

COMMITTEE ON CONCEPTUAL AND HISTORICAL STUDIES OF SCIENCE

Chair (2024-2027)

- Fredrik Albritton Jonsson, History

Professors

- Fredrik Albritton Jonsson, History
- Lorraine Daston, Social Thought
- James A. Evans, Sociology
- Adrian Johns, History
- Emily Kern, History
- Karin Knorr Cetina, Sociology and Anthropology
- Joseph Masco, Anthropology
- Salikoko Mufwene, Linguistics
- Robert J. Richards, History
- Michael Rossi, History
- James T. Sparrow, History
- Kaushik Sunder Rajan, Anthropology

Emeritus Faculty

- Arnold Davidson, Philosophy
- Judith B. Farquhar, Anthropology
- Jan Goldstein, History
- Karl Matlin, Department of Surgery
- Robert Perlman, Pediatrics
- Stephen M. Stigler, Statistics
- 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 PhDs 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 (bethcalderson@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/>. (<https://socialsciences.uchicago.edu/admissions/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 fourteen courses at the University for a grade of B or better, including at least five CHSS courses. Students must also take 2 quarters of individual "reading and research" classes with a CHSS faculty member, leading to a research paper to be completed by the end of year 2. This paper must attain a grade of A- or higher. 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.

In addition to formal graded courses, the Committee conducts an informal, bi-weekly "Seminar on Important Things." It is intended to bring together students and selected faculty to discuss topics of general interest in the field; it should provide common ground for students whose quite varied interests might not otherwise draw them to the same classes. Topics are chosen by the participants and change from quarter to quarter. Often it is a recent book or books that is the focus of attention. First and second year students are required to participate in the Seminar, but do not receive a grade for doing so.

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.

All coursework incompletes remaining at the end of an academic year must be cleared by the start of the next academic year. All students should finish the course requirements (including the R/R courses and research paper) by the end of the 2nd year. Students are generally expected to complete their two qualifying exams by the end of the fall quarter of year 3. Students are generally expected to have passed their proposal defense by the end of the spring quarter of year 3. Every CHSS student submits to the Committee a written report on their progress by May 1 each year. If the student is in candidacy then this report should include a schedule for remaining research and writing. In the spring quarter of every year, the Committee evaluates the progress of all students. If a student is not advancing in line with the expectations, then that student may be placed on probation or asked to leave the program.

Students must then pass two qualifying exams:

1. An oral examination based on readings in the constituent disciplines of CHSS. In general, students choose to focus mainly on one discipline, such as History, Philosophy, Sociology, or Anthropology.
2. An oral examination based on a draft syllabus for an undergraduate course and teaching statement compiled by the student.

The order in which students take the exams does not matter. These exams are, in part, designed by the students themselves. In the case of each exam, the process begins when the student proposes to the Chair two faculty members to serve as an exam committee. At least one of the two must be a member of CHSS. The committees for the two exams may overlap, but they must not be identical. Following the approval of the Chair, and with the commitment of the two faculty members, the student will then work with the committee to develop reading lists for the exams. The administrative assistant of CHSS should be given a copy of the student's

approved reading list and questions for inclusion in their file. The student arranges the exact day and time of the exam in consultation with the members of the exam committee.

After all of the above requirements have been satisfied, a student may form a dissertation committee. These normally consist of three faculty members, with one designated as the chair. At least two members of the committee, one of them the chair, must be members of CHSS. The student chooses the committee, subject to the approval of the Chair of CHSS and the agreement of the faculty involved. Once the committee has been formed, the student will work with its members to develop a dissertation proposal. The student will defend the proposal in a proposal hearing. The dissertation proposal defense should happen by the end of spring quarter of year 3. The exact day and time of the hearing should be arranged by the student in consultation with the members of the committee and the Chair of CHSS. The student must inform the CHSS administrative assistant of the day and time chosen, and do so sufficiently far in advance that it is possible for the administrative assistant to notify the faculty, and get copies of the proposal to them, a full two weeks in advance of the hearing. If the proposal is approved at the hearing, the student will be considered to have advanced to "Ph.D. candidacy." At this point, a student will proceed to write the dissertation itself.

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.

Once the student submits a completed dissertation, and the chair of the dissertation committee secures agreement from all the committee members that it is ready to be defended, a dissertation defense may be scheduled. The exact day and time should be arranged by the student in consultation with the members of the committee and the Chair of CHSS. The student must inform the CHSS administrator of the day and time chosen, and give the administrative assistant both a copy of the dissertation and a short written summary (on the order of 5 to 10 pages). He or she must do so sufficiently far in advance that it is possible for the administrative assistant to notify the faculty, and get copies of the summary to them, a full two weeks in advance of the defense. The faculty present at the defense make the final decision on whether to accept the dissertation.

COURSES

The department website offers descriptions of representative courses offered in recent years: <https://chss.uchicago.edu/phd-program/degree-requirements/courses> (<https://chss.uchicago.edu/phd-program/degree-requirements/courses/>)
Please see University of Chicago Class Search (<https://my.uchicago.edu/>) for specific class schedule information.

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): CHST 20506, HIP5 20506, PLSC 20506, CCCT 30506, KNOW 30506, CEGU 20506, SOCI 20506, PLSC 30506, MAPS 30506, ARCH 20506, SOCI 30506, ENST 20506

CHSS 30574. How to Think Sociologically. 100 Units.

This course tackles the "big problem" of low sociological literacy. When faced with the problems of the world, people usually resort to economic, biological, or ideological explanations. They cite self-interest, genetically encoded drives, or some pre-given understanding of how the world works. The price of such simple frameworks is an impoverished view of the world, a lack of understanding and empathy, and a predisposition to orthodoxy or ideology. In this sense, low sociological literacy is a big problem in the world today. This course was developed in the belief that the capacity to think sociologically—that is, to understand people as socially embedded, or shaped by the situations in which they find themselves—can enrich our understanding of the world immeasurably. It can give us analytical purchase on a number of social problems, including poverty; social inequality; racial, class, and gender discrimination; urban segregation; populism and political polarization; and organizational wrongdoing (we'll discuss each of these topics in class). A sociological perspective can also transform how we engage with the world, promoting an ethics of understanding and empathy—as opposed to the ethics apparently prevalent today: judging people and insisting they change.

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

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

CHSS 30576. Social Theory for the Digital Age. 100 Units.

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

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

Equivalent Course(s): SOCI 30576, ANTH 20576, HIPS 20576, SOCI 20576, ANTH 30576

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): Lorraine Daston

Equivalent Course(s): HREL 30927, KNOW 31415, SALC 30927, SCTH 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, cCassirer, 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): SCTH 30928, KNOW 30928, HIST 45002

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*.

Instructor(s): Lorraine Daston Terms Offered: Spring, Spring 2021. Not offered 2022.

Note(s): Instructor's consent required.

Equivalent Course(s): HIST 45003, SCTH 30929

CHSS 30930. Thinking with Natural Disasters. 100 Units.

Disasters tax efforts to make sense of human experience to the limits. Whether the death and devastation are wrought by war, plague, storm, or earthquake, disasters bring an abrupt end to life as we once knew it. Such moments shift the human urge to explain and understand into overdrive. This seminar explores the efforts to make sense of disasters, from late Antiquity to the present, in philosophy, science, literature, and theology. Readings will center on specific examples of disasters, drawing upon primary sources wherever possible.

Equivalent Course(s): SCTH 20930, HIST 42202, SCTH 30930, PHIL 37330

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): SETH 30962, HIPS 20962, HIST 45005

CHSS 31000. Good Hands: Research Ethics. 100 Units.

Basic research is intended to explore and evaluate truth claims at the edge of our understanding of the natural and physical world, and it is this very quality that renders it useful as science. Yet, this often creates significant ethical questions for the research as well as for the social order in which all research takes place. Often, courses in research ethics focus on the establishment and enforcement of canonical rules of behavior, where the goal is to inform the investigator about how to follow these established rules. This course will turn to a different set of problems in research ethics. While we will begin with a foundation in the history of research ethics, reviewing the key cases that shaped the policies about which we have consensus, (human and animal subject protections; authorship, etc.) will consider the problems about which there is not yet a clear ethical course: what are the limits of human mastery? Why is research deception so prevalent? Are there experiments which are impermissible and why? What is the obligation of the researcher toward their community? How can we think clearly and ethically in situations of deep uncertainty? We will consider how moral philosophy as well as theological arguments have shaped research science and reflect on the nature, goal and meaning of basic and translational research in modernity.

Instructor(s): Laurie Zoloth Terms Offered: Autumn

Note(s): Required course for MS program in Biological Sciences. Undergraduates must petition to enroll. This course meets the CS Committee distribution requirement for Divinity students.

Equivalent Course(s): BMSC 31000, RETH 31000, KNOW 31001

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): HIST 22218, HIPS 21413, KNOW 21413, GNSE 21413

CHSS 31812. East Asian Science and Technology: Ways of Knowing. 100 Units.

This course is the first half of the East Asian Science, Technology, and Medicine series. The second part of the course will be offered in the spring quarter by Professor Jacob Eyferth. In this series, we will read major works on the history of STM in East Asia and constantly are in conversation with studies of this history in the globe.

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

Equivalent Course(s): HIPS 24812, HIST 34812, EALC 25812, HIST 24812, EALC 35812

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): Michael Paul Rossi Terms Offered: Winter. Offered in Winter 2024

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

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, HIPS 22102, ANTH 33336, KNOW 32012, CRES 32012, KNOW 22012

CHSS 32211. Magic in Early Modern Europe. 100 Units.

Magic was a constant element in early modern European culture. Almost all people in this period, from peasant to prince, accepted it as a real and powerful presence in their lives. They respected its credibility and practices in general, even if they might question particular claims. In this course we address why it was so ubiquitous, what it involved, and why, in the end, it seemed to decline. The course will introduce students to the major arguments that historians in this field have advanced, and provide critical perspectives on the interpretation of the range of practices falling under the term "magic," from witchcraft and necromancy to alchemy. Among the topics likely to be discussed are demonology, natural magic, astrology, the witch craze, the roles of memory, orality, and literacy in sustaining and qualifying magical cultures, and the relationships between magic, medicine, and science.

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

Note(s): Assignments: short papers, long papers, in-class presentations, alternative projects.

Equivalent Course(s): HIPS 22211, HIST 32211, HIST 22211

CHSS 32500. Modal Logic. 100 Units.

TBD

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: Autumn

Equivalent Course(s): HIPS 22204, KNOW 32204, HIST 28308, HIST 38308

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, KNOW 22708, HIPS 22708, KNOW 32808, HIST 22708, HIST 32708

CHSS 32820. Reading Darwin's Origin of Species. 100 Units.

In this course, we will read carefully each chapter of Darwin's Origin and discuss it in detail-especially the logic and rhetoric of his arguments and special features. Each student will takes us through a chapter of the 1st edition, noting any changes introduced in subsequent editions, and, then, a general discussion will ensue guided by the instructor.

Instructor(s): R. Richards Terms Offered: Autumn. Offered in Autumn 2024.

Equivalent Course(s): HIPS 22820, HIST 25211, HIST 35211

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: TBD. Not offered in 2023-2024.

Prerequisite(s): Prior statistics course

Equivalent Course(s): STAT 36700, HIPS 25600, STAT 26700

CHSS 33810. Big Data and AI: Global Histories, Ethics, and Justice. 100 Units.

Algorithms, Big Data, and Artificial Intelligence have become deeply ingrained in our daily lives, shaping how we interact with the world—from ChatGPT to Spotify's Smart Shuffle. These computational, statistical, and data-driven technologies have enabled remarkable breakthroughs in science and medicine and have fueled visions of an optimized, data-driven future. But alongside these advances come significant challenges. These technologies often reflect and amplify societal biases embedded in the vast datasets they are trained on, resulting in phenomena such as algorithmic bias, cognitive bias, exclusion bias, and sample bias. Moreover, are these technologies truly revolutionary? If they are built upon historical systems of thought and prejudice, how "new" are the modes of computation and data science they claim to represent? This course critically examines our current algorithmic and AI moment through the lenses of history, ethics, and justice. We will explore the global historical roots of data technologies, their ethical implications, and their impact on equity and social justice. No prior knowledge of AI, big data, or history is required. The class is discussion-based, and students are encouraged to share their own experiences with data technologies to enrich our conversations.

Equivalent Course(s): HIPS 23810

CHSS 33820. Reading William James's Principles of Psychology. 100 Units.

In this course we will read carefully the chapters of the Principles and discuss the various features of each chapter, especially the logic and rhetoric of James's arguments.

Instructor(s): R. Richards Terms Offered: Spring. Offered in Spring 2025

Equivalent Course(s): HIPS 23820, HIST 25212, HIST 35212

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): BIOS 29288, HIPS 24101

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): EALC 24225, EALC 34225, HIST 34215, HIPS 24215, HIST 24215

CHSS 34300. A History of Cell and Molecular Biology. 100 Units.

This course will trace the parallel histories of cell and molecular biology, primarily in the 20th century, by exploring continuities and discontinuities between these fields and their precursors. Through discussion, attempts will be made to develop definitions of cell and molecular biology that are based upon their practices and explanatory strategies, and to determine to what extent these practices and strategies overlap. Finally, the relevance of these definitions to current developments in biology will be explored. The course is not designed to be comprehensive, but will provide an overall historical and conceptual framework.

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

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

Equivalent Course(s): HIST 25511, HIST 35511, HIPS 25902

CHSS 34615. History of Energy in East Asia. 100 Units.

This course discusses the history of major energy sources in East Asia with a focus on coal, hydropower, and nuclear power plant. We pay close attention to both the technological side of the history of energy and how different energy sources interact with the social and political environment in Japan, China, and Korea.

Equivalent Course(s): CEGU 24615, HIPS 24615, HIST 24615, EALC 24615, EALC 35615, HIST 34615, CEGU 34615

CHSS 34813. East Asian Science and Technology: Ways of Making. 100 Units.

This is the second part of the East Asian Science, Technology, and Medicine series. In this series, we will read major works on the history of STM in East Asia and constantly are in conversation with studies of this history in the globe.

Instructor(s): J. Eyferth Terms Offered: Spring

Equivalent Course(s): EALC 34813, HIST 34813, HIPS 24813, HIST 24813, EALC 24813

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 universal aspects of human nature. In this course we read the work of several novelists such as George Eliot, HG Wells, Joseph Conrad, Jack London, Yvgeny Zamyatin, Leopold von Sacher-Masoch, Italo Svevo, and Elias Canetti, and discuss how these authors anticipated the discoveries made decades later by cognitive, social, and evolutionary psychology.

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

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

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

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. Albritton Jonsson Terms Offered: Winter

Equivalent Course(s): HIST 35014, CEGU 25014, ENST 25014, HIST 25014, HIPS 25014

CHSS 35121. The Brazil-Argentina Nuclear Cooperation Agreement and Thermolectric 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 thermolectric 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, LACS 25121, HIPS 25121

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): HIPS 22202, HIST 31103, KNOW 32201

CHSS 35205. The Scientific Image. 100 Units.

This course explores the broad field of scientific image-making, focusing in particular on problems of formalism, abstraction, and realism. What makes a "good" scientific image? What kind of work do scientific images do? What philosophical, ideological, and political constraints underwrite attempts to render the complexity of events

and entities in the world in stylized visual vocabularies? And how might we approach the work of aesthetics and style in image-making? We will examine these questions through a survey of several contemporary scholarly frameworks used for thinking about problems of representation in scientific practice, and will attend to such image-making practices as graphing, diagramming, modeling, doodling, illustrating, sculpting, and photographing, among other methods.

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

Equivalent Course(s): HIPS 25505, HIST 25205, HIST 35205

CHSS 35222. Philosophies of Life Before and After DNA. 100 Units.

What is life? Most of us learn in high-school biology that life is some combination of growth, reproduction, and animation, and that it always contains DNA. Yet upon reflection, this definition is unsatisfying. This quarter we will explore some of the philosophical implications of modern biology by reading some of the best twentieth-century thinkers on the subject. The authors we will read have distinct theories about the nature of life, but they share the belief that understanding organic life, not simply spiritual or intellectual life, but the material basis of existence, is a fundamental task for thought. What makes these texts so exciting is that they were written during a time when biology itself was undergoing a series of profound revolutions, most notably (for us), the molecular turn and the discovery of the structure of DNA. As a result of these discoveries, ultimately some thinkers came to wonder, does life exist at all? After taking this course you will have a grounding in the core philosophical problems that are raised by modern biology about the concept of life. You will gain an understanding of the ways that science, far from simply providing answers, continually furnishes us with new questions about the nature of existence, many of which may be outside the scope of science itself. This course emphasizes close reading and careful analysis of texts. You will be asked "think with" the text before you begin to critique it.

Equivalent Course(s): HIPS 25222, KNOW 39625

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, and 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 36043. The Aesthetics of Artificial Intelligence. 100 Units.

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

Instructor(s): Andre Uhl Terms Offered: Winter

Equivalent Course(s): CMST 26043, MACS 36043, HIPS 26043, CMST 36043, MADD 12043, KNOW 36043, KNOW 26043, ANTH 26043, ANTH 36043

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, Shadi Bartsch Zimmer Terms Offered: Winter

Equivalent Course(s): HIPS 26054, KNOW 36054, HIST 35103

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 Daiichi, 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 Pringle Terms Offered: Winter

Equivalent Course(s): HIPS 26059, MADD 26059, CMST 42802, SOCI 30329, 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 truism? 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—particularly 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 conce

Instructor(s): Alexander Campolo Terms Offered: Spring

Equivalent Course(s): SOCI 30331, HIPS 26065, SETH 36065, KNOW 36065

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): HLTH 26069, CHDV 36069, KNOW 36069, EDSO 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): HIST 35015, KNOW 36071

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): GNSE 36080, HIPS 26080, SOCI 30345, 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 texts 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 36311. Aspirations of Justice. 100 Units.

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

Instructor(s): Kaushik Sunder Rajan

Equivalent Course(s): RDIN 22311, ANTH 36311, AASR 36311, HIPS 26311, CRES 22311, CCCT 36311

CHSS 36815. History of Science and Technology in South Asia. 100 Units.

This course is an introduction to a growing literature on the production of scientific knowledge in and about South Asia. Moving away from an earlier historiography, which treated science as a black-boxed, essentially European kind of knowledge that was diffused to the rest of the world, we will pay special attention to the role indigenous and vernacular forms of knowledge played in making modern science. We will range from the early modern period to the contemporary, and deal with a range of topics such as agriculture, industry, communications, biomedicine, water, religion, and capitalism.

Instructor(s): S. P. Kumar Terms Offered: Winter

Equivalent Course(s): SALC 36815, HIST 26815, SALC 26815, HIPS 26815, HIST 36815

CHSS 37011. Histories of Women in Science. 100 Units.

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

Instructor(s): Kristine Palmieri Terms Offered: Winter

Equivalent Course(s): HIST 27806, PHSC 27010, GNSE 23162, KNOW 37011, GNSE 37011, HIPS 27011, ASTR 23700

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): ENGL 27015, HLTH 27015, KNOW 37015, KNOW 27015, HIPS 27015

CHSS 37260. Knowledge of Man, Society, and Culture in Europe, 1700-1914. 100 Units.

What makes us human? What is society and how do societies evolve? What is culture and how do we study it? These kinds of questions spurred the development of disciplines ranging from Anthropology, Sociology, and Linguistics to History, Psychology, and Religious Studies today. But in the period from the Enlightenment to the First World War, they were part of an emerging complex of entangled human sciences, which endeavored to answer questions about humanity, its origins, its nature, and its development. Moving from the Scottish Highlands and French Salons to German Universities and British India, this course takes a transnational and transdisciplinary approach that investigates how the answers to these questions changed over time. Students will also examine how distinct modes of scholarship and different knowledge making practices grew out of specific socio-political contexts and trace the development of concepts such as "progress," "civilization," "modernity," and even "science" itself. In so doing, this course not only asks students to question what it means to belong to, or work within, a discipline but also to reflect on the ways in which our modern taxonomy of knowledge dictates what it is possible to know.

Instructor(s): Kristine Palmieri Terms Offered: Spring

Equivalent Course(s): HIPS 27260, HIST 32709, HIST 22709, KNOW 37250

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): Thomas Pendlebury Terms Offered: Autumn

Equivalent Course(s): PHIL 27500, PHIL 37500, HIPS 25001, FNLD 27800

CHSS 38307. Global Environmental Humanities. 100 Units.

This course is an introduction to the interdisciplinary field of environmental humanities, which calls on us to study the global environment, and the threats posed by globalization and climate change, using the tools of history, cultural studies, philosophy, and literature. Reading texts from these and other disciplines, we will attend to the ways that "environment" registers in political, aesthetic, and social life across the globe. Sample authors: Fernand Braudel, William Cronon, Dipesh Chakrabarty, Amitav Ghosh, Ursula Heise, Joseph Masco, Jed Purdy, Anna Tsing.

Instructor(s): Isabel Gabel Terms Offered: Autumn. Offered in Autumn 2023

Equivalent Course(s): KNOW 28307, KNOW 38307, HIPS 28307, HIST 25422, ENST 28307, CEGU 28307

CHSS 38309. Natural Science in Aristotle and His Predecessors. 100 Units.

'Unlike art, science destroys its past,' is how Thomas Kuhn (1969) once partly distinguished the sciences from the arts. The scientific heroes of old get removed by progress and new breakthroughs. In this class, we examine Aristotle's relationship to his predecessors in the first book of his foundational treatise on natural science, the Physics. We ask how Aristotle takes himself to make progress over his predecessors and how the answer to that question shapes our understanding of Aristotle's project in 'physics.' To answer these questions, we will develop a rich and complex understanding of Aristotle's conception of natural scientific inquiry and of the epistemological and methodological assumptions that drive his engagement with his predecessors. In doing so,

we will be taking a critical look at the long-standing assumption by readers of Aristotle that his engagement with his predecessors in Physics I uniformly belongs to the dialectical stage of inquiry.

Instructor(s): D. Kranzelbinder Terms Offered: Winter. Winter 2025

Equivalent Course(s): HIPS 28309

CHSS 39001. Counterhistories of Mathematics and Astronomy. 100 Units.

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

Instructor(s): Prashant Kumar Terms Offered: Spring

Equivalent Course(s): HIPS 27010, SALC 39000, ASTR 29000, HIST 35305, KNOW 39000, ASTR 39000

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): PHIL 43011, DVPR 46616, CLAS 46616, KNOW 40201, HIST 66606

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 Üexküll'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): ENGL 40203, CMLT 40203, KNOW 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): HMRT 40207, KNOW 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

CHSS 40304. Between Nature and Artifice: The Formation of Scientific Knowledge. 100 Units.

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 P. 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): HIST 34920, HIPS 40304, KNOW 40304, CRES 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 thoughtfulness 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): KNOW 40305, ENGL 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 about the idea 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 foci will be the interrelations between regions and peoples; and 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): HIST 37013, KNOW 40306

CHSS 40307. Seeing and Knowing. 100 Units.

The concept of visibility 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 visibility 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): ARTH 40307, CMST 47007, KNOW 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 Mazzaferro Terms Offered: Spring

Equivalent Course(s): SCTH 40308, KNOW 40308, CRES 30308

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 41920. The Evolution of Language. 100 Units.

This course is designed to review critically some of the literature on the phylogenetic emergence of Language, in order to determine which questions have been central to the subject matter, which ones have recurred the most, and to what extent the answers to these are now better informed. The class will also review new questions such as the following: What is the probable time of the emergence of modern language(s)? Should we speak of the emergence of Language or of languages, in the plural?

Instructor(s): Salikoko Mufwene Terms Offered: Winter

Equivalent Course(s): COGS 22007, PSYC 41920, LING 41920, CHDV 41920, EVOL 41920, ANTH 47305, LING 21920, CHDV 21920

CHSS 43204. Climate change, history and Social Theory. 100 Units.

This course considers some of the major approaches to climate change and society that have been elaborated by contemporary social and environmental theorists. Key topics include the legacies of environmental thought in classical social theory; the histories and geographies of environmental crises under capitalism; the conceptualization of "nature" in relation to societal dynamics; the role of capitalism and fossil capital in the production of "metabolic rifts"; questions of periodization and associated debates on the "Anthropocene," the "Capitalocene" and the "Plantationocene"; the interplay between urbanization and climate emergencies; the (geo)politics of decarbonization; insurgent struggles for climate justice; and possible post-carbon futures.

Instructor(s): N. Brenner, F. Albritton Jonsson Terms Offered: Autumn

Prerequisite(s): Some previous course work in classical and/or contemporary social theory, preferably at the graduate level

Equivalent Course(s): SOCI 40244, CCCT 40244, CEGU 40244, HIST 43204, PLSC 40244

CHSS 44806. Creation and Human Creatures: Theological Explorations. 100 Units.

This course will explore the intersection between theological symbols (doctrines) of creation and human creatures. How are macrocosm and microcosm drawn into theological reflection and construction? How have human and other living creatures and nature served as reference points, exemplars, even counter examples for interpreting divine creation and the enhancement (or diminishment) of life? Explorations will include traditional theological themes of human creatures as the imago Dei and of nature as a mirror of God's providence and majesty, as well as philosophical and literary texts on human and animal nature, the moral sense of nature, and cultivation and devastation.

Instructor(s): Kristine Culp Terms Offered: Spring

Note(s): This course meets the CS Committee distribution requirement for Divinity students.

Equivalent Course(s): RLST 24806, THEO 44806

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

Equivalent Course(s): CHDV 45100, ANTH 45125, GNSE 45112

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. Maestriperi Terms Offered: Winter

Note(s): Part of Study Abroad program in Paris. Satisfies CHD graduate distribution (1)

Equivalent Course(s): KNOW 28015, CHDV 27015, HIPS 27515, KNOW 47015, SETH 47015, CHDV 47015

CHSS 47700. Reading and Research. 100 Units.

TBD

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 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

Equivalent Course(s): CRES 50755, ANTH 50755

CHSS 51310. Images and Science. 100 Units.

TBD

Equivalent Course(s): ENGL 51310, ARTH 41310

CHSS 51725. The Irreducibility of the Mind. 100 Units.

Cognitive science, and much allied work in metaphysics and epistemology, adopts a 'naturalistic' orientation to the mind: they treat thought, perception, reasoning, intentional agency, and so on as phenomena tractable to natural-scientific explanation. On the other hand, some of the deepest ideas that emerged from 20th century philosophy stand in apparent opposition to this orientation. In various way, they suggest that a 'naturalism' of the mind does not make sense. In this seminar we will do our best to understand and adjudicate this dispute. (II)

Instructor(s): Jason Bridges Terms Offered: Spring

Equivalent Course(s): PHIL 51725

CHSS 51802. Climate Ethics. 100 Units.

Anthropogenic climate change is the largest challenge facing human civilization. Its physical and temporal scale and unprecedented complexity at minimum require extensions of existing ethical systems, if not new ethical tools. This course will begin by examining natural and social-scientific studies of climate change and its current and predicted effects (e.g. the reports of the Intergovernmental Panel on Climate Change and the Stern Review). Most of the course will examine how religious and philosophical ethical systems respond to the vast temporal and spatial scales of climate change and its inherent uncertainties. For instance, common principles of environmental ethics such as justice and responsibility are often reimagined in climate ethics. We will also explore the degree to which the assumptions of many modern Western ethical systems including linear causality, an emphasis on individuals, and purely rational decision-making foster or inhibit climate ethics. In the course, we will take a comparative approach to environmental ethics and may examine perspectives from secular Western philosophy, Christianity (Catholic and Protestant), Buddhist, and Islamic thought.

Instructor(s): Sarah Fredericks Terms Offered: Spring

Note(s): This course meets the CS Committee distribution requirement for Divinity students. Undergraduates must petition to enroll.

Equivalent Course(s): CEGU 51802, KNOW 51802, RETH 51802

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

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 53991. Religion and Psychoanalysis. 100 Units.

Freud postulated that many cultural activities with no apparent connection to sexuality, including religious practice and belief, have their origin in the sexual instincts. Sublimation, which describes the process by which the sexual instincts are diverted to nonsexual aims or objects, plays a crucial role in Freudian metapsychology. And yet Freud never managed to articulate a coherent account of this process, and thus he failed to provide a concept of sublimation as such. In this class we will study the role of sublimation in Freudian metapsychology with specific reference to the theme of religiosity. In examining how sublimation is taken up by others (e.g. Klein, Lacan) we will also consider whether this concept affords a novel understanding of religion.

Instructor(s): Ryan Coyne Terms Offered: Spring

Note(s): This course meets the CS Committee distribution requirement for Divinity students. Undergraduates must petition to enroll.

Equivalent Course(s): THEO 53991, KNOW 53991, DVPR 53991

CHSS 54320. Contagion: Ethics and the Other. 100 Units.

This is a graduate seminar which explores the complex ways that epidemic disease has shaped and been shaped by religion, philosophy, literature, and the emerging sciences of modernity. Contagion has long been a central moral problem in theology and philosophy, the organizing terror of all human civilization because of the sudden, stochastic, and terrifying spread of visible, embodied changes. Contagion is our most intimate companion:

Plague as punishment, as test, and as a sign of divine judgement have long been a topic of sacred texts, defining how societies thought about, duties, telos, meaning, and salvation. Contagious diseases raise stark ethical choices as well. The uses of quarantine as a defense, the establishment of isolation, and the fear of the stranger mark the historical responses to plagues. In this course, we will consider both the science behind the plagues that have torn across the course of human history, and the sacred and secular textual responses to them. Plagues leave behind cultural artifacts and traces of the puzzle of human behavior in response to epidemics: compliance, resistance imagination, and innovation. We will explore this theme in all its complexity, focusing on the textual and literary responses to the challenge of contagion.

Instructor(s): Laurie Zoloth Terms Offered: Winter

Note(s): This course meets the CS Committee distribution requirement for Divinity students.

Equivalent Course(s): KNOW 54320, RETH 54320

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 footholds 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): KNOW 55100, PHIL 55100

CHSS 56602. Materials and Materiality. 100 Units.

Things have gathered more interest among scholars in both history and beyond. Considering this new focus on the materials and the materiality of things, some describe this trend as a "material turn" from the previous focus on cultural history and the analysis of discourses. How do historians in different areas write about things? What aspects of materiality do they focus on? In this course, we will explore the nascent "material turn" by diving into a few selected and representative works that look into the "thingness" behind materials. Instead of seeing this focus on materiality as separate from earlier approaches, this course hopes to incite discussions on how different scholarship's focus on materiality contribute to, engage with, and complicate other scholarship. The assignment for this course includes a combined book review of about 1000-2000 words that brings three recent books on electricity into a dialogue with each other. For the final project, students will write a research paper of about

20-25 pages long on a specific thing or a discussion of the materiality of their choice after consultation with the instructor.

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

Equivalent Course(s): HIST 56602, CEGU 56602, EALC 56602

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 57300. 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, enviro-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.

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

Equivalent Course(s): HIST 57300, CEGU 57300

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 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): L. Auslander Terms Offered: Winter

Prerequisite(s): Students must take Public History Practicum I (HIST 47603) and II (HIST 47604) in sequence.

Equivalent Course(s): ANTH 34611, SOCI 50126, RDIN 47603, HIST 47603, ARTH 47603

CHSS 67604. Public History Practicum II. 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.

Terms Offered: Spring

Prerequisite(s): Students must take Public History Practicum I (HIST 47603) and II (HIST 47604) in sequence.

Equivalent Course(s): HIST 47604, RDIN 47604, SOCI 50127, ANTH 34612, ARTH 47604

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

Advanced Study: Conceptual & Historical Studies of Science

