SCIENCE AND TECHNOLOGY STUDIES (Div II)
Chair: Professor Jason Josephson Storm

Advisory Committee

- Matt E. Carter, Associate Professor of Biology; affiliated with: Neuroscience Program; on leave Fall 2021
- José A. Constantine, Assistant Professor of Geosciences
- Laura D. Ephraim, Associate Professor of Political Science; on leave Fall 2021
- Ezra D. Feldman, Visiting Assistant Professor of English; affiliated with: Science & Technology Studies, Graduate Program-Art History
- Laura J. Martin, Assistant Professor of Environmental Studies and Faculty Affiliate in History; affiliated with: History Department; on leave Spring 2022
- Bojana Mladenovic, Professor of Philosophy
- Eli Nelson, Assistant Professor of American Studies
- Jason Josephson Storm, Professor of Religion, Chair of Science & Technology Studies; affiliated with: Science & Technology Studies

Science and Technology Studies (STS) is an interdisciplinary program concerned with science and technology and their relationship to society. The community of scholars in the Williams STS program apply methods from diverse disciplines. They seek to illuminate the historical, social, cultural, ethical, and political dimensions of science and technology. By bridging humanities, social sciences, science, and technology, our program seeks to build relationships across campus.

The STS program at Williams takes a broad umbrella approach to the discipline. Topics include: sociology of knowledge production; philosophy of science; history of science and technology; the economics of research and development; science and public policy; technology and the environment; scientometrics; interactions between humans and technology; science fiction and other artistic depictions of science and technology; boundaries between pseudo-science, religion, and science; and the broader ethical issues evoked by science and technology.

Science and Technology Studies concentrators must complete a total of six courses. Five of these must have the STS prefix. Students must take: Introduction to STS; Senior Seminar; and three electives, of which at most two can originate in the same department. In addition, Science and Technology Studies concentrators must complete one course with a laboratory or field work component in natural, social, or computer science; this course may also satisfy one of the divisional distribution requirements.

Students may petition the Chair for recognition of a course as an STS course even if it is not cross-listed in STS. The petitions will be approved or denied on a case-by-case basis.

The program is administered by a chair and an advisory committee of faculty who teach in the program. Students who wish to enroll normally register with the chair by the fall of their junior year.

STUDY ABROAD

FAQ

Can your department or program typically pre-approve courses for major/concentration credit?

Yes, in some cases, if appropriate course information is available in advance (e.g. syllabi and/or course descriptions), though students should be sure to contact the department.

What criteria will typically be used/required to determine whether a student may receive major/concentration credit for a course taken while on study away?

Complete syllabus and course description, including readings/assignments.

Does your department/program place restrictions on the number of major/concentration credits that a student might earn through study away?

No.

Does your department/program place restrictions on the types of courses that can be awarded credit towards your major?

No.

Are there specific major requirements that cannot be fulfilled while on study away?

No.
Are there specific major requirements in your department/program that students should be particularly aware of when weighing study away options? (Some examples might include a required course that is always taught in one semester, laboratory requirements.)

Yes. Be sure to check record of enrollment in classes with laboratory of fieldwork components to satisfy program.

Give examples in which students thought or assumed that courses taken away would count toward the major or concentration and then learned they wouldn’t:

None to date.

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STS 101  (S)  STEM's Empire: A Critical Introduction to Science and Technology Studies  (DPE)
Who follows the science? The COVID-19 pandemic has upended many's beliefs in the rationality of scientific enterprise, exposing the institutions, power dynamics, and inequalities that shape its constitution. Meanwhile, the "tech fix" approach to ending the pandemic solely through vaccination has produced staggering death tolls compared to non-pharmaceutical interventions like masking, social distancing, and contact tracing implemented in places such as Liberia, Rwanda, and the Asia-Pacific, which have contained COVID-19 with relative success. As feminist and postcolonial scholars have long told us, the power of science often operates through division, producing dichotomies such as West/non-West, modern/traditional, global/local, developed/underdeveloped, and science/non-science. It is inextricably linked to the colonial conquest of territories, bodies, and minds. In this course, we will explore scientific practice and the production of scientific knowledge through the metaphor of empire: How might we understand scientific claims to truth, knowing that colonial relations of power are still embedded in our identities and institutions, and in the hegemonies that shape our world? We will explore this question by engaging with feminist and postcolonial critiques of science, studying controversies over the environment, medicine, indigenous knowledge, diversity in STEM, and other topics. We will pay particular attention to the situated processes out of which claims to the universal or global are made, asking who is left out of making such claims as well. An introductory course, students will be exposed to key debates in STS and learn critical tools for analyzing science and technology in an unequal but interconnected world.

Requirements/Evaluation:  Several short response papers, mid-term paper, final project

Prerequisites:  none

Enrollment Limit:  14

Enrollment Preferences:  first-years and sophomores

Expected Class Size:  14

Grading:  yes pass/fail option,  yes fifth course option

Distributions:  (D2)  (DPE)

Difference, Power, and Equity Notes:  This course will demonstrate how issues of power shapes the practices of empiricism.

Spring 2022
SEM Section:  01  TR 11:20 am - 12:35 pm  Shoan Yin Cheung

STS 102  (F)  Breeding Controversy: Technologies and Ideologies of Population Control  (DPE)
Cross-listings:  WGSS 103  STS 102

Primary Cross-listing

What is "good breeding?" For whom is birth control "liberating?" This course traces the surprising ways that concepts of population growth and decline from the natural sciences come to inform social discourses on "overpopulation" in the twentieth and twenty-first centuries. Science and politics mix to decide: who should be able to reproduce--and, consequently, who might not be born--so that some may live more prosperously? By studying the history of eugenics movements, contraceptive technologies in the context of development, and the racialized cultures of reproductive medicine, we will analyze how scientific ways of thinking about human lives reflect and reproduce social inequities. We will use the tools of feminist technoscience studies to understand how science, culture, power, and politics intersect to create new technologies of "selection" that are far from natural. New literatures in critical race STS, black feminist thought, and critical theory will inform our discussions.

Requirements/Evaluation:  Weekly paper or response and in-class debate.

Prerequisites:  None.

Enrollment Limit:  10
Enrollment Preferences: Freshmen. If over-enrolled, students will submit a short paragraph stating their interest in the course.

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:
WGSS 103 (D2) STS 102 (D2)

Difference, Power, and Equity Notes: This course will demonstrate how scientific knowledges also reflect biases organized along lines of social difference, including race, gender, class and nation. Readings in critical race theory will give students a deeper appreciation of these issues.

Attributes: PHLH Reproductive, Maternal and Child Health

Fall 2021
TUT Section: T1 TBA Shoan Yin Cheung

STS 106 (F) Being Human in STEM (DPE)

Cross-listings: PHYS 106 GEOS 106 STS 106

Secondary Cross-listing
This course combines academic inquiry and community engagement to investigate the themes of diversity and social climate within STEM (science, technology, engineering and mathematics) disciplines. Students will examine how diverse identities including but not limited to gender, race, disability, sexuality, national origin, socioeconomic status, religion, and ethnicity shape the STEM experience both at Williams and nationally. We will ground our understanding through critical reading of primary scholarly research on topics such as implicit bias, identity threat, and effects of team diversity on excellence. From there, we will execute small group projects. Students will design, execute, and evaluate interventions that relate to the course goals and that have direct relevance to Williams students, faculty, and staff. For example, a student group could implement a survey of minoritized STEM students, or create a qualitative interview-based assessment of how socioeconomic status impacts students' abilities to participate in STEM fields. Course work includes weekly readings, reflective/opinion writing, in class discussion, and the development and presentation of a group project.

Class Format: class discussions, group project work (out of class time required)

Requirements/Evaluation: short response papers, class discussion participation, leading class discussions, group work, and final project

Enrollment Limit: 15

Enrollment Preferences: DIV III majors; statement of interest may be requested

Expected Class Size: 15

Grading: no pass/fail option, yes fifth course option

Unit Notes: does not count towards GEOS or PHYS major credit

Distributions: (D3) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:
PHYS 106 (D3) GEOS 106 (D3) STS 106 (D2)

Difference, Power, and Equity Notes: This course explicitly addresses the intersection of marginalized identities and the STEM experience. Students will learn how to critically address how issues such as gender, race, ethnicity, and disability impact participation in and the experience of STEM fields. For example, students will read and critique literature documenting bias in STEM fields, and will also learn about and create interventions that can address these biases.

Not offered current academic year

STS 115 AIDS: The Disease and Search for a Cure

Since the discovery of the human immunodeficiency virus (HIV-1) in 1983, modern techniques of molecular biology have revealed much about its structure and life cycle. The intensity of the scientific investigation directed at HIV-1 is unprecedented in history. We now know more about this virus than any other known pathogen. However, the early optimism concerning the prospects for an effective AIDS vaccine has now waned and HIV strains that are resistant to drug therapies are common. We are now three decades into the AIDS pandemic and the World Health Organization estimates that there are more than 34 million HIV-infected persons worldwide. After an introduction to chemical structure, we examine the molecular biology of the HIV virus, the molecular targets of anti-HIV drugs, and the prospects for a cure. We look at how HIV-1 interacts with the human immune system and
discuss prospects for developing an effective HIV vaccine.

Class Format: three hours per week

Requirements/Evaluation: problem sets, a midterm, quizzes, a final exam, and a presentation/discussion

Prerequisites: none; designed for the non-science major who does not intend to pursue a career in the natural sciences

Enrollment Limit: 45

Expected Class Size: 45

Grading:

Distributions: (D3)

Attributes: PHLH Biomedical Determinants of Health

Not offered current academic year

STS 135 (F) Politics after the Apocalypse

Cross-listings: STS 135 PSCI 135

Secondary Cross-listing

What shape will politics take after the apocalypse? Even before the coronavirus pandemic gave us reason to wonder if we are, in fact, living through an apocalypse, speculation about the end of the world and its aftermath pervaded recent television, movies, literature, philosophy, and critical theory. In this class we draw these works into conversation with political theories of the "state of nature" and "state of exception" to better understand what political possibilities are opened and foreclosed in times of crisis. What aspects of politics will endure the ravages of fire or pestilence? What new political realities might emerge on ground cleared by disaster? What does it say about pre-pandemic politics that we were so eager to consume stories of states falling and bands of survivors scraping together a nasty, brutish and short existence? And how will the unfolding pandemic change how we respond to these stories? Class will be driven primarily by discussion, typically introduced by a brief lecture.

Class Format: Class meetings will be conducted remotely using zoom.

Requirements/Evaluation: two 3-5 page papers, one short story (7-15 pages and including an explanatory cover letter), contributions to a class project documenting and analyzing the pandemic, and class participation

Prerequisites: first- or second-year students, or permission of instructor

Enrollment Limit: 12

Enrollment Preferences: first-year students

Expected Class Size: 12

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 135 (D2) PSCI 135 (D2)

Attributes: PSCI Political Theory Courses

Not offered current academic year

STS 142 (F) AlterNatives: Indigenous Futurism and Science Fiction (DPE)

Cross-listings: AMST 142 STS 142

Secondary Cross-listing

Indigenous people occupy a paradoxical position in time. On one hand, as survivors of genocide and occupation, they are already post-apocalyptic, occupying what many Indigenous thinkers argue is "our ancestor's dystopia." On the other hand, Indigenous people are relegated to the past in settler and colonial discourses, which, in relying heavily on notions of contact, authenticity, and vanishing, preclude Indigenous peoples from not only futurity, but from modernity and associated visions of science and technology too. This tutorial explores how Native science fiction imagines and enacts futurity from this paradoxical Indigenous temporality. Looking across numerous national and transnational Indigenous contexts, in addition to different kinds of media, including short stories, novels, visual art, video games, films, and online platforms like second life, this tutorial foregrounds the ways in which science fiction functions as a mode of Indigenous theory, knowledge production, and claiming of not only the future but of the past and present, as well. Pairing media readings with works in science fiction and Indigenous studies, we will explore the role of indigeneity in the founding and tropes of European and settler science fiction, Native "slipstream" and eco SF, post-post-apocalyptic thinking, space travel and frontiers, Native pessimism, and
Indigenous technologies and epistemologies cast into the future. We will pay careful attention to the political stakes of these narratives and expression for Indigenous sovereignty and self-determination.

Requirements/Evaluation: attendance and participation, weekly 2- to 4-page written responses to class readings, short fiction prompts, and your partner’s writing

Prerequisites: permission of instructor

Enrollment Limit: 10

Enrollment Preferences: American Studies majors and Science and Technology Studies concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

AMST 142 (D2) STS 142 (D2)

Difference, Power, and Equity Notes: This course will underscore the ways in which structures like race, gender, sexuality, and colonialism are deeply imbedded in every form of cultural production, and will highlight how imagining the future otherwise has real impact and import in the lives and political existence colonized people.

Attributes: AMST Arts in Context Electives AMST Comp Studies in Race, Ethnicity, Diaspora

Not offered current academic year

STS 153 (S) Androids, Cyborgs, Selves (WS)

Cross-listings: STS 153 ENGL 153

Secondary Cross-listing

In this expository writing course, we will analyze and argue about how near-human and partly human bodies appear in fiction and film. When do these bodies improve the spaces in which they appear? When do they threaten them? How are they gendered, how are they raced, and why? What do they desire? Authors in different cultural and technological contexts have imagined not-quite-human selves for different ends and in different ways. Together we will develop our ideas on these topics in clear, strong prose. We will also ask how artists have cast human identities into foreign materials and media, and study the distortions and revelations that result. During museum visits at WCMA, students will use examples of self-portraiture, electrified bodies, and aspirational bodies to explore the representation, imitation, and abstraction of selves. Because this is an expository writing seminar, we will spend half or more of our class time discussing and practicing writing skills.

Requirements/Evaluation: five response papers (500 words); four essays (1200-1500 words, each in two drafts); class participation

Prerequisites: none

Enrollment Limit: 12

Expected Class Size: 12

Grading: no pass/fail option, no fifth course option

Distributions: (D1) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 153 (D2) ENGL 153 (D1)

Writing Skills Notes: This expository writing course is dedicated to facilitating real improvement in students’ written work. Students write five response papers and four five-page essays (in two drafts) over the course of the semester, receiving substantial instructor feedback on all. Students will practice: drafting, revising, and responding to critique; writing appropriately for given occasions and audiences; grounding their writing in close, analytical reading; and acknowledging sources.

Not offered current academic year

STS 208 (S) Designer Genes (DPE) (WS)

Cross-listings: ENGL 208 STS 208 AMST 206 WGSS 208

Secondary Cross-listing

In this course, we explore cultural texts that attempt to come to terms with—or exploit—the revolution in contemporary genetics with a particular focus
on gender, race, class, and sexuality. The mapping of the human genome in 2001 opened incredible opportunities for medicine, law, and society, but it also, as Alice Wexler has written, "opened a vast arena for contests of power over what it means to be human, who has the power to define what is normal, [and] who has access to what resources and when." Wexler was writing before the final sequencing of the human genome. Now we have CRISPR technology, ushering in a new, more pressing set of ethical concerns. We are currently in the midst of a "global race to genetically modify humans," as the anthropologist Eben Kirksey has documented in his new book The Mutant Project. How will we come to define the human? Who gets to decide? Our writers and filmmakers make clear that genetic medicine cannot be thought apart from a profit-driven American health care system or family and gender dynamics. Joanna Rudnick's documentary In the Family, for instance, explores the personal and political issues associated with hereditary breast cancer and the patenting of genes. Octavia Butler's Afro-futurist novel Dawn explores black female sexuality, reproduction, and the survival of the species in her character's encounter with a genetically enhanced alien species. The film Gattaca shows us a fully realized dystopian society where genetically modified humans are the norm—a society that now "has discrimination down to a science." The transgender artist Tamara Pertamina, on the other hand, "hopes to decolonize the science of genetic engineering," as Kirksey has written, with her performance artist projects. Our texts come from a number of different genres, including the memoir, science fiction, film, documentary, art, and non-fiction writing at the intersections of science, medicine, philosophy, anthropology, and law.

Requirements/Evaluation: Two short analysis papers (4-5 pages), digital humanities Story Map assignment/art analysis, discussion posts (5 pages), short presentation, longer final researched paper/project (8-10 pages).

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Women's, Gender, and Sexuality Studies, American Studies, English majors

Expected Class Size: 19

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

ENGL 208 (D1) STS 208 (D2) AMST 206 (D2) WGSS 208 (D2)

Writing Skills Notes: Writing skills taught through a series of assignments evenly spaced throughout the semester: weekly p/f discussion posts; two four-to-five-page graded papers; one descriptive digital assignment (the Story Map); and a final researched paper (8-10 pages)—written in stages. Students receive critical feedback on written assignments through conferences and Google Docs and on final graded assignments within one week with sufficient time between assignments to improve the next.

Difference, Power, and Equity Notes: This course asks students to think deeply about questions of social justice in the context of the revolution in modern genetics. Race, class, gender, and sexuality all play a role in who has access to new life-saving technologies, and how these technologies are used. This course employs critical tools (feminist and queer theory, ethics’ case studies, close reading) to help students question and articulate the social injustices at play in scientific research and bioengineering.

Attributes: AMST Critical and Cultural Theory Electives ENGL Criticism Courses ENGL Literary Histories C WGSS Racial Sexual + Cultural Diversity Courses

Spring 2022

SEM Section: 01 TR 9:55 am - 11:10 am Bethany Hicok

STS 209 (S) Philosophy of Science

Cross-listings: STS 209 PHIL 209

Secondary Cross-listing

It is a generally held belief, in our time and culture, that science is the best source of our knowledge of the world, and of ourselves. The aim of this course is to examine the origins, grounds, and nature of this belief. We will analyze and discuss various accounts of scientific method, structure and justification of scientific theories, scientific choice, change, and the idea that scientific knowledge is progressive in a cumulative way. The course will begin with the “received view” of science, advanced by logical empiricists, which assumes the objectivity and the rationality of science and argues that induction is the main scientific method. We will then discuss philosophies of science which emerged out of various criticisms of this view - especially those of Popper, Lakatos, Kuhn and Feyerabend - and the challenges to the assumptions of scientific objectivity and rationality their works provoked. This discussion will lead us to the relativist and social-constructivist views developed within contemporary science studies. Finally, we will analyze the current debate about cognitive credentials of science and about proper approaches to the study of science, which came to be known as “the science wars.”
Class Format: short lecture component in each class

Requirements/Evaluation: class attendance, preparedness and participation; two short assignments; three five pages long papers, the last of which will be the final paper, due a week after the end of classes

Prerequisites: one PHIL course, or two STS courses, or declared major in a natural science, or permission of the instructor

Enrollment Limit: 19

Enrollment Preferences: Philosophy majors and prospective majors, then Div III majors.

Expected Class Size: 10-15

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 209 (D2) PHIL 209 (D2)

Attributes: COGS Related Courses PHIL Contemp Metaphysics + Epistemology Courses

Spring 2022

SEM Section: 01   MR 2:35 pm - 3:50 pm   Bojana Mladenovic

STS 210  (S) Networks of Power: Technology in Human Affairs

Cross-listings: STS 210 SOC 210

Secondary Cross-listing

Do we control our technologies, or do our technologies control us? This course will explore different philosophies of technological progress, particularly the constructivist and determinist theories, by examining major technological systems that shaped modern society, such as the telegraph system, the electric grid, radio and television broadcasting, and the internet. Each of these innovations entailed the construction of a complex network designed to serve a mix of public and business interests, and each resulted in wide-ranging and often unforeseen changes to people's lives. Guided by pertinent readings in the history and philosophy of technology, we will look critically at the forms and consequences of technological change, seeking answers to a series of complex and important questions: Is the course of technological progress an inevitable byproduct of scientific and engineering advances, or is it contingent on social and political circumstances and choices? Does technological change reinforce the social and political status quo or challenge it? Are technological and social progress synonymous, or is there a tension between the two? One of the goals of the course will be to provide students with a more informed and critical perspective on the technological upheavals that continue to shape society today.

Class Format: hybrid

Requirements/Evaluation: attendance and participation, team assignments, two in-class exams, one 15-page seminar paper

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: Anthropology and Sociology majors

Expected Class Size: 15

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 210 (D2) SOC 210 (D2)

Not offered current academic year

STS 211  (F) Scientific Selves: Medicine, Technology, and Identity in Early Modern France

Cross-listings: STS 211 RLFR 210

Secondary Cross-listing

The early modern period has long been associated with scientific discovery and shifting ideology in France. From Copernicus on, thinkers such as René Descartes, Blaise Pascal, and Antoine Lavoisier helped advance the Scientific Revolution, which led to medical and technological
breakthroughs, as well as important advances in our understanding of the world and our solar system. This course examines the role that France played in pursuing such discoveries, as well as the ways newfound knowledge impacted notions of belonging and alterity. How did the Scientific Revolution and French colonization lead to the creation of social, cultural, and medical "others"? How did scientific discourse permeate verbal and visual expression and depict those who did not fit into normative paradigms of gender, sexuality, ability, ethnicity, belief, and culture? What avenues for self-expression and definition were available to those whom society excluded? What parallels can we see with twenty-first-century questions of political activism, social justice, sciences, and technology? To explore these questions, we will analyze literary texts, visual representations, and historical documents, such as medical treatises, scientific diagrams, and texts on new technologies. *Conducted in French.*

**Requirements/Evaluation:** active class participation, written reflections, quizzes, mid-semester presentation, and final paper

**Prerequisites:** strong performance in RLFR 105; RLFR 106; another RLFR 200-level course; placement exam; or permission of instructor

**Enrollment Limit:** 20

**Enrollment Preferences:** French Majors and certificate students

**Expected Class Size:** 20

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D1)

**This course is cross-listed and the prefixes carry the following divisional credit:**

STS 211 (D1) RLFR 210 (D1)

Not offered current academic year

**STS 212 (S) Ethics and Reproductive Technologies**

**Cross-listings:** WGSS 212 PHIL 212 STS 212 SCST 212

**Secondary Cross-listing**

In her groundbreaking book, *The Tentative Pregnancy*, Barbara Katz Rothman writes that "[t]he technological revolution in reproduction is forcing us to confront the very meaning of motherhood, to examine the nature and origins of the mother-child bond, and to replace--or to let us think we can replace--chance with choice." Taking this as our starting point, in this course we will examine a number of conceptual and ethical issues in the use and development of technologies related to human reproduction, drawing out their implications for such core concepts as "motherhood" and "parenthood," family and genetic relatedness, exploitation and commodification, and reproductive rights and society's interests in reproductive activities. Topics will range from consideration of "mundane" technologies such as in vitro fertilization (IVF), prenatal genetic screening and testing, and surrogacy, to the more extraordinary, possibly including pre-implantation genetic diagnosis (PGD), post-menopausal reproduction, and post-mortem gamete procurement. Background readings include sources rooted in traditional modes of bioethical analysis as well as those incorporating feminist approaches.

**Class Format:** discussion

**Requirements/Evaluation:** active participation in class discussions, three or four short reflection papers, and two longer papers (5-7 and 7-10 pages)

**Prerequisites:** none, but introductory-level course in PHIL and/or WGSS recommended

**Enrollment Limit:** 19

**Enrollment Preferences:** WGSS and PHIL majors or prospective majors

**Expected Class Size:** 19

**Grading:** yes pass/fail option, yes fifth course option

**Unit Notes:** meets Contemporary Value Theory requirement only if registration is under PHIL

**Distributions:** (D2)

**This course is cross-listed and the prefixes carry the following divisional credit:**

WGSS 212 (D2) PHIL 212 (D2) STS 212 (D2) SCST 212 (D2)

**Attributes:** PHIL Contemporary Value Theory Courses PHLH Bioethics + Interpretations of Health

Not offered current academic year

**STS 213 (S) Race, Gender, and the Alien Body: Octavia Butler's Science Fiction**

**Cross-listings:** STS 213 WGSS 213 AFR 213
Secondary Cross-listing

Science fiction is a genre well known for its ability to envision new realities, and Octavia E. Butler (1947-2006) is among the most highly regarded science fiction writers. Butler’s uncanny ability to imagine the future anew and to merge those ruminations with her experiences as an African American woman provide powerful commentary on—and often disrupt—modern understandings of race, gender, and human embodiment. We will explore questions such as: What role does ‘gender’ play in Butler’s fiction? How does Butler’s treatment of the ‘alien’ cause us to reconsider what it means to be human? How does Butler incorporate ‘race’ and the concept of ‘other’ into her fiction, and how do these techniques help us situate contemporary discussions of a post-race society? We will examine the relationship between Butler’s visions for the future and what her narratives of future worlds invariably suggest about the present. We will read key texts including the best-selling text Kindred (1979), the haunting dystopian novel Parable of the Sower (1994), the popular vampire text Fledgling (2005), and the collection Bloodchild and Other Stories (1996). We will also explore contemporary engagement with Butler's work including the relationship between the main character from her book Dawn (1987), and Henrietta Lacks, the African American woman from whom the immortal cell line (HeLa) used for medical research derives. This tutorial will engage Octavia Butler's work broadly, and with particular attention to how the concepts ‘race,’ ‘gender’, ‘alien’ and ‘body’ are interrogated in her writings.

Requirements/Evaluation: attendance, paired weekly reflection/response papers, a 5- to 7-page creative writing assignment, and a final essay of 10 pages

Prerequisites: none

Enrollment Limit: 10

Enrollment Preferences: students with interests and/or prior coursework in Africana Studies and Women's, Gender, and Sexuality Studies

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 213 (D2) WGSS 213 (D2) AFR 213 (D2)

Attributes: AFR Core Electives WGSS Racial Sexual + Cultural Diversity Courses

Spring 2022

TUT Section: T1  Cancelled

STS 214 (S) Understanding Social Media

Cross-listings: STS 214 SOC 212

Secondary Cross-listing

Over just the last twenty years--beginning with Friendster and MySpace and continuing through Facebook and Twitter, Snapchat and Instagram--the rise of social media has had a profound influence on the way we live. It has given a new rhythm to our daily routines, shaped the way we inform ourselves and converse with others, and transformed media and entertainment, politics and public discourse, and many other aspects of culture. This seminar course will undertake a broad and critical examination of social media, looking at it from historical, economic, legal, social, and phenomenological perspectives. The topics addressed will include social media's effects on self-image and self-formation, its influence on protest movements and political campaigns, its use as a conduit for news and propaganda, and the way commercial interests and technical characteristics have shaped its design and use. Through pertinent readings and lively discussions, and drawing on students' own experiences with social media, the course will illuminate social media's benefits and drawbacks while providing a foundation for thinking about possible legal, regulatory, and personal responses to this far-reaching and still unfolding social phenomenon.

Class Format: hybrid

Requirements/Evaluation: attendance and participation, team assignments, two 5-page writing assignments, final exam

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: Anthropology and Sociology majors

Expected Class Size: 15

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)
STS 215 (F) Viral Inequality: Power and Difference in Pandemics (DPE)
Cross-listings: GBST 217 STS 215

Primary Cross-listing

From contested data to controversial containment strategies, the shape and course of pandemics are influenced at every level by the question: Who matters? Whose lives are prioritized and protected? Whose expertise is made actionable, and why? Focusing on the uneven distribution of risk and care during pandemics, this course explores how global health emergencies are not states of exception, but rather events that lay bare the priorities and interests of their host societies. Our investigation into pandemics—including Black Death, cholera, “Spanish” flu, HIV/AIDS, Ebola and novel coronaviruses—will provide a critical entry point into understanding the social, political, and economic processes that shape health interventions and outcomes, and their divergences along lines of social difference. We will ground our discussion and analysis using key concepts in Science & Technology Studies, while drawing from critical medical anthropology, disability studies, theories of capitalism and disaster studies to enrich our conversation.

Class Format: Online seminar
Requirements/Evaluation: Several short essays and reflection papers
Prerequisites: None, open to all students
Enrollment Limit: 12
Enrollment Preferences: If overenrolled, preference will be given to first-years and sophomores
Expected Class Size: 12
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 221 (F) History of Photography
Cross-listings: STS 221 ARTH 221

Secondary Cross-listing

This lecture course will examine the history of photography from its beginnings in the 1830s to the present, from the first grainy black and white images to the work of contemporary artists using cutting-edge photographic technologies. We will examine photographs used for documentary, scientific, and aesthetic purposes, and we will trace the medium’s emergence and acceptance as a fine art. We will also explore photography’s physical and conceptual characteristics as a medium, paying particular attention to its uniquely intimate and frequently contested relationship to “the real.” By the end of the course, students will have a broad understanding of photography as a unique medium within the history of art and knowledge of the theoretical frameworks that developed alongside that history.
Requirements/Evaluation: three to four short papers, quizzes, online presentations.
Prerequisites: none
Enrollment Limit: 14
Enrollment Preferences: art history majors
Expected Class Size: 14
STS 226 (F) The Art of Natural History (WS)

Cross-listings: STS 226 ARTH 229

Secondary Cross-listing

The scientific revolutions of the eighteenth and nineteenth centuries fundamentally changed the way the natural world was seen and celebrated, classified and organized, displayed and manipulated. New discoveries in the natural sciences and competing theories of evolution intertwined with shifting conceptions of natural history, of nature, and of humankind's proper place within it. This course will investigate the links between art and natural science. It will seek to understand the crucial role of the visual arts and visual culture in the study and staging of natural history from the eighteenth century to the present. We will pursue the questions that preoccupied the artists themselves. How should an artist react to new ecological insights? What is the proper artistic response to newly discovered flora and fauna? What is the role of aesthetics in the communication of knowledge? How are those aesthetics connected to ethics? How might a drawing of a plant convey information that is different from that of a photograph or a glass model of a plant? How might a theatrical diorama frame a scientific idea in a way that is different from a bronze statue? Students will seek to understand the myriad connections between seeing, depicting, and knowing, to question long-held assumptions about the division between "objective" science and "subjective" art, and to recognize that art has the ability not only to interpret, disseminate, and display scientific knowledge, but to create it as well.

Class Format: There will be field trips if travel is allowed.

Requirements/Evaluation: Five 5 page essays, five 1-2 page responses to partner's essays, critical conversation.

Prerequisites: None.

Enrollment Limit: 8

Enrollment Preferences: Sophomores with an interest in art history, art studio, ecology, environmental studies, and science and technology studies, juniors with these same interests, then art history majors, and science and technology majors, in that order.

Expected Class Size: 8

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 226 (D1) ARTH 229 (D1)

Writing Skills Notes: This course will require students to write a short paper or a critical response to their partner's paper each week. Students will receive critical feedback on both form and content from their professor and from their peers.

Attributes: ARTH post-1800 Courses
**Requirements/Evaluation:** class attendance and participation, periodic short essays (3 or 4 total, 2-3 pages each), two mid-length papers (5-7 pages and 7-10 pages, respectively); possible experiential learning component

**Prerequisites:** none

**Enrollment Limit:** 19

**Enrollment Preferences:** PHIL majors, PHLH and STS concentrators, and students with curricular need for the course.

**Expected Class Size:** 15-19

**Grading:**

**Distributions:** (D2)  (WS)

**Writing Skills Notes:** Students will write periodic short papers (2-3 pages each), a midterm paper (5-7 pages) and a final paper (7-10 pages). Short papers focus on concepts, arguments, and writing skills needed in the midterm and final papers, in which students are expected to describe and evaluate arguments from assigned readings, and to present clear and effective arguments in support of their own ethical positions. Students receive feedback on all papers and have the opportunity to revise midterm and final papers.

**Attributes:** PHIL Contemporary Value Theory Courses  PHLH Bioethics + Interpretations of Health

Not offered current academic year

**STS 228 (F) Feminist Bioethics**  (WS)

**Cross-listings:** PHIL 228  STS 228  WGSS 228

**Secondary Cross-listing**

In this course we will explore the ways in which feminist approaches to moral thinking have influenced both the methodology and the content of contemporary bioethics. The first portion of the course will address the emergence of the "Ethics of Care," critically assessing its origins in feminist theory, its development within the context of the caring professions, and its potential as a general approach to bioethical reasoning. The second portion of the course will use feminist philosophy to inform our understanding of the ways in which gender structures the individual's interactions with the health care system. To do this we will explore topics that might traditionally be considered "women's issues" in healthcare, such as medicine and body image (e.g., cosmetic surgery, eating disorders), reproductive and genetic technologies, and research on women and their health care needs. In addition we'll also look at feminist analyses of topics that traditionally have not been regarded as "gendered," such as resource allocation and end of life issues.

**Class Format:** discussion

**Requirements/Evaluation:** active participation in class discussions; periodic short papers (2-3 pages); midterm and final paper (5-7 and 7-10 pages, respectively); and one oral presentation

**Prerequisites:** none, although previous coursework in WGSS is desirable

**Enrollment Limit:** 19

**Enrollment Preferences:** prospective and declared majors or concentrators in PHIL, WGSS, STS, and PHLH, especially those who need the course to satisfy major or concentration requirements

**Expected Class Size:** 19

**Grading:** yes pass/fail option, yes fifth course option

**Unit Notes:** meets Contemporary Value Theory requirement only if registration is under PHIL

**Distributions:** (D2)  (WS)

**This course is cross-listed and the prefixes carry the following divisional credit:**

PHIL 228 (D2) STS 228 (D2) WGSS 228 (D2)

**Writing Skills Notes:** Students will write periodic short papers (2-3 pages each), a midterm paper (5-7 pages) and a final paper (7-10 pages). Short papers focus on concepts, arguments, and writing skills needed in the midterm and final papers, in which students are expected to describe and evaluate arguments from assigned readings, and to present clear and effective arguments in support of their own ethical positions. Students receive feedback on all papers and have the opportunity to revise midterm and final papers.

**Attributes:** AMST Critical and Cultural Theory Electives  JLST Interdepartmental Electives  PHIL Contemporary Value Theory Courses  PHLH Bioethics + Interpretations of Health

Not offered current academic year
STS 229 (F) The Panopticon: Surveillance, Power, and Inequality (DPE)

Cross-listings: STS 229 SOC 228

Secondary Cross-listing

Surveillance is built into the very fabric of modern life. From CCTV cameras, to supermarket loyalty cards, to the massive gathering of personal data on social media sites, people participate in today's "surveillance societies" just by doing everyday activities. This course uses the metaphor of the "Panopticon" as a doorway to engagement with traditional and new forms of surveillance. First described by philosopher and social theorist Jeremy Bentham, the Panopticon is a physical structure that enables one observer to see all inhabitants without those inhabitants knowing when they are being observed. In *Discipline and Punish*, Michel Foucault famously expanded thinking on the Panopticon as a metaphor for the "disciplinary" power that lies at the heart of inequality in modern society. Since Bentham and Foucault's time, however, surveillance technologies have changed significantly. To what extent does the concept of the Panopticon give us purchase on today's surveillance societies? How does watching people with new digital and algorithmic surveillance technologies shape the exercise of power and, in turn, (re)produce forms of inequality? Can privacy, convenience, and safety ever be truly balanced? Topics include: the historical origins and expansion of surveillance in modern societies, the emerging total surveillance state in Baltimore City, and whether social media is turning us all into self-surveillance addicts.

Class Format: This class will be taught online only with both synchronous and asynchronous components. Students will be asked to attend one synchronous video meeting per week. The asynchronous portion will involve discussion of readings and video lectures.

Requirements/Evaluation: participation, reading responses, midterm essay, final paper

Prerequisites: none

Enrollment Limit: 16

Enrollment Preferences: Anthropology and Sociology majors

Expected Class Size: 16

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 229 (D2) SOC 228 (D2)

Difference, Power, and Equity Notes: This course explores how power is distributed unequally through the mechanism of surveillance technologies, particularly in regard to racial and class differences. Among other topics, it will consider the concrete case of surveillance in Baltimore City and the question of if and when surveillance is appropriate there, given the city's ongoing crisis of citizen and police violence. Students will discuss police surveillance in a context shaped by racial segregation and class inequality.

Not offered current academic year

STS 231 (S) Africa and the Anthropocene (DPE)

Cross-listings: STS 231 ENVI 231 AFR 231

Secondary Cross-listing

Despite its low contributions to global carbon emissions, the continent of Africa is predicted to experience some of the worst effects of climate change. This interdisciplinary course investigates the causes and consequences of this troubling contradiction. It positions the African continent as an important site for understanding how legacies of empire, racial and gendered inequality, resource extraction, and capital accumulation impact contemporary global environmental politics. Students will engage theoretical texts, reports from international organizations, films, novels, and web-based content. Topics include: humanism/post-humanism; migration and displacement; representations of conflict; and sustainable development.

Requirements/Evaluation: Assignments include: short written commentaries, current event analysis, presentations, and a final analytical essay

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Environmental Studies majors and concentrators

Expected Class Size: 19

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 231 (D2) ENVI 231 (D2) AFR 231 (D2)
**Difference, Power, and Equity Notes:** Africa and the Anthropocene considers inequity in environmental politics from the vantage of the African continent. Through selected readings and classroom discussions students will tackle questions of power, racial and gendered difference, empire, and economic stratification. The course contributes to the DPE requirement by helping students to develop skills to better analyze abiding challenges in global society.

**Attributes:** ENVI Humanities, Arts + Social Science Electives GBST African Studies Electives GBST Economic Development Studies Electives

Spring 2022

SEM Section: 01    MR 2:35 pm - 3:50 pm     Brittany  Meché

**STS 235 (F) Innovation, Gender, and Sustainable Development (DPE)**

**Cross-listings:** WGSS 235 STS 235 SCST 235

**Secondary Cross-listing**

Technological innovation is vital for communities, businesses and nations seeking to adapt to a globalized, competitive world. But any innovation also has impacts on all three dimensions of sustainability: the ecological, the economic, and the social. For example, such impacts may either exacerbate or mitigate gender inequalities. This course uses a gender studies lens to study innovation in the development of sustainable practices in the present and for the future. We will look at the impact of gender stereotypes on innovation, including the co-construction of gender and technology. Since the course is taught by a visiting scholar from Sweden, a particular focus will be the EU's policy of "Gender Mainstreaming" which requires all proposed policies to be assessed for their impact on gender inequality. The course looks at technical development as necessary and valuable, while investigating power relations and taken-for-granted views embedded in the particular forms it takes. The course will rely largely on analysis of case studies, and students will be encouraged to apply the analytic tools of the course to develop US-based case studies of their own.

**Class Format:** combination of lecture and discussion

**Requirements/Evaluation:** reading journal, mid-term exam, and a final research project

**Prerequisites:** none

**Enrollment Limit:** 15

**Enrollment Preferences:** Women's, Gender and Sexuality Studies majors, Environmental Studies majors, students who have taken WGSS 101

**Expected Class Size:** 10

**Grading:** no pass/fail option, no fifth course option

**Distributions:** (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

WGSS 235 (D2) STS 235 (D2) SCST 235 (D2)

**Difference, Power, and Equity Notes:** The course focuses specifically on tools for analyzing the potential differential impacts of sustainable development projects along gender lines.

Not offered current academic year

**STS 236 (F) Aesthetics of Automation: From the Mechanical Turk to A.I.**

In this course we will study the changing aesthetics of automation in European and North American cultural contexts from the 18th century to the present. We will also explore the wider cultural and material effects of automation (as imagined and as implemented) upon public and private spheres, craftsmen and courts, wage-laborers, artists, and inventors. The objects we examine will be as various as the dulcimer-playing android presented as a gift to Marie Antoinette, IBM's Deep Blue, and singer-actor Janelle Monae's android alter-ego, Cindi Mayweather. Our primary sources will consist of visual representations in print and film as well as literary and commercial writing; our secondary sources will consist of essays in aesthetic theory, cultural studies, science and technology studies, and the history of technology.

**Requirements/Evaluation:** mid-term and final essays, an annotated bibliography, discussion participation, and brief in-class writing exercises.

**Prerequisites:** none

**Enrollment Limit:** 25

**Enrollment Preferences:** STS concentrators

**Expected Class Size:** 25

**Grading:** yes pass/fail option, yes fifth course option
Distributions: (D2)

Fall 2021

SEM Section: 01    TR 8:30 am - 9:45 am     Ezra D. Feldman

STS 239  (S)  The Ethics of Artificial Intelligence

Cross-listings: STS 239  PHIL 239

Secondary Cross-listing

We will someday live alongside artificially intelligent beings who equal or exceed us. Commentators ranging from technology magnates to physics geniuses—not to mention decades of apocalyptic science fiction—have urged that that future is nothing short of an existential threat to human beings. Whether this is hyperbole or wise prognostication, it cannot be denied that the rise of AI will be a tectonic shift for culture, technology, and our fundamental sense of ourselves. When AI is fully realized, it is likely to be amongst the most important things to happen to our species. Some challenges we face are broad and about the future, though perhaps not the far future. How can we ensure that AI’s will act morally? Is a world with AI’s overall better or worse for us? How do we create legal and policy frameworks that cover a new kind of thinking being? If they are conscious, will AI’s have dignity and rights? Other questions are pressing and immediate: Artificial intelligence techniques are used today to help decide whether someone gets a bank loan, is eligible to be released on bail, or in need of particular medical treatment. And right now there are autonomous vehicles deciding how to behave in traffic, and autonomous weapons capable of delivering lethal force. Is it moral for us to pass along these sorts of decisions to AI’s? What if they are biased, unbeknownst to us? What if they are more fair? In this course we will engage ethical questions surrounding the seeming inevitability of AI.

Class Format: mixture of lectures and discussion

Requirements/Evaluation: four short (3- to 4-page) writing assignments and a final essay (8-10 pages)

Prerequisites: none

Enrollment Limit: 25

Enrollment Preferences: CSCI or PHIL majors or STS or COGS concentrators

Expected Class Size: 25

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
STS 239 (D2) PHIL 239 (D2)

Attributes: PHIL Contemporary Value Theory Courses

Not offered current academic year

STS 240  (F)  Great Astronomers and Their Original Publications  (WS)

Cross-listings: STS 240  ASTR 240  HSCI 240  LEAD 240

Secondary Cross-listing

In this course we will study some of the greatest figures in astronomy and consider their leadership in advancing progress in the field. We will consider their lives and works, especially as represented by original copies of their books and other publications. These great astronomers include: 16th century, Nicolaus Copernicus (heliocentric universe); Tycho Brahe (best pre-telescopic observations); 17th century, Galileo (discoveries with his first astronomical telescope, 1610; sunspots, 1613; *Dialogo*, 1632); Johannes Kepler (laws of planetary motion, 1609, 1619); Johannes Hevelius and Elisabeth Hevelius (atlases of the Moon and of stars, 1647, and 1687); Isaac Newton (laws of universal gravitation and of motion, 1687); 18th century, Edmond Halley (*Miscellanea curiosa*, eclipse maps, 1715, 1724); John Flamsteed and Margaret Flamsteed (*Atlas Coelestis*, 1729); and William Herschel and Caroline Herschel (1781, 1798). Also, from more recent times in which original works are often articles rather than books: 20th century, Albert Einstein (special relativity, 1905; general relativity, 1916); Marie Curie (radioactivity); Cecilia Payne-Gaposchkin (hydrogen dominating stars, 1929), Edwin Hubble (*Miscellanea curiosa*, eclipse maps, 1715, 1724); Vera Rubin (dark matter, 1970s); Jocelyn Bell Burnell (pulsar discovery, 1968); and 21st century: Wendy Freedman (Universe's expansion rate, 2000s). First editions will be available in Williams's Chapin Library of rare books, and facsimiles or digital copies will be provided for remote learning. We will also consider how such original materials are collected and preserved, and look at examples from the wider world of rarities, such as a leaf from the *Gutenberg Bible* (c. 1450) and a Shakespeare *First Folio* (1623, with a discussion of astronomical
references in Shakespeare's plays). We evaluate a trove of books and papers about historic transits of Venus. We discuss matters of fraud and authenticity, especially the case of a purported *Sidereus Nuncius*, shown to be a modern construction. The course will be taught in collaboration between an astronomer and a rare books librarian, with remote lectures by experts from around the world.

**Class Format:** Meeting on campus in the Chapin Library classroom (Sawyer 452) or remotely; students who are not on campus can visit the original books at a later time/year.

**Requirements/Evaluation:** class participation, two 5-page intermediate papers, and a final 15-page paper; student choice of additional readings from a provided reading list

**Prerequisites:** none

**Enrollment Limit:** 12

**Enrollment Preferences:** if overenrolled, preference by written paragraph of explanation of why student wants to take the course

**Expected Class Size:** 12

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D3) (WS)

**This course is cross-listed and the prefixes carry the following divisional credit:**

ST5 240 (D2) ASTR 240 (D3) HSCI 240 (D3) LEAD 240 (D3)

**Writing Skills Notes:** Comments on submitted papers will aid in writing skills

**Attributes:** LEAD Facets or Domains of Leadership

Not offered current academic year

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**STS 243 (F) Epidemic! A Critical History of Medicine, Science and Power (DPE)**

The world after COVID won't look the same. It has disrupted our lives and laid bare the racial, gendered and economic inequalities in our health system, and the deficiencies of political and public health institutions, as it continues to claim more victims. For centuries, communicable diseases ravaged different communities and led to massive mortality and morbidity. The death toll disrupted social organizations, destroyed families and communities, and challenged medical institutions and State authority. Medical thought and practice struggled to make sense of contagion, disease factors and treatment; State authorities were faced with demands to intervene, protect and support the sick, all while its own institutions were ravaged by diseases; race, gender, sexuality and other human differences were deployed to justify why some died more, and to show that, for the State, some lives mattered more than others. In this course, we trace how epidemics influenced the history of medicine, science and technology, and how they impacted social structures around the world. We ask about the meaning of contagion, how medical and scientific thought understood diseases. We investigate the history of quarantines and isolations. We ask about race, gender and sexuality and their place in the making of epidemics, and we investigate the history of colonialism and its connection to changing disease landscape. Tracing epidemics from the nineteenth century plagues to COVID, the course investigates the place of epidemics and contagion in medical and scientific thought, how they relate to race, gender, sexuality and colonialism, and how they changed and shaped the world we live in.

**Class Format:** The class will be hybrid with once a month F2F meeting outside. All other meetings will be conducted remotely

**Requirements/Evaluation:** 2 response papers (3-5 pages each) + final project (could be a 10-15p paper or creative project of any kind)

**Prerequisites:** none

**Enrollment Limit:** 15

**Enrollment Preferences:** Concentrators, followed by seniors

**Expected Class Size:** 15

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D2) (DPE)

**Difference, Power, and Equity Notes:** The course addresses how epidemics, and the way medical and political institutions dealt with them, were shaped by issues of race, gender, sexuality and human difference, and how epidemics in turn impacted perception of race, gender and sexuality. Students will engage with a number of theories and methods related to difference, such as critical race theory, postcolonial theory and queer theory.

Not offered current academic year

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**STS 250 (F) Environmental Justice (DPE)**

**Cross-listings:** STS 250  ENVI 250
Secondary Cross-listing

How are local and global environmental problems distributed unevenly according to race, gender, and class? What are the historical, social and economic structures that create unequal exposures to environmental risks and benefits? And how does inequity shape the construction and distribution of environmental knowledge? These are some of the questions we will take up in this course, which will be reading and discussion intensive. Through readings, discussions, and case studies, we will explore EJ in both senses. Potential topics include: toxics exposure, food justice, urban planning, e-waste, unnatural hazards, nuclearism in the U.S. West, natural resources and war, and climate refugees. Occasionally, community leaders, organizers, academics, and government officials will join the class to discuss current issues.

Requirements/Evaluation: several short essays, final essay

Prerequisites: ENVI 101 or permission of the instructor

Enrollment Limit: 12

Enrollment Preferences: juniors, seniors

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 250 (D2) ENVI 250 (D2)

Difference, Power, and Equity Notes: This course will explore how unequal power leads to environmental injustice. Specifically, we will analyze how local and global environmental problems are distributed unevenly according to race, gender, and class. This is a service-based learning course, and students will hone skills to address environmental injustices.

Attributes: ENVI Humanities, Arts + Social Science Electives  EVST Culture/Humanities  EXPE Experiential Education Courses  GBST Economic Development Studies Electives  JLST Interdepartmental Electives

Fall 2021

SEM Section: 01  W 1:10 pm - 3:50 pm  Laura J. Martin

STS 251 Science and Militarism in the Modern World (WS)

In 1961, United States President Dwight D. Eisenhower warned of the global dangers of what he called the "military-industrial complex." In this course, we will interrogate the military-scientific complex, or the imbrication of militarism and scientific knowledge. This tutorial takes up a number of environmental themes, including the role of environmental science within military campaigns, conservation and environmental racism, nuclear waste and ecological contamination. Surveying conflicts from World War II through the present-day War on Terror, this course will investigate how environmental scientists, politicians, soldiers, activists, and artists have grappled with the intertwined legacies of science and militarism. Students will engage a range of textual materials including books, films, photographs, and news reports.

Requirements/Evaluation: Course requirements include bi-weekly response papers (5-7 pages) and tutorial discussions.

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences: ENVI and STS majors and concentrators

Expected Class Size: 10

Grading:

Distributions: (D2) (WS)

Writing Skills Notes: Over the course of the semester, students will write 5 papers (5-7 pages each). They will receive bi-weekly detailed feedback on their writing from the professor and their tutorial partner. This feedback will include advice on strengthening their argumentation and use of textual evidence, as well as grammar and usage suggestions/corrections. Students will be graded on the portfolio of papers, with specific attention to how they have incorporated feedback in each subsequent paper.

Attributes: ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

STS 261 Science and Militarism in the Modern World (F)
In 1961, United States President Dwight D. Eisenhower warned about the global dangers of what he called the "military-industrial complex." In this course, we will interrogate the military-scientific complex, or the imbrication of militarism and scientific knowledge. Surveying conflicts from World War II through to the present-day War on Terror, this course will consider how empire, networks of expert knowledge, resource extraction, environmental contamination, and land degradation have shaped the modern world. Students will engage a range of textual materials including books, films, photographs, and news reports. Course requirements include weekly writing assignments and participation in small group discussions.

**Class Format:** This course adopts a tutorial model. Students will be divided into 5 groups of 2. Each week the groups will meet with me. Each pair will include one "presenter," who shares a 4-6 page paper responding to the week's theme, and one "respondent," who will offer a 2-3 page response to the presenter's paper. The roles of presenter and respondent will alternate each week. Each student will produce 5 papers as "presenter" and 5 papers as "respondent."

**Requirements/Evaluation:** Each student will produce five (4-6 page) papers as "presenter" and five (2-3 page) papers as "respondent." Grades will be issued based on the portfolio of papers and active participation in discussions.

**Prerequisites:** None

**Enrollment Limit:** 10

**Enrollment Preferences:** ENVI and STS majors and concentrators

**Expected Class Size:** 10

**Grading:** no pass/fail option, no fifth course option

**Distributions:** (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 261 (D2) ENVI 261 (D2)

**Attributes:** ENVI Humanities, Arts + Social Science Electives

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**STS 269 (F) Mindfulness Examined: Meditation, Emotion, and Affective Neuroscience** (DPE) (WS)

**Cross-listings:** REL 269  STS 269  ASIA 269  ANTH 269

**Secondary Cross-listing**

This course provides a social analysis of and practical engagement with mindfulness in the US today. It considers the modern applications of Buddhist meditation as a tool to improve awareness of the related processes of mind, behavior, and emotions within landscapes structured by racism, sexism, and other systemic inequalities. We consider how mindfulness relates to Buddhist discourses as well as the rapid rise of fields like contemplative neuroscience, affective neuroscience, and integrative neurobiology. How can mindfulness help people communicate more effectively—be they doctors or patients, teachers or students? How does the exploding research on mindfulness and meditation since 2000 help us understand the intersection of human emotions, behaviors, and relationships? We train in a variety of Buddhist meditation practices through the semester including forest bathing, mindfulness, compassion meditation, while unpacking the subjective experience of our minds and emotions first-hand. Students will be asked to train in mindfulness practices the entire semester while studying models of the mind developed by research in clinical and evolutionary psychology, affective neuroscience, and interpersonal neuroscience.

**Requirements/Evaluation:** weekly tutorial papers and discussion

**Prerequisites:** A prior class or some experience with meditation is recommended

**Enrollment Limit:** 10

**Enrollment Preferences:** ANTH, SOC, REL, ASST majors; PHLH, STS concentrators; seniors and juniors

**Expected Class Size:** 10

**Grading:** yes pass/fail option, no fifth course option

**Distributions:** (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:
**Writing Skills Notes:** This class will involve weekly tutorial essays or oral responses, intensive written feedback on every essay, and a mid-semester 'writing chat' with the instructor.

**Difference, Power, and Equity Notes:** This class fulfills the Difference, Power, and Equity requirement because it will explore the ways that mindfulness can address the growing epidemic of anxiety, depression, and other mental health issues we find in the US today. We study mindfulness from an intersectional perspective and relate its benefits to intersecting inequities and intergenerational trauma in the US today.

**Attributes:** GBST South + Southeast Asia Studies Electives  PHLH Social Determinants of Health

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Fall 2021

TUT Section: T1  TBA  Kim Gutschow

**STS 272 (S) The History and Mythology of Chinese Scripts**

**Cross-listings:** STS 272  CHIN 272  COMP 272

**Secondary Cross-listing**

Written scripts using what are most often called "Chinese characters" have an attested history of over 3000 years and have been used all over the world to represent a range of different languages. In this course we will examine the history and development of Chinese characters from their earliest extant examples on sacrificial animal bones to their often amusingly misguided use for contemporary tattoos. We will look at historical evidence and mythology, carefully constructed grammatological studies and wild orientalist imaginings. Some topics will include: comparisons between the development of Chinese characters and other written scripts, the relationship between Chinese characters and the languages of China, the use of Chinese characters to write non-Chinese languages, Chinese characters in art and calligraphy, theories of connections between Chinese characters and Chinese philosophy and literature, issues of education and literacy, and the future of Chinese characters in the digital age.

**Class Format:** discussion

**Requirements/Evaluation:** quizzes, short writing assignments, a midterm, and a final exam

**Prerequisites:** none

**Enrollment Limit:** none

**Enrollment Preferences:** none

**Expected Class Size:** 15

**Grading:** yes pass/fail option,  yes fifth course option

**Distributions:** (D1)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 272 (D2)  CHIN 272 (D1)  COMP 272 (D1)

**Attributes:** Linguistics

Not offered current academic year

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**STS 273 (F) Politics without Humans?**

**Cross-listings:** ENVI 273  STS 273  PSCI 273

**Secondary Cross-listing**

Are human beings the only beings who belong in politics? And is political involvement a unique or defining aspect of what it means to be human? Such questions are increasingly complex as the boundaries of "the human" become blurred by the rise of artificial intelligence, robotics, and brain implants: shifting attitudes towards both animal and human bodies; and the automation of economic and military decisions (buy! sell! attack! retreat!) that used to be the prerogative of human actors. How do visions of politics without humans and humans without politics impact our thinking about longstanding questions of freedom, power, and right? Can and should the link between humans and politics survive in an age in which "posthuman" or "transhuman" entities become central characters in the drama of politics? This class will consider these questions through readings, films and artifacts that bring political theory into conversation with science fiction, popular literature on the so-called "singularity" (the merger of humans with computers), science and technology studies, evolutionary anthropology, "new materialist" philosophy, and feminist theory.

**Requirements/Evaluation:** three 5- to 7-page papers, regular Glow posts, class participation

**Prerequisites:** please note that this is an introductory-level course with no prerequisites; first-year students and those with no background in political
theory are welcome, as are more experienced students

Enrollment Limit: 25

Expected Class Size: 20

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
ENVI 273 (D2) STS 273 (D2) PSCI 273 (D2)

Attributes: AMST Critical and Cultural Theory Electives ENVI Environmental Policy PHIL Related Courses PSCI Political Theory Courses

Not offered current academic year

STS 276 Music and the Internet

Since the release of Napster in 1999, the Internet’s relationship with music has been sometimes elevating and sometimes adversarial. While it has granted listeners access to broad music libraries and musicians access to large audiences, the Internet has also exposed listeners to legal action, taxed artists with dwindling royalties, and disrupted and reshaped the recording and publishing industries. This course examines how the Internet has affected music at every level, from its creation to its distribution and consumption. Topics will include music written for online spaces, musical performances that take place online, music and online gaming, live music that refers to the Internet, the financial and philosophical background of music file formats, changing notions of musical ownership, censorship of music online, music’s place in memes, and the user experience in (and attitudes toward music projected by) services like iTunes, YouTube, Spotify, and musically.

Class Format: discussion

Requirements/Evaluation: 4-page midterm paper, 8-page final paper, one presentation, two mid-semester creative projects

Prerequisites: none

Enrollment Limit: 19

Expected Class Size: 14

Grading:

Distributions: (D1)

Attributes: FMST Core Courses

Not offered current academic year

STS 280 (F) Silicon Valley: Digital Transformation and Democracy (WS)

Cross-listings: PSCI 280 STS 280 POEC 280

Secondary Cross-listing

Nearly every country in the world seeks to drive economic growth by promoting digital technologies. The universal model is Silicon Valley. In this tutorial, students will examine the origins of the Silicon Valley model and other countries’ attempts to emulate it. Departing from “just so” stories of technological determinism, we take up the lens of comparative political economy to investigate the politics that allowed US tech firms to shape economic policy to meet their interests. It is no accident that tech became a symbol for economic growth in the 1970s, precisely when it also began to build powerful alliances in Washington. After investigating the origins of the Silicon Valley model, we trace attempts to adopt it in Europe and Asia, which highlight the model’s political contingencies and some of the more salient conflicts over the tech sector. We focus on the ways in which the Silicon Valley model can threaten social welfare through economic inequality and precarious employment, and engage a variety of perspectives, including workplace ethnography, to examine these threats, as well as potential regulatory responses. The course concludes by considering what policies could be appropriate for supporting, while also regulating, the tech sector in the twenty-first century.

Requirements/Evaluation: Five 5-page papers; five 2-page responses; participation

Prerequisites: One introductory course in political science and/or permission of the instructor.

Enrollment Limit: 10

Enrollment Preferences: Preference will be given to sophomores or juniors majoring in a Division II field

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option
Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

PSCI 280 (D2) STS 280 (D2) POEC 280 (D2)

Writing Skills Notes: Students will write essays each week. In addition, students will read each others' work and engage in structured critique.

Attributes: POEC Comparative POEC/Public Policy Courses PSCI American Politics Courses PSCI Comparative Politics Courses PSCI Political Theory Courses

Fall 2021
TUT Section: T1 TBA Sidney A. Rothstein

STS 281 (S) Religion and Science

Secondary Cross-listing

In the last few years the deniers of religion such as Dennett and Dawkins have forcefully argued that recent scientific developments show the degree to which religion is irrelevant to a modern understanding of what it means to be human. Atran and Boyer have made a similar case, arguing that recent progressors in our understanding of human cognition demonstrate that religion is a purely natural phenomenon that has little if any value for human development. Theologians such as Haught and Polkinghorne have rejected these views, arguing that a proper understanding of scientific developments such as evolution and quantum mechanics suggests religiously relevant views of the universe and our place therein. This course considers these competing perspectives while offering critical reflections on the views and categories involved in these controversies. We also examine the works of reflective naturalists such as Bellah and Herrstein, who argue that far from showing the irrelevance of religious ideas and practices, the new mind and life sciences suggest a much more nuanced view according to which religion is both grounded in the natural world and central to the development of human culture. Hence, it cannot be easily discounted as irrelevant to a scientifically informed understanding of what it means to be human.

Requirements/Evaluation: tutorial format. one paper every two weeks

Prerequisites: none

Enrollment Limit: 10

Enrollment Preferences: preference for religion majors or future religion majors

Expected Class Size: 10

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 281 (D2) REL 281 (D2)

Spring 2022
TUT Section: T1 TBA Georges B. Dreyfus

STS 301 (F) Social Construction (DPE)

Secondary Cross-listing

"Social construction" can often seem like the great collegial insight. By now, you've all heard that categories such as race, gender, and sexuality are in some sense not part of nature, but instead are created and maintained socially or culturally. The idea of social construction has been vital to critical race theory and queer theory, and, in this course, we will push ourselves into philosophy of science to see whether or not these same insights apply to everything. If we know that "Whiteness," "heterosexuality," and "masculinity," for instance, are all socially constructed, we will ask if the same is true of "electrons," "money," "the solar system," and "climate change." Can it be that all of our reality is socially constructed? Or does social construction have limits? If so, what are they? We will also ask more fundamental questions, such as: What does it mean to say something is socially constructed? How does social construction relate to claims that an aspect of the world is "real" or "not real?" Is social construction a theory about language, power, culture, societies, human perceptions, or the limits of science? What kind of political, ethical, ontological, or epistemological work do theories of social
construction do? We will begin with different accounts of the social construction of race, gender, and sexuality. In the second part of the course, we will dig deeper into philosophical debates about social construction as such. Then we will explore constructionism about natural science. In the last part of the course, we will change gears and explore look at cutting-edge work in the theory of social science aimed at explaining the construction and ontology of social worlds. The class will culminate in a project in which students will put their social construction theories into practice.

Requirements/Evaluation: regular attendance and participation, short weekly reflection papers, a 10-page research paper, and final project

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: Religion majors, then majors from cross-listed departments

Expected Class Size: 15

Grading: no pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

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<th>Course</th>
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<td>COMP 315</td>
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<td>WGS 302</td>
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<td>REL 301</td>
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<td>SOC 301</td>
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<td>SCST 301</td>
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<td>STS 301</td>
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Difference, Power, and Equity Notes: Central to REL 301 will be an analysis of the social construction of race, gender, and sexuality. It will show how power and difference are tied up in their construction and maintenance of these categories. Students will be taught how to critically analyze race, gender, and sexuality as well as social construction as such. Students will also learn sophisticated tools for studying systems of social power and difference.

Attributes: PHIL Related Courses

Not offered current academic year

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STS 302 (S) Race, gender and science: A Black, Brown, and Queer inquiry into Science and Technology Studies (DPE)

Cross-listings: HIST 390 STS 302

Primary Cross-listing

The protests that followed the murder of George Floyd have brought to the fore the realities of racism and violence that Black, Indigenous and People of Color experience daily. They also motivated a long overdue reckoning in various fields and institutions with the legacy of structural racism, and of colonial history. The history of modern science, technology and medicine is intractably connected to questions of race, gender, sexuality and colonialism. Scientific knowledge has been influenced by debates related to human difference and to colonialism, and has also contributed to the production of ideas around difference and distinction as well as around equality and equity. In this course, we will take a deeper look into different episodes in the history of modern science, technology and medicine, and will engage in a Black, Brown and Queer reading and investigation of science and technology. The course will offer a deep historical and methodological introduction to STS, as well as to a number of critical disciplines, such as Critical Race Theory, Postcolonial and decolonial theory, queer theory, in relation to science, technology and medicine. This course can serve as an alternative to STS 101.

Class Format: The course will be held remotely

Requirements/Evaluation: 2 response papers (3-5 pages each) + final project (could be a 10-15p paper or creative project of any kind)

Prerequisites: Previous courses in STS, history, CRT, WGS, or similar disciplines is preferred but not necessary.

Enrollment Limit: 10

Enrollment Preferences: Juniors and Seniors

Expected Class Size: 15

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

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<td>HIST 390</td>
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<td>STS 302</td>
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Difference, Power, and Equity Notes: The course addresses how the history of science, technology and medicine is impacted by issues related to race, gender, sexuality and colonialism

Attributes: HIST Group G Electives - Global History STS Senior Seminars

Not offered current academic year
What is Power?

Despite the importance of notions of power across the social sciences, there is a broad lack of consensus. Is power essentially domination or resistance? Is it freedom, empowerment, privilege, or oppression? Are there forms of unequal social power which are morally neutral or even good? Is power the kind of thing held by individuals, races, genders, classes, discourses, causal mechanisms, institutions, or social structures? What is the connection between social and physical power? Does power obey laws? How does power relate to technology? Or knowledge? Or agency? Or ideology? This course begins with the observation that power is often described as a causal relation—an individual's power is supposed to equal their capacity to produce a change in someone else's behavior. This suggests that the better we can understand the nature of cause and effect, the better we can understand power. Fortunately, in recent decades philosophers have made significant progress in theorizing causation. Hence, this seminar will put two very different bodies of theory in conversation: critical theory about power and philosophy of science about cause and effect. We will trace classic philosophical accounts of power and causation (in European and Chinese philosophy), as well as more recent developments in philosophy of science, political theory, and other fields. The insights we gain in this course from analyzing the nature of power should empower us to more effectively transform society. It will help students in the social sciences to understand the nature of causation in the social world, and it will help students interested in political action to better understand the nature of power. Thinkers to be considered may include: Aristotle, Amy Allen, Hannah Arendt, Bourdieu, Judith Butler, Nancy Cartwright, Foucault, Gramsci, Byung-Chul Han, Han Feizi, Giddens, Hobbes, Hume, Locke, Steven Lukes, Machiavelli, J.L. Mackie, Marx, Nietzsche, Sunzi, and Max Weber.

Class Format: Remote

Requirements/Evaluation: critical annotations for every class, midterm review essay (4-6 pages), final essay (10-12 pages)

Prerequisites: None.

Enrollment Limit: 10

Enrollment Preferences: Religion majors, STS concentrators,

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

REL 308 (D2) STS 308 (D2) SOC 308 (D2) PSCI 306 (D2)

Attributes: PHIL Related Courses

Not offered current academic year

Global Health in the Transpacific

East is East, and West is West, Rudyard Kipling famously wrote in 1889, but never has this been true. Just as war, imperialism, and transnational flows of capital move people, cultures, and ideas across the Pacific, similar patterns of migration and mobility shape the transmission of illness and disease as well. This course explores global health and disease control as sites of domination and resistance in the Pacific Rim. Articulating the linkages between Asia/America, we will look at the racialization of people and pestilence during the third plague pandemic in Hong Kong and San Francisco, malaria control projects in colonial Southeast Asia, and the rise of modern genomics out of the ashes of Hiroshima and concern over radiation risk, and other cases, to understand how disregard for Asian bodies has shaped the development of modern medicine and public health. At the same time, Indonesia's claim of "viral sovereignty" to protect their biological specimens from Western intellectual property regimes and Hmong refugees' resistance to biomedical intervention in their struggles with mental illness offer counterpoints to Western hegemony. This course provides a critical examination of biosecurity as modern geopolitical struggle and puts Asia-Pacific and the Pacific Rim at the center of our exploration of global health.

Requirements/Evaluation: Reading responses, two short review essays, and one seminar paper

Prerequisites: Previous coursework in anthropology and sociology, some knowledge of the Asia-Pacific region.

Enrollment Limit: 12

Enrollment Preferences: Juniors and Seniors, STS concentrators. If overenrolled, students will submit a short paragraph explaining their interest in the course.
**Expected Class Size:** 12

**Grading:** no pass/fail option, no fifth course option

**Distributions:** (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:
AMST 352 (D2) STS 311 (D2) ASIA 352 (D2)

**Difference, Power, and Equity Notes:** This course examines the inequalities that shape global health interventions.

**Attributes:** PHLH Bioethics + Interpretations of Health

Spring 2022

SEM Section: 01  MR 2:35 pm - 3:50 pm  Shoan Yin Cheung

**STS 312 (S) Philosophical Implications of Modern Physics (QFR)**

**Cross-listings:** STS 312  PHYS 312  PHIL 312

**Secondary Cross-listing**

Some of the discoveries made by physicists over the last century seem to show that our common sense views are deeply at odds with our most sophisticated and best confirmed scientific theories. The course will present the essential ideas of relativity theory and quantum theory and explore their implications for philosophy. We will ask, for example, what these theories tell us about the nature of space, time, probability and causality.

**Requirements/Evaluation:** attendance, participation, problem sets, exams, six 1- to 2-page papers and a 12- to 15-page term paper

**Prerequisites:** MATH 140, high-school physics, and either a 200-level course in PHIL or a 100-level course in PHYS

**Enrollment Limit:** 20

**Enrollment Preferences:** Philosophy majors and Physics majors

**Expected Class Size:** 20

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D2) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:
STS 312 (D2) PHYS 312 (D3) PHIL 312 (D2)

**Attributes:** PHIL Contemp Metaphysics + Epistemology Courses

Spring 2022

LEC Section: 01  MW 8:25 pm - 9:40 pm  Keith E. McPartland, Frederick W. Strauch

**STS 315 (S) Blackness 2.0: Race, Film and New Technologies**

**Cross-listings:** AFR 315  STS 315  SCST 315  AMST 315

**Secondary Cross-listing**

Are distinctions of race truly eliminated with digital technologies? Through an engagement with scholarship in media studies, cultural studies, gender studies, and Africana studies (to name a few), this course will investigate the nuanced ways blackness is (re)constructed and (re)presented in digital technologies. Although we will largely focus on representations of blackness in modern film, we will examine the impact of 'new' technologies upon the broader categories of race, gender, and sexuality. Additional topics may include: avatar-based entertainment; race in the 'real' vs 'virtual' world; emoji wars; blogosphere politics; internet and hashtag activism; social networking and a post-race future; and fandom in the twitter era.

**Requirements/Evaluation:** participation and attendance, creation and maintenance of a personal blog, structural analyses for film, and design of an original multimedia project

**Prerequisites:** none

**Enrollment Limit:** 19

**Enrollment Preferences:** Africana Studies concentrators

**Expected Class Size:** 15
Grading: no pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
AFR 315 (D2) STS 315 (D2) SCST 315 (D2) AMST 315 (D2)

Attributes: AFR Core Electives AMST Arts in Context Electives AMST Comp Studies in Race, Ethnicity, Diaspora FMST Core Courses

Not offered current academic year

STS 316 (F) Social Ontology

Cross-listings: STS 316 REL 316

Secondary Cross-listing

What is society? What is the social world made of? The obvious answer—individual people—was for a long time dominant in the social sciences. Indeed, many theorists argued that there was no such thing as society distinct from individual humans and their intentional actions. While this mode of theorizing had some advantages, it has recently fallen out of vogue because of its inability to explain group norms, institutions, corporations, and other collectives. Explanations at the individual level are not necessarily incorrect, but rather philosophers have increasingly come to see them as incomplete. Society seems to more than an aggregate of individuals. Hence, philosophers have increasingly turned to questions of social ontology and produced fresh theories about the nature of the fundamental constituents of the social world. We will explore this research, but with the added intuition that looking beyond humans to other social animals can provide a fresh theoretical vantage. We will set out from the idea that the social world is composed not just out of humans, but also out of materialized signs produced by social animals (e.g., a no-smoking sign or an ant’s chemical trail). This seminar will offer an advanced survey of current debates about the ontology, methodology, and aims of the humanities and social sciences. We will address questions such as: Is there a difference between explaining and understanding social actions? Should explanation in the humanities and social sciences follow the model of explanation in the natural sciences, or are there peculiarities about social phenomena that demand a different approach? What are social structures, practices, norms, institutions? How might social structures exist over and above individuals? Do social groups have agency in their own right? What are social kinds and what is their relationship to natural kinds? How do debates in the social sciences look different if we attend to other social animals and their materialized signs? Course readings will come from a variety of areas including: sociology, semiotics, feminist theory, philosophy of science, and philosophy of mind. When possible, we will supplement these with readings on research into animal behavior.

Requirements/Evaluation: Attendance and participation. Weekly critical responses/comments. 10-12 page final research paper.

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: STS concentrators, Religion or Biology majors, and then other students majoring/concentrating in DIV II areas.

Expected Class Size: 10

Grading: yes pass/fail option, yes fifth course option

Unit Notes: advanced theory seminar with difficult readings.

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
STS 316 (D2) REL 316 (D2)

Fall 2021

SEM Section: 01 W 1:10 pm - 3:50 pm Jason Josephson Storm

STS 319 (S) Neuroethics (WS)

Cross-listings: PSYC 319 NSCI 319 STS 319

Secondary Cross-listing

Neuroscience studies the brain and mind, and thereby some of the most profound aspects of human existence. In the last decade, advances in our understanding of brain function and in our ability to manipulate brain function have raised significant ethical challenges. This tutorial will explore a variety of important neuroethical questions. Potential topics will include pharmacological manipulation of "abnormal" personality; the use of "cosmetic pharmacology" to enhance cognition; the use of brain imaging to detect deception or to understand the ability, personality or vulnerability of an
individual; the relationship between brain activity and consciousness; manipulation of memories; the neuroscience of morality and decision making. In addition to exploring these and other ethical issues, we will explore the basic science underlying them.

Requirements/Evaluation: six 5-page position papers and five 2-page response papers as well as participation in discussions
Prerequisites: PSYC 212 (same as BIOL 212 or NSCI 201); or permission of instructor

Enrollment Limit: 10

Enrollment Preferences: Psychology majors and Neuroscience concentrators

Expected Class Size: 10

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:
PSYC 319 (D3) NSCI 319 (D3) STS 319 (D2)

Writing Skills Notes: In alternating weeks, each student in a tutorial pair will write a 5-page essay based on the assigned readings. Essays will be discussed during tutorial meetings and written feedback from the professor will be provided for each essay. At the end of the semester, students will choose one of their prior essays to revise as their final submission. Students will receive from the instructor timely comments on their writing skills, with suggestions for improvement.

Attributes: NSCI Group B Electives PSYC Area 1 - Behavioral Neuroscience

Spring 2022
TUT Section: T1 TBA Noah J. Sandstrom

STS 321 (F) Unsettled Futures: Time, Crisis, and Science Fiction from the Margins (DPE)

Cross-listings: AMST 321 STS 321

Secondary Cross-listing

Societies around the globe are now confronting a triple crisis that threatens not only political orders but also the very existence of certain forms of life: (1) financial collapse(s) that have increased the awareness and severity of mass inequality, (2) climate change and mass extinctions, and (3) the rise of white supremacy and ethno-nationalisms that threaten BIPOC lives and representative democracies. These material and political challenges have depleted many of the cultural resources that enable imagining non-apocalyptic futures. Yet, these crises are not novel. Many groups in the periphery—geographic, economic, and cultural—were and are already living through the uneven distribution of the apocalypse. Science fiction (SF) has emerged as a privileged symbolic field for the expression of hopes and anxieties that drive both culture and tech industries. Whether seen as a form of productive pessimism or liberatory theory, SF from the margins is deployed as a political tool for enacting change in the present. In this course, we will survey the history of SF as a variable and theoretical orientation constituted through the unfolding of uneven global encounters. We will analyze SF in the Cold War, Anthropocene, decolonization movements, and postcolonial and Indigenous landscapes, reading major works in SF and science and technology studies (STS) that address the politics of crisis, apocalypse, and global futures. In addition to novels and short stories, this course will incorporate film, graphic novels, music videos, video games, and other science fiction subgenres.

Requirements/Evaluation: Class discussion, approximately 10 pages of creative writing, 5 page analysis paper of your classmate's creative writing, final paper or project (5-8 page paper or equivalent)

Enrollment Limit: 15

Enrollment Preferences: Students who have taken American Studies 101 and/or Science and Technology Studies 101

Expected Class Size: 15

Grading: yes pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:
AMST 321 (D2) STS 321 (D2)

Difference, Power, and Equity Notes: This course examines the racial, ethnic, gendered, and sexed dimensions of science fiction and traces how marginalized people have imagined the future amidst an atemporal and unfolding apocalypse. Students will work with postcolonial, Indigenous, queer, and critical race media concerning the future, and will gain the skills needed to read political orders and crises through the lens of the margin.

Attributes: AMST Arts in Context Electives AMST Comp Studies in Race, Ethnicity, Diaspora AMST Critical and Cultural Theory Electives
STS 338 (F) Transhumanism: Religion, Technoscience, Obsolescence

Cross-listings: HSCI 338 SOC 338 STS 338 REL 338

Secondary Cross-listing

This interdisciplinary seminar invites students to pursue sociohistorical analysis and sustained critical discussion of the transhumanist movement and its overriding aims: the augmentation, transformation, and eventual transcendence of human biological constitution; the realization, through speculative technoscientific means, of an enhanced or even "postbiological existence"—a "posthuman condition." "Humanity 2.0." Through close readings of primary historical documents, transhumanist texts, scholarship on transhumanism, works of science-fiction film, literature, and popular culture, we will position the movement as an empirical conduit through which to explore the sociohistorical conditions under which transhumanist ideas and practices have emerged, circulated, and taken up residence. To that end, we will consider the ties of transhumanism to eugenics and massive investments in pharmaceuticals, anti-aging medicine, and so-called "GNR" technologies (i.e. genetics, nanotechnology, and artificial intelligence and robotics); the movement's affinities with neoliberalism and what some have pointed to as transhumanism's racialized subtext of whiteness. We will furthermore devote considerable attention to the technological singularity, the figure of the cyborg, mind-uploading, space colonization, and cryonic suspension, all of which, like transhumanism broadly, suggest that science and technology have in some sense come to operate as powerful channeling agents for the very sorts of beliefs, practices, and forms of association that theorists of secularization expected modernity to displace. Lastly, throughout the course of the seminar we will take transhumanism as a provocation to think broadly and seriously about religion, technology, embodiment, and ways of being human.

Class Format: Remote

Requirements/Evaluation: informal weekly writing, two short review essays, and one 15-page seminar paper

Prerequisites: Prior coursework in sociology-anthropology, history, religion, or science and technology studies.

Enrollment Limit: 14

Enrollment Preferences: Anthropology and Sociology majors and Science and Technology Studies concentrators

Expected Class Size: 14

Grading: yes pass/fail option, no fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

HSCI 338 (D2) SOC 338 (D2) STS 338 (D2) REL 338 (D2)

Not offered current academic year

STS 340 Science, Religion, and the (post)colony: Critical approaches to the global history of knowledge (DPE)

Histories of science and religion have been deeply intertwined with colonial and postcolonial history. Colonial claims to legitimacy were often rooted in perceptions of scientific and technological superiority, and colonial expansion often marched in lockstep with missionary activity and forced conversions. In the process, race and human difference emerged as concepts at the intersection of scientific and religious discourses and was forged within the colonial framework. This colonial history of science and religion impacted how scientific and religious thought, practices and institutions developed through the period of decolonization and into today. Similarly, the attendant history of race and human difference continues to influence postcolonial and contemporary discourses around race, ethnicity, identity and migration. In this course, we will trace key moments in the history of science and religion and their relation to coloniality. We will start in the sixteenth century with the rise of modern European empires, move into the height of modern colonialism, indigenous genocides and chattel slavery, and trace decolonization from the middle of the nineteenth into today. Throughout, we will investigate how science and religion emerged as concepts, practices and institutions, and how these narratives impacted, and were impacted by colonial expansion and history. We will pay particular attention to questions of race, gender, sexuality and human difference as key concepts and practices that emerged at the intersections of science, religion and (post)colonialism

Requirements/Evaluation: 2 response papers (3-5pages each) + final project (could be a 10-15p paper or creative project of any kind)

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Concentrators, followed by seniors and juniors

Expected Class Size: 15
Grading:

Distributions: (D2) (DPE)

Difference, Power, and Equity Notes: The course addresses questions of race, gender, sexuality and human difference as seen through the history of science, technology and medicine. Students will creatively engage with critical race theory, postcolonial theory and queer theory. They will also investigate human suffering as a category that provides a deeper understanding of difference, diversity and equality.

Not offered current academic year

STS 348 (S) Women, Men and Other Animals (DPE)

Cross-listings: ARTH 348 STS 348 SCST 348 WGSS 348 ENGL 348

Secondary Cross-listing

In this seminar, we will together learn to be "animal critics." We will explore ways in which human groups and interests, particularly in the United States, have both attached and divorced themselves from other animals, considering such axes as gender, race, ability, and sexuality as key definitional foils for human engagements with animality. What are the "uses" of "animals" for "us," and precisely who is this "us"? How and when are some willing to see themselves as animal--indeed, under what political conditions do they embrace it? What is the history of unique, often asymmetric, interdependencies between human animals and nonhuman animals? How do actual lives of humans and non-human animals merge and clash with the rhetorics and visualities of human animality? We will examine both "everyday" animality and the forms of animality that stand out only today in retrospect, in their exceptionality, or upon reflecting on structures of privilege. We will build a critical animal studies vocabulary from a range of readings in science, philosophy, art, feminism, indigenous studies, critical race, geography, fiction, film, rhetoric, history, activist movements, disability studies, postcolonial studies, and examine both visual and narrative cultural production.

Requirements/Evaluation: individual research project

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: Women's, Gender and Sexuality Studies majors, Art History majors, English majors, Environmental Studies majors

Expected Class Size: 15

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

ARTH 348 (D1) STS 348 (D2) SCST 348 (D2) WGSS 348 (D2) ENGL 348 (D1)

Difference, Power, and Equity Notes: Human/animal intersections are analysed with special attention to axes of gender, race, ability and sexuality.

Not offered current academic year

STS 349 (F) The Politics of Algorithms

Cross-listings: STS 349 AMST 349 PSCI 331

Secondary Cross-listing

Every day, you interact with or through computer algorithms. In ways often obscure to users, they structure communication or conduct in social media, education, healthcare, shopping, entertainment, dating, urban planning, policing, criminal sentencing, political campaigns, government regulation, and war. Moving from the emergence of cybernetics during World War II through such contemporary examples as facial recognition software, this seminar approaches algorithms as complex technological artifacts that have social histories and political effects. Asking how algorithms are political and what that tells us about politics today (particularly in the U.S.), we will consider how their design expresses forms of power and their deployment shapes ways of living. What behaviors do different algorithms solicit, reward, discourage, or stigmatize? What kinds of selfhood and relationships do they promote or thwart? How do various algorithms influence political partisanship and beliefs and intersect with existing hierarchies of race, class, gender, and sexuality? When inequities are built into a design, can that be addressed by rooting out "bias," or do such efforts miss something more inherent in the kinds of artifacts algorithms are or what they can be in a capitalist economy? Might developments in artificial intelligence transform our sense of the human or even threaten the species? Many of the seminar's themes, including democracy, power, inequality, judgment, deliberation, publicity, subjectivity, and agency, are central to political theory, but readings and course materials will also be drawn from such fields as media theory, surveillance studies, sociology, American studies, critical data science, film, and contemporary art. The course neither requires nor teaches any computer science skills.

Requirements/Evaluation: Class attendance and participation, regular short posts or exercises, and either three eight-page essays or one 8-page
essay and one longer final paper.

**Prerequisites:** At least one course in political, cultural, or social theory or the critical study of science and technology, or permission of the instructor. Not open to first-year students.

**Enrollment Limit:** 15

**Enrollment Preferences:** Political Science and American Studies majors and STS concentrators; then qualified students from all other majors welcome, space permitting.

**Expected Class Size:** 15

**Grading:** no pass/fail option, no fifth course option

**Distributions:** (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 349 (D2) AMST 349 (D2) PSCI 331 (D2)

**Attributes:** AMST Critical and Cultural Theory Electives PSCI Political Theory Courses

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**STS 350  Emotions**

Philosophy is often described as thinking about thinking: variously conceived inquiries into the nature, scope and limits of human reasoning have always been at its heart. Without challenging the centrality of such projects for philosophy, this tutorial will focus on a less emphasized, but equally essential aspect of our lives: emotions. What are emotions, and how should we think about them? What is the proper ‘geography’—classification and analysis—of our emotions, and what is their relation to our somatic states, feelings, beliefs, judgments, evaluations and actions? Do we have any control over our emotions? Could we (individually and socially) educate and cultivate them? How are conscious and unconscious emotions related to a person’s action, character, and her social world? In addressing these substantive questions, we will also consider which methodological approach—if a single one can be privileged—we should adopt for examining emotions. We will try to determine what is the scope and nature of an adequate theory of emotions, what are the desiderata for such a theory, and what should count as evidence in its favor. We will examine a variety of philosophical and scientific theories of emotion, as well as some issues concerning normative aspects of emotions: the role of emotions in a good life, and the concept of emotional maturity.

**Class Format:** The class will meet remotely only.

**Requirements/Evaluation:** Class attendance, preparedness and participation; weekly meetings with the tutorial partner outside of the class; five lead papers (5-7 pages) and five short response papers (2-3 pages).

**Prerequisites:** two philosophy courses.

**Enrollment Limit:** 10

**Enrollment Preferences:** philosophy majors and prospective majors, then psychology majors.

**Expected Class Size:** 10

**Grading:**

**Distributions:** (D2)

**Attributes:** PHIL Contemp Metaphysics + Epistemology Courses

Not offered current academic year

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**STS 353 (S) Is Science Native to Turtle Island? The History of Native Science in North America**  (DPE)

**Cross-listings:** STS 353 AMST 353

**Secondary Cross-listing**

Settler sciences and technologies deployed by Europeans colonizing Turtle Island (what settlers called North America) were introduced as weapons of Indigenous termination. From medical violation, to anthropological theft, and industrial pollution, settler technoscience objectified and appropriated Indigenous people and lands, and attempted to displace Indigenous knowledge in the pursuit of settler supremacy. Indigenous bodies were cast as victims, objects and sometimes the tools of this project. And yet, as tools and objects, Indigenous peoples took up settler technoscience in a multitude of ways that failed (both purposefully and not) to adhere to the colonizing mission, incorporating Indigenous knowledges and orientations, subverting
settler science as a source of authority, and positioning science as a site of Indigenous sovereignty. The practice of taking up science as a tool of decolonization has become explicit in recent decades as expressly Native sciences now shape tribal funding, college education, and negotiations with international governing bodies. This course will trace the history of Native science across different nations and disciplines from the antebellum period when settler sciences were taking shape in civilian institutions to the present when Native science is professionalizing and being codified. We will read primary sources and scientific treatises by Indigenous leaders, activists, and scientists alongside secondary sources in Indigenous science and technology studies (STS), history, and postcolonial and queer theory.

Requirements/Evaluation: attendance and class participation, two 4-page research papers, and a final creative project (TBD with instructor) or 8- to 10-page paper

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: American Studies majors and Science and Technology Studies concentrators

Expected Class Size: 13

Grading: no pass/fail option, no fifth course option

Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 353 (D2) AMST 353 (D2)

Difference, Power, and Equity Notes: This course will explore how settler sciences have been used as a technology of difference making, dispossession, and genocide in United States history. It will also provide students a theoretical toolkit and historical perspective by which they can grapple with the fact that power structures like settler technoscience can be a source of both colonization and liberation.

Attributes: AMST Comp Studies in Race, Ethnicity, Diaspora AMST Critical and Cultural Theory Electives

Spring 2022

SEM Section: 01    W 1:10 pm - 3:50 pm    Eli Nelson

STS 355 (S) Foucault: Confessions of the Flesh

Cross-listings: REL 355 STS 355 COMP 359

Secondary Cross-listing

The French philosopher, historian, and social critic, Michel Foucault (1926-1984) has had a massive influence across a range of disciplines. Indeed, in 2019, Google Scholar ranked Foucault as the number one most highly cited scholar in the Humanities and Social Sciences. While many of his contemporaries have faded in importance, Foucault's writings on power, madness, the history of sexuality, and the structures of domination and governmentality have become central to the theoretical canon of a range of academic disciplines. To be a scholar in the humanities today is often to be in Foucault's shadow. But despite the many references to his work, Foucault is frequently misunderstood and subsequent scholars often attribute to him positions he would have repudiated. Now almost forty years after his death, his work is also long overdue for a reappraisal as we come to understand Foucault better as a person and especially as the final, and posthumous, volume of his History of Sexuality, Confessions of the Flesh, has only just appeared and been translated into English. In this course we will mainly read Foucault supplemented with occasional contextual readings. Although we will touch on his earlier writings, this seminar will emphasize his middle-to-late period (beginning with The Archaeology of Knowledge) and including selections from his later monographs, lectures, interviews, and short writings. It will culminate in the unfinished intellectual and political project that occupied Foucault in his last days. We will think with and often against Foucault, focusing primarily on questions of power, knowledge, truth, and addressing his later emancipatory gesture toward "technologies of the self." We will also appraise the methodologies that Foucault described as "archaeology" and "genealogy." We will historicize Foucault in his life and cultural context and ask how much of his arguments still apply today. What blind-spots did he have? Which of his ideas are worth consolidating and which need repudiating? How might we go beyond Foucault?

Requirements/Evaluation: class participation, weekly critical responses, 10- to 12-page final paper

Prerequisites: none

Enrollment Limit: 15

Enrollment Preferences: In order of preference, Religion majors, STS concentrators, Comp Lit majors, and then Philosophy majors.

Expected Class Size: 15

Grading: no pass/fail option, yes fifth course option
**Unit Notes:** in-depth seminar on a difficult philosopher who we'll be reading closely

**Distributions:** (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

REL 355 (D2) STS 355 (D2) COMP 359 (D1)

Spring 2022

SEM Section: 01    W 1:10 pm - 3:50 pm     Jason Josephson Storm

**STS 364 (S) Mental Health and Illness: Philosophical Considerations**

**Cross-listings:** STS 364  PHIL 364

**Secondary Cross-listing**

This course will raise and discuss a number of philosophical questions concerning our current understanding of mental health and mental illness. We will begin by examining the general concepts of health and disease, and then apply them to human psychology. Throughout the course, our focus will be on the best theoretical and practical knowledge we now have to diagnose, explain, and alleviate mental illness. Some of the questions that we will discuss are: What is psychopathology and what are its causes? Is it possible to have systematic knowledge of subjective experience? If so, is that knowledge importantly different in kind or in rigor from the knowledge we gain through physics, chemistry or geology? Are there metaphysical and ideological assumptions in contemporary psychiatry, and if so, could and should they be avoided? What is the basis on which current psychiatric diagnostic manuals are organized? Is that principle of organization justifiable or not? Do particular case histories offer good explanations of psychopathology? In framing and answering these questions, we will discuss subjective experience (or phenomenology) of mental illness; holism vs. reductionism; functional, historical and structural explanations of psychopathology; theory formation, evidence, and the role of values in psychology and psychiatry; the diversity and disunity of psychotherapeutic approaches; relationship between knowers and the known; and relationship between theoretical knowledge in psychiatry and the practices of healing.

**Requirements/Evaluation:** several writing assignments, evenly spaced throughout the semester

**Prerequisites:** two philosophy courses; or one philosophy and one STS course; or consent of the instructor

**Enrollment Limit:** 20

**Enrollment Preferences:** students who took Philosophy of Science or Philosophy of Mind; Philosophy and Psychology majors

**Expected Class Size:** 20

**Grading:** no pass/fail option, yes fifth course option

**Distributions:** (D2)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 364 (D2) PHIL 364 (D2)

**Attributes:** PHIL Contemp Metaphysics + Epistemology Courses

Not offered current academic year

**STS 370 (F) Medicine and Campus Health in Disruptive Times (DPE) (WS)**

**Cross-listings:** STS 370  WGSS 371  ANTH 371

**Secondary Cross-listing**

This class applies the methods and theories of critical medical anthropology and medical sociology to help students design and pursue innovative ethnographic projects that explore campus or community health. How do disruptive moments like COVID-19 serve as focal moments in social history that reveal underlying social inequalities of access, health outcomes, and well-being? Students learn and use an array of ethnographic techniques such as observant participation, interviewing, focus groups, and qualitative surveys building on weekly discussions, feedback, and design exercises to explore our campus and/or wider community. We situate our campus health projects by considering the wider context of power and intersectionality that inflect and structure health and well-being within our community, nation, & world. Our case ethnographies explore how structural racism shapes medical education and healthcare care in the US, how concepts of sexual citizenship can reshape debates on sexual assault on campus, how the spread of US psychiatry inflects the landscape of global mental health across Asia, and how queer activism responds to the HIV/AIDS crisis. We consider the roles of narrative, active listening, and empathy in both medicine and ethnography, while practicing skills that can benefit student researchers and interlocutors, providers as well as patients. Our goal is understand the strengths and limits of qualitative and participatory research
within communities always already structured by power, privilege, and engaged practices.

**Requirements/Evaluation:** Three written fieldnotes, weekly attendance, writing and discussion exercises, & final oral presentations & data visualizations for fieldwork projects.

**Prerequisites:** A course in Anthropology, Sociology, Science & Technology Studies, or across DIV II is strongly recommended

**Enrollment Limit:** 20

**Enrollment Preferences:** Majors in Anthropology, Sociology, Women's, Gender and Sexuality Studies; Concentrators in Public Health, Science and Technology Studies

**Expected Class Size:** 20

**Grading:** yes pass/fail option, no fifth course option

**Distributions:** (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:

| STS 370 (D2) | WGSS 371 (D2) | ANTH 371 (D2) |

**Writing Skills Notes:** This class assignments includes over 9,000 words of essay assignments, and will help students develop critical writing skills, including use of rhetoric, evidence, argument, synthesizing data, logic, and anticipating counter-arguments.

**Difference, Power, and Equity Notes:** This class examines the intersectionality of race, class, gender, & sexuality in impacting healthcare and health outcomes. It theorizes and explores the ways that intersectionality and implicit bias shapes health and well-being in the community, patient/provider encounters, and efforts to 'improve' community and individual health in the US, Asia, and across the globe.

**Attributes:** EXPE Experiential Education Courses  PHLH Methods in Public Health

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### STS 372 Time and Temporality

Duration, rhythm, speed, pace, trajectory, sequence, articulation, busyness, boredom, flow—time is one of the most fundamental categories of our experience of reality. Since the founding of the discipline, sociologists have been interested in how time, while seemingly given and natural, is deeply influenced by history and society. This two-part course will introduce students to the sociological analysis of time and temporality. In part one, students will explore the emergence of the so-called "modern western temporal order"—the sense of time that many people take for granted as the way things are. We will excavate the historical roots of schedules, clocks, calendars, and time zones; examine how capitalism and colonial conquest disseminated particular notions of time around the globe; and discuss leading theories of how constructions of time change through history and vary among communities. In part two, we will focus on one of the most frequently lamented and celebrated qualities of modern temporality: acceleration. Is the world speeding up? Why do so many people feel always pressed for time? What are the promises and limits of speed, acceleration, and ceaseless change for building a robust democratic society?

**Requirements/Evaluation:** participation, time diary analysis (3-5 pages), final paper (10-12 pages)

**Prerequisites:** none

**Enrollment Limit:** 20

**Enrollment Preferences:** Anthropology and Sociology majors

**Expected Class Size:** 15

**Grading:**

**Distributions:** (D2)

Not offered current academic year

### STS 375 Human Work in Computational Systems (QFR)

**Cross-listings:** CSCI 377  STS 375

**Secondary Cross-listing**

As far as we know, the technological singularity has not yet arrived. Therefore, humans remain a part of our current computation pipeline. However,
the role humans play varies greatly: self-driving cars aim to have human involvement only in development and emergencies, whereas educational tools are built for constant human involvement. In this course, we broadly explore human work within computational systems through topics such as crowdsourcing, educational technology, citizen science, human computation, open-source software, micro-labor markets, and online gaming. Students should expect broad exposure to a wide variety of human computing topics and group projects on building and evaluating computational systems that use human work.

**Class Format:** Lectures will be held on Wednesday and Friday each week. Conference sections will each meet once per week. Students should sign up for the lecture section and one conference.

**Requirements/Evaluation:** Course projects, in-class group work/participation, weekly written homework assignments/readings.

**Prerequisites:** CSCI 136

**Enrollment Limit:** 20

**Enrollment Preferences:** Preference for current CS majors

**Expected Class Size:** 20

**Grading:** yes pass/fail option, no fifth course option

**Materials/Lab Fee:** $75 for purchase of software and work on crowdsourcing platforms.

**Distributions:** (D3) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:

CSCI 377 (D3) STS 375 (D3)

**Quantitative/Formal Reasoning Notes:** This course includes regular homework and projects in which quantitative/formal reasoning skills are practiced and evaluated.

Not offered current academic year

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**STS 376 (F) Human-Computer Interaction**

**Cross-listings:** STS 376 CSCI 376

**Secondary Cross-listing**

Human-Computer Interaction (HCI) principles are practiced in the design and evaluation of most software, greatly impacting the lives of anyone who uses interactive technology and other products. There are many ways to design and build applications for people, so what methods can increase the likelihood that our design is the most useful, intuitive, and enjoyable? This course provides an introduction to the field of human-computer interaction, through a user-centered approach to designing and evaluating interactive systems. HCI draws on methods from computer science, the social and cognitive sciences, and interaction design. In this course we will use these methods to: ideate and propose design problems, study existing systems and challenges, explore design opportunities and tradeoffs, evaluate and improve designs, and communicate design problems and solutions to varying audiences.

**Requirements/Evaluation:** course projects, in-class group work/participation, and exams

**Prerequisites:** CSCI 136

**Enrollment Limit:** 24

**Enrollment Preferences:** current or expected Computer Science majors

**Expected Class Size:** 24

**Grading:** no pass/fail option, no fifth course option

**Distributions:** (D3)

This course is cross-listed and the prefixes carry the following divisional credit:

STS 376 (D2) CSCI 376 (D3)

Not offered current academic year

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**STS 377 (F) Landscapes in American Literature**

**Cross-listings:** ENGL 376 STS 377 AMST 376

**Secondary Cross-listing**

This course examines representations of American landscapes in selected texts from the British colonial era to the present. Critical approaches will
include narrative theory, formalism, eco-criticism, and science and technology studies. The central questions are: (1) How do authors adapt narrative and poetic forms to the representation of particular landscapes? (2) How do literary landscape representations change when new technologies arise for traversing and transforming them? (3) What effects can literary landscapes have on the landscapes we live in? Landscapes include settlements, cities, wildernesses, "frontiers," suburbia, and infrastructural scenes. Relevant technologies include the postal service, the railroad, the telegraph and telephone, the automobile, commercial aviation, and Skype. Texts may include: letters of Columbus, American Indian creation stories, early American religious texts, captivity narratives, slave narratives, and poems, short stories, and novels from the 17th to the 21st centuries, as different from one another as Dickinson's "Nature-sometimes sears a Sapling-" and Annie Proulx's *Brokeback Mountain*.

**Requirements/Evaluation:** discussion participation; five brief response papers (~2 pages); a mid-semester essay (~5 pages); a final essay (12- to 15-pages)

**Prerequisites:** none

**Enrollment Limit:** 15

**Expected Class Size:** 12

**Grading:** yes pass/fail option, yes fifth course option

**Distributions:** (D1)

**This course is cross-listed and the prefixes carry the following divisional credit:**

ENGL 376 (D1) STS 377 (D2) AMST 376 (D1)

**Attributes:** ENGL Criticism Courses

Not offered current academic year

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**STS 378 (S) Human Artificial Intelligence Interaction**

**Cross-listings:** STS 378 CSCI 378

**Secondary Cross-listing**

Artificial intelligence (AI) is already transforming society and every industry today. In order to ensure that AI serves the collective needs of humanity, we as computer scientists must guide AI so that it has a positive impact on the human experience. This course is an introduction to harnessing the power of AI so that it benefits people and communities. We will cover a number of general topics such as: agency and initiative, AI and ethics, bias and transparency, confidence and errors, human augmentation and amplification, trust and explainability, and mixed-initiative systems. We explore these topics via readings and projects across the AI spectrum, including: dialog and speech-controlled systems, computer vision, data science, recommender systems, text summarization, and UI personalization, among others.

**Class Format:** There is no scheduled time for lectures. They will be available for asynchronous viewing. Each conference section will meet once per week, on either Tuesday or Wednesday. Students should sign up for lecture and one conference.

**Requirements/Evaluation:** homework, programming assignments, group work, participation, and quizzes

**Prerequisites:** CSCI 136, and at least one of CSCI 237, 256, or 334

**Enrollment Limit:** 20(8/conf)

**Enrollment Preferences:** current or expected Computer Science majors

**Expected Class Size:** 20

**Grading:** yes pass/fail option, no fifth course option

**Distributions:** (D3)

**This course is cross-listed and the prefixes carry the following divisional credit:**

STS 378 (D2) CSCI 378 (D3)

Not offered current academic year

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**STS 380 (S) Freedom Dreams, Afro-Futures & Visionary Fictions**

**Cross-listings:** AFR 380 WGSS 380 ENGL 381 AMST 380 STS 380

**Secondary Cross-listing**

In this course we will examine the various ways Black scholars, artists, & writers use science fiction and visionary fiction to imagine freedom and new world orders. We will focus on the role of history, particularly slavery, in the Black radical imagination. "Freedom" is the keyword throughout the course. We will grapple with the various and sometimes conflicting meanings and uses of freedom as it relates to blackness, gender, sexuality, class
and ability. We will explore multiple forms of scholarship and cultural productions, including film, music, novels, short-stories, art, poetry, and other academic texts. All students will be asked to discover and develop their writerly voices through various critical, creative, experimental and performative assignments.

Requirements/Evaluation: active participation, completion of various short assignments, one 5-page paper and one 7- to 10-page final paper

Prerequisites: none

Enrollment Limit: 20

Enrollment Preferences: Women's, Gender and Sexuality Studies majors, then Africana Studies concentrators

Expected Class Size: 20

Grading: no pass/fail option, yes fifth course option

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
AFR 380 (D2) WGST 380 (D2) ENGL 381 (D1) AMST 380 (D2) STS 380 (D2)

Attributes: WGSS Racial Sexual + Cultural Diversity Courses

Spring 2022

SEM Section: 01 Cancelled

STS 397 (F) Independent Study: Science and Technology Studies
Independent Study: Science and Technology Studies
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

Fall 2021

IND Section: 01 TBA Jason Josephson Storm

STS 398 (S) Independent Study: Science and Technology Studies
Independent Study: Science and Technology Studies
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

Spring 2022

IND Section: 01 TBA Jason Josephson Storm

STS 401 (F) Critical Perspectives on Science and Technology
A research-oriented course designed to give students direct experience in evaluating and assessing scientific and technological issues. Students initially study particular techniques and methodologies by employing a case study approach. They then apply these methods to a major research project. Students may choose topics from fields such as biotechnology, computers, biomedical engineering, energy, and other resource development. Students will apply their background of historical, philosophical, and technological perspectives in carrying out their study.

Requirements/Evaluation: research paper or project

Prerequisites: none

Enrollment Limit: 5

Expected Class Size: 5

Grading: yes pass/fail option, yes fifth course option

Distributions: (D2)

Attributes: STS Senior Seminars
STS 402  (F)  Cold War Technocultures
Cross-listings:  SCST 401  STS 402  SOC 363

Secondary Cross-listing
In this seminar students will pursue sociohistorical analyses of Cold War American culture(s) by attending to key points of intersection between politics, aesthetics, and major technoscientific developments during this period. Part I will focus principally on the emergence of the computer and its role in shaping American infrastructure and styles of thought aimed at Soviet "containment." We will trace the historical threads connecting MIT's "Whirlwind" computer project and the SAGE continental air defense system; nuclear wargaming at the RAND Corporation and the aesthetics of "thinking the unthinkable"; the science of cybernetics and the prospect of automation; and ultimately the role of computation, intermedia, and systems logic in perpetrating the atrocities of the Vietnam War. Part II will take up the Cold War space race--from Luna 2, Sputnik I, and Yuri Gagarin to Projects Mercury, Gemini, and the Apollo moon landing. Within this context we will also consider the Club of Rome's Limits to Growth report; plans backed by NASA for the industrialization and colonization of outer space; and the place of science-fiction as a Cold War aesthetic (print, televisual, cinematic). Part III, finally, will explore key moments of conflict, resistance, appropriation, and unintended consequences of Cold War technoscientific developments, among them antipsychiatry and environmentalism; Project Cybersyn, an infrastructural casualty of the U.S./CIA-backed Chilean coup of 1973; the New Left, the American counterculture, new social movements, and the countercultural roots of new media and neoliberalism.

Requirements/Evaluation:  two 5-page book review essays, weekly 1-page papers, midterm essay exam, final essay exam
Prerequisites:  STS 101 or instructor consent; prior coursework in Anthropology and Sociology and/or History
Enrollment Limit:  15
Enrollment Preferences:  Anthropology and Sociology majors, Science and Technology Studies concentrators
Expected Class Size:  15
Grading:  no pass/fail option, no fifth course option
Distributions:  (D2)
This course is cross-listed and the prefixes carry the following divisional credit:
SCST 401 (D2) STS 402 (D2) SOC 363 (D2)
Attributes:  STS Senior Seminars

Not offered current academic year

STS 413  (S)  Feminist and Critical Technoscience  (DPE)
Cross-listings:  WGSS 413  STS 413

Primary Cross-listing
Are Feminism and Science compatible commitments? What do these nouns mean when paired with one another, when capitalized (or not), when pluralized (or not), and when deployed by a range of authors in different disciplines? Scholars of feminist science and technology studies (FSTS) have addressed these questions in their studies of scientific objectivity, technological vulnerability, environmentalism, and the makings (or doings) of race as well as gender. We will explore these questions and topics with a view to identifying the range of ethical, political, and epistemological practices within feminist and critical technoscience. We will read theoretical texts in FSTS, such as Donna Haraway's "Situated Knowledges" and Safiya Umoja Noble's "A future for intersectional black feminist technology studies." We will also read case studies, such as Pat Treusch's "The Art of Failure in Robotics" and Emily Martin's "The Egg and the Sperm: How Science Has Constructed a Romance Based on Stereotypical Male-Female Roles." While our preliminary readings will be set in advance, students will help shape the syllabus as we advance toward a better understanding of feminist technoscience's potentials and limitations at a time when technical change often outpaces careful consideration of its consequences.

Requirements/Evaluation:  discussion participation; five response papers (~2 pages); mid-semester essay (8 pages); annotated bibliography; final essay (12-15 pages + in-class presentation)
Prerequisites:  none
Enrollment Limit:  12
Enrollment Preferences:  Science and Technology Studies concentrators
Expected Class Size:  12
Grading:  yes pass/fail option, yes fifth course option
Distributions: (D2) (DPE)

This course is cross-listed and the prefixes carry the following divisional credit:
WGSS 413 (D2) STS 413 (D2)

Difference, Power, and Equity Notes: Central to “Feminist and Critical Technoscience” is a recognition of and engagement with the historical under-privileging of women, women's work, and women's bodies in capital-S “Science” and in a wide range of other technoscientific practices. We will examine and elucidate several branches of feminist theory. We will also examine feminist accounts of contemporary technoscientific work as well as critical STS with a focus on race.

Attributes: STS Senior Seminars

Spring 2022
SEM Section: 01    W 1:10 pm - 3:50 pm    Ezra D. Feldman

Winter Study -----------------------------------------------

STS 12 (W) Artificial Intelligence: What a Concept!
Cross-listings: SOC 12 STS 12
Secondary Cross-listing
Computer scientists coined the term "artificial intelligence" in the 1950s, and the idea of a digitally fabricated mind has been stirring people's hopes and fears ever since. Will an artificial intelligence bring humanity to perfection, or will it exterminate us? Will it steal our jobs, or make them more fulfilling? Will it resemble us, or be entirely alien? In this course, we will examine society's evolving conceptions of AI, from early fantasies of robot invasions to contemporary speculations about machine learning and the approach of a post-human world. We'll trace the history of efforts to develop AI and the public's responses to them, with a special focus on discerning what our reactions to AI tell us about our conceptions of ourselves--our minds, our bodies, our destiny. In addition to considering scholarly and journalistic explorations of artificial intelligence, we'll examine how androids and other "thinking machines" have been portrayed in movies, fiction, and art. The course will meet for two hours three times a week, and the class sessions will be supplemented by readings and viewings.

Requirements/Evaluation: 10-page paper
Prerequisites: none
Enrollment Limit: 20
Enrollment Preferences: preference will be given to Sociology majors and Science and Technology Studies concentrators
Grading: pass/fail only
Materials/Lab Fee: none

This course is cross-listed and the prefixes carry the following divisional credit:
SOC 12 STS 12

Winter 2022
LEC Section: 01    TR 10:00 am - 12:50 pm    Nicholas Carr

STS 99 (W) Independent Study: Science and Technology Studies
Open to upperclass students. Students interested in doing an independent project (99) during Winter Study must make prior arrangements with a faculty sponsor. The student and professor then complete the independent study proposal form available online. The deadline is typically in late September. Proposals are reviewed by the pertinent department and the Winter Study Committee. Students will be notified if their proposal is approved prior to the Winter Study registration period.
Class Format: independent study
Grading: pass/fail only

Winter 2022