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?

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

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

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

None to date.

STS 101 (F)(S) Science, Technology, and Human Values
Cross-listings: HSCI 101 STS 101 SOC 201

Primary Cross-listing
This course offers an introduction to science and technology studies, or STS. A radically interdisciplinary field of inquiry, the roots of STS stretch through the philosophy, history, and sociology/anthropology of science and technology. Students will become acquainted with major STS schools, methodological strategies and research trajectories through intensive reading and analysis of classical and contemporary works in the field. Considerable 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. A fundamental goal of the course is to cultivate awareness and understanding of the social organization of technology and scientific knowledge production, and the technoscientific structuring of modern social life broadly. The course as such is aimed at attracting from all divisions those students who are intellectually adventurous and inclined to think critically about the place and prominence of science and technology in the modern world.

Class Format: Remote
Requirements/Evaluation: two or three short exercises, two papers (3-5 pages and 5-7 pages), and two hour exams
Prerequisites: none
Enrollment Limit: 14
Enrollment Preferences: first-years and sophomores
Expected Class Size: 14
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
HSCI 101 (D2) STS 101 (D2) SOC 201 (D2)

Fall 2020
SEM Section: R1 TR 8:00 am - 9:15 am Grant Shoffstall

Spring 2021
SEM Section: 01 TBA Ahmed Ragab

STS 106 (F) Being Human in STEM (DPE)
Cross-listings: PHYS 106 GEOS 106 STS 106

Secondary Cross-listing
This course combines academic inquiry and community engagement to investigate the themes of diversity and social climate within STEM (science, technology, engineering and mathematics) disciplines. Students will examine how diverse identities including but not limited to gender, race, disability, sexuality, national origin, socioeconomic status, religion, and ethnicity shape the STEM experience both at Williams and nationally. We will ground our understanding through critical reading of primary scholarly research on topics such as implicit bias, identity threat, and effects of team diversity on excellence. From there, we will execute small group projects. Students will design, execute, and evaluate interventions that relate to the course goals and that have direct relevance to Williams students, faculty, and staff. For example, a student group could implement a survey of minoritized STEM students, or create a qualitative interview-based assessment of how socioeconomic status impacts students’ abilities to participate in STEM fields. Course work includes weekly readings, reflective/opinion writing, in class discussion, and the development and presentation of a group project.
Class Format: class discussions, group project work (out of class time required)
Requirements/Evaluation: short response papers, class discussion participation, leading class discussions, group work, and final project
Enrollment Limit: 15
Enrollment Preferences: DIV III majors; statement of interest may be requested
Expected Class Size: 15
Grading: no pass/fail option, yes fifth course option
Unit Notes: does not count towards GEOS or PHYS major credit
Distributions: (D3) (DPE)

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

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

Not offered current academic year

STS 115  AIDS: The Disease and Search for a Cure

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

Class Format: three hours per week
Requirements/Evaluation: problem sets, a midterm, quizzes, a final exam, and a presentation/discussion
Prerequisites: none; designed for the non-science major who does not intend to pursue a career in the natural sciences
Enrollment Limit: 45
Expected Class Size: 45
Grading:
Distributions: (D3)
Attributes: PHLH Biomedical Determinants of Health

Not offered current academic year

STS 135  (F)  Politics after the Apocalypse

Cross-listings: STS 135  PSCI 135
Secondary Cross-listing

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

Class Format: Class meetings will be conducted remotely using zoom.
Requirements/Evaluation: two 3-5 page papers, one short story (7-15 pages and including an explanatory cover letter), contributions to a class project documenting and analyzing the pandemic, and class participation
STS 142 (F) AlterNatives: Indigenous Futurism and Science Fiction (DPE)

Cross-listings: AMST 142 STS 142

Secondary Cross-listing

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

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

Prerequisites: permission of instructor

Enrollment Limit: 10

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

Expected Class Size: 10

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

Distributions: (D2) (DPE)

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

AMST 142 (D2) STS 142 (D2)

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

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

Not offered current academic year

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

Cross-listings: STS 153 ENGL 153

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

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

Prerequisites: none

Enrollment Limit: 12

Expected Class Size: 12

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

Distributions: (D1) (WS)

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

STS 153 (D2) ENGL 153 (D1)

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

Not offered current academic year

STS 209 (S) Philosophy of Science

Cross-listings: STS 209 PHIL 209 SCST 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. The course will begin with the "received view" of science, advanced by logical empiricists, which assumes the objectivity and the rationality of science. 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 naturally 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 proper approach 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; three short assignments; three 5 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 declared major in a natural science, or permission of instructor

Enrollment Limit: 19

Enrollment Preferences: Philosophy majors and prospective 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) SCST 209 (D2)

Attributes: COGS Related Courses HSCI Interdepartmental Electives 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 innovations that shaped modern society, including the telegraph system, electrification, 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, two 5-page writing assignments, 15- to 20-page seminar paper

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

Enrollment Limit: 20

Enrollment Preferences: Anthropology and Sociology majors

Expected Class Size: 18

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)

Spring 2021

SEM Section: 01  TBA  Nicholas Carr

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

Cross-listings: STS 211  RLFR 210

Secondary Cross-listing

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

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

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

Enrollment Limit: 20

Enrollment Preferences: French Majors and certificate students

Expected Class Size: 20

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

Distributions: (D1)

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

STS 211 (D1) RLFR 210 (D1)

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

Class Format: discussion

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

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

Enrollment Limit: 19

Enrollment Preferences: WGSS and PHIL majors or prospective majors

Expected Class Size: 19

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

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

Distributions: (D2)

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

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

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

Not offered current academic year

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
STS 214  (S)  Understanding Social Media

Cross-listings: STS 214  SOC 212

Secondary Cross-listing

Over just the last twenty years--beginning with Napster 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: 20

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 214 (D2) SOC 212 (D2)

Attributes: FMST Core Courses

Spring 2021

SEM Section: 01    TBA     Nicholas Carr

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

Cross-listings: GBST 217  STS 215

Primary Cross-listing

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

Class Format: Online seminar

Requirements/Evaluation: Several short essays and reflection papers

Prerequisites: None, open to all students

Enrollment Limit: 12
**Enrollment Preferences:** If overenrolled, preference will be given to first-years and sophomores

**Expected Class Size:** 12

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

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

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

GBST 217 (D2) STS 215 (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

Fall 2020

SEM Section: R1    TR 11:30 am - 12:45 pm     Shoan Yin  Cheung

**STS 221 (F) History of Photography**

**Cross-listings:** ARTH 221 STS 221

**Secondary Cross-listing**

This lecture course will examine the history of photography from its beginnings in the 1830s to the present, from the first grainy black and white images to the work of contemporary artists using cutting-edge photographic technologies. We will examine photographs used for documentary, scientific, and aesthetic purposes, and we will trace the medium’s emergence and acceptance as a fine art. We will also explore photography’s physical and conceptual characteristics as a medium, paying particular attention to its uniquely intimate and frequently contested relationship to “the real.” By the end of the course, students will have a broad understanding of photography as a unique medium within the history of art and knowledge of the theoretical frameworks that developed alongside that history.

**Requirements/Evaluation:** three to four short papers, quizzes, online presentations.

**Prerequisites:** none

**Enrollment Limit:** 14

**Enrollment Preferences:** art history majors

**Expected Class Size:** 14

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

**Distributions:** (D2)

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

ARTH 221 (D1) STS 221 (D2)

**Attributes:** ARTH post-1800 Courses  FMST Related Courses

Fall 2020

LEC Section: R1    MWF 11:45 am - 1:00 pm     Catherine N. Howe

**STS 227 Death and Dying (WS)**

In this course we will examine traditional philosophical approaches to understanding death and related concepts, with a special focus on the ethical concerns surrounding death and care for the dying. We will begin with questions about how to define death, as well as reflections on its meaning and function in human life. We will move on to examine ethical issues of truth-telling with terminally ill patients and their families, decisions to withhold or withdraw life-sustaining treatments, the care of seriously ill newborns, physician-assisted suicide, euthanasia, and posthumous interests. In addition to key concepts of death, dying, and terminal illness, we will develop and refine notions of medical futility, paternalism and autonomy, particularly within the context of advance directives and surrogate decision making.

**Class Format:** discussion

**Requirements/Evaluation:** class attendance and participation, periodic short essays (3 or 4 total, 2-3 pages each), two mid-length papers (5-7 pages
In this course we will explore the ways in which feminist approaches to moral thinking have influenced both the methodology and the content of contemporary bioethics. The first portion of the course will address the emergence of the "Ethics of Care," critically assessing its origins in feminist theory, its development within the context of the caring professions, and its potential as a general approach to bioethical reasoning. The second portion of the course will use feminist philosophy to inform our understanding of the ways in which gender structures the individual's interactions with the health care system. To do this we will explore topics that might traditionally be considered "women's issues" in healthcare, such as medicine and body image (e.g., cosmetic surgery, eating disorders), reproductive and genetic technologies, and research on women and their health care needs. In addition we'll also look at feminist analyses of topics that traditionally have not been regarded as "gendered," such as resource allocation and end of life issues.

Class Format: discussion

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

Prerequisites: none, although previous coursework in WGSS is desirable

Enrollment Limit: 19

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

Expected Class Size: 19

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

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

Distributions: (D2) (WS)

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

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

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

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

Not offered current academic year
Surveillance is built into the very fabric of modern life. From CCTV cameras, to supermarket loyalty cards, to the massive gathering of personal data on social media sites, people participate in today’s “surveillance societies” just by doing everyday activities. This course uses the metaphor of the "Panopticon" as a doorway to engagement with traditional and new forms of surveillance. First described by philosopher and social theorist Jeremy Bentham, the Panopticon is a physical structure that enables one observer to see all inhabitants without those inhabitants knowing when they are being observed. In *Discipline and Punish*, Michel Foucault famously expanded thinking on the Panopticon as a metaphor for the “disciplinary” power that lies at the heart of inequality in modern society. Since Bentham and Foucault’s time, however, surveillance technologies have changed significantly. To what extent does the concept of the Panopticon give us purchase on today’s surveillance societies? How does watching people with new digital and algorithmic surveillance technologies shape the exercise of power and, in turn, (re)produce forms of inequality? Can privacy, convenience, and safety ever be truly balanced? Topics include: the historical origins and expansion of surveillance in modern societies, the emerging total surveillance state in Baltimore City, and whether social media is turning us all into self-surveillance addicts.

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

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

**Prerequisites:** none

**Enrollment Limit:** 16

**Enrollment Preferences:** Anthropology and Sociology majors

**Expected Class Size:** 16

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

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

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

STS 229 (D2) SOC 228 (D2)

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

Fall 2020

SEM Section: R1  MW 10:00 am - 11:15 am  Ben Snyder

**STS 231 (F) The African Anthropocene** (DPE)

**Cross-listings:** ENVI 231  AFR 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, poetry, novels, and web-based content. Topics include: humanism/post-humanism; migration and displacement; representations of conflict; and sustainable development.

**Class Format:** non-traditional technologies, web-streams, social media (Tumblr/Twitter)

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

**Prerequisites:** none

**Enrollment Limit:** 19

**Enrollment Preferences:** Environmental Studies majors and concentrators; juniors and seniors

**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:
ENVI 231 (D2) AFR 231 (D2) STS 231 (D2)

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

Attributes: ENVI Humanities, Arts + Social Science Electives GBST African Studies Electives GBST Economic Development Studies Electives
Not offered current academic year

STS 233 (F) Chemical Intimacies (DPE)

Cross-listings: ARTH 243 ENGL 243 SCST 233 WGSS 233 STS 233

Secondary Cross-listing

This is a research seminar that understands human-chemical entanglement in relationship to environment, sexuality, geography, ecology, and capacity. It doubles as a research class in which students choose a project of chemical intimacy to investigate as their own through the course of the semester. In the first half, we will together read and discuss forms of human-chemical entanglement, whether a matter of industrial pollution, pharmaceutical use, habitual intoxication, gendered self-care or enhancement, or built environment; the goal is to achieve a broad sensibility for the concept as well as a familiarity with thinking biochemically and biopolitically about living bodies, while consistently registering questions of race, gender, class, sexuality, disability, and more. In the second half, each participant will choose and research a historically and geopolitically specific scenario of chemical entanglement, while 1) considering the political, legal, cultural, and labor contexts of the case; 2) exploring relationships between "actual" and "represented" (protest slogans or visual productions in the case of environmental justice activism, for example); 3) examining other research questions germane to their site of interest and their chosen discipline of study. We will take one field trip to a local site.

Requirements/Evaluation: individual research project
Prerequisites: none
Enrollment Limit: 10
Enrollment Preferences: Women's, Gender and Sexuality Studies majors, Art History majors, English majors, Environmental Studies majors
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:
ARTH 243 (D2) ENGL 243 (D1) SCST 233 (D2) WGSS 233 (D2) STS 233 (D2)

Difference, Power, and Equity Notes: The course gives special attention to forms of human-chemical entanglement that are related to environmental justice (pollution), and gender, racial, sexual, indigenous, and disability politics.
Attributes: WGSS Theory Courses
Not offered current academic year

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

Cross-listings: WGSS 235 STS 235 SCST 235

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 15

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

Expected Class Size: 10

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

Distributions: (D2) (DPE)

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

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

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

Not offered current academic year

STS 236 (F) Automatic Culture: From the Mechanical Turk to A.I.

Cross-listings: HSCI 236 SCST 236 STS 236

Primary Cross-listing

Using literary writing and visual representation as our primary points of entry, we will study the history of automation, exploring its effects as idea and as material implementation upon public and private spheres, craftsmen and courts, wage-laborers, artists, and inventors. Readings from such authors as E.T.A. Hoffman, Kurt Vonnegut, Roald Dahl, and Sydney Padua will be supplemented with studies in the history and historiography of technology. The objects we examine will be as different from one another as the dulcimer-playing android presented as a gift to Marie Antoinette, IBM's Deep Blue, and contemporary devices like Amazon's Echo.

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

Prerequisites: none

Enrollment Limit: 25

Enrollment Preferences: STS concentrators

Expected Class Size: 25

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

Distributions: (D2)

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

HSCI 236 (D2) SCST 236 (D2) STS 236 (D2)

Not offered current academic year

STS 239 (S) The Ethics of Artificial Intelligence

Cross-listings: STS 239 PHIL 239

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 25

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

Expected Class Size: 25

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

Distributions: (D2)

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

Attributes: PHIL Contemporary Value Theory Courses

Not offered current academic year

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

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

Secondary Cross-listing

In this course we will study some of the greatest figures in astronomy and consider their leadership in advancing progress in the field. We will consider their lives and works, especially as represented by original copies of their books and other publications. These great astronomers include: 16th century, Nicolaus Copernicus (heliocentric universe); Tycho Brahe (best pre-telescopic observations); 17th century, Galileo (discoveries with his first astronomical telescope, 1610; sunspots, 1613; *Dialogo*, 1632); Johannes Kepler (laws of planetary motion, 1609, 1619); Johannes Hevelius and Elisabeth Hevelius (atlases of the Moon and of stars, 1647, and 1687); Isaac Newton (laws of universal gravitation and of motion, 1687); 18th century, Edmond Halley (*Miscellanea curiosa*, eclipse maps, 1715, 1724); John Flamsteed and Margaret Flamsteed (*Atlas Coelestis*, 1729); and William Herschel and Caroline Herschel (1781, 1798). Also, from more recent times in which original works are often articles rather than books: 20th century, Albert Einstein (special relativity, 1905; general relativity, 1916); Marie Curie (radioactivity); Cecilia Payne-Gaposchkin (hydrogen dominating stars, 1929, 1930); Edwin Hubble (Hubble's law, 1929); Vera Rubin (dark matter, 1970s); Jocelyn Bell Burnell (pulsar discovery, 1968); and 21st century: Wendy Freedman (Universe's expansion rate, 2000s). First editions will be available in Williams's Chapin Library of rare books, and facsimiles or digital copies will be provided for remote learning. We will also consider how such original materials are collected and preserved, and look at examples from the wider world of rarities, such as a leaf from the *Gutenberg Bible* (c. 1450) and a Shakespeare *First Folio* (1623, with a discussion of astronomical references in Shakespeare's plays). We evaluate a trove of books and papers about historic transits of Venus. We discuss matters of fraud and authenticity, especially the case of a purported *Sidereus Nuncius*, shown to be a modern construction. The course will be taught in collaboration between an astronomer and a rare books librarian, with remote lectures by experts from around the world.

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

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

Prerequisites: none

Enrollment Limit: 12

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

Expected Class Size: 12

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

Distributions: (D2) (WS)

This course is cross-listed and the prefixes carry the following divisional credit:
STS 240 (D2) ASTR 240 (D3) HSCI 240 (D3) LEAD 240 (D3)

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

Attributes: LEAD Facets or Domains of Leadership
STS 243  (F) Epidemic! A Critical History of Medicine, Science and Power  (DPE)

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

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

Requirements/Evaluation: 2 response papers (3-5pages 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.

Fall 2020

SEM Section: H1   MW 11:45 am - 1:00 pm   Ahmed  Ragab

STS 250  (S) 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:  Environmental 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:

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

Not offered current academic year

STS 251  Science and Militarism in the Modern World

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. Surveying conflicts from the colonial wars of the late 19th century 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.

Requirements/Evaluation:  Course requirements include 3 short response papers (2-3 pages), a mid-term analytical essay (8-10 pages), and a final group research project (in-class presentation and a 20-25 page written report).

Prerequisites:  None

Enrollment Limit:  19

Enrollment Preferences:  ENVI and STS majors and concentrators

Expected Class Size:  15

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

Distributions:  (D2)

Attributes:  ENVI Humanities, Arts + Social Science Electives

Not offered current academic year

STS 252  (F)  Autopoietic Systems  (WS)

Cross-listings:  PHIL 252  STS 252

Secondary Cross-listing

In ancient Greece, Democritus took his ontological bearings by atoms he took not to come to be, change, or pass away, but to move and interconnect in space so as to compose everything else. Plato also took his ontological bearings by entities that do not change, but ones that are not in space or time: mathematical structures and, at least aspirationally, the forms or ideas of the good, the beautiful, etc. Aristotle, finally, took his ontological bearings by temporal entities, i.e., organisms. In these terms, modern science combines central teachings of Democritus and Plato: the universe is understood as a mechanism whose components--ultimately, atoms--interact in ways governed by mathematical laws, and--for Descartes and his followers--animals, too, are machines rather than organisms. Hence, Laplace's (1814) thesis that "An intellect which at a certain moment would know all forces that set nature in motion, and all positions of all items of which nature is composed, if this intellect were also vast enough to submit these data to analysis, it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atom; for such an intellect nothing would be uncertain and the future just like the past would be present before its eyes." This deterministic, mechanistic, and reductionist way of thinking has, for the past several hundred years, powerfully influenced such diverse fields as philosophy, biology, and economics. Over the past few decades, however, it has been challenged by new discoveries, particularly in physics and biology, and by theoreticians in a variety of disciplines. These theoreticians focus on complex, dynamic systems as, in one terminology, wholes that are more than the sums of their constituents. In this tutorial, we examine some of the most promising and intriguing trends in this potentially revolutionary movement. Our central focus will be on autopoietic systems, i.e., entities that subsist over time despite changing their material constituents. The smallest such entities are cells, but the tissues, organs, and organisms of which many cells are constituents are also autopoietic systems, as are yet more complex entities such as universities, economies, ecosystems, and states. The process ontology required by autopoietic systems is a radical alternative to the ontology that has been dominant for the past several centuries. It has many exciting implications for various subdisciplines in philosophy and for various academic
disciplines beyond philosophy.

**Class Format:** Virtual

**Requirements/Evaluation:** Presentations, responses to presentations, essays, response papers, participation in discussions.

**Prerequisites:** None.

**Enrollment Limit:** 10

**Enrollment Preferences:** Philosophy majors and potential majors.

**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:**

PHIL 252 (D2) STS 252 (D2)

**Writing Skills Notes:** Students will write 6 6-8 page essays and 6 2-3 page response papers. I will comment on all the essays, and my comments will aim to help students improve their writing skills. Among the issues to be addressed will be the challenge of writing essays to be presented rather than simply to be read.

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

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**STS 261 (S) Science and Militarism in the Modern World**

**Cross-listings:** STS 261 ENVI 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 quasi-tutorial model. Students will be divided into 5 groups of 3. Each week the groups will meet with me. Groups will include one "presenter," who shares a 5-7 page paper responding to the week's theme and two "respondents," who each offer a 2-3 page response to the presenter's paper. The roles of presenter and respondents will circulate each week. Each student will produce 4 papers as "presenter" and 6 papers as "respondent."

**Requirements/Evaluation:** Each student will produce four (5-7 page) papers as "presenter" and six (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:** 15

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

**Expected Class Size:** 15

**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 261 (D2) ENVI 261 (D2)

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

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**Fall 2020**

TUT Section: HT1 TBA Alan White

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**Spring 2021**

SEM Section: 01 TBA Brittany Meché
STS 265  (F)  Digital Performance Lab

**Cross-listings:** SCST 265  THEA 265  STS 265

**Secondary Cross-listing**

A collaborative laboratory investigating the intersection of live art and new media, this studio course explores the opportunities for (and problems of) performing through various media. Using audio, video, web-based, interactive, algorithmic, and analog platforms, students will perform research and create performances that examine liveness, broadcasting, digital stages, networking, and what it means to be both a spectator and a maker in the digital age. Students will develop technical and collaborative skills in artistic and new media production, gain fluency in contemporary theories of liveness, performance, and visual culture, and will research historical and current trends in mediatized performance practices. Platforms/technologies/media forms that may be considered include Twitter, live radio, in-ear monitors, algorithmic composition, bots, video games, live streaming, VJ software, interactive audio, sensors, soundwalks, Snapchat, VR, and surveillance.

**Requirements/Evaluation:** bi-weekly projects and presentations, bi-weekly 2-page critical writing assignments, class participation, work ethic, and collaborative skills

**Prerequisites:** none

**Enrollment Limit:** 20

**Expected Class Size:** 6

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

**Materials/Lab Fee:** $100

**Distributions:** (D1)

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

SCST 265 (D2) THEA 265 (D1) STS 265 (D1)

**Attributes:** EXPE Experiential Education Courses

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

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

**Secondary Cross-listing**

This course offers a social analysis and condensed genealogy of mindfulness from its roots as a Buddhist meditation practice through its modern application as a tool to improve our awareness of the related processes of mind, behavior, and emotions. We consider how mindfulness relates to Buddhist discourses and practices, and to the rapid rise of fields like contemplative neuroscience, affective neuroscience, and integrative neurobiology. How and why has the research on mindfulness and other applied meditative practices exploded since 2000? How has this research helped us understand and explain the intersection of mind, emotion, behavior, and human development? We critically examine the models of the mind developed by clinical and evolutionary psychologists and researchers in fields such as affective neuroscience to better understand the applications of mindfulness in the US today. Specifically, we consider how mindfulness and other forms of meditation are being used to improve the training of health care providers and educators, while augmenting and deepening the quality of their engagement with patients, students, and others they serve. We examine and train in a variety of meditation practices including mindfulness and forest bathing, while unpacking the subjective experience of our minds and emotions first-hand. Students will be asked to engage in mindfulness practices the entire semester.

**Class Format:** Offered in a hybrid format, but students are encouraged to attend in person if they can. Studies will be grouped in pairs or threesomes, that will meet in-person or remotely. Please email me (Kgutsch@williams.edu) to indicate whether you intend to take this class in-person or remotely.

**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:**

REL 269 (D2) STS 269 (D2) ASST 269 (D2) ANTH 269 (D2)
Writing Skills Notes: This class will involve weekly tutorial essays of 1200 or 600 words, 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 alleviate pervasive and population-wide health issues in the US including rising rates of anxiety, depression, and other mental health issues that are exacerbated by stress related to social inequality and structural violence. It also explores the ways that mindfulness has been marketed as an elite and non-inclusive practice within the US.

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

Fall 2020
TUT Section: HT1   TBA   Kim Gutschow

STS 272 (S) The History and Mythology of Chinese Scripts
Cross-listings: STS 272  CHIN 272  COMP 272

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

Class Format: discussion
Requirements/Evaluation: quizzes, short writing assignments, a midterm, and a final exam
Prerequisites: none
Enrollment Limit: none
Expected Class Size: 15
Grading: yes pass/fail option, yes fifth course option
Distributions: (D1)
This course is cross-listed and the prefixes carry the following divisional credit:
STS 272 (D2) CHIN 272 (D1) COMP 272 (D1)
Attributes: Linguistics

Not offered current academic year

STS 273 (F) Politics without Humans?
Cross-listings: ENVI 273  PSCI 273  STS 273

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

Requirements/Evaluation: three 5- to 7-page papers, regular Glow posts, class participation
Prerequisites: please note that this is an introductory-level course with no prerequisites; first-year students and those with no background in political
theory are welcome, as are more experienced students

Enrollment Limit: 25
Expected Class Size: 20
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
ENVI 273 (D2) PSCI 273 (D2) STS 273 (D2)
Attributes: AMST Critical and Cultural Theory Electives ENVI Environmental Policy PHIL Related Courses PSCI Political Theory Courses

Not offered current academic year

STS 276 Music and the Internet

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

Class Format: discussion
Requirements/Evaluation: 4-page midterm paper, 8-page final paper, one presentation, two mid-semester creative projects
Prerequisites: none
Enrollment Limit: 19
Expected Class Size: 14
Grading:
Distributions: (D1)
Attributes: FMST Core Courses

Not offered current academic year

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

Cross-listings: POEC 280 PSCI 280 STS 280
Secondary Cross-listing

Nearly every country in the world seeks to drive economic growth by promoting digital technologies. In the twenty-first century, the universal model is Silicon Valley. But as much as tech may drive economic growth, it may also threaten democratic politics. This tutorial explores this tension. We do so in four steps by examining (1) the origins of the Silicon Valley model, (2) other countries’ attempts to emulate it, (3) what it’s like to work in tech, and (4) possibilities for regulating the tech sector. Each step will deepen students’ understanding of tech. By engaging multiple analytical lenses, students will develop the tools to articulate the possibilities and imperatives of democratic politics in the twenty-first century.

Requirements/Evaluation: Five 5-page papers; five 2-page responses; participation
Prerequisites: One introductory course in political science and/or permission of the instructor.
Enrollment Limit: 10
Enrollment Preferences: Preference will be given to sophomores or juniors majoring in a Division II field
Expected Class Size: 10
Grading: no pass/fail option, no fifth course option
Distributions: (D2)

This course is cross-listed and the prefixes carry the following divisional credit:
POEC 280 (D2) PSCI 280 (D2) STS 280 (D2)
Attributes: POEC Comparative POEC/Public Policy Courses PSCI American Politics Courses PSCI Comparative Politics Courses PSCI Political
Theory Courses

Fall 2020
TUT Section: RT1  TBA     Sidney A. Rothstein

STS 281 (S) Religion and Science

Cross-listings: STS 281 REL 281

Secondary Cross-listing

In the last few years the deniers of religion such as Dennett and Dawkins have forcefully argued that recent scientific developments show the degree to which religion is irrelevant to a modern understanding of what it means to be human. Atran and Boyer have made a similar case, arguing that recent 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: full attendance and participation, two essays

Prerequisites: none

Enrollment Limit: 18

Expected Class Size: 18

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 281 (D2) REL 281 (D2)

Spring 2021
SEM Section: 01  TBA     Georges B. Dreyfus

STS 301 (F) Social Construction (DPE)

Cross-listings: COMP 315 WGSS 302 REL 301 SOC 301 STS 301 SCST 301

Secondary Cross-listing

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

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

Prerequisites: none
Enrollment Limit: 15

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

Expected Class Size: 15

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

Distributions: (D2) (DPE)

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

COMP 315 (D2) WGSS 302 (D2) REL 301 (D2) SOC 301 (D2) STS 301 (D2) SCST 301 (D2)

Difference, Power, and Equity Notes: Central to REL 301 will be an analysis of the social construction of race, gender, and sexuality. It will show how power and difference are tied up in their construction and maintenance of these categories. Students will be taught how to critically analyze race, gender, and sexuality as well as social construction as such. Students will also learn sophisticated tools for studying systems of social power and difference.

Attributes: PHIL Related Courses

Not offered current academic year

STS 308 (S) What is Power?

Cross-listings: REL 308 STS 308 SOC 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 trace classic philosophical accounts of power and causation (in European and Chinese philosophy), as well as more recent developments in philosophy of science, political theory, and other fields. The insights we gain in this course from analyzing the nature of power should empower us to more effectively transform society. It will help students in the social sciences to understand the nature of causation in the social world, and it will help students interested in political action to better understand the nature of power. Thinkers to be considered may include: Aristotle, Amy Allen, Hannah Arendt, Bourdieu, Judith Butler, Nancy Cartwright, Foucault, Gramsci, Byung-Chul Han, Han Feizi, Giddens, Hobbes, Hume, Locke, Steven Lukes, Machiavelli, J.L. Mackie, Marx, Nietzsche, Sunzi, and Max Weber.

Requirements/Evaluation: weekly critical reflections, midterm review essay (4-6 pages), final essay (10-12 pages)

Prerequisites: None.

Enrollment Limit: 15

Enrollment Preferences: Religion majors, STS concentrators,

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:

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

Attributes: PHIL Related Courses

Spring 2021

SEM Section: 01 TBA Jason Josephson Storm

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

Cross-listings: SCST 312 PHYS 312 STS 312 PHIL 312
Secondary Cross-listing

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

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

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

Enrollment Limit: 20

Enrollment Preferences: Philosophy majors and Physics majors

Expected Class Size: 20

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

Distributions: (D3) (QFR)

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

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

Attributes: PHIL Contemp Metaphysics + Epistemology Courses

Not offered current academic year

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

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

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 19

Enrollment Preferences: Africana Studies concentrators

Expected Class Size: 15

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

Distributions: (D2)

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

AFR 315 (D2) STS 315 (D2) SCST 315 (D2) AMST 315 (D2)

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

Not offered current academic year

STS 319 (S) Neuroethics (WS)

Cross-listings: NSCI 319  PSYC 319  STS 319

Secondary Cross-listing

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

**Requirements/Evaluation:** six 5-page position papers and five 2-page response papers as well as participation in discussions

**Prerequisites:** PSYC 212 (same as BIOL 212 or NSCI 201); or permission of instructor

**Enrollment Limit:** 10

**Enrollment Preferences:** Psychology majors and Neuroscience concentrators

**Expected Class Size:** 10

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

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

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

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

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

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

*Not offered current academic year*

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

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

**Secondary Cross-listing**

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

**Class Format:** Remote

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

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

**Enrollment Limit:** 14

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

**Expected Class Size:** 14

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

**Distributions:** (D2)

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

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

Fall 2020

**SEM Section:** R1  TR 9:45 am - 11:00 am  Grant Shoffstall
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 353  (S)  Is Science Native to Turtle Island? The History of Native Science in North America  (DPE)

Cross-listings: STS 353 AMST 353

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 15

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

Expected Class Size: 13

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

Distributions: (D2) (DPE)

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

STS 353 (D2) AMST 353 (D2)

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

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

Not offered current academic year

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

Cross-listings: STS 364 PHIL 364

Secondary Cross-listing

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

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

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

Enrollment Limit: 20

Enrollment Preferences: students who took Philosophy of Science or Philosophy of Mind; Philosophy and Psychology majors
ST370 (F) Medicine and Campus Health in Disruptive Times (DPE)

Cross-listings: STS 370  WGSS 371  ANTH 371

Secondary Cross-listing

This class uses the methods and theories of critical medical anthropology and medical sociology to help students design and pursue innovative ethnographic projects that explore campus health or community health. Students will use an array of ethnographic techniques such as observant participation, interviewing, focus groups, and qualitative surveys to explore our campus community comprised of students, faculty, and/or staff, that build on weekly discussions, feedback, and design exercises. We situate our campus health projects within the wider context of how power and intersectionality inflect and structure health and well-being locally and globally. Our case studies explore how structural racism shapes medical education, pediatric care, and maternity care in the US, how the spread of US psychiatry inflects the landscape of global mental health, and how queer activism responded to the HIV/AIDS crisis. We consider how disruptive moments like COVID-19 or HIV/AIDS can serve as focal moments in social history that reveal underlying inequalities of health outcomes and access. We attend to the parallel roles of narrative in medicine and ethnography, as we contrast the discourse of providers & patients as well as researchers & interlocutors. Throughout our goal is to better understand the strengths and limits of ethnographic inquiry while exploring the challenges of collaborative and participatory research within communities always already structured by power, privilege, and engaged practices.

Class Format: Offered in hybrid format, yet students are encouraged to attend in person if they can. Students will be grouped into in-person or remote sections and can be reassigned during the semester if they request or require it for health reasons. Students should complete all assignments, weekly exercises, and attendance in class discussion. Please email me (Kgutschow@williams.edu) to indicate whether you plan to attend in person or remotely.

Requirements/Evaluation: Three written fieldnotes, weekly attendance and other writing exercises, midterm and final presentations on fieldwork projects

Prerequisites: none, but a class in Anthropology, Sociology, Science & Technology Studies, or other social science is recommended

Enrollment Limit: 20

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

Expected Class Size: 20

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

Distributions: (D2) (DPE)

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

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

Difference, Power, and Equity Notes: This class examines the intersection of race, gender, class, and sexuality in structuring health outcomes, well-being, and access to health resources. It theorizes the ways that intersectionality shapes health of individuals and societies, including patient/provider encounters and efforts to 'improve' community health within contexts of social inequality and social suffering.

Attributes: EXPE Experiential Education Courses  PHLH Methods in Public Health

Fall 2020

SEM Section: H1   WF 1:30 pm - 2:45 pm   Kim Gutschow

ST372 Time and Temporality

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

Requirements/Evaluation: participation, time diary analysis (3-5 pages), final paper (10-12 pages)
Prerequisites: none
Enrollment Limit: 20
Enrollment Preferences: Anthropology and Sociology majors
Expected Class Size: 15
Grading:
Distributions: (D2)

Not offered current academic year

STS 375  (F)(S)  Human Work in Computational Systems  (QFR)
Cross-listings: CSCI 377  STS 375
Secondary Cross-listing

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

Class Format: Lectures will be held on Wednesday and Friday each week. Conference sections will each meet only once per week, on either Wednesday or Thursday. Students should sign up for the lecture section and one conference.
Requirements/Evaluation: Course projects, in-class group work/participation, weekly written homework assignments/readings.
Prerequisites: CSCI 136
Enrollment Limit: 18
Enrollment Preferences: Preference for current CS majors
Expected Class Size: 18
Grading: yes pass/fail option, no fifth course option
Materials/Lab Fee: $75 for purchase of software and work on crowdsourcing platforms.
Distributions: (D2)  (QFR)
This course is cross-listed and the prefixes carry the following divisional credit:
CSCI 377 (D3) STS 375 (D2)
Quantitative/Formal Reasoning Notes: This course includes regular homework and projects in which quantitative/formal reasoning skills are practiced and evaluated.

Fall 2020
CON Section: 04  TR 9:45 am - 11:00 am  Molly Q Feldman
CON Section: 05  TR 11:30 am - 12:45 pm  Molly Q Feldman
LEC Section: H1  MWF 11:45 am - 1:00 pm  Molly Q Feldman
CON Section: R2  W 1:30 pm - 2:20 pm  Molly Q Feldman
CON Section: R3  W 2:50 pm - 3:40 pm  Molly Q Feldman
STS 376 (F) Human-Computer Interaction

Cross-listings: STS 376 CSCI 376

Secondary Cross-listing

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

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

Prerequisites: CSCI 136

Enrollment Limit: 24

Enrollment Preferences: current or expected Computer Science majors

Expected Class Size: 24

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

Distributions: (D3)

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

STS 376 (D2) CSCI 376 (D3)

Not offered current academic year

STS 377 (F) Landscapes in American Literature

Cross-listings: ENGL 376 STS 377 AMST 376

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 15

Expected Class Size: 12

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

Distributions: (D1)

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

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

Attributes: ENGL Criticism Courses

Not offered current academic year
STS 378  (F)(S)  Human Artificial Intelligence Interaction

Cross-listings: STS 378  CSCI 378

Secondary Cross-listing

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

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

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

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

Enrollment Limit: 40(8/conf)

Enrollment Preferences: current or expected Computer Science majors

Expected Class Size: 40

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 378 (D2) CSCI 378 (D3)

Fall 2020
LEC Section: R1    TBA     Iris  Howley
CON Section: R2    TF 1:30 pm - 2:45 pm     Iris  Howley
CON Section: R3    TF 3:15 pm - 4:30 pm     Iris  Howley
CON Section: R4    MWF 9:20 am - 10:10 am     Iris  Howley
CON Section: R5    MWF 10:40 am - 11:30 am     Iris  Howley
CON Section: R6    MWF 12:00 pm - 12:50 pm     Iris  Howley

Spring 2021
LEC Section: 01    TBA     Iris  Howley

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

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

Secondary Cross-listing

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

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

Prerequisites: none

Enrollment Limit: 20

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

Expected Class Size: 20

Grading: no pass/fail option, yes fifth course option
STS 397 (F) Independent Study: Science and Technology Studies
Independent Study: Science and Technology Studies
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)

Fall 2020
IND Section: H1 TBA Jason Josephson Storm

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

Spring 2021
IND Section: 01 TBA Jason Josephson Storm

STS 401 (F) Critical Perspectives on Science and Technology
A research-oriented course designed to give students direct experience in evaluating and assessing scientific and technological issues. Students initially study particular techniques and methodologies by employing a case study approach. They then apply these methods to a major research project. Students may choose topics from fields such as biotechnology, computers, biomedical engineering, energy, and other resource development. Students will apply their background of historical, philosophical, and technological perspectives in carrying out their study.
Requirements/Evaluation: research paper or project
Prerequisites: none
Enrollment Limit: 5
Expected Class Size: 5
Grading: yes pass/fail option, yes fifth course option
Distributions: (D2)
Attributes: STS Senior Seminars
Not offered current academic year

STS 402 (F) Cold War Technocultures
Cross-listings: SCST 401 STS 402 SOC 363
Secondary Cross-listing
In this seminar students will pursue sociohistorical analyses of Cold War American culture(s) by attending to key points of intersection between politics, aesthetics, and major technoscientific developments during this period. Part I will focus principally on the emergence of the computer and its role in shaping American infrastructure and styles of thought aimed at Soviet "containment." We will trace the historical threads connecting MIT's "Whirlwind" computer project and the SAGE continental air defense system; nuclear wargaming at the RAND Corporation and the aesthetics of "thinking the unthinkable"; the science of cybernetics and the prospect of automation; and ultimately the role of computation, intermedia, and systems logic in perpetrating the atrocities of the Vietnam War. Part II will take up the Cold War space race--from Luna 2, Sputnik I, and Yuri Gagarin to Projects Mercury, Gemini, and the Apollo moon landing. Within this context we will also consider the Club of Rome's Limits to Growth report; plans
backed by NASA for the industrialization and colonization of outer space; and the place of science-fiction as a Cold War aesthetic (print, televisual, cinematic). Part III, finally, will explore key moments of conflict, resistance, appropriation, and unintended consequences of Cold War technoscientific developments, among them antipsychiatry and environmentalism; Project Cybersyn, an infrastructural casualty of the U.S./CIA-backed Chilean coup of 1973; the New Left, the American counterculture, new social movements, and the countercultural roots of new media and neoliberalism.

Requirements/Evaluation: two 5-page book review essays, weekly 1-page papers, midterm essay exam, final essay exam

Prerequisites: STS 101 or instructor consent; prior coursework in Anthropology and Sociology and/or History

Enrollment Limit: 15

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

Expected Class Size: 15

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

Distributions: (D2)

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

SCST 401 (D2) STS 402 (D2) SOC 363 (D2)

Attributes: STS Senior Seminars

Not offered current academic year

STS 413 (S) Feminist Technoscience (DPE)

Cross-listings: WGSS 413 STS 413

Primary Cross-listing

Are Feminism and Science compatible commitments? What do these nouns mean when paired with one another, when capitalized (or not), when pluralized (or not), and when deployed by a range of authors in different disciplines? What features do they share as ethical, political, and epistemological practices? What have scientific feminism and feminist science looked like in print and in practice since the middle of the 20th century, and how have they shaped our present, 21st-century technoscientific culture? To address these questions, we will read a set of essays and academic articles that are connected by a trail of citations. These will include works of theory -- like Donna Haraway’s “Situated Knowledges” and “A Cyborg Manifesto" -- research write-ups like Pat Treusch’s "The Art of Failure in Robotics," and ethnographic work like Sophia Roosth’s "Evolutionary Yarns in Seahorse Valley." We will also examine the editorial introduction to "Science Out of Feminist Theory," a 2017 special issue of Catalyst, and we will circle outward and backward to make sense of the terms and arguments we encounter there. While some of the readings will be set in advance, students will help shape the syllabus as we travel 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); final essay (12-15 pages + in-class presentation)

Prerequisites: none

Enrollment Limit: 12

Enrollment Preferences: Science and Technology Studies concentrators

Expected Class Size: 12

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

Distributions: (D2) (DPE)

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

WGSS 413 (D2) STS 413 (D2)

Difference, Power, and Equity Notes: Central to "Feminist 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 develop feminist accounts of contemporary technoscientific work, even as we critique a number of such accounts from the past several decades.

Attributes: STS Senior Seminars

Spring 2021

SEM Section: 01 TBA Ezra D. Feldman
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

Not offered current academic year