Committee on Conceptual and Historical Studies of Science

Chair
- Adrian Johns, History

Professors
- Fredrik Albritton Jonsson, History
- Lorraine Daston, Social Thought
- James A. Evans, Sociology
- Adrian Johns, History
- Karin Knorr Cetina, Sociology and Anthropology
- Joseph Masco, Anthropology
- Karl Matlin, Department of Surgery
- Salikoko Mufwene, Linguistics
- Robert J. Richards, History
- Michael Rossi, History
- James T. Sparrow, History
- Stephen M. Stigler, Statistics
- Kaushik Sunder Rajan, Anthropology

Emeritus Faculty
- Arnold Davidson, Philosophy
- Judith B. Farquhar, Anthropology
- Jan Goldstein, History
- Robert Perlman, Pediatrics
- William C. Wimsatt, Philosophy

Affiliate Faculty
- William H. Sterner, CHSS

The Committee on Conceptual and Historical Studies of Science (CHSS) is an interdisciplinary graduate program dedicated to advancing social, historical, and philosophical perspectives on science. Its areas of interest are broad, extending across the sciences and from the ancient world to the present day. Its faculty derive from many departments in the University, but particularly from History, Sociology, Anthropology, and Philosophy. We currently have major strengths in the study of evolutionary biology, psychology, and medicine, and in issues of the social activity of science, such as those relating to scientific authority, credibility, communication, and intellectual property. Students in the Ph.D. program have an opportunity to investigate such aspects of the scientific enterprise in depth, within its many rich historical, social, and philosophical contexts. They are also encouraged to grapple with the practices and approaches of science itself.

A brief description of the Committee's degree requirements is provided below, along with a representative list of courses that have been taught in recent years. For more complete information, you are encouraged to consult the website at http://chss.uchicago.edu/. This site contains an up to date description of faculty research interests, a complete statement of degree requirements, descriptions of individual courses being taught this year, a calendar of events (including meetings of the Committee's regular Workshop in the History, Philosophy, and Sociology of Science), a list of students who have received Ph.D.s from the Committee with the titles of their dissertations, and more.

Those with questions about the Committee should write to the Administrative Assistant, The Committee on Conceptual and Historical Studies of Science, The University of Chicago, 1126 East 59th Street, Chicago, IL 60637 (bethcalderon@uchicago.edu (bbmackev@uchicago.edu)).

APPLICATION

New students are admitted to the Committee through the Division of the Social Sciences. Applicants will be expected to submit undergraduate transcripts, scores from the general Graduate Record Examination, three letters of recommendation, short descriptions of their interests and/or reasons for wanting to study in CHSS, and a writing sample.
The application process for admission and financial aid for all Social Sciences graduate programs is administered through the divisional Office of the Dean of Students. The Application for Admission and Financial Aid, with instructions, deadlines and department specific information is available online at: https://apply-ssd.uchicago.edu/apply/. Questions pertaining to admissions and aid should be directed to ssd-admissions@uchicago.edu or (773) 702-8415.

Our application process is now entirely online (paperless). All supporting material - including letters of recommendation, transcripts, and writing samples (if required by a specific department) - must be submitted electronically through the online application.

More information about applying to programs in the University of Chicago's Division of the Social Sciences can be found at https://socialsciences.uchicago.edu/admissions/how-to-apply (https://socialsciences.uchicago.edu/admissions/how-to-apply/).

**Degree Requirements**

Every new student in CHSS is assigned an adviser, with whom he or she designs an individual program of study. Because the interests of students within CHSS vary widely, so too do these programs. Yet all students are expected to fulfill certain common requirements. Full and up to date details are given on the website, but the main elements are described here.

Students choose one of the following options:

1. **SCIENCE OPTION:** The student may earn a master's degree in a science (here understood to include mathematics, statistics, and social science).

2. **PHILOSOPHY OPTION:** The student may earn a master's degree in philosophy.

3. **HISTORY OPTION:** The student may earn a master's degree in history.

All students must complete a total of at least eighteen courses at the University for a grade of B or better, including at least seven CHSS courses. They must maintain at least a B+ average every quarter. Students must take a coherent series of six courses in a scientific area at the University, approved by the Committee, at a level appropriate to their preparation and of an appropriately advanced nature. (The term science here includes social sciences as represented in the University’s Division of the Social Sciences.) This will normally mean that students must take at least some portion of their science work at a graduate level. Note that if a student enters the program with a master's degree in an appropriate area, the committee determines what level of credit is given for it.

The expected timetable is that students entering with a master's degree will complete coursework by the end of the second year, and those entering without will complete it by the end of year three (see the website for this and other details of the expected timetable).

Among the coursework of the first two years, students should take three courses offered by the committee: Philosophy of Science, History of Science, and Introduction to Science Studies.

Students must then pass two oral examinations. Each student has the option of taking the exams in history of science, philosophy of science, sociology of science, or anthropology of science; but at least one of the exams must be in either history of science or philosophy of science. These exams are, in part, designed by the students themselves.

At this point the student writes a dissertation proposal, and defends it at a hearing before his or her dissertation committee. He or she is then considered to have advanced to Ph.D. candidacy, and proceeds to write the dissertation itself.

**Courses**

The department website offers descriptions of representative courses offered in recent years: https://chss.uchicago.edu/content/courses (https://chss.uchicago.edu/content/courses/)

**Conceptual and Historical Studies of Science Courses**

**CHSS 30100. Wit & Wisdom in 18th-Century Literature. 100 Units.**

TBD

Equivalent Course(s): ENGL 36003

**CHSS 30400. Music & Science in the Early Modern Period. 100 Units.**

TBD

Equivalent Course(s): MUSI 43705

**CHSS 30506. Cities, Space, Power: Introduction to urban social science. 100 Units.**

This lecture course provides a broad, multidisciplinary introduction to the study of urbanization in the social sciences. The course surveys a broad range of research traditions from across the social sciences, as well as the work of urban planners, architects, and environmental scientists. Topics include: theoretical conceptualizations of the city and urbanization; methods of urban studies; the politics of urban knowledges; the historical geographies of capitalist urbanization; political strategies to shape and reshape the built and unbuilt environment; cities and
planetary ecological transformation; post-1970s patterns and pathways of urban restructuring; and struggles for the right to the city.

Instructor(s): N. Brenner Terms Offered: Winter
Equivalent Course(s): ENST 20506, ARCH 20506, KNOW 30506, CCCT 30506, PLSC 30506, CHST 20506, SOCI 20506, PLSC 20506, SOCI 30506, HIPS 20506

CHSS 30574. 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): HIPS 20574, SOCI 20574, SOCI 30574

CHSS 30925. The Humanities as a Way of Knowing. 100 Units.
Despite intertwined histories and many shared practices, the contemporary humanities and sciences stand in relationships of contrast and opposition to one another. The perceived fissure between the "Two Cultures" has been deepened by the fact that the bulk of all history and philosophy of science has been devoted to the natural sciences. This seminar addresses the history and epistemology of what in the nineteenth century came to be called the "sciences" and the "humanities" since the Renaissance from an integrated perspective. The historical sources will focus on shared practices in, among others, philology, natural history, astronomy, and history. The philosophical source will develop an epistemology of the humanities: how humanists know what they know.

Instructor(s): Lorraine Daston Terms Offered: Not offered 21-22.
Equivalent Course(s): SCTH 30925, PHIL 20925, HIST 29517, HIST 39517, PHIL 30925, CLAS 37316, KNOW 40303

CHSS 30927. Knowledge as a Platter: Comparative Perspectives on Knowledge Texts in the Ancient World. 100 Units.
In various ancient cultures, sages created the new ways of systematizing what was known in fields as diverse as medicine, politics, sex, dreams, and mathematics. These texts did more than present what was known; they exemplified what it means to know - and also why reflective, systematic knowledge should be valued more highly than the knowledge gained from common sense or experience. Drawing on texts from Ancient India, Greece, Rome, and the Near East, this course will explore these early templates for the highest form of knowledge and compare their ways of creating fields of inquiry: the first disciplines. Texts include the Arthashastra, the Hippocratic corpus, Deuteronomy, the Kama Sutra, and Aristotle’s Parva naturalia.

Terms Offered: Not offered in 21-22.
Prerequisite(s): Permission of instructor.
Equivalent Course(s): KNOW 31415, SALC 30927, SCTH 30927, HREL 30927

CHSS 30928. Thinking the Present through the Past: Classic Works of History since 1750. 100 Units.
As proudly empirical as the sciences, as interpretive as the humanities, and as analytical as the social sciences, history as the pursuit of knowledge about the past resists classification. Because all history is written through the lens of the present, most works of history cease to be read after a generation, especially during the modern period, as the pace of change accelerated. In this seminar we will read some of the exceptions, including works by Kant, Tocqueville, Michelet, Cassirer, Huizinga, Lovejoy, and Frances Yates, to understand how powerful vision of the past can transcend its own present.

Instructor(s): Lorraine Daston Terms Offered: Not offered in 21-22.
Prerequisite(s): Permission of instructor.
Equivalent Course(s): KNOW 30928, HIST 45002, SCTH 30928

CHSS 30929. The Strange World of Francis Bacon. 100 Units.
Francis Bacon (1561-1626) was a statesman, natural philosopher, essayist, and one of the most original thinkers of a spectacularly original age. Hailed as a visionary of modern science, reviled for his politics, praised for his prose style, admired for his legal reasoning, and skewered as a naïve empiricist, Bacon eludes modern categories. This seminar will look at his thought in the round. Texts include The Great Instauration, the New Organon, the Essays, and New Atlantis.

Note(s): Instructor’s consent required.
Equivalent Course(s): SCTH 30929, HIST 45003

CHSS 30961. The Values of Attention. 100 Units.
Attention confers value - aesthetic, moral, epistemic, and now monetary value - upon whatever it singles out from the stream of experience. This seminar explores the long history of the theories and practices of attention in philosophy, religion, science, psychology, and the arts. Guiding questions include what objects are deemed worthy of attention and why; extreme states of attention such as religious contemplation or scientific observation,
the schooling of attention through practices such as reading and web-surfing, theories of how attention works, and pathologies of attention.

Instructor(s): Lorraine Daston
Terms Offered: TBD. Course is not being offered AY 21-22.
Prerequisite(s): Reading knowledge of at least one other language besides English; students who wish to enroll in the seminar should contact the instructor directly by email.
Note(s): Note: This course will be taught during the first 5 weeks of the quarter.
Equivalent Course(s): HIST 45004, SCTH 30961

CHSS 30962. 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): SCTH 30962, HIST 45004, HIPS 20962

CHSS 31108. Time After Physics. 100 Units.
This course provides a historical survey of the philosophy of time. We begin with the problems of change, being and becoming as formulated in Ancient Greece by Parmenides and Zeno, and Aristotle's attempted resolution in the Physics by providing the first formal theory of time. The course then follows theories of time through developments in physics and philosophy up to the present day. Along the way we will take in Descartes’ theory of continuous creation, Newton’s Absolute Time, Leibniz’s and Mach’s relational theories, Russell’s relational theory, Broad’s growing block, Whitehead’s epochal theory, McTaggart’s A, B and C theories, Prior’s tense logic, Belnap’s branching time, Einstein’s relativity theory and theories of quantum gravity. (B) (II)
Instructor(s): T. Fashby
Terms Offered: Spring
Equivalent Course(s): PHIL 21108, PHIL 31108, KNOW 21108, HIPS 21108, KNOW 31108

CHSS 31202. Goethe: Literature, Science, Philosophy. 100 Units.
This lecture-discussion course will examine Johann Wolfgang von Goethe’s intellectual development, from the time he wrote Sorrows of Young Werther through the final states of Faust. Along the way, we will read a selection of Goethe’s plays, poetry, and travel literature. We will also examine his scientific work, especially his theory of color and his morphological theories. On the philosophical side, we will discuss Goethe’s coming to terms with Kant (especially the latter's third Critique) and his adoption of Schelling’s transcendental idealism. The theme uniting the exploration of the various works of Goethe will be unity of the artistic and scientific understanding of nature, especially as he exemplified that unity in “the eternal feminine.” (B) (IV)
Instructor(s): R. Richards
Terms Offered: Winter
Note(s): German would be helpful, but it is not required. Assignments: four papers (5–8 pages each).
Equivalent Course(s): GRMN 25304, HIPS 26701, KNOW 31302, FNDL 25315, HIST 25304, PHIL 20610, PHIL 30610, HIST 35304, GRMN 35304

CHSS 31404. Britain in the Age of Steam 1783-1914. 100 Units.
In the Victorian era, Britain rose to global dominance by pioneering a new fossil-fuel economy. This course explores the profound impact of coal and steam on every aspect of Victorian society, from politics and religion to industrial capitalism and the pursuit of empire. Such historical investigation also serves a second purpose by helping us see our own fossil-fuel economy with fresh eyes through direct comparison with Victorian energy use. Assignments include short essays based on energy “field work” and explorations in past and present material culture.
Instructor(s): F. Albritton Jonsson
Terms Offered: Winter
Equivalent Course(s): KNOW 31410, HIST 31404, ENST 21404, LLSO 21404, HIST 21404, HIPS 21404

CHSS 31413. Sex and Enlightenment Science. 100 Units.
What do a lifelike wax woman, a birthing dummy, and a hermaphrodite have in common? This interdisciplinary course seeks answers to this question by exploring how eighteenth-century scientific and medical ideas, technologies, and practices interacted with and influenced contemporary notions of sex, sexuality, and gender. In our course, the terms “sex,” “Enlightenment,” and “science” will be problematized in their historic contexts using a variety of primary and secondary sources. Through these texts, as well as images and objects, we will see how emerging scientific theories about sex, sexuality, and gender contributed to new understandings of the human, especially female, body. We will also see how the liberating potential of Enlightenment thought gave way to sexual and racial theories that insisted on fundamental human difference. Topics to be covered include theories of generation, childbirth, homosexuality, monstrosities, race and procreation, and hermaphrodites and questions about the “sex” of the enlightened scientist and the gendering of scientific practices.
Equivalent Course(s): GNSE 21413, KNOW 21413, HIST 22218, HIPS 21413
CHSS 32000. 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): Karin Knorr Cetina Terms Offered: Spring, Offered in Spring 2023
Equivalent Course(s): HIPS 22001, HIST 56800, KNOW 31408, SOCI 40137, ANTH 32305

CHSS 32012. Technologies of Race Making. 100 Units.
This course considers the intersections between technology, science, and race. It explores how technologies have been developed and used to assign racial meaning to people’s identities and bodies and how this has impacted economic, political, and social power structures. We will read studies relating to historical and present-day technologies and discuss topics such as racial science, phrenology, biometry, surveillance and policing, artificial intelligence and automation, and data production and reuse. A major theme that runs through the course is the practice of race-making, how biological race is enacted and made relevant in specific technological practices. Which assumptions and expectations about human variation are built into the technologies? What are the effects of its use in practice? How does race making configure into more durable forms, such as standards, databanks, and protocols? This class will be bi-modal, with in class and online options.
Instructor(s): Iris Clever Terms Offered: Autumn
Equivalent Course(s): SOCI 30325, KNOW 22012, CRES 32012, KNOW 32012, ANTH 33336, HIPS 22102

CHSS 32500. Modal Logic. 100 Units.
TBD

CHSS 32503. Capturing the Stars: Exhibiting the History of Women at Yerkes Observatory in early 20th C America. 100 Units.
Capturing the Stars,” the exhibit, that will illuminate the history of women at Yerkes Observatory and demonstrate how their labor contributed to the advancement of astronomy and astrophysics in Fall 2023. In this experimental and hands-on course, students will actively participate in the creation of this physical exhibit for the Special Collections Research Center and its digital counterpart. Students will begin by learning about the history of women in science, the social, economic, and cultural history of early twentieth-century America, as well as the history of astronomy and astrophysics. They will then develop skills in historical research, exhibition development, community outreach, and science communication while working on final projects to be featured in the exhibit. No prior historical, scientific, or museum experience is required for this course. Students will learn how to conduct historical research and how to communicate with a public audience by contributing to the production of a physical exhibit on the history of women at Yerkes Observatory with an ambitious digital footprint. This highly experimental class will move beyond the confines of a traditional history seminar by involving students in the development and execution of an exhibit on the history of women at Yerkes Observatory.
Instructor(s): Kristine Palmieri Terms Offered: Winter
Equivalent Course(s): GNSE 32510, GNSE 22510, HIST 27802, KNOW 32203, ASTR 18950, HIST 37802

CHSS 32504. 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: Winter
Equivalent Course(s): KNOW 32204, HIST 38308, HIPS 22204, HIST 28308

CHSS 32708. 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): ENST 22708, HIST 32708, HIPS 22708, KNOW 22708, KNOW 32808, HIST 22708

CHSS 32710. Philosophical Issues in Quantum Mechanics. 100 Units.
TBD
Equivalent Course(s): PHIL 22710, PHIL 32710

CHSS 32900. 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: Not offered in 2021-2022.
Prerequisite(s): Prior statistics course
Equivalent Course(s): HIPS 25600, STAT 36700, STAT 26700

CHSS 32905. Topics in the History of Attention. 100 Units.
Our data,” said a recent social critic, “is the oil of the twenty-first century.” In these infinite reserves, perhaps no data is more “ours” than the data we generate simply by paying attention to some things over other things. This particular feature of how our minds work has become the natural resource supply for the vastly profitable attention economy. But hasn’t it always been thus? In this course we will explore how something every human has always had becomes a new resource and a new problem from one historical moment to another. We will pursue our quarry with zealous particularism and zealous universalism, by tracking discourses of attention across several recurring themes: questions of autonomy and choice; problems of overabundance; forms of collective attention, trained attention, and pathological attention-including pathologies of excess, deficiency, and erroneous attention. Throughout the course we will ask what problems of attention say about the cultures and societies that produce them, and how all problems of attention might be different historical attempts to come to terms with human limitation and human potential.
Instructor(s): Huang, Lily Terms Offered: Spring
Equivalent Course(s): HIPS 22905, MAPS 32905

CHSS 33300. Introduction to 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): T. Fashby Terms Offered: Winter
Equivalent Course(s): HIPS 22000, HIST 25109, PHIL 22000, PHIL 32000, HIST 35109

CHSS 33500. 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): G. Schultheis Terms Offered: Autumn
Equivalent Course(s): HIPS 20700, LING 20102, PHIL 20100, PHIL 30000

CHSS 33519. The Arts of Number in the Middle Ages: The Quadrivium. 100 Units.
Alongside the arts of language (grammar, rhetoric, and logic), medieval students would encounter the arts of number: arithmetic, the study of pure number; geometry, number in space; music, number in time; and astronomy, number in space and time (in Stratford Caldecott’s formulation). In this course, we will be following this medieval curriculum insofar as we are able through some of its primary texts, many only recently translated, so as to come to a better appreciation of the way in which the study of these arts affected the development of the medieval European intellectual, scientific, and artistic tradition. This is a companion course to “The Arts of Language in the Middle Ages: The Trivium,” but the two courses may be taken in either order.
Instructor(s): R. Fulton Brown Terms Offered: Spring
Equivalent Course(s): HIST 33519, MDVL 23519, FNDL 25688, HIPS 23519, HIST 23519

CHSS 34200. The Nuclear Age. 100 Units.
This seminar examines the history of nuclear science, technology, and politics since World War II. The invention of atomic weapons transformed the international security landscape in the middle of the last century, yet most nuclear arms have never been deployed in conflict. This course encourages students to consider the roles of ideas, knowledge, culture, and secrecy in the development and deployment of technologies often considered as quintessentially material. It asks how nuclear science and technology both reflected and informed social
landscapes, intersecting in crucial, often surprising ways with issues of gender, race, and class. What kinds of people in which places have had access to atomic knowledge, and to what ends? Ranging across national contexts and through social layers that intersect with nuclear industries, we will consider the perspectives of victims / survivors, scientists, workers, environmentalists, miners, diplomats, and other people. Students will encounter a multifaceted approach to the Nuclear Age, including how its promise and peril have been represented and contested, into the present time.

Instructor(s): Benjamin Goossen  
Terms Offered: Autumn  
Equivalent Course(s): KNOW 32200, HIST 38608

CHSS 34201. Genetics In Evol Perspective. 100 Units.  
TBD  
Equivalent Course(s): HIPS 24101, BIOS 29288

CHSS 34215. 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  
Terms Offered: Winter  
Equivalent Course(s): HIST 34215, EALC 34225, EALC 24225, HIPS 24215, HIST 24215

CHSS 34908. Being Human: Histories of Paleoanthropology, Origins, and Deep Time. 100 Units.  
What does it mean to be "human," and how have different sciences been used at different points in time to answer that question? While the scientific discipline of paleoanthropology—the study of human evolution and the deep human past-only emerged at the start of the twentieth century, it grew out of both nineteenth-century investigations into mysterious stone tools and the fossils of strange prehistoric creatures and much older traditions about origins, creation, and the nature of human difference drawn from history, religious faith, and the mythological tradition. This seminar will explore the connected histories of paleoanthropology, prehistory, and the geosciences from the late eighteenth to the early twenty-first century, and consider how these sciences have been shaped by ideas about history, human nature, gender and race, and the earth itself.  
Instructor(s): E. Kern  
Note(s): Assignments: two short papers and one long final research paper.  
Equivalent Course(s): HIST 24908, HIST 34908, HIPS 24908

CHSS 34921. 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 universals aspects of human nature. In this course we read the work of several novelists such as George Eliot, HG Wells, Joseph Conrad, Jack London, Yuvgeny 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. Maestripieri  
Terms Offered: Autumn  
Note(s): Distribution requirements: Undergraduate: A; Graduate: 1  
Equivalent Course(s): HIPS 24921, KNOW 31418, CHDV 27861, KNOW 21418, HIST 34921, HIST 24921, CHDV 37861

CHSS 35014. 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. Albrinton Jonsson  
Terms Offered: Winter  
Equivalent Course(s): HIST 35014, ENST 25014, HIPS 25014, HIST 25014

CHSS 35110. Philosophy of History: Narrative & Explanation. 100 Units.  
This lecture-discussion course will focus on the nature of historical explanation and the role of narrative in providing an understanding of historical events. Among the figures considered are Gibbon, Kant, Humboldt, Ranke, Collingwood, Acton, Furet, Hempel, Danto. (B) (III)  
Instructor(s): R. Richards  
Terms Offered: Winter  
Equivalent Course(s): PHIL 20506, KNOW 31401, HIPS 25110, HIST 25110, HIST 35110, PHIL 30506
CHSS 35121. 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, HIPS 25121, LACS 25121, PPHA 39921

CHSS 35202. 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): HIST 31103, HIPS 22202, KNOW 32201

CHSS 35270. Infrastructure Histories. 100 Units.

Dams, sewers, container ships, water pipes, power lines, air conditioning, and garbage dumps: the critical infrastructures that enable modern life are so often invisible, except when they fail. This course explores the historical role of infrastructure as a set of planet-spanning systems of resource extraction and crucial conduits of social and political power. Looking at cases from apartheid South Africa and the Suez Canal to Mumbai and Chicago itself, we will consider the relationship of infrastructure with capitalism, settler colonialism, and postcolonial development. We will see how forms of citizenship and power have been shaped and negotiated via wires, leaky pipes, and improvised repairs, and we will consider perhaps the biggest question of all: In this age of ecological crisis, do energy-guzzling infrastructural systems have a strange form of more-than-human agency all of their own?

Instructor(s): L. Chatterjee Terms Offered: Autumn
Note(s): Assignment: a long paper
Equivalent Course(s): HIST 35027, ARCH 25027, ENST 25027, HIPS 25270, HIST 25027

CHSS 35302. Intro to History of Science. 100 Units.

This course provides an introduction to the interdisciplinary study of science, medicine, and technology. Beginning early in the twentieth century, sociologists, historians, philosophers, and anthropologists engaged in a consistent set of inquiries posing original, interesting, and consequential questions about the sciences. Their works drew on and responded to each other, and, taken together, their various approaches constituted a field, which in the 1970s came to be called “science studies.” This course furnishes an initial guide to this field. Students will not only encounter some of its principal concepts, approaches, and findings, but see how they have developed over time and in context. They will also get a chance to apply science-studies perspectives themselves, by performing a fieldwork project. Among the topics we will examine include: 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: Autumn
Equivalent Course(s): HIST 35003

CHSS 35308. 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 30202, KNOW 25308, HIPS 25808, HIST 25308, ANTH 34307, HIST 35308, ANTH 24307

CHSS 35309. 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): HIST 25309, ANTH 34308, ANTH 24308, KNOW 21404, HIPS 25309, KNOW 31404, HIST 35309

CHSS 35408. The History of Suggestion. 100 Units.
This course examines the history of studies of the nature of what has commonly become known as suggestion—subtle influences over personal and group behavior that are thought to affect us outside our conscious awareness or control. The idea of an unconscious influence of this kind has deep roots, but it was only in the nineteenth and twentieth centuries that it became a major focus of research, controversy and reflection. The course will examine the development and significance of characterizations of suggestion and related concepts of subtle influence in medicine, advertising, and various fields in the sciences. Course materials will include primary sources in those areas, literary materials, and film.
Instructor(s): A. Winter Terms Offered: Winter
Equivalent Course(s): HIST 25408, HIPS 25408, HIST 35408

CHSS 35415. History of Information. 100 Units.
Everybody knows that ours is an information age. No previous generation ever enjoyed access to the mass of material made available by Google, iTunes, Amazon, and the like. At the same time, however, no previous generation ever had its reading, listening, and traveling so thoroughly tracked, recorded, data-mined, and commercialized. Information thus shapes our culture for both good and ill, and it is up to us to understand how. This course provides students with the materials to do that. It ranges across centuries to trace how information has been created, circulated, and controlled. In short, it tells us how our information age came into being, and why it has generated the issues with which it now confronts us.
Instructor(s): A. Johns Terms Offered: Spring
Equivalent Course(s): HIPS 25415, LLSO 23501, HIST 25415, KNOW 35415, HIST 35415, KNOW 25415

CHSS 35421. Renaissance Book History: Censorship and the Print Revolution. 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 rare books and archival materials. 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, with a 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.
Instructor(s): A. Palmer
Note(s): Assignments: short and long papers, alternative assignments
Equivalent Course(s): KNOW 21403, HREL 34309, RLST 22121, CLCV 25417, HIST 35421, HIST 25421, SIGN 26010, CLAS 35417, HIPS 25421, KNOW 31403

CHSS 35525. Environmental Histories of the Global South. 100 Units.
Drawing on cases from Africa, Latin America, and especially Asia, this course explores key themes in the modern environmental history of the world beyond the rich industrialized North. Our investigations will focus on the ecological impacts of colonialism, war, and development, and how environmental management has helped to construct modern states and capitalist practices in turn. Ranging from the malarial plantations of the Caribbean to the forests of southeast Asia, we will analyze not-so-natural disasters like floods and chemical spills as well as the slow violence of deforestation and droughts. Combining primary sources with classic scholarship, we will encounter pioneering green activists like the original “tree huggers” of the Himalayas and environmental advocates for brutal population control. The course will conclude by examining the emergence of a newly assertive Global South in international climate negotiations, and its implications for the environmental history of our planet at large. The course is open to all, but may be of particular interest to students who have taken “Introduction to Environmental History.”
Instructor(s): L. Chatterjee Terms Offered: Winter
Note(s): Assignments: in-class presentation and a long paper.
Equivalent Course(s): HIPS 25525, HIST 25025, SALC 25025, HIST 35024, SALC 35025, ENST 25025

CHSS 36054. Formation of Knowledge MAPSS Core: Ways of Knowing. 100 Units.
This seminar introduces students to the conditions and processes of knowledge formation that shape our understanding of truth, our theories of social life, and our projections of possible futures. It examines how claims to knowledge emerge out of disciplinary, historical, and political contexts, as well as local cultural factors, both explicit and unspoken: how do institutions, technologies, and other normative structures produce, stabilize, or
disrupt knowledge? How do scientists and artists examine and represent the world differently? What makes expertise and why do we trust certain ways of knowing over others? Building upon methods and perspectives in the social sciences and humanistic social sciences, this seminar introduces problems, concepts, and analytical tools that will enable students from diverse disciplinary backgrounds to examine how we know what we know. 

Ways of Knowing is a required seminar for all students wishing to undertake the Formation of Knowledge MAPSS track https://sifk.uchicago.edu/mapss/. It also counts towards a required MAPSS Methods seminar.

Instructor(s): Tal Arbel, Andre Utii Terms Offered: Winter
Equivalent Course(s): HIST 35103, KNOW 36054, HIPS 26054

CHSS 36059. Media, Environment, and Risk. 100 Units.
In 1991, Ulrich Beck wrote that “society is made into a laboratory.” Following the Chernobyl disaster, Beck articulated how modern technology and its potential side-effects—such as radiation or chemical poisoning—had created the novel epistemological category of environmental risk defined by threats that escape human perception and transcend borders. Institutions monitoring ecological conditions gained responsibility for communicating public health. Political conflicts emerged between formations of expert and lay environmental knowledge. The technological application of modern science, and its associated environmental risks, pushed research beyond the laboratory and into the governmental fabric of social order: nuclear reactors had to be constructed and chemicals distributed to populations before their properties and safety could be understood. This seminar reads the debates on risk in environmental sociology alongside the emergence of risk criticism in media studies to interrogate the probabilistic thinking inherent to the communication of ecological threat. Two common traits characteristic of recent environmental catastrophes ranging from Bhopal, Fukushima Daiishi, Deepwater Horizon, Exxon Valdez, Hurricane Katrina, and the varied crises of global climate change, are that each disaster involves the failure or side-effect of an implemented technological project and that the corresponding risks—whether imperceptible or probable—are necessarily communicated to publics by media.

Instructor(s): Thomas Fringle Terms Offered: Winter
Equivalent Course(s): HIPS 26059, SOCI 30329, MAAD 26059, CMST 42802, KNOW 36059

CHSS 36065. Classification as World-Making. 100 Units.
To classify,” write Geoffrey Bowker and Susan Star, “is human.” There can be no doubt that classification sits at the heart of almost any form of knowledge production—arguably even thought itself. But what diversity hides under such atruism? This course will explore a set of exemplary fields in order to track genealogies and discontinuities in classificatory. We will begin with two philosophers, Aristotle and Kant, who stand as respective avatars of ancient and modern categorical thought. We will then proceed to sites where classification has flourished: the biological sciences which sought to capture the diversity of the living world; the social sciences—notably anthropology—which challenged the universality of Western cultural categories; and statistics or data science, which seek to understand numerical aggregates as categories. We will conclude by reflecting on the present explosion of digital techniques of classification, from social media algorithms to artificial intelligence, which structure more and more of our lives, often without human oversight. In this sense, classification is perhaps nonhuman as well. Moving between history, epistemology, and practice, this course will furnish students with a rich set of classificatory ideas that they can bring to their own research and disciplinary communities. Above all, it will ask students to account for both the construction and effects of categories, which are too often taken to be a neutral substrate of knowledge or conve

Instructor(s): Alexander Campolo Terms Offered: Spring
Equivalent Course(s): DIGS 20019, SCTH 36065, SOCI 30331, KNOW 36065, DIGS 30019, HIPS 26065

CHSS 36069. Scientific Childhood. 100 Units.
The first half of the twentieth century was a period of intensified focus and progressive thinking regarding the rights, development, and well-being of children as interests of utmost importance to all society. This focus was marked, inter alia, by concerted efforts to apply the methods of modern science to the investigation of childhood, efforts that in turn forever changed the way we understand, raise, and educate children. This seminar will revisit the lives of children who had served as subjects of observation and experiment from the 1880s to the 1950s, and whose childhood experiences (their emotions, thoughts, and games; their family lives and institutional realities) had shaped the central dogmas of developmental psychology, as well as our ideas about normality. The course takes a biographical approach to the history of science, but rather than focus on the careers of scientists and doctors, delves into the stories of their objects of study, from the Bostonian first graders who answered G. Stanley Hall’s pioneering survey to the 44 “juvenile thieves” who had informed John Bowlby’s influential attachment theory.

Instructor(s): Tal Arbel Terms Offered: Autumn
Equivalent Course(s): CHDV 36069, EDSO 36069, HLTH 26069, KNOW 36069

CHSS 36071. Knowing Animals. 100 Units.
What is an animal, and are we them? In “Knowing Animals,” we will approach this deceptively simple question from multiple angles, exploring the diverse ways that humans come to know and differentiate themselves from other animals and the implications of that labor. How can we understand and write about the lived experience of a bat, an octopus, or a hawk? Who decides which species are essential to experimental science, and which are simply edible? Why do we buy canine pharmaceuticals or construct tiger preserves in Oklahoma? The course will explore how hunting, eating, petkeeping, labor, experimentation, and cohabitation with animals contribute to the formation of knowledge. We will draw on scholarship in history, cultural anthropology, philosophy, and critical theory, as well as novels and films in order to do so. The course is meant to serve in part as an
introduction to the topics and methods of animal history and animal studies, so we will read foundational texts as well as recent scholarship on the intersections of animality, capital, disability, gender, and race. Students will leave with core competencies in the field as well as hopefully a deeper sense of what it means to be human.

Instructor(s): Bradley Bolman
Terms Offered: Winter
Equivalent Course(s): KNOW 36071, HIST 35015

CHSS 36078. 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 Émile 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, SOCI 40255, CHDV 36078, KNOW 36078, HIPS 26078

CHSS 36080. 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): HLTH 26080, KNOW 36080

CHSS 36088. The Scientist in the Nineteenth-Century Imagination. 100 Units.
The nineteenth century saw both the professionalization of science and the specialization of its practitioners. In this age of “human empire” produced by industrialization, new technologies offered humanity unprecedented dominion over the natural world, and the “scientist,” a term coined in 1834, marked the advent of the idea of a vocation dedicated to that mastery. Moreover, by the end of the century, the natural philosophers and polymaths of earlier ages had given way to chemists, physicists, biologists, and statisticians, whose scope of study was necessarily both deeper and narrower. These developments produced a new social and political positioning for the scientist - an expert, an authority, a wielder of power. This class explores how nineteenth-century fiction writers, from Mary Shelley and Edgar Allan Poe to Jules Verne and Arthur Conan Doyle, engaged with these emerging and transforming conceptualizations of the scientist figure. We will pair our literary explorations with non-fiction readings by thinkers and scientists such as Humphry Davy, Karl Pearson, Claude Bernard, William Whewell, and Max Weber (“Science as Vocation”) about what the scientist should be and science should do. Additionally, we’ll consider how this literary genealogy influences both our fictional portrayal of science to this day as well as our perceptions of it - from our contemporary distrust of expertise to our fear of the scientist playing god.

Instructor(s): Anastasia Klimchynskaya
Terms Offered: Winter
Equivalent Course(s): CMLT 36088, KNOW 36088

CHSS 37015. Graphic Medicine: Comic Creation as Knowledge Formation. 100 Units.
What does the medium of comics contribute to our knowledge and understanding of illness, disability, caregiving, and disease? How can making comics help us form individual and community knowledge about our bodies and health? This is a course designed to introduce students to the basic concepts and practices of the field of graphic medicine. To do this, we will closely engage with the elements and process of making comics as applied to the goals, principles, and applications of graphic medicine in particular, but also in relation to the health humanities. Broadly defined as the “intersection between the medium of comics and the discourse of healthcare,” graphic medicine allows for unique explorations of health, disease, and illness through the use of sequential images and textual elements within a narrative structure. Students will learn about conceptual and
practical aspects of the field. Through critical analysis and discussion of key works, they will also be exposed to a variety of styles, genres, and applications that capture the breadth and diversity of graphic medicine. An important component of the class will be exercises through which students will create their own graphic medicine works as a way to explore knowledge formation about health, illness, and one’s body through comics-making. Taught by a nurse cartoonist (and a founding figure in the field) and a physician.

Instructor(s): Brian Callender, MK Czerwiec
Terms Offered: Spring
Prerequisite(s): No prior knowledge or experience of graphic novels, comics, drawing, or medicine required.
Equivalent Course(s): KNOW 37015, HIPS 27015, HLTH 27015, ENGL 27015, KNOW 27015

CHSS 37400. Colloquium: Environmental History. 100 Units.
This graduate colloquium provides an advanced introduction to the vibrant field of environmental history. We will trace the evolution of this rich historiography, from first-generation classics—often focused on the American West—through to the geographical and thematic diversification of recent years. The course will give a flavor of this diversity, touching too upon influential works in emerging subfields like animal history, climate history, envirot-tech, and evolutionary history. Throughout, we will study how historians have addressed new analytical and aesthetic challenges: negotiating the insights of the natural sciences, incorporating nonhuman agency, and writing history at the vast scales of deep time and the planetary. The course is ideal for PhD students preparing a general examination field and/or designing a research paper, but is open to MA students as well.
Equivalent Course(s): HIST 57300

CHSS 37402. History and Philosophy of Biology. 100 Units.
This lecture-discussion course will consider the main figures in the history of biology, from the Hippocrates 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): KNOW 37402, HIPS 25104, HIST 35104, PHIL 23405, HIST 25104, PHIL 33405

CHSS 37600. Philosophical Problems in the Biological Sciences. 100 Units.
TBD
Equivalent Course(s): PHIL 32700, HIPS 22700, EVOL 32700

CHSS 37901. Kant’s 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) (IV)
Instructor(s): M. Boyle
Terms Offered: Winter
Equivalent Course(s): PHIL 37500, HIPS 25001, PHIL 27500, FNDS 27800

CHSS 38003. Hegel’s Phenomenology of Spirit. 100 Units.
Our goal in this course will be to read through and understand the most important chapters of Hegel’s revolutionary book. Main topics will include Hegel’s new conception of philosophy and philosophical methodology, his agreements and disagreements with Kant, the nature of self-consciousness and human mindedness in general, individuality and sociality, and the relation between philosophy and history. (V)
Instructor(s): Robert Pippin
Terms Offered: Winter
Prerequisite(s): Undergraduates should have some background in philosophy; a knowledge of Kant would be especially helpful.
Equivalent Course(s): SCTR 38003, PHIL 38202, PHIL 28202, FNDS 23410

CHSS 38400. Darwin’s “On the Origin of Species” and “The Descent of Man” 100 Units.
This lecture-discussion course will focus on a close reading of Darwin’s two classic texts. An initial class or two will explore the state of biology prior to Darwin’s Beagle voyage, and then consider the development of his theories before 1859. Then we will turn to his two books. Among the topics of central concern will be the logical, epistemological, and rhetorical status of Darwin’s several theories, especially his evolutionary ethics; the religious foundations of his ideas and the religious reactions to them; and the social-political consequences of his accomplishment. The year 2019 was the 210th anniversary of Darwin’s birth and the 160th anniversary of the publication of On the Origin of Species. (B) (IV)
Instructor(s): R. Richards
Terms Offered: Autumn
Note(s): Assignments: several short papers and one long paper.
Equivalent Course(s): HIPS 24901, PHIL 23015, FNDS 24905, PHIL 33015, HIST 34905, HIST 24905

CHSS 39405. Advanced Logic. 100 Units.
This class will explore dependent type theory, with a focus on the identity relation. Different ways of thinking of the identity relation will be examined, culminating in a presentation of the Univalence axiom and a discussion of its role as a potential foundation for mathematics. (B) (II)
Instructor(s): K. Davey
Terms Offered: Winter
Prerequisite(s): Although background material will be discussed in the first lectures, students will be expected to have some familiarity with the lambda calculus and the theory of types. Interested students without this background should contact the instructor in advance to discuss possible material to read to help prepare for the course.

Equivalent Course(s): HIPS 20905, PHIL 29405, PHIL 39405

CHSS 40201. Religion and Reason. 100 Units.
The quarrel between reason and faith has a long history. The birth of Christianity was in the crucible of rationality. The ancient Greeks privileged this human capacity above all others, finding in reason the quality wherein man was closest to the gods, while the early Christians found this viewpoint antithetical to religious humility. As religion and its place in society have evolved throughout history, so have the standing of, and philosophical justification for, non-belief on rational grounds. This course will examine the intellectual and cultural history of arguments against religion in Western thought from antiquity to the present. Along the way, of course, we will also examine the assumptions bound up in the binary terms ‘religion’ and ‘reason.’

Equivalent Course(s): CLAS 46616, HIST 66606, DVPR 46616, PHIL 43011, KNOW 40201

CHSS 40203. Biopolitics & Posthumanism. 100 Units.
Much has been written about the possibility (or impossibility) of creating an integrated political schema that incorporates living status, not species boundary, as the salient distinction between person and thing. In this course, we will explore how biopolitical and posthumanistic scholars like Michel Foucault, Hannah Arendt, Giorgio Agamben, Jane Bennett, Cary Wolfe, and Donna Haraway have acknowledged (and advocated transcending) the anthropocentric umwelt, to borrow Jakob von Uexküll’s influential term. In parallel with our theoretical readings, we will explore how actual legal systems have incorporated the nonhuman, with a particular focus on Anglo-American and transnational law. Our goal is to develop our own sense of an applied biopolitics—whether to our own research, to future legislation and jurisprudence, or both.

Instructor(s): Nicolette I. Bruner Terms Offered: Winter

Note(s): This course fulfills part of the KNOW Core Seminar requirement to be eligible to apply for the SIFK Dissertation Research Fellowship. No instructor consent is required, but registration is not final until after the 1st week in order to give Ph.D. students priority.

Equivalent Course(s): KNOW 40203, CMLT 40203, ENGL 40203

CHSS 40205. Ecological Thinking. 100 Units.
What is the environment, anyway? Is it a collection of resources? An entity in need of protection? An autonomous state of being? In this course, we will engage with writers and thinkers who have grappled with what it means to think ecologically. We will examine how environmental concerns have reached across borders to shape law, culture, and theories of knowledge on a global scale. Course themes will include environmental justice, the energy humanities, postcolonial environmentalisms, ecocriticism, ecofeminism, queer ecologies, and critical life studies. Readings will include works by Rachel Carson, William Cronon, Lawrence Buell, Helena Maria Viramontes, Christopher Stone, Rob Nixon, Tamara Giles-Vernick, Timothy Morton, and others.

Instructor(s): Nicolette I. Bruner Terms Offered: Winter

Equivalent Course(s): KNOW 40205

CHSS 40206. Assaulting the Paradigm: Franz Boas and His Contemporaries. 100 Units.
How do ideas succeed? What challenges do those who voice new ideas face as they try to gain adherents, and how do they rise to influence against the odds? This course examines how the unexpected, the unconventional, and the radically original can dethrone accepted truths. We will investigate this question through a case study of the anthropologist Franz Boas and his contemporaries, who assaulted the paradigm of race at the turn of the twentieth century. In addition to reading Boas, we will study the works of John Dewey, W. E. B. Du Bois, Sigmund Freud, Zora Neale Hurston, Claude Lévi-Strauss, Margaret Mead, and Thorstein Veblen. By tracing the mutual influence between Boas and thinkers in fields from psychology to philosophy, we can examine how knowledge is contested and propagated—including the challenges those who frame ideas face as they break away from the pack, the role of social networks in the success of concepts that go “against the grain” of conventional wisdom, and the special agency of multidisciplinary collaboration in the periods of ferment produced when authority is tested and new ideas are demanded.

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

Equivalent Course(s): KNOW 40206, ANTH 44810

CHSS 40207. Human Rights and Humanitarianism in the Modern World. 100 Units.
The related concepts of human rights and humanitarianism form the basis of contemporary ethical and political thought. Acting in the name of “humanity” is seen as unequivocally noble, and very few of us would ever claim to be anti-humanitarian or anti-human rights. Yet the moral consensus surrounding these terms obscures a contested and often disturbing history. Rather than uncritically accepting a triumphalist story of the progressive victory of human rights and humanitarianism, this course will explore how these concepts were constructed over time, paying special attention to how they were used in practice, what kind of rhetorical work they accomplished, and whose interests they served. The course will consider the origins of modern concepts of humanity, rights, citizenship, and social responsibility during the enlightenment and trace how they developed over the course of the 19th and 20th centuries. We will study the role of human rights and humanitarianism in the transformative events and processes of modern history, including the rise of nation-states, the trans-Atlantic slave trade and its abolition, imperial expansion and decolonization, the world wars, and twentieth-century
genocides. Students will leave the course with an understanding of how human rights and humanitarianism can be applied to their own research interests.

Instructor(s): Yan Slobodkin Terms Offered: Winter
Equivalent Course(s): KNOW 40207, HMRT 40207

CHSS 40208. Man and/as Machine. 100 Units.
Recently, Amazon employees fighting for better working conditions united under the slogan "We are not robots!" Recalling Karl Capek's R.U.R., which coined the word robot (from the Czech word for slave), the slogan suggests the importance of the machine as an object and a concept in relation to which human identity has been - and continues to be - defined. Throughout the history of human thought, the machine has existed as both something that we are like (for example, Descartes comparing the brain to a machine) but also as an opposite to humanity (as in the aforementioned slogan). This course will trace this tension between the machine as an 'Other' and as a metaphor for our human self from the early modern period to the present. Beginning with theoretical and philosophical writing on the importance of oppositions and binaries to human identity and language, it will trace the history of the idea of the machine as it relates to the human in texts by Rene Descartes, La Mettrie, Emile Zola, Karl Capek, Alan Turing, and Donna Haraway, among others. In addition to confronting the complexity and ambiguity of a concept that ubiquitously shapes our lives today, students in this course will also wrestle with broader humanistic questions regarding the nature of the Self, the boundaries between self and other, and the relationship between human identity and technology.

Instructor(s): Anastasia Klimchynskaya Terms Offered: Winter
Equivalent Course(s): KNOW 40208

This course critically examines concepts of "nature" and "artifice" in the formation of scientific knowledge, from the Babylonians to the Romantics, and the ways that this history has been written and problematized by both canonical and less canonical works in the history of science from the twentieth century to the present. Our course is guided by three overarching questions, approached with historical texts and historiography, that correspond to three modules of investigation: 1) Nature, 2) Artifice, and 3) Liminal: Neither Natural nor Artificial.

Instructor(s): Margaret Carlyle, Eduardo Escobar, Jennifer F. Daly Terms Offered: Spring
Note(s): This course fulfills part of the KNOW Core Seminar requirement to be eligible to apply for the SIFK Dissertation Research Fellowship. Ph.D. students must register with the KNOW 40304 course number in order for this course to meet the requirement.
Equivalent Course(s): KNOW 40304, HIST 34920, CRES 40304, HIPS 40304, GNSE 40304

CHSS 40305. The Archive of Early English Literature: Manuscripts, Books, and Canon. 100 Units.
This course will introduce students to early English literature through manuscript studies and book history. Throughout the course we will reflect on archival research as a critical practice: how do the material histories of early texts invite us to rethink the fundamental categories that organize literary history, like authorship or canonicity? The course will be both a practicum (teaching the basics of paleography, codicology, and textual editing) and an ongoing conversation about the archives of literary history, as sites of interpretation, memory, and erasure. We will meet in the Special Collections Research Center, and use the collections of the University of Chicago. We will first focus on the archives of Chicago's Chaucer Research Project and its principals, John Matthews Manly and Edith Rickert, who tried to establish an authoritative text of the Canterbury Tales in the early twentieth century. The second half of the course will focus on print culture and reading practice, with a focus on Chicago's collection of early modern commonplace books. Students will propose and pursue a research project in the U of C or Newberry Library collections, on a topic of their choosing. Students will produce a piece of scholarship that reflects both careful research in those collections and thoughtful about the place of that research in critical practice.

Instructor(s): J. Stadolnik Terms Offered: Spring
Note(s): This course fulfills part of the KNOW Core Seminar requirement to be eligible to apply for the SIFK Dissertation Research Fellowship. No instructor consent is required, but registration is not final until after the 1st week in order to give Ph.D. students priority.
Equivalent Course(s): ENGL 40305, KNOW 40305

CHSS 40306. Race, Land, and Empire: History, Intersectionality, and the Meanings of America. 100 Units.
This seminar examines the making and meaning of the United States at the intersections of race, land, and empire. It considers a set of profound historical transformations that shape American and global life today: the conquest and colonization of the vast North American continent; the expansion of slavery and, with it, a system of global capitalism; the growth of opposition to that system of labor, culminating in the Civil War; the origins, as a result of that war, of a modern American nation-state; the ethnic cleansing and resettlement of the West; and the ascension of the United States of America to global eminence as a military power. Rather than framing these events within a national narrative of the nation of Manifest Destiny or an epic struggle toward the ideal of democracy-an approach that ignores most of the continent, divides the West from the North and South, and frames history itself as progress-this course makes use of a global lens to analyze the borders between and border crossings by American communities. Our focus will be the interrelations between regions and peoples; the processes that led to alteration; and the evolution of structures that redistributed social power.

Instructor(s): Isaiah Lorado Wilner Terms Offered: Spring
Note(s): This course fulfills part of the KNOW Core Seminar requirement to be eligible to apply for the SIFK Dissertation Research Fellowship. No instructor consent is required, but registration is not final until after the 1st week in order to give Ph.D. students priority.
Equivalent Course(s): KNOW 40306, HIST 37013

CHSS 40307. Seeing and Knowing. 100 Units.
The concept of visuality attends to the ways in which things become seeable, knowable, and governable. Scholars who study optical instruments, architecture, cinema, and media have done much to show us how visual technologies change our ways of seeing. Others in the history of science study how practices of observation transform our understanding of nature-and ourselves. This comparative course analyzes regimes of visuality in different cultural and historical contexts. After a short introduction on the philosophy of visual experience and psychology of visual perception, we will investigate a series of configurations of seeing and knowing. These sites range from the history of disability to contemporary climate science, and students will be asked to contribute visual topics from their own research or disciplines for collective exploration in our seminar. Through comparative study, we will work to develop new categories or relationships for linking perception and knowledge.
Instructor(s): Alex Campolo Terms Offered: Spring
Equivalent Course(s): CMST 47007, KNOW 40307, ARTH 40307

CHSS 40308. Political Theologies of Slavery and Freedom in the Atlantic World. 100 Units.
This seminar examines the interdisciplinary form of knowledge known as "political theology" in the context of Atlantic slavery. The course will trace two major developments. First, we will explore how Christian metaphysics facilitated colonialism and slavery, focusing on the emergence of race as a theological (rather than a biological) concept and on the self-fulfilling providentialism that structured fantasies of Euro-Christian world dominance. Second, we will explore how indigenous and African cosmologies and Christianities informed enslaved resistance and abolitionism. Our readings will range from works of political theology (Augustine, Calvin, Hobbes) to early American writings (Las Casas, Ligon, Jefferson) to Black Atlantic anti-slavery texts (Wheatley, Walker, Turner). We'll consider the explorer George Best's rewriting of the biblical Curse of Ham, Francis Bacon's claim that Europe's superior technology evidenced its Chosen status, and the ideology of "hereditary heathenism" that forestalled early efforts to convert slaves to Christianity. Likewise, we'll consider the role of obeah in the Haitian Revolution, the competing attitudes toward Christian slave revolt found in fiction by Douglass and Stowe, and the continued contestation of what W. E. B. Du Bois called "the new religion of whiteness." Secondary authors may include Charles Taylor, Talal Asad, Max Weber, Colin Kidd, Rebecca Goetz, Jared Hickman, Katharine Gerbner, Jorge Cañizares-Esguerra, and J. Kameron Carter.
Instructor(s): Alex Mazzaferrro Terms Offered: Spring
Equivalent Course(s): SCTR 4308, CREC 30308, KNOW 40308

CHSS 40310. Topics in Medical Anthropology. 100 Units.
Over the past two decades, the field of "global health" has become the dominant narrative and organizing logic for interventions into health and well-being worldwide. This seminar will review theoretical positions and debates in anthropology, focusing on the decolonizing global health movement. Divergent historical legacies of colonialism and racism, institutionalized forms of structural violence, and modern-day extractive capitalism have resulted in stark global inequities, which currently stand at shockingly unprecedented levels. This seminar offers a critical lens to rethink contemporary global health's logic and practice by considering other histories and political formations, experiences, and knowledge production systems. This seminar opens up a space for generative dialogue on the future directions of what constitutes health, equity, and aid, and whether social justice is or should be the new imperative for action.
Instructor(s): P. Sean Brotherton Terms Offered: Not Offered 2021-22; may be offered 2022-23
Prerequisite(s): Strongly recommended: previous lower-division courses in the social studies of health and medicine through ANTH, HIPS, HLTH, or CHDV
Note(s): This is an advanced reading seminar. Among undergraduates, 3rd and 4th year students are given priority. Consent only: Use the online consent form via the registrar to enroll.
Equivalent Course(s): ANTH 24341, CRES 24341, KNOW 24341, CHDV 24341, HIPS 24341, HLTH 24341, ANTH 40310, CHDV 40301, KNOW 40312

CHSS 40410. Technology and Aesthetics. 100 Units.
New technologies regularly enable new mediums, styles, genres, and narrative forms as they offer us new ways to record the world, express ourselves, and tell stories. But the advent of each new artistic and literary form raises anew fundamental theoretical questions: what is the difference between an objective record of the world and an artistic rendition of it? Is what makes something art the creator's intent or the viewer's perception of it as art? That is, can something be experienced as art if it is not intended as such? What, even, is a narrative, given our minds' tendency to resolve any random pattern into a coherent series of cause and effect? And, finally, as new technologies offer endless new creative possibilities, how can we continuously recalibrate how we define art and engage with it? This class will span the 19th through the 21st centuries to explore how technological innovation has produced new literary and aesthetic forms while addressing the above questions. Its aim is two-fold: to offer a deeper understanding of literary and artistic movements and (often-canonical) texts by relating them to technoscientific concerns and contexts, and to strengthen students' foundation in literary and aesthetic theory. Thus, we will read key works of fiction that represent new aesthetic paradigms alongside scholarship that puts
them into context and theoretical texts, including those of Walter Benjamin, Michael Saler, Catherine Gallagher, and Henry Jenkins.

Instructor(s): Anastasia Klimchynskaya
Terms Offered: Spring

Equivalent Course(s): KNOW 40310, ARTV 40310, ARTH 40311

CHSS 44903. Colloquium: History of Information. 100 Units.
TBD
Equivalent Course(s): HIST 44903, HIPS 24903, LLSO 24903

CHSS 45125. Seminar: Anthropology of the Body. 100 Units.
Drawing on a wide and interdisciplinary range of texts, both classic and more recent, this seminar will variously examine the theoretical debates of the body as a subject of anthropological, historical, psychological, medical and literary inquiry. The seminar will explore specific themes, for example, the persistence of the mind/body dualism, experiences of embodiment/alienation, phenomenology of the body, Foucauldian notions of bio-politics, biopower, queering the body, and the medicalized, gendered, and racialized body, among other salient themes.

Instructor(s): P. Sean Brotherton
Terms Offered: TBD. Not offered in 2020-21
Equivalent Course(s): ANTH 45125, CHDV 45100, GNSE 45112

CHSS 45300. 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 graduate colloquium, 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
Prerequisite(s): Upper-level undergraduates with consent of instructor.
Equivalent Course(s): HIST 45300

CHSS 47000. Reading And Research: CHSS. 100 Units.
Readings and Research for working on their PhD

CHSS 47015. 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. Maestripieri
Terms Offered: Autumn
Note(s): Satisfies CHD graduate program distribution (1) Comparative Behavioral Biology
Equivalent Course(s): SCTH 47015, KNOW 47015, CHDV 47015, HIPS 27515, CHDV 27015

CHSS 47700. Reading and Research. 100 Units.
TBD

CHSS 47701. AdvRdgs: Science Studies. 100 Units.
TBD
Equivalent Course(s): ANTH 55956

CHSS 50003. Sociology of the State. 100 Units.
Through taxation, regulation, redistribution, and the provision of services, modern states profoundly shape social life and constitute a principal form of political power. This seminar will survey major theories of the state, engaging with both comparative-historical questions (pre-modern state forms, the rise of nation-states, the development of welfare states and economic policy regimes) and contemporary challenges of governance. The course provides an overview of selected current research and an opportunity for those interested in political, historical, or macro-comparative sociology to develop empirical projects with the state as an important dimension of analysis.

Instructor(s): E. Clemens
Terms Offered: Winter
Equivalent Course(s): SOCI 50003

CHSS 50100. Sem: Making Things Public. 100 Units.
TBD
Equivalent Course(s): ANTH 51015

**CHSS 50755. Race/Capital/Extraction. 100 Units.**

In the concluding chapters of Capital, Vol. 1, Karl Marx describes the origins of capitalism as an enterprise "written in the annals of mankind in letters of blood and fire." This process that Marx christened as "so-called primitive accumulation" rests fundamentally on the extraction of raw materials through colonial regimes of enclosure and the brutal exploitation of racialized labor. Nonetheless, the relationship between race and capital is not sufficiently elaborated in Marx’s oeuvre. In turn, this course will reconsider Marxist concepts and categories through a critical evaluation of the analytical domains of "race," "capital," and "extraction." Moreover, students will consider the extent to which these domains productively modify each other: Does capitalism as an economic system depend on race as its ideological substrate? Can race be understood as an extractive project founded on the violent enslavement and mercantile transit of racialized laboring subjects? How are the production of race and the accumulation of capital transformed by extractive economies of fossil fuels and metallic ores? To this end, students will consult the writings of Sylvia Wynter, W.E.B. Du Bois, C.L.R. James, Claudia Jones, Walter Rodney, and Octavia Butler.

Instructor(s): Ryan Jobson  Terms Offered: Winter. Winter 2022
Equivalent Course(s): ANTH 50755, CRES 50755

**CHSS 51310. Images and Science. 100 Units.**

TBD  
Equivalent Course(s): ARTH 41310, ENGL 51310

**CHSS 51947. Techno-Natures: Anthropology and Science Fiction. 100 Units.**

This graduate seminar explores science fiction narratives alongside anthropological theory and ethnographic practice in an attempt to develop novel theoretical and methodological interventions into questions concerning environment, governance, the body, and the relationship between humans and machines. In so doing the course aims to elaborate potential correspondences between anthropology and science fiction, with particular focus on re-conceptualizing nature in relation to post-apocalyptic narratives and crises of the Anthropocene. Following science fiction’s speculative process, the course encourages a mode of inquiry that is experimental in order to explore the ways in which science fiction might operate as ethnographic thought experiment while challenging received understandings of the nature of empirical evidence. Course material will include science fiction texts as well as films.

Instructor(s): Michael Fisch  Terms Offered: Winter. Winter 2019
Equivalent Course(s): ANTH 51947

**CHSS 52900. Wksp: Evol Proc: Bio/Lang/Cult. 100 Units.**

TBD  
Equivalent Course(s): PHIL 52800, LING 49000

**CHSS 53001. Frege. 100 Units.**

TBD  
Equivalent Course(s): PHIL 53000

**CHSS 53105. Philosophy of Mathematics. 100 Units.**

TBD  
Equivalent Course(s): PHIL 53105

**CHSS 53506. Non-Deductive Inference. 100 Units.**

This course will examine modern non-Bayesian ways of understanding non-deductive inference. Topics include the problem of induction, Pierce’s theory of abduction, inference to the best explanation, and the general connection between explanation and non-deductive inference. (III)

Instructor(s): K. Davey  Terms Offered: Winter
Equivalent Course(s): PHIL 53506

**CHSS 53709. Conceptual Change and the a-priori. 100 Units.**

(II) and (III)

Instructor(s): K. Davey  Terms Offered: Winter
Equivalent Course(s): PHIL 53709

**CHSS 54833. Engineered Worlds III: Terraformations. 100 Units.**

This experimental seminar is part of a larger series of events in 2019-20 organized under the Engineered Worlds theme. It will be linked to activities on several other campuses as well as a spring 2020 conference. It examines the effects of industrial living on the biosphere and considers the multiple ways that people have been involved in terraforming planet earth. Attending to the ways that race, gender, and class inform industrial life, the seminar will explore (via social theory, ethnography, and history) ways of thinking about planetary scale problems that have local intensities that matter. This is an advanced graduate seminar. Registration is by permission of instructor.

Instructor(s): Joseph Masco  Terms Offered: Autumn. Autumn 2019
Prerequisite(s): Consent of Instructor
Note(s): Course will involve Skyped in participants from another university.
Equivalent Course(s): ANTH 54833
CHSS 55100. The Development of Whitehead’s Philosophy of Nature. 100 Units.
Alfred North Whitehead’s philosophy has seen a resurgence of academic interest in recent years via a line of influence passing through Deleuze and Latour. Meanwhile, Whitehead’s Process and Reality (1929) has gained a reputation, not undeserved, as possibly the most challenging English language text in the philosophical canon; it is seldom read in a department of philosophy. This is a pity, since the striking originality and creative potential of the philosophy contained within is unmatched. This course offers an opportunity for a gradual approach to understanding the “philosophy of organism” of Process and Reality by first taking in the footfalls of earlier and less obtuse Whitehead texts Concept of Nature and Science and the Modern World. We will supplement these readings with newly discovered notes from Whitehead’s Harvard lectures (published just last year). These documents reveal Whitehead in meditative mood, thinking through in real time his philosophical concerns. With their help, this course will explore the striking continuity of his earlier natural philosophy with the mature philosophy of Process and Reality and so provide a more gentle ascent to the heady realms of “actual entities”, “concrescence” and “conceptual feelings” described therein. (II)
Instructor(s): T. Pashby Terms Offered: Autumn
Equivalent Course(s): PHIL 55100, KNOW 55100

CHSS 55792. Naturalized Metaphysics. 100 Units.
This course examines the feasibility of doing metaphysics in a way that is responsive to, or determined by, the results of the natural sciences. In an influential book, Everything Must Go: Metaphysics Naturalized, published just over 15 years ago, philosophers of science James Ladyman and Don Ross advocated for a newly naturalized metaphysics and argued forcefully against alternative analytic approaches to metaphysics (in a chapter later described by Kyle Stanford as “embody[ing] the most admirable characteristics of a good slap across the face”). Unsurprisingly, many analytic metaphysicians responded defensively to this assault. Aside from providing the occasion for a good philosophical dispute, however, this debate resulted both in a literature full of fascinating methodological reflections on metaphysics, and a camp of metaphysicians who decided that being responsive to the results of science might not be a bad idea, leading to the creation of a (now thriving) Society for the Metaphysics of Science. As it happens, though, the outgoing President of the Society, Kerry McKenzie, has apparently become disillusioned with the project, arguing against the possibility of metaphysics tout court in a recent paper entitled “A Curse on Both Houses.” Against this argument we will place the detailed work of self-avowed naturalized metaphysicians, including David Wallace’s award-winning book The Emergent Multiverse. (III)
Instructor(s): T. Pashby Terms Offered: Spring
Equivalent Course(s): PHIL 55792

CHSS 55978. AdvRdgs in Technoscience. 100 Units.
Advanced Readings
Equivalent Course(s): ANTH 55973

CHSS 56900. Colloquium: The Scientific Image-Formalism, Abstraction, and Realism. 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: Spring
Prerequisite(s): Consent of instructor; open to MA and PhD students only.
Equivalent Course(s): HIST 56900

CHSS 57200. Colloquium: Infrastructure in History-Theory, Materiality, and Power. 100 Units.
Dams, sewers, railroads, water pipes, power lines, barbed wire, and garbage dumps: long treated as virtually invisible, the study of infrastructure has exploded in recent years. This colloquium will explore different theoretical and methodological approaches to the history of infrastructure. What are the best methodological tools for studying the history of large technological systems? What is the relationship of infrastructure with capitalism, settler and liberal colonialism, and postcolonial development? How should we theorize and write about nonhuman agency, especially in an age of ecological crisis? While reading and critiquing recent historical classics, we will also venture across interdisciplinary boundaries to examine innovative approaches arising out of science and technology studies, anthropology, urban geography, and the environmental humanities.
Instructor(s): E. Chatterjee Terms Offered: Winter
Prerequisite(s): Open to MA and PhD students only.
Equivalent Course(s): HIST 57200

CHSS 58108. The Philosophy of Howard Stein. 100 Units.
Howard Stein’s impressive body of work is notable for its tight integration of history of science with philosophy of science. Topics include: theories of spacetime structure (Newtonian and relativistic), the conceptual structure of quantum mechanics, the methodology of science in general and the character of scientific knowledge, and
the history of physics and mathematics. Readings by Stein will be supplemented by primary historical texts and secondary philosophical literature, including selections from a forthcoming edited collection on Stein. (II)
Equivalent Course(s): PHIL 58108

CHSS 60905. Colloquium: Topics in Early Modern Europe. 100 Units.
This colloquium introduces graduate students to important themes in early modern history, providing an opportunity to get to grips with both classic interpretations and new arguments in the field. The subjects addressed will vary from year to year, depending on the faculty member leading the class and the interests of the participants. They will generally include a comparative element, however. Students will be expected to gain experience in interpreting historical evidence while appraising historiographical debates. The course will require historiography essays and may serve as an incubator for research papers.
Instructor(s): A. Johns Terms Offered: Autumn
Prerequisite(s): Open to MA and PhD students only.
Equivalent Course(s): HIST 60905

CHSS 66900. Colloquium: Reading Marx's Ecology. 100 Units.
In this course we will read Marx's own ideas in their historical context and then explore commentaries on them by Paul Burkett, John Bellamy Foster, and others to see what of Marx's ideas can be productively used in environmental history and in discussions of the Anthropocene.
Instructor(s): F. Albritton Jonsson & D. Chakrabarty Terms Offered: Spring
Equivalent Course(s): HIST 66900

CHSS 67603. Public History Practicum I. 100 Units.
In this two-quarter course students will engage in the theory and practice of public history in partnership with organizations doing community-oriented work in a variety of areas. In the winter colloquium, we will read and discuss the theory and practice of public history as well as materials relevant to the projects you will pursue in the spring. In the spring practicum, you will work in groups of 3-5 directly with one of the partner organizations. All of the project-based work will be done collaboratively; working with partners means that there will be hard deadlines. Projects and coursework will be designed to be adaptable to current public health conditions. A showcase presentation of the projects is scheduled for the end of the spring quarter, by which time you will have become acquainted with current scholarship on public history and with experience in its actual practice. The final projects will be part of your portfolio and may be listed on your c.v.
Instructor(s): M. Rossi Terms Offered: Winter
Prerequisite(s): Consent only; email Prof. Rossi by 7th wk of Aut qtr (michaelrossi@uchicago.edu) if interested in taking the course. Partner organizations/projects will be advertised in advance of that deadline; an info session will explain the sequence’s details. The Win qtr counts as a History grad colloquia.
Note(s): Every effort will be made to place students in their first choice of project; contact Prof. Rossi for further information. The course is open to PhD students in the Social Sciences, Humanities, and Divinity School at any point in their residency as well as to MA students.
Equivalent Course(s): ARTH 47603, HIST 67603, SOCI 50126, ANTH 54610

CHSS 67604. Public History Practicum II. 100 Units.
See HIST 67603
Instructor(s): M. Rossi Terms Offered: Spring
Equivalent Course(s): ANTH 54611, SOCI 50127, ARTH 47604, HIST 67604

CHSS 70000. Advanced Study: Conceptual & Historical Studies of Science. 300.00 Units.
Advanced Study: Conceptual & Historical Studies of Science