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**

Students MUST contact departments/programs BEFORE assuming study away credit will be granted toward the major or concentration.

**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?**
ST5 101 (S) Science, Technology, and Human Values

Cross-listings: STS 101 SOC 201

Primary Cross-listing
This course offers an introduction to science and technology studies. Attention will be devoted to exploring the nature of science and technology, their relationships to and interactions with one another, society and the natural world, and the influences these interactions exert in shaping what humans value. With widespread use of new social media, controversial developments in such bio-technical practices as gene-editing and the cloning of mammals, rapid advances in various forms of technological surveillance, and the increasing sophistication of technological weaponry in the military, the triumph of technology remains a defining feature of modern life. For the most part, modern humans remain unflinchingly confident in the possibilities technology holds for continuing to improve the human condition. As with other features of modernity, however, technology has also had significant, albeit largely unanticipated, social consequences. This course will focus on the less often examined latent functions of science and technology in modern society. It will consider, for example, the social effects of technology on community life, on privacy, and on how people learn, think, understand the world, communicate, and organize themselves. The course will also examine the effects of technology on medicine, education, criminal law, and agriculture and will consider such counter-cultural reactions to technology as the Luddite movement in early nineteenth century England, Amish agrarian practices, and the CSA (community supported agriculture) movement.

Requirements/Evaluation: A midterm, final, and two short papers.

Prerequisites: none

Enrollment Limit: 20

Enrollment Preferences: first-years and sophomores

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:

STS 101(D2) SOC 201(D2)

Spring 2024

SEM Section: 01 MR 1:10 pm - 2:25 pm James L. Nolan

ST5 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

Not offered current academic year

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**STS 115 (F) AIDS: The Disease and Search for a Cure**

**Cross-listings:** CHEM 115 STS 115

**Secondary Cross-listing**

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 pathogen. However, the early optimism concerning the prospects for an effective AIDS vaccine has not yet materialized, and HIV strains that are resistant to drug therapies are common. We are now four decades into the AIDS pandemic, and the World Health Organization estimates that there are more than 38 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 strategies 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:** 32

**Enrollment Preferences:** seniors, juniors, sophomores, then first-year students

**Expected Class Size:** 32

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

**Distributions:** (D2)

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

CHEM 115(D3) STS 115(D2)

**Attributes:** PHLH Biomedical Determinants of Health

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**STS 135 (F) Politics after the Apocalypse**

**Cross-listings:** STS 135 PSCI 172

**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.

**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 172(D2)

**Attributes:** PSCI Political Theory Courses

Not offered current academic year

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

**Cross-listings:** STS 142 AMST 142

**Secondary Cross-listing**

Indigenous people occupy a paradoxical position in time. As survivors of genocide, they are already post-apocalyptic, occupying what could be called "their ancestors' dystopia." But Indigenous people are also imagined to exist frozen in history, merely one step in the ceaseless march of civilization that brought us to the present. This tutorial explores how contemporary Native science and speculative fiction imagines and enacts futurity from this dynamic temporal position. Looking across numerous national and transnational Indigenous contexts, we will survey a diverse range of media, including short stories, novels, visual art, video games, films, and online platforms like Second Life. Pairing these with works in Science and Technology Studies (STS) and Native American and Indigenous Studies (NAIS), we will explore concepts like the Native "slipstream," eco-erotics, post-post-apocalyptic stress, Native pessimism, biomedical speculative horror, and what it would be like to fly a canoe through outer space.

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

**Prerequisites:** permission of instructor

**Enrollment Limit:** 10

**Enrollment Preferences:** first and second year students, American Studies majors, 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:

STS 142(D2) AMST 142(D2)

**Difference, Power, and Equity Notes:** Students in this course will explore the relationship between political violence, resistance, and speculation. We will develop close reading practices, analytical methods, and careful discussion dynamics to enable students to make sense and use of concepts like futurity, race, settler colonialism, gender, and technological determinism.

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

Spring 2024

TUT Section: T1 Cancelled

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**STS 145 (S) Black Mathematics: The Power of Revolutionary Numbers** (DPE)

**Cross-listings:** STS 145 AFR 145
Secondary Cross-listing

The power of numbers is undeniable. Numbers can be used to illuminate, obscure or oppress. Numbers are not only symbols in the strictest sense, but are powerful representations that have considerable impact on institutions, policy, the real world and our lives. Data are said to be the "Black gold" of the 21st century. By use of human, economic, political and social indicators and metrics Western scientists, statisticians, governments and powerful actors have promoted liberalism, militarism and capitalism, which often dehumanized the racialized 'Other'. Various techniques in social sciences like forecasting, statistics, quantification, predicting, modeling all rely heavily on numbers or their manipulation/interpretation. But what social and economic goals and who do statistics serve? What ideologies underpin these numbers about Black people/communities? What is the significance of numbers to Black life? To what purpose have numbers been put in the furtherance of Black liberation? This course addresses these questions and the different uses to which numbers have been put by Black revolutionaries and communities. Black activists, scholars and communities have questioned how statistics are formulated, used and their Eurocentric basis as well as their limited ability to accurately reflect the Black world. We delve an alternative Black philosophy, specifically how Black people have historically used/defied/circumvented the numbers game. We will study and historically trace the invention of statistics, and how Black people, organizations and communities have utilized numbers to resist oppression, shape movements and direct emancipatory efforts. From Ida B Wells, to W. E. B. du Bois, Claudia Jones and Eric Williams, using numbers differently, has pushed back against oppression, reinterpreted history and spurred social and political change.

Requirements/Evaluation:  Attendance and Participation (20%); Themed visual infographic/design (25%); Critical numbers/data analysis paper (30%); Case study/peer review exercise (25%)

Prerequisites: None

Enrollment Limit: 10

Enrollment Preferences:  If over-enrolled, preference to AFR majors/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:

STS 145(D2) AFR 145(D2)

Difference, Power, and Equity Notes: Students will be guided through the history and alternative use of numbers to understand how they came to constitute powerful tools that have brought about systemic inequality and liberation. They will gain an appreciation of how these tools have been used and manipulated both by powerful historical actors, and oppressed groups and emerging figures acting towards emancipatory purposes.

Attributes: AFR Theories, Methods, and Poetics

Spring 2024

SEM Section: 01   Cancelled

STS 208  (S) Designer Genes  (DPE)

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

Not offered current academic year

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

Not offered current academic year

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.

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

Cross-listings: STS 213 AFR 213 WGSS 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) AFR 213(D2) WGSS 213(D2)

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

Not offered current academic year
STSTS 214 (S) Understanding Social Media

Cross-listings: SOC 212 STS 214

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.

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)

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

SOC 212(D2) STS 214(D2)

Attributes: FMST Core Courses

Not offered current academic year

STS 215 (F) Viral Inequality: Power and Difference in Pandemics (DPE)

Cross-listings: STS 215 GBST 217

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 215(D2) GBST 217(D2)

Difference, Power, and Equity Notes: This course takes an intersectional approach to understanding how global pandemics unfold. It will emphasize how power dynamics and social differences shape responses to, and outcomes of, health emergencies. Readings in social and critical race theory are
designed to give students a deeper appreciation of these issues.

Attributes: PHLH Social Determinants of Health

Not offered current academic year

STS 219 (F)  Realizing Utopias

Cross-listings: STS 219 REL 219

Secondary Cross-listing

Our world can be better. We are faced with unfolding global catastrophes, such as the pandemic, anthropogenic climate change, economic crises, racialized injustice, and political polarization, and many people seem to have lost their capacity to imagine better futures. Perhaps that is why we as a society have no problem picturing the end of the world--fictional dystopias and apocalypses are abundant while (e)utopias are scarce. This a problem because, as numerous political theorists have observed, it is hard to organize meaningful change around cynicism and nihilism. But our dystopian present makes it even more important to imagine and even realize utopias. This course will help us do so. Our core collective goal will be to explore pragmatic realizations of radical hope. Complementing urgent efforts to resist or mitigate intense injustice in the present, we will aspire to articulate bold visions for emancipatory communities of the future. Rather than primarily focusing on the limitations of existing institutions, this seminar will treat these as problems to be solved rather than as reasons to accept the status quo, and we will embrace affirmative projects of designing the frameworks for better worlds. But we also don't want to blind ourselves to the challenges of being visionary. In brief, we will engage in serious explorations of the underlying principles and rationales for various emancipatory political communities while also pragmatically assessing their potential difficulties. We will spend the first part of the course reading political theory (on issues such as resource allocation, collective decision making, and social justice) alongside various artistic and political manifestos. We will spend one week reading utopian novels (including as possibilities socialist, anarchist, techno-futurist, ecotopias, Afrofuturist, queer utopias, and many more). But the majority of the course will be project-based. Students will form small teams to engage in radical thought experiments and then construct and refine their ideas of better possible societies/political communities. These teams will produce 1) policy papers to address how their utopian societies would deal with real world issues, and 2) artifacts (such as art, manifestos, pamphlets, short stories, videos, or the like) that might appear in the futures they envision, exploring both their ideals and their limits. The semester will culminate in a public exhibition of these works. Thinkers to be considered may include: Marx & Engels, José Esteban Muñoz, Boaventura de Sousa Santos, Lucy Sargisson, David Schweickart, Colin Ward, Erik Olin Wright, and others.

Requirements/Evaluation: attendance and participation, short writing assignments, group policy papers, and artifacts (e.g., art, manifestos, pamphlets, short stories, or videos) for end of semester exhibit.

Prerequisites: none.

Enrollment Limit: 20

Enrollment Preferences: If overenrolled students will be asked for a statement of interest and utopian project idea.

Expected Class Size: 15

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

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
STS 219(D2) REL 219(D2)

Not offered current academic year

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
STS 226 (F) The Art of Natural History (WS)

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.

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

Materials/Lab Fee: $150 Lab and materials fees for all classes are covered by the Book Grant for all Williams financial aid recipients.

Distributions: (D2) (WS)

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

STS 226(D2) ARTH 229

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

Fall 2023

TUT Section: T1 TBA Catherine N. Howe

STS 228 (F) Feminist Bioethics (WS)

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 interactions with and within 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:
STS 228(D2) WGSS 228(D2) PHIL 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

Fall 2023
LEC Section: 01 TF 2:35 pm - 3:50 pm Julie A. Pedroni

STS 229 (S) 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, policing and state surveillance, and social media surveillance.

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

Prerequisites: none

Enrollment Limit: 20

Enrollment Preferences: Anthropology and Sociology majors

Expected Class Size: 20
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 by police 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.

Spring 2024
SEM Section: 01  MR 1:10 pm - 2:25 pm  Ben  Snyder

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

Cross-listings:  AFR 231 ENVI 231 STS 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: 2 short written commentaries (2-3 pages each), mid-term current event analysis (5-7 pages), final analytical essay (10-12 pages) and class presentation

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:
AFR 231(D2) ENVI 231(D2) STS 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:  AFR Black Landscapes  ENVI Humanities, Arts + Social Science Electives  GBST African Studies Electives  GBST Economic Development Studies Electives

Spring 2024
SEM Section: 01  MR 2:35 pm - 3:50 pm  Brittany  Meché

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

Cross-listings:  STS 240 ASTR 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, Rudolphine Tables 1627); Johannes Hevelius and Elisabeth Hevelius (atlases of the Moon and of stars, 1647, and 1687); Isaac Newton (Principia Mathematica: 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 (Hubble's law, 1929); George Ellery Hale (Mt. Wilson Observatory 100" telescope, 1917; Palomar Observatory 200" telescope, 1948), 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' Chapin Library of rare books, where we will meet in an adjacent classroom. 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. 1453) and a Shakespeare First Folio (1623, with a discussion of astronomical references in Shakespeare's plays). 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)

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:  (D2) (WS)

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

STS 240(D2) ASTR 240(D3) LEAD 240(D2)

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

Attributes:  LEAD Facets or Domains of Leadership

Not offered current academic year

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.

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

STS 250  (F) Environmental Justice  (DPE)

Cross-listings: ENVI 250 STS 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:

ENVI 250(D2) STS 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

Not offered current academic year

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 254 (S) Food, Forests, & Fungi: Environmental Health in the Anthropocene** (DPE) (WS)

**Cross-listings:** ANTH 254 ENVI 254 STS 254

**Secondary Cross-listing**

This tutorial will examine the impacts of the climate crisis on human, environmental, and planetary health via the lens of food systems & plant medicines in the Anthropocene. We use anthropological, environmental, evolutionary, & ecological approaches to explore the ecosystems connecting humans, plants, animals, and fungi that have been massively disrupted by systems of industrial agriculture, industrial forestry, corporate food systems, and corporate biomedicine. We will dwell on the growing signs of our climate catastrophe including the sharp rise of global temperatures, floods, hurricanes, alongside declining freshwater reserves, melting cryosphere, and falling crop yields, that are helping produce a growing wave of hunger and climate refugees in every world region. Along the way, we will hear from and read about youthful climate activists from Extinction Rebellion, Ende Gelände, Fridays for the Future, 350.org, and the Sunrise Movement who are designing and implementing innovative, local, and sustainable solutions to inaction, apathy, and inertia even as situations of internal migration or displacement, food scarcity, food sovereignty, water shortages, and other climate-related disruptions are increasing in both developing and developed parts of our globe. We learn how activist narratives intersect with wider movements to promote more local and circular economies of regenerative agriculture and forestry, ethically produced and sourced organic food, wild & cultivated botanicals, and complementary medicines that are healing both humans and the planet.

**Requirements/Evaluation:** Weekly attendance, reading 200-300 pages/week, weekly lead essays or oral responses to texts, showing up in mind & body each week.

**Prerequisites:** none, but a class in ENVI or ANTH preferred

**Enrollment Limit:** 10

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

**Expected Class Size:** 10

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

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

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

ANTH 254(D2) ENVI 254(D2) STS 254(D2)

**Writing Skills Notes:** Students will write essays: either a lead essay of 1400 words, or written & oral feedback on the lead essay plus an oral response to text. Students receive intensive weekly feedback on their essays and a mid semester writing chat with instructor to negotiate and understand strengths and weaknesses of their writing.

**Difference, Power, and Equity Notes:** We will examine the ways that food systems reproduce social and structural inequalities within public health, environmental health, climate health. We also examined the interconnected nature of the health of our planet, food systems, forests, and fungal
networks and how climate activism and action can fight unequal access to food, forests, nature, and health.

Attributes: ENVI Humanities, Arts + Social Science Electives PHLH Nutrition, Food Security + Environmental Health

Spring 2024
TUT Section: T1 TBA Kim Gutschow

STS 261 (F) Science and Militarism in the Modern World (WS)
Cross-listings: ENVI 261 STS 261
Secondary Cross-listing
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 5-7 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 (5-7 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) (WS)
This course is cross-listed and the prefixes carry the following divisional credit:
ENVI 261(D2) STS 261(D2)
Writing Skills Notes: This is a writing intensive tutorial. Students will complete weekly written assignments and receive in-depth feedback to improve their writing. Over the course of the semester, students will write 10 papers ranging from 2-7 pages.
Attributes: ENVI Humanities, Arts + Social Science Electives

Fall 2023
TUT Section: T1 Cancelled

STS 262 (S) Paper Trails (DPE)
Cross-listings: GBST 262 SOC 262 STS 262
Secondary Cross-listing
Long before the invention of the passport, states or state-like entities sought to document and manage populations and discipline bodies. This course invites students to critically reflect on documentation practices and systemic violence, particularly against racial, ethnic, sexual, and political minorities. Students will explore identity-making through documentary practices such as the three-generation life history, a biographical form that Soviet-allied countries used to reward loyalty and punish disloyalty. Labels, such as a criminal record or pre-existing health conditions, also trail or precede individuals their whole lives. Students will grapple with what happens when the paper trail goes cold--when identification documents are invalidated, birth certificates withheld, household registries purged, and archives destroyed. Students will explore the rise of surveillance and biometric data alongside the actors, technologies, and industries that try to circumvent them in places such as the Xinjiang Uyghur Autonomous Region and along the US-Mexico border. In this project-based course, students will exhume paper trails and imagine alternative ways to create, alter, and subvert them.

Requirements/Evaluation: thoughtful and consistent class participation, facilitation of guest speakers, Special Collections visit, project memos, and
Difference, Power, and Equity Notes: In this course, students will interrogate some of the key documents that structure our lives and serve as tools for waging systemic violence against ethnic, racial, sexual, and political minorities. Students will synthesize and apply these lessons about bureaucratic documentation toward the benefit of a community partner.

Not offered current academic year

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

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

Secondary Cross-listing

This course asks students to practice and study mindfulness while observing their own minds, emotions, and behavior for an entire semester. We examine the historic roots and current applications of mindfulness, both as a Buddhist meditation practice as well as a secular tool to improve our awareness of awareness. Throughout, we are interested in the nexus of mind, brain, and emotions and the ways that mindfulness has been studied within contemplative and affective neuroscience, integrative neurobiology, and evolutionary psychology. How and why has the research on mindfulness and other meditative practices exploded since 2000? How has this research helped us understand and explain how our minds as well as brains shape everyday emotions and behaviors? We examine the ways evolutionary psychologists, clinical psychiatrists, neuroscientists, clinicians, and medical anthropologists have studied and applied mindfulness to better understand human emotions. We consider the applications of mindfulness for clinicians, therapists, and educators—all of whom attend to how emotions impact interpersonal relationships. We will train in a variety of meditation practices all semester, while learning to better appreciate our own minds, emotions, and relationships.

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: no pass/fail option, no fifth course option

Distributions: (D2)  (DPE)  (WS)

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

ASIA 269(D2) STS 269(D2) REL 269(D2) ANTH 269(D2)

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

Fall 2023

TUT Section: T1  TBA  Kim Gutschow

STS 275  (S)  Environmental Science, Policy, and Justice  (DPE)
Environmental science is much more than collecting data. Scientific experts are often called upon—and often position themselves—to guide environmental governance, which means that science has (some) power over public life. What is, and what should be, the relationship between science, on the one hand, and the creation and implementation of environmental policy, on the other? In this seminar we will study how science shapes governance and how science itself is governed. We will explore how legislatures, agencies, and courts respond to scientific information and uncertainty. And we will learn about how communities facing environmental racism and injustice collect data and use it in their advocacy. Along the way, we will challenge the idea of a unified “scientific method,” and we will think about how Western scientific knowledge relates to other ways of knowing, including non-Western sciences, embodied knowledge, and traditional knowledge. Topics include: international climate negotiation, chemical exposure, the regulation of biotechnology, agricultural policy, pandemic responses, and plastics and electronics waste.

Requirements/Evaluation: several short essays, final essay
Prerequisites: none
Enrollment Limit: 18
Enrollment Preferences: juniors, seniors
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:
STS 275(D2) ENVI 275(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. Using case studies we will analyze how communities facing environmental racism interact with scientists and sciences.

Attributes: ENVI Environmental Policy EVST Social Science/Policy

Spring 2024
SEM Section: 01 TR 8:30 am - 9:45 am Laura J. Martin

STS 281 (S) Religion and Science

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 progresses 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:
REL 281(D2) STS 281(D2)

Not offered current academic year

**STS 290  (S)  Technologies of Friendship**

**Cross-listings:** STS 290 ENGL 290

**Primary Cross-listing**

Contemporary friendships--whether among roommates, near neighbors, or friends living thousands of miles apart--are highly mediated. We communicate and signal our attachment through Zoom windows, apps, and social media platforms, and we create ambiguous relationships with people whom we "follow" or "friend" without having met in person. Sometimes we text as much as we talk even with intimate friends, and carrying on in-person friendships was complicated in myriad ways by the Covid-19 pandemic. But friendships have always been mediated, and in this tutorial we will examine how writers across centuries have described the tools and technologies of friendship: some perhaps quaint or sentimental (for example the written letter) and others creepy or invasive (for example Apple's "Find My" app or social media's "suggestions"). We will ask common and important questions, such as "Can one have too many friends?"; "Are long-distance friendships sustainable?"; and "What health risks do we take for friendship, and what other risks do technologies of friendship carry?" Readings will include works of fiction and journalism, and scholarship from psychology, the history of technology, and science and technology studies. The technologies we will consider include emojis, coffeehouses, memes, letters, telephones, video games, social media, and novels themselves.

**Requirements/Evaluation:** Students will write essays and critique their partner's essays in alternate weeks. Essays will receive detailed instructor feedback, including writing instruction.

**Prerequisites:** none

**Enrollment Limit:** 10

**Enrollment Preferences:** STS 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 290(D2) ENGL 290(D1)

Spring 2024

TUT Section: T1    TBA     Ezra D. Feldman

**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.

**Requirements/Evaluation:** 2 response papers (3-5pages 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:
HIST 390(D2) STS 302(D2)

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

STS 308 (S) What is Power?

Cross-listings: SOC 308 STS 308 REL 308 PSCI 306

Secondary Cross-listing

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 touch on classic philosophical accounts of power and causation, but focus our attention on 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, Steven Lukes, Machiavelli, J.L. Mackie, Marx, Nietzsche, and Max Weber. (Note that in 2023 this course will also fulfill the senior seminar requirement for STS)

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

Prerequisites: None.

Enrollment Limit: 15

Enrollment Preferences: STS concentrators, then Religion, Sociology, and Political Science majors.

Expected Class Size: 14

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

Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
SOC 308(D2) STS 308(D2) REL 308(D2) PSCI 306(D2)

Attributes: PHIL Related Courses STS Senior Seminars

Not offered current academic year

STS 311 (S) Global Health in the Transpacific (DPE)

Cross-listings: STS 311 AMST 352 ASIA 352

Primary Cross-listing

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:

STS 311(D2) AMST 352(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

Not offered current academic year

STS 312 (F) Philosophical Implications of Modern Physics (QFR)

Cross-listings: PHIL 312 PHYS 312 STS 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:

PHIL 312(D2) PHYS 312(D3) STS 312(D2)

Attributes: PHIL Contemp Metaphysics + Epistemology Courses

Fall 2023

LEC Section: 01  MR 2:35 pm - 3:50 pm Frederick W. Strauch, Keith E. McPartland

STS 316 (F) Social Ontology

Cross-listings: REL 316 STS 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 increasing 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:**

REL 316(D2) STS 316(D2)

**Not offered current academic year**

**STS 319 (F) Neuroethics** (WS)

**Cross-listings:** STS 319 PSYC 319 NSCI 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:**

STS 319(D2) PSYC 319(D3) NSCI 319(D3)

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

Cross-listings: STS 321 AMST 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:

STS 321(D2) AMST 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

Not offered current academic year

STS 331 (S) Automation in an Unequal Society  (DPE)

Cross-listings: STS 331 SOC 331

Secondary Cross-listing

Could you be competing for a job--even after getting a college degree--with a robot or an AI-powered chatbot? As technologies advance, every few years debates emerge: will this new kind of automation increase unemployment, or will it generate new kinds of jobs? Will these new jobs be more interesting and high paying, or will they be boring and poorly paid? To think these questions through, in this course we will study some key attempts to understand the socio-economic and political determinants as well as the repercussions of automation. We will delve into the micro-level dynamics operating between machines and workers involved in concrete production processes. We will also explore the macro-level trends in national and global inequality that social scientists associate with automation. In our investigation of both macro- and micro-levels, we will focus on how the risks and benefits of automation get distributed unevenly along already existing axes of class, race, gender, etc.

Requirements/Evaluation: Class participation; 1 mid-term paper proposal; 1 final paper

Prerequisites: none, open to all students

Enrollment Limit: 20

Enrollment Preferences: Preference given to ANTH/SOC majors and STS concentrators

Expected Class Size: 20

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


**Distribution:** (D2) (DPE)

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

STSS 331(D2) SOC 331(D2)

**Difference, Power, and Equity Notes:** The course is centrally concerned with the iniquitous distribution of risks and benefits of automation. Students will gain familiarity with how social scientists study the impacts of automation on class, racial, and gendered dynamics. We will consider how automation may disempower certain workers, and deepen already existing social segmentations.

Spring 2024

SEM Section: 01       TF 2:35 pm - 3:50 pm    Bhumika Chauhan

**STS 338 (F) Transhumanism: Religion, Technoscience, Obsolescence**

**Cross-listings:** STS 338 SOC 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.

**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:

STSS 338(D2) SOC 338(D2) REL 338(D2)

Not offered current academic year

**STS 340 Science, Religion, and the (post)coloniality: 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 (3-5 pages 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 349  (F)  The Politics of Algorithms

Cross-listings: AMST 349 STS 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:
AMST 349(D2) STS 349(D2) PSCI 331(D2)

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

Not offered current academic year

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.

**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

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

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

AMST 353(D2) STS 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

Not offered current academic year
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:

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

Not offered current academic year
Grading: yes pass/fail option, no fifth course option

Distributions: (D2) (DPE) (QFR)

This course is cross-listed and the prefixes carry the following divisional credit:
AMST 363(D2) MATH 308(D3) STS 363(D2)

Difference, Power, and Equity Notes: Students study issues of equity, diversity, and inclusion in areas such as criminal justice, arts/media, environmental justice, education, and health care, and along identity axes such as gender, race/ethnicity, disability status, and sexual orientation.

Quantitative/Formal Reasoning Notes: Students use multiple mathematical, statistical, and computational frameworks to acquire, model, and analyze real-world data.

Not offered current academic year

STS 370 (S) Campus and Community Health in Disruptive Times (DPE) (WS)

Cross-listings: STS 370 WGSS 371 ANTH 371

Secondary Cross-listing

We study and seek “campuses where students feel enabled to develop their life projects, building a sense of self-efficacy and respecting others, in community spaces that work to diminish rather than augment power asymmetries.” -- Sexual Citizens (Hirsch and Khan, 2020). Students will design and pursue innovative ethnographic projects that explore campus or community health. We will learn ethnographic techniques such as observant participation, interviewing, focus groups, qualitative surveys, as well as design thinking and data visualization skills. We use and critique the methods of medical anthropology and medical sociology in order to hone our skills in participatory research. Every week, we collaborate with and share our research with our participants and peers both inside and outside class through a variety of innovative exercises. We attend to the parallel roles of narrative and listening in both medicine and ethnography, as we contrast the discourse of providers & patients along with researchers & participants. We aim to understand the strengths and limits of ethnographic inquiry while privileging marginalized voices and attending to power and identity within our participatory research framework. We recognize that our campus health projects are always already shaped by power and privilege, as we examine the ways that daily life, individual practices, and collective institutions shape health on and off campus. Our ethnographic case studies explore how systemic inequalities of wealth, race, gender, sex, ethnicity, and citizenship shape landscapes of pediatric care, mental health, maternity care, and campus sexual assault in the US and elsewhere. We consider how lived practices shape health access & outcomes as well as well-being in our communities and on our campus.

Requirements/Evaluation: Weekly attendance, 3 written fieldnotes (3000 words), weekly writing & fieldwork exercises in class and out of class, a final presentation that includes data visualizations and analysis of research findings.

Prerequisites: A course in Anthropology, Sociology, STS or in DIV II is strongly recommended

Enrollment Limit: 19

Enrollment Preferences: Majors in Anthropology, Sociology, WGSS; Concentrators in PH, STS, ASIA, ENVI

Expected Class Size: 19

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 uses experiential learning to examine the intersectionality of race, class, gender, & sexuality in impacting healthcare and health outcomes. It explores the ways that intersectionality and implicit bias shapes health and well-being in patient/provider encounters as well as ethnographic research. It engages with and critiques efforts to ‘improve’ community and individual health outcomes in the US and elsewhere across the globe.

Attributes: ENVI Humanities, Arts + Social Science Electives EXPE Experiential Education Courses PHLH Methods in Public Health WGSS Racial Sexual + Cultural Diversity Courses

Spring 2024

SEM Section: 01 M 7:00 pm - 9:40 pm Kim Gutschow
STS 373 (F) Technologies of Race (DPE) (WS)

Cross-listings: AFR 374 STS 373 AMST 372

Secondary Cross-listing

This course is an introduction to theories, methods, sources, and approaches for interdisciplinary research and creativity in the interdisciplinary field of American Studies. We will focus on the intersection of race, gender, sexuality, and disability with modern media technologies, from early photography in the mid-19th century to contemporary trends in machine learning and artificial intelligence. Through a process of shared inquiry, course participants will investigate the ways that historical legacies of oppression and futuristic speculation combine to shape human lives in the present under racial capitalism. Whether analyses of the automation of militarized border control in Texas, or of the ways that obsolete, racist concepts are embedded in machine vision and surveillance systems, the readings in the course will chart out the key moments in the co-evolution of race and technology in the Americas. Students will gain a working competence in all four tracks of the American Studies major (Space and Place; Comparative Studies in Race, Ethnicity, and Diaspora; Arts in Context; and Critical and Cultural Theory). Finally, we will also explore alternative paths toward a future where technology might help to effect the abolition of oppressive structures and systems, rather than continue to perpetuate them.

Requirements/Evaluation: Four papers, in-class writing/reflective work, and a final exam.

Prerequisites: none

Enrollment Limit: 16

Enrollment Preferences: AMST majors or prospective majors.

Expected Class Size: 16

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

Distributions: (D2) (DPE) (WS)

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

AFR 374(D2) STS 373(D2) AMST 372(D2)

Writing Skills Notes: Students in this course develop a capacity to write generative arguments in an interdisciplinary scholarly context. Students will receive feedback not only on structure, substance, and style, but also on how to best build a line of inquiry, how to gather high-quality evidence, and how to make one's thinking productively intersect with more than one scholarly or creative field.

Difference, Power, and Equity Notes: This course requires students to contextualize technologies historically and in relation to one another, with attention to their entanglements with racial discourses and racism. Students gain critical skills that equip them to imagine possible futures where technologies serve increasingly as abolitionist tools.

Attributes: AFR Theories, Methods, and Poetics AMST Arts in Context Electives AMST Comp Studies in Race, Ethnicity, Diaspora AMST Critical and Cultural Theory Electives AMST Space and Place Electives

Fall 2023

SEM Section: 01  TR 9:55 am - 11:10 am  Brian Murphy

STS 378 (S) Human Artificial Intelligence Interaction

Cross-listings: CSCI 378 STS 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: Lecture content is delivered via video, and in-class time will be spent doing hands-on activities or in group discussion.

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: 24

Enrollment Preferences: current or expected Computer Science majors
**Expected Class Size:** 24

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

**Distributions:** (D2)

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

CSCI 378(D3) STS 378(D2)

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**Spring 2024**

**LEC Section:** 01    **TF** 1:10 pm - 2:25 pm    **Iris Howley**

**STS 379 (F) Animals and Society**

**Cross-listings:** STS 379 ENVI 380

**Secondary Cross-listing**

How do humans and animals shape each other's lives? People encounter animals in farms, laboratories, zoos, wildernesses, and backyards, on purpose and by chance. They treat animals as family members, entertainment, food, vectors of disease, and objects of scientific wonder. Drawing on the works of biologists, philosophers, and feminist science and technology studies scholars, this seminar will examine our relationships with animals and help clarify our responsibilities to them. We will ask: What are the social and environmental consequences of consuming animals? Should humans swim with dolphins, feed manatees, use gene-editing to create species that can survive climate change? Should moral standing depend upon the ability to communicate or the ability to experience emotions like grief and joy? What can animal models tell us about human health and society, and when is animal otherness too large a gap to bridge? What might human violence toward animals tell us about sexism, racism, or capitalism, and what will human-animal relationships look like in the future?

**Requirements/Evaluation:** short essays, final portfolio

**Prerequisites:** none

**Enrollment Limit:** 18

**Enrollment Preferences:** juniors and seniors

**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 379(D2) ENVI 380(D2)

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

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**Fall 2023**

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

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

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

**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:

STS 380(D2) AFR 380(D2) AMST 380(D2) WGSS 380(D2) ENGL 381(D1)

Attributes: WGSS Racial Sexual + Cultural Diversity Courses

Not offered current academic year

STS 397 (F) Independent Study: Science and Technology Studies

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

Distributions: (D2)

Fall 2023

IND Section: 01 TBA Jason Josephson Storm

STS 398 (S) Independent Study: Science and Technology Studies

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

Distributions: (D2)

Spring 2024

IND Section: 01 TBA Jason Josephson Storm

STS 412 (S) Cold War Archaeology  (DPE) (WS)

Cross-listings: AMST 412 STS 412 AFR 394

Secondary Cross-listing

In this advanced American Studies course, we will examine Cold War history and culture with attention to the intersection of racialization and nuclear paranoia. The concurrent unfolding of the struggle for Civil Rights and the national strategy of Civil Defense played out against the backdrop of a global ideological battle, as the United States and the Soviet Union fought each other for planetary domination. From the scientific fantasy of bombproofing and "safety in space," to the fears of both racial and radioactive contamination that drove the creation of the American suburbs, the affective and material dimensions of nuclear weaponry have, from the beginning, been entangled with race. Drawing on the critical and analytical toolkits of American Studies and media archaeology, students will dig beneath the surface of received narratives about the arms race, the space race, and race itself. Students will uncover generative connections between mineral extraction, the oppression of Indigenous populations, the destructive legacies of "urban renewal," and the figure of the "typical American family" huddled in their backyard bunker. Finally, this course will examine the ways in which the Cold War exceeds its historical boundaries, entangles with the ideology and military violence of the Global War on Terror, and persistently shapes the present through its architectural, affective, and cultural afterlives.

Requirements/Evaluation: Three short papers, in-class writing/reflective work, and a final paper.

Prerequisites: none

Enrollment Limit: 12

Enrollment Preferences: AMST majors or prospective majors.

Expected Class Size: 12

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

Distributions: (D2) (DPE) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:
Writing Skills Notes: Students in this course develop a capacity to write generative arguments in an interdisciplinary scholarly context. Students will receive feedback not only on structure, substance, and style, but also on how to best build a line of inquiry, how to gather high-quality evidence, and how to make one’s thinking productively intersect with more than one scholarly or creative field.

Difference, Power, and Equity Notes: This course requires students to contextualize historical events during the Cold War in relation to racialization, inequitable distributions of resources, and the stratification of national space in relation to risk and radioactivity. Students gain critical skills that equip them to see the ways in which the Cold War continues to shape processes of racialization, oppression, and imperial extraction, and spatial arrangements.

Attributes: AFR Black Landscapes  AMST Comp Studies in Race, Ethnicity, Diaspora  AMST Critical and Cultural Theory Electives  AMST Space and Place Electives

Spring 2024
SEM Section: 01   TR 8:30 am - 9:45 am   Brian Murphy

STS 413  (F) Feminist Technoscience  (DPE)
Cross-listings: STS 413 WGSS 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 research project (12-15 page essay + 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:
STS 413(D2) WGSS 413(D2)

Difference, Power, and Equity Notes: Central to "Feminist 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

Fall 2023
SEM Section: 01   TR 11:20 am - 12:35 pm   Ezra D. Feldman

Winter Study -----------------------------------------------------------------------------------------------
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 2024
IND Section: 01 TBA Jason Josephson Storm