in HIPS should meet with the program director before the end of Spring Quarter of their third year to declare their intention to complete the program. The director's approval for the minor program should be submitted to the student's College adviser by the deadline above on a form obtained from the adviser.

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

Group 1

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|---|--|-----|
| Tutorial: | | 100 |
| HIPS 29405 | Tutorial: Evolution and Pragmatism | |
| 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 | |
| Total Units | | 600 |

Group 2

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|--|--|-----|
| Tutorial: | | 100 |
| HIPS 29606 | Tutorial: Medicine, Disease, and Death in American History | |
| Concentration in History of Medicine and Medical Ethics: | | 500 |

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|-------------|---|-----|
| HIPS 17501 | Science, Culture, and Society in Western Civilization III (if not taken to meet general education requirements) | |
| HIPS 21400 | Intro To Medical Ethics | |
| HIPS 21600 | Advanced Medical Ethics: Health Care | |
| HIPS 24800 | Gender: Hist of Sci Tech Med | |
| HIPS 27300 | Medicine and Culture | |
| Total Units | | 600 |

History, Philosophy, and Social Studies of Science and Medicine Courses

HIPS 14903. History of Information. 100 Units.

Information" in all its forms is perhaps the defining phenomenon of our age. But although we tend to think of it as something distinctively modern, in fact it came into being through a long history of thought, practice, and technology. This course will therefore suggest how to think historically about information. Using examples that range from the Middle Ages to the twenty-first century, we shall explore how different societies have conceptualized the subject and how they have sought to control it. We shall address how information has been collected, classified, circulated, contested, and destroyed. The aim is to provide a different kind of understanding of information practices—one that can be put to use in other historical inquiries, as well as casting an unfamiliar light on our own everyday lives.

Instructor(s): A. Johns

Note(s): History Gateways are introductory courses meant to appeal to 1st- through 3rd-yr students who may not have done previous course work on the topic of the course; topics cover the globe and span the ages.

Equivalent Course(s): HIST 14903

HIPS 17300–17310, HIPS 17400–17410, HIPS 17500–17510

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

HIPS 17300. Science, Culture, and Society in Western Civilization I. 100 Units.

This undergraduate core course represents the first quarter of the Science, Culture, and Society in Western Civilization sequence. Taking these courses in sequence is recommended but not required. This quarter will focus on aspects of ancient Greek and Roman intellectual history, their perceived continuities or discontinuities with modern definitions and practices of science, and how they were shaped by the cultures, politics, and aesthetics of their day. Topics surveyed include history-writing and ancient science, the cosmos, medicine and biology, meteorology, ethnography and physiognomics, arithmetic and geometry, mechanics, taxonomy, optics, astronomy, and mechanical computing.

Instructor(s): J. Wee Terms Offered: Winter

Equivalent Course(s): HIST 17300

HIPS 17400. Science, Culture, and Society in Western Civilization II. 100 Units.

This course addresses one of the great transformations in Western history. During the period from the early sixteenth century to the late seventeenth, European understandings of the natural world - and ways of achieving such understandings - underwent a series of radical and far-reaching transformations. The process affected every aspect of life as it was then lived, and as it has been lived since. It is often called the Scientific Revolution. Many people think that it was the central process in the development of modern culture itself.

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

Note(s): Not Offered in 2018-2019 academic year.

Equivalent Course(s): HIST 17400

HIPS 17402. Science, Culture, and Society in Western Civilization II: History of Medicine I. 100 Units.

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

Instructor(s): M. Rossi Terms Offered: TBD. Not offered in 2018-2019

Equivalent Course(s): HIST 17402

HIPS 17403. Science, Culture, and Society in Western Civilization II: Early Modern Period. 100 Units.

Section 1, offered by Robert J. Richards - "Renaissance & Enlightenment." This lecture-discussion course examines the development science and scientific philosophy from the mid-fifteenth to the mid-nineteenth centuries. The considerations begin with the recovery of an ancient knowledge in the works of Leonardo, Vesalius, Harvey, and Copernicus. Thereafter the course will focus on Enlightenment science, as represented by Galileo, Descartes, Newton, and Hume. The course will culminate with the work of Darwin, who utilized traditional concepts to inaugurate modern science. For each class, the instructor will provide a short introductory lecture on the texts, and then open discussion to pursue with students the unexpected accomplishments of the authors under scrutiny. Section 2, offered by Margaret Carlyle - "Revolutions in Astronomy & Anatomy." This course explores scientific developments in Western Europe from the sixteenth-century Scientific Revolution to the eighteenth-century Enlightenment. During this period, European understandings of the natural world-and ways of achieving such understandings-underwent a series of radical and far-reaching transformations that are often called the Scientific Revolution.

Instructor(s): Robert J. Richards, Margaret Carlyle Terms Offered: Autumn Winter

Note(s): Offered by Robert J. Richards in Fall 2018, and by Margaret Carlyle in Winter 2019.

Equivalent Course(s): KNOW 17403, HIST 17403

HIPS 17500. Sci/Culture/Society In W Civ-3. 100 Units.

No description available

Equivalent Course(s): HIST 17500

HIPS 17501. Science, Culture, and Society in Western Civilization III. 100 Units.

Full course title: Science, Culture, and Society in Western Civilization III: Medicine since the Renaissance. This course is an examination of various themes in the history of medicine in Western Europe and America since the Renaissance. Topics include key developments of medical theory (e.g., the circulation of the blood and germ theory), relations between doctors and patients, rivalries between different kinds of healers and therapists, and the development of the hospital and laboratory medicine.

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

Equivalent Course(s): HIST 17501

HIPS 17502. Science, Culture, and Society in Western Civilization III. 100 Units.

The course is organized around a series of broad questions about science. These questions are addressed by means of examples drawn from both the past and the present. The historical cases arise in chronological sequence, ranging from the development of experimental methods in the late seventeenth century to the advent of biotechnology in the modern era. They furnish a selective set of materials for a history of scientific practice. Their other purpose here, however, is to highlight the depth and importance of many problems still confronting the world of science today - problems that are cultural as well as scientific, and that demand of us an understanding of what science is and how it works.

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

Equivalent Course(s): HIST 17502

HIPS 17503. Sci/Cult/Soc in Western Civilization III - The History of Medicine Part II: 1900 -Present. 100 Units.

Full course title: Science, Culture, and Society in Western Civilization III: History of Medicine 2. This three-quarter sequence focuses on the origins and development of science in the West. The twentieth century is sometimes called the "golden age" of medicine: a period in which medicine broke free of tradition and combined with science to provide powerful new ways of understanding disease, and spectacular new technologies for fighting sickness. Along with amelioration of suffering, however, came new diseases, new medical systems, and new ways of thinking about the relationship between medical bodies, political bodies, and the nature and scope of human misery. This course examines some of the many transformations of (predominantly Euro-American) medicine in the twentieth century, looking not only at advances in medical knowledge and technologies, but also at the social, political, moral and affective ramifications of new ways of thinking about the promise - and perils - of (bio)medical practice.

Instructor(s): Michael Paul Rossi Terms Offered: Spring

Equivalent Course(s): HIST 17503

HIPS 17504. Science, Culture, and Society in Western Civilization III: The Environment. 100 Units.

This course charts the development of modern science and technology with special reference to the environment. Major themes include natural history and empire, political economy in the Enlightenment, the discovery of deep time and evolutionary theory, the dawn of the fossil fuel economy, Malthusian anxieties about overpopulation, the birth of ecology, the Cold War development of climate science, the postwar debates about the limits to growth, and the emergence of modern environmentalism. We will end with the new science of the Anthropocene.

Instructor(s): Fredrik Albritton Jonsson Terms Offered: TBD. Not offered in 2018-2019 Academic Year

Equivalent Course(s): HIST 17504

HIPS 20003. Discovering Anthropology: Reading Race. 100 Units.

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

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

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

HIPS 20300. Scientific/Technological Change. 100 Units.

Equivalent Course(s): PHIL 20300, PHIL 30300, CHSS 42300

HIPS 20401. Philosophy of Mind. 100 Units.

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

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

Equivalent Course(s): PHIL 23501

HIPS 20500. Intermediate Logic. 100 Units.

In this course, we will prove the soundness and completeness of deductive systems for both sentential and first-order predicate logic. We will also establish related results in elementary model theory, such as the compactness theorem for first-order logic, the Löwenheim-Skolem theorem and Lindström's theorem. (B) (II)

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

Equivalent Course(s): PHIL 39600, PHIL 29400, CHSS 33600

HIPS 20700. Elementary Logic. 100 Units.

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

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

Note(s): Course not for field credit.

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

HIPS 20905. Advanced Logic. 100 Units.

Since Russell's discovery of the inconsistency of Frege's foundation for mathematics, much of logic has revolved around the question of to what extent we can or cannot prove the consistency of the basic principles with which we reason. This course will explore two main efforts in this direction. We will first look at proof-theoretic efforts towards demonstrating the consistency of various foundational systems, discussing the virtues and limitations of this approach. We will then closely examine Gödel's theorems, which are famous for demonstrating limits on the extent to which we can formulate consistency proofs. Much has been written on the implications of Gödel's theorems, and we will spend some time trying to carefully separate what they really entail from what they do not entail. Assessment will be by regular homework sets. Intermediate logic or prior equivalent required. (II) and (B).

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

Prerequisite(s): Elementary Logic or equivalent

Equivalent Course(s): CHSS 39405, PHIL 39405, PHIL 29405

HIPS 21000. Introduction To Ethics. 100 Units.

In this course, we will read, write, and think about philosophical work meant to provide a systematic and foundational account of ethics. We will focus on close reading of two books, Immanuel Kant's *Groundwork of the Metaphysics of Morals* and John Stuart Mill's *Utilitarianism*, along with a handful of more recent essays. Throughout, our aim will be to engage in serious thought about good and bad in our lives. (A)

Instructor(s): C. Vogler Terms Offered: Winter

Equivalent Course(s): PHIL 21000, FNDL 23107

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

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

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

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

Equivalent Course(s): ANTH 21406, ANTH 38300

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

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

Equivalent Course(s): ANTH 22129, KNOW 21407

HIPS 21408. History of Medicine. 100 Units.

This course surveys the history of medicine from the medieval period to the present. How did medicine emerge as a defined body of knowledge? To what extent do diseases and disorders have an independent existence, and to what extent are they cultural constructs? How have social mores—particularly those related to religion, class, nationality, race, and gender—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): CCTS 21408, KNOW 21408, HIST 25314

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): HIST 24917, KNOW 21409, 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): KNOW 21410, CRES 21410, ANTH 22165

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): KNOW 21411, HIST 25315, GNSE 21411, CRES 21411

HIPS 21413. Sex and Enlightenment Science. 100 Units.

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

Equivalent Course(s): HIST 22218, CHSS 31413, KNOW 21413, 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 21428. Apes and Human Evolution. 100 Units.

This course is a critical examination of the ways in which data on the behavior, morphology, and genetics of apes have been used to elucidate human evolution. We emphasize bipedalism, hunting, meat eating, tool behavior, food sharing, cognitive ability, language, self-awareness, and sociability. Visits to local zoos and museums, film screenings, and demonstrations with casts of fossils and skeletons required.

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

Prerequisite(s): BIOS 10130. NO BIOLOGICAL SCIENCES MAJORS OR NON-BIOLOGY PRE-MED STUDENTS, except by petition.

Equivalent Course(s): BIOS 13253, EVOL 38600, ANTH 38600, ANTH 21428

HIPS 21911. Medical Ethics: Who Decides and on What Basis? 100 Units.

Decisions about medical treatment take place in the context of changing health care systems, changing ideas about rights and obligations, and among doctors and patients who have diverse religious and cultural backgrounds. By means of historical, philosophical, and medical readings, this course examines such issues as paternalism, autonomy, the commodification of the body, and the enhancement of mental and/or physical characteristics. (A)

Instructor(s): D. Brudney, Staff

Prerequisite(s): Third- or fourth-year standing

Note(s): This course does not meet requirements for the biological science major.

Equivalent Course(s): HIST 25009, PHIL 21610, PHIL 31610, BPRO 22610, HIST 35009

HIPS 22000. Intro: Philosophy of Science. 100 Units.

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

Instructor(s): K. Davey Terms Offered: Winter

Equivalent Course(s): HIST 35109, HIST 25109, PHIL 22000, CHSS 33300, PHIL 32000

HIPS 22001. Introduction to Science Studies. 100 Units.

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

Equivalent Course(s): ANTH 32305, HIST 56800, CHSS 32000, SOCI 40137, KNOW 31408

HIPS 22401. Darwinian Health. 100 Units.

This course will use an evolutionary, rather than clinical, approach to understanding why we get sick. In particular, we will consider how health issues such as menstruation, senescence, pregnancy sickness, menopause, and diseases can be considered adaptations rather than pathologies. We will also discuss how our rapidly changing environments can reduce the benefits of these adaptations.

Instructor(s): J. Mateo Terms Offered: Winter

Prerequisite(s): Permission of instructor only.

Note(s): CHDV Distribution: A

Equivalent Course(s): CHDV 21500, GNSE 21500

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

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

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

HIPS 22709. Introduction to Quantum Mechanics, Introduction to Philosophy of Quantum Mechanics. 100 Units.

In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. In this course we examine some of the conceptual problems associated with quantum mechanics. We will critically discuss some common interpretations of quantum mechanics, such as the Copenhagen interpretation, the many-worlds interpretation, and Bohmian mechanics. We will also examine some implications of results in the foundations of quantum theory concerning non-locality, contextuality, and realism. (B)
 Instructor(s): T. Pashby Terms Offered: Winter
 Prerequisite(s): Prior knowledge of quantum mechanics is not required since we begin with an introduction to the formalism, but familiarity with matrices, freshman calculus and high school geometry will be presupposed.
 Equivalent Course(s): KNOW 22709, PHIL 22709

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

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

HIPS 24300. Foucault and The History of Sexuality. 100 Units.

This course centers on a close reading of the first volume of Michel Foucault's "The History of Sexuality", with some attention to his writings on the history of ancient conceptualizations of sex. How should a history of sexuality take into account scientific theories, social relations of power, and different experiences of the self? We discuss the contrasting descriptions and conceptions of sexual behavior before and after the emergence of a science of sexuality. Other writers influenced by and critical of Foucault are also discussed.

Instructor(s): A. Davidson Terms Offered: Autumn
 Prerequisite(s): One prior philosophy course is strongly recommended.
 Equivalent Course(s): GNSE 23100, FNDL 22001, CMLT 25001, KNOW 27002, PHIL 24800

HIPS 24401. Freud & Psychoan: Lec/Cse Stud. 100 Units.

TBD
 Equivalent Course(s): PSYC 28501, FNDL 23302, PSYC 38501

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

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

Instructor(s): S. Graeter Terms Offered: Spring
 Equivalent Course(s): LACS 24706, ANTH 23026

HIPS 25001. Kant: Critique of Pure Reason. 100 Units.

This will be a careful reading of what is widely regarded as the greatest work of modern philosophy, Immanuel Kant's Critique of Pure Reason. Our principal aims will be to understand the problems Kant seeks to address and the significance of his famous doctrine of "transcendental idealism". Topics will include: the role of mind in the constitution of experience; the nature of space and time; the relation between self-knowledge and knowledge of objects; how causal claims can be justified by experience; whether free will is possible; the relation between appearance and reality; the possibility of metaphysics. (B)

(V)
 Instructor(s): J. Conant Terms Offered: Winter
 Equivalent Course(s): PHIL 37500, FNDL 27800, PHIL 27500, CHSS 37901

HIPS 25014. Introduction to Environmental History. 100 Units.

How have humans interacted with the environment over time? This course introduces students to the methods and topics of environmental history by way of classic and recent works in the field: Crosby, Cronon, Worster, Russell, and McNeill et al. Major topics of investigation include preservationism, ecological imperialism, evolutionary history, forest conservation, organic and industrial agriculture, labor history, the commons and land reform, energy consumption, and climate change. Our scope covers the whole period from 1492 with case studies from European, American and British imperial history. Equivalent Course(s): HIST 35014, ENST 25014, HIST 25014, CHSS 35014

HIPS 25114. Natural History and Empire, circa 1500-1800. 100 Units.

This course will examine natural history-broadly defined as a systematic, observational body of knowledge devoted to describing and understanding the physical world of plants, animals, natural environments, and (sometimes) people-in the context of European imperial expansion during the early modern era. Natural history was upended by the first European encounters with the New World. The encounter with these new lands exposed Europeans for the first time to unknown flora and fauna, which required acute empirical observation, collection, cataloguing, and circulation between periphery and metropole in order to understand their properties and determine their usefulness. As the Spanish, Portuguese, British, French, and Dutch competed with one another to establish overseas trade and military networks in the sixteenth, seventeenth, and eighteenth centuries, they also competed over and shared information on natural resources. The course will combine lecture and discussion and mix primary source readings on natural history in the early modern world with modern historical writings. Though the readings skew a bit toward Britain and the British Atlantic world, every effort has been made to include texts and topics from multiple European and colonial locales. Topics and themes will include early modern sources of natural history from antiquity and their (re)interpretation in imperial context; early modern collecting cultures and cabinets of curiosities; Linnaeus and the origins of

Equivalent Course(s): HIST 25114, ENST 25114

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

The course will be developed in a series of theory-practice based sessions. Due to the richness that the University offers, in terms of faculties and other resources, some of the sessions will be accompanied by scholars from other faculties to address a particular topic or expertise relevant to the session.

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

Note(s): Tinker Visiting Professor Autumn 2018

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

HIPS 25205. Computers, Minds, Intelligence & Data. 100 Units.

How are we co-evolving with our machines? How do we teach ourselves and our computers how to learn? What kinds of human intelligences do we promote in liberal education in comparison with artificial intelligence(s)? Through our distributed cognition with tools of all kinds, as we engage in participatory culture using digital computers and networks, we provide information that generates the basis for big (and small) data. At the crux of our investigation-on the one hand into reading and conversation and on the other hand into algorithms and information theory-are issues about human action and the multifaceted agency of the universal Turing machine-as mobile phone, laptop, internet, robot.

Equivalent Course(s): HUMA 25205, MAAD 25205

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

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

Instructor(s): Browning, Margot Terms Offered: Autumn

Equivalent Course(s): HUMA 25206, LLSO 25206

HIPS 25309. History of Perception. 100 Units.

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

Equivalent Course(s): CHSS 35309, ANTH 24308, HIST 35309, ANTH 34308, KNOW 21404, KNOW 31404, HIST 25309

HIPS 25421. Censorship from the Inquisition to the Present. 100 Units.

Collaborative research seminar on the history of censorship and information control, with a focus on the history of books and information technologies. The class will meet in Special Collections, and students will work with the professor to prepare an exhibit, *The History of Censorship*, to be held in the Special Collections exhibit space in the spring. Students will work with rare books and archival materials, design exhibit cases, write exhibit labels, and contribute to the exhibit catalog. Half the course will focus on censorship in early modern Europe, including the Inquisition, the spread of the printing press, and clandestine literature in the Renaissance and Enlightenment. Special focus on the effects of censorship on classical literature, both newly rediscovered works like Lucretius and lost books of Plato, and authors like Pliny the Elder and Seneca who had been available in the Middle Ages but became newly controversial in the Renaissance. The other half of the course will look at modern and contemporary censorship issues, from wartime censorship, to the censorship of comic books, to digital-rights management, to free speech on our own campus. Students may choose whether to focus their own research and exhibit cases on classical, early modern, modern, or contemporary censorship. This course is part of the College Course Cluster, The Renaissance.

Equivalent Course(s): CLCV 25417, RLST 22121, KNOW 21403, KNOW 31403, HIST 25421, CLAS 35417, SIGN 26010, CHSS 35421, HIST 35421, HREL 34309

HIPS 25425. Censorship, Info Control, & Revolutions in Info Technology from the Printing Press to the Internet. 100 Units.

The digital revolution is triggering a wave of new information control efforts and censorship attempts, ranging from monopolistic copyright laws to the "Great Firewall" of China. The print revolution after 1450 was a moment like our own, when the explosive dissemination of a new information technology triggered a wave of information control efforts. Many of today's attempts at information control closely parallel early responses to the printing press, so the premodern case gives us centuries of data showing how diverse attempts to control or censor information variously incentivized, discouraged, curated, silenced, commodified, or nurtured art, thought, and science. This unique course is part of a collaborative research project funded by the Neubauer Collegium for Culture and Society and is co-organized with digital information expert Cory Doctorow. The course will bring pairs of experts working on the print and digital revolutions to campus to discuss parallels between their research with the class. Classes will be open to the public, filmed, and shared on the Internet to create an international public conversation. This is also a Department of History "Making History" course: rather than writing traditional papers, students will create web resources and publications (print and digital) to contribute to the ongoing collaborative research project.

Instructor(s): A. Johns & A. Palmer Terms Offered: Autumn

Note(s): Making History courses forgo traditional paper assignments for innovative projects that develop new skills with professional applications in the working world. Open to students at all levels, but especially recommended for 3rd- and 4th-yr students. This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40103 to be eligible to apply for the SIFK dissertation fellowship.

Equivalent Course(s): KNOW 40103, SIGN 26035, CHSS 35425, HREL 35425, BPRO 25425, KNOW 25425, HIST 25425, HIST 35425

HIPS 25600. History of Statistics. 100 Units.

This course covers topics in the history of statistics, from the eleventh century to the middle of the twentieth century. We focus on the period from 1650 to 1950, with an emphasis on the mathematical developments in the theory of probability and how they came to be used in the sciences. Our goals are both to quantify uncertainty in observational data and to develop a conceptual framework for scientific theories. This course includes broad views of the development of the subject and closer looks at specific people and investigations, including reanalyses of historical data.

Instructor(s): S. Stigler Terms Offered: Spring

Prerequisite(s): Prior statistics course

Equivalent Course(s): STAT 26700, CHSS 32900, STAT 36700

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

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

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

Note(s): This course fulfills part of the KNOW core seminar requirement. PhD students should register for KNOW 40202 to be eligible to apply for the SIFK dissertation fellowship.

Equivalent Course(s): ANTH 24307, KNOW 25308, ANTH 34307, HIST 35308, HIST 25308, KNOW 40202, CHSS 35308

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

A survey of the thought of some of the most important figures of this period, including Anselm, Aquinas, Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkeley, and Hume.

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

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

Equivalent Course(s): PHIL 26000

HIPS 26121. Nature, Science, and Empire in the Early Modern Iberian World, 1400-1800. 100 Units.

Full title: "Nature, Science, and Empire in the Early Modern Iberian World, 1400-1800." Historians have often relegated Iberia and its New World domains from accounts of the developments of modern science. They have traditionally claimed that strict censorship and a commitment to orthodox Catholicism prevented Spain, once the most powerful empire of the world, from embarking on the path towards scientific modernity in the eighteenth century. Modern scholars, however, have challenged this narrative by embracing more inclusive concepts of "science" to explain the many ways in which early modern people related to nature. Some of these practices include the writing of natural histories, botanical research, and linguistic studies, all fields that Iberian scholars pioneered in their efforts to govern their vast domains. This course will introduce students to a diversity of scientific practices that flourished in the Hispanic world between 1400 and 1800. Equivalent Course(s): LACS 26121, HIST 26121

HIPS 26617. Sciences as Solutions to Latin American Challenges, 1500-2000. 100 Units.

Equivalent Course(s): HIST 26107, LACS 26617

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

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

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

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

HIPS 27005. Secrecy and Science. 100 Units.

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

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

HIPS 27301. Medical Anthropology. 100 Units.

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

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

Prerequisite(s): SOSC sequence

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

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

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

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

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

Note(s): CHDV Distribution, C, D

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

HIPS 27501. Freud: Human Dev/Personality. 100 Units.

Equivalent Course(s): HUDV 31300

HIPS 27860. History of Evolutionary Behavioral Sciences. 100 Units.

This course will consist in lectures and discussion sessions about the historical and conceptual foundations of evolutionary behavioral sciences (evolutionary anthropology, evolutionary psychology, ethology, comparative behavioral biology), covering the period from the publication of Charles Darwin's *The Origin of Species* up to the present day. Topics will include new theoretical developments, controversies, interdisciplinary expansions, and the relationships between evolutionary behavioral sciences and other disciplines in the sciences and the humanities.

Instructor(s): D. Maestriperi Terms Offered: Autumn 2018

Prerequisite(s): N/A

Equivalent Course(s): CHDV 37860, CHSS 37860, KNOW 27860, CHDV 27860

HIPS 28101. Psychoanalysis and Philosophy. 100 Units.

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

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

HIPS 29400-29500. Tutorial.

Tutorial

HIPS 29400. Tutorial. 100 Units.

Terms Offered: Autumn

HIPS 29500. Tut: Hist/Bio Of Emotions. 100 Units.**HIPS 29500. Tut: Hist/Bio Of Emotions. 100 Units.****HIPS 29412. The Face in Western Culture from the Mona Lisa to the Selfie. 100 Units.**

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

Equivalent Course(s): ARTH 29412, HIST 29412

HIPS 29629. Tutorial: Romantic Bodies: Theater in the History of Science and Medicine. 100 Units.

It seems that science and theater have longed shared an ambiguous treatment as amoral yet bordering the ethically suspect. Scientific, medical, and technological advancements alter our everyday lives in profound ways and theater can play with the development and repercussions of these advancements, altering our memories of history. This stimulates a line of questioning for historians who view "science plays," or plays that use science as the basis of their content and often also their form. In this tutorial, we will explore how these plays can (or cannot) fit into intellectual history as well as social and cultural histories of science. We will investigate how these plays can act as vehicles for remembering (or reconstructing) histories of science, reminding ourselves that the moral quandaries and ethical dilemmas that we juggle in science and medicine are as recurring as the theatrical productions are.

Instructor(s): Ashley Clark Terms Offered: Autumn. Autumn 2018

Equivalent Course(s): HIST 24920, KNOW 29629

HIPS 29630. Tutorial: History and Philosophy of Social Science. 100 Units.

Sociology and anthropology are highly self-reflexive disciplines. Their own contested histories have been taught and critiqued as a matter of course in the majority of sociology and anthropology departments in the US and Europe since their inception—hardly a surprise, given how dense, kaleidoscopic, and political they are. Meanwhile, the philosophy of social science has been gaining popularity in philosophy departments, apparently independently of the centuries-old reflection on social scientific methodologies that can be found within sociological and anthropological texts². In true interdisciplinary fashion, this course seeks to marry these areas of scholarship, bringing together readings in philosophy, sociology, anthropology, and classical social theory, under the common themes that unite (and divide) them. We will cover debates on the epistemological priority of the individual or of society, the priority of naturalist or humanist perspectives, and the generalisability or spatio-temporal specificity of social scientific explanations.

Instructor(s): Parysa Mostajir Terms Offered: Autumn. Autumn 2018

Equivalent Course(s): KNOW 29630

HIPS 29631. Tutorial: History of Cryptography. 100 Units.

People have used codes and ciphers to keep their communications secret for thousands of years. Codebreakers, meanwhile, have been battling in parallel to break into those secrets nearly as long. From Roman generals to Arabic mathematicians to the Zimmerman telegram, cryptography has long been important to military and diplomatic history, while technological developments in the last forty years have brought cryptography to the masses, securing bank transactions, text messages, and countless other data on the Internet. This course will survey the long history of cryptology from the ancient world to today, with a focus on its uses in society. We will discuss, among other things, changing ideas of secrecy, privacy, and freedom of speech; the relationship between the state and science; and how technological developments influence and are influenced by cultural context. No technical or mathematical background is necessary for this course, although those with such background are welcome. (Syllabus and CV attached.)

Instructor(s): Jillian Foley Terms Offered: Winter. Winter 2019

Equivalent Course(s): HIST 24919

HIPS 29632. Tutorial: The Poet's Scientist: A pre-disciplinary course in science & literature. 100 Units.

This course is a way of gathering three interests. I'm interested in understanding a way of writing about scientists that is not readily available to historians of science, a more expressive, more intuited way of writing that we can find in some poets and novelists: Osip Mandelstam writing of the way "Lamarck wept his eyes out over his magnifying glass"; Arthur Koestler of how Kepler laid "a monstrous egg" with his elliptical orbit. I am interested in the particular license taken in these instances--that flash of soul; I think the same license is taken to great effect in, for instance, the historical fiction of Hilary Mantel, and I want to see what we can win by it if we permit ourselves to tolerate it in real histories, and particularly in histories of science. That's a larger inquiry than this course undertakes, but I try to begin here by studying some writers who have won by it.

Instructor(s): Lily Huang Terms Offered: Spring. Spring 2019

Equivalent Course(s): KNOW 29632

HIPS 29678. History Colloquium: Medicine and Society. 100 Units.

How does medical knowledge change? How do medical practices transform over time? What factors influence the ways in which doctors and patients--and scientists, artists, politicians, legislators, activists, and educators, among others--understand matters of health and disease, of proper and improper interventions, of the rights of individuals and the needs of communities? This course treats these questions as a starting point for exploring the interactions of medicine and society from 1800 to the present. Through a combination of primary and secondary sources we will examine changing causes of morbidity and mortality, the development of new medical technologies and infrastructures, shifting patterns of disease and shifting ideas about bodies, and debates about health care policy, among other topics. Students will be expected to conduct original research and produce an original research paper of fifteen to twenty pages.

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

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

Equivalent Course(s): HIST 29678

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

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

Terms Offered: Autumn Spring Winter

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

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

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

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

Equivalent Course(s): HIST 25503

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

Thesis writing workshop for HIPS seniors.

Terms Offered: Autumn, Spring, Winter

HIPS 29900. Bachelor's Thesis. 100 Units.

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

Terms Offered: Autumn, Winter, Spring

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



Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Trajan.

Times was used instead of Palatino.

The editor may contact Leepfrog for a draft with the correct fonts in place.