

SCIENCE & TECHNOLOGY STUDIES (STS)

STS 1101 - Science, Technology, and Politics (3 Credits)

From global warming to surveillance of citizens to health-care reform, issues in science, technology, and medicine are also political issues. This course uses contemporary scientific controversies to explore the intersections of science and politics. Issues explored may include the role of the military and private sector in funding research, the politics of experts and expertise, computer privacy and national security, and environmental politics.

Distribution Requirements: (SBA-AG), (SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023, Summer 2022

Schedule of Classes

STS 1102 - Histories of the Future (4 Credits)

Crosslisted with HIST 1620

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2018, Fall 2014

Schedule of Classes

STS 1105 - Climate (you can) Change (3 Credits)

When you think of climate change, what do you see? Do you picture images of polar bears or of displaced peoples? Do you imagine politicians in pressed suits or scientists in lab coats? Each of these images helps to tell a story about climate change: why do you think some stand out more urgently than others? This class will help us to answer this question - but it will not stop there. We will listen to the various voices that narrate the stakes of climate change to the public: scientists, politicians, journalists, creative writers. Although we may discuss the rhetoric of dissenters, we will focus on the consensus of people who agree that climate change is inflected by human behaviors and industry, and we will consider the role of writing in conveying the stakes of this global issue to different audiences. We will ask: What stories do people tell about climate change, and why? Do some stories have a greater effect than others? What kind of political work can climate change stories do? And, most importantly, what kind of stories can we write?

Last Four Terms Offered: Summer 2025

Schedule of Classes

STS 1123 - FWS: Technology and Society Topics (3 Credits)

This seminar explores the ways in which Technology and Society shape one another and provides the opportunity to write extensively about this mutual shaping. Topics vary by section. Topics for 2023-2024 may include: Term Topic Instructor Fall History of Artificial Intelligence J. He

Distribution Requirements: (WRT-AG)

Last Four Terms Offered: Spring 2025, Fall 2023, Fall 2022, Spring 2022

Schedule of Classes

STS 1126 - FWS: Science and Society Topics (3 Credits)

This seminar explores the ways in which Science and Society shape one another and provides the opportunity to write extensively about this mutual shaping. Topics vary by section.

Distribution Requirements: (WRT-AG)

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Fall 2025, Spring 2025, Fall 2024, Spring 2023

Schedule of Classes

STS 1128 - FWS: Planetary Health: Plagues, Pandemics, Extinctions (3 Credits)

Last Four Terms Offered: Fall 2021, Fall 2020

Schedule of Classes

STS 1180 - Evolution (3 Credits)

Crosslisted with BIOEE 1180

Evolution is the central unifying concept in biology. This course examines evolution as a science and places it in an historical context. Classes focus on descent with modification, natural selection, evolutionary genetics, the history of the earth, the information content of the fossil record, and diversification processes. The science of evolutionary biology is presented in the context of a broader history of ideas in science. The course also explores the importance of evolutionary thinking in the 21st century, including antibiotic and pesticide resistance, personalized genomics, human evolution, and evolutionary ecology. Courses of Study: Intended for students with no background in college biology.

Enrollment Information: Primarily for: students with no background in college biology.

Distribution Requirements: (BIO-AG, BSC-AG, OPHLS-AG), (BIO-AS), (SCT-IL)

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023, Fall 2022

Learning Outcomes:

- Provide examples of the kinds of questions evolutionary biologists ask, and the types of tools and evidence they use to answer them.
- Recognize and correct common misunderstandings about evolution.
- Differentiate between the four main mechanisms of evolution (mutation, natural selection, migration, genetic drift).
- Communicate about evolutionary principles to classmates and the general public.
- Describe examples of evolution occurring in the modern day.
- Articulate specific applications of evolutionary biology in medicine and agriculture.

Schedule of Classes

STS 1201 - Information Ethics, Law, and Policy (3 Credits)

Crosslisted with INFO 1200

This course investigates the ethical, legal, and policy foundations of contemporary information technology. Through lectures, readings, discussions, and short assignments, we will address contemporary challenges ranging from the contests over intellectual property and privacy in a networked world to questions of inequality and control over technology. We will cover key areas of technology law and policy such as computing ethics; intellectual property; competition, antitrust, and freedom of expression; privacy and security; and AI ethics. We will also address new ethical questions and controversies that law and policy has yet to sort out. Through this course you'll learn about the key frameworks, processes, and institutions that govern the contemporary world of information technology, along with key theories and methods from academic fields that shape and inform them (law, philosophy, economics, political science, communication, sociology, etc.). You will also learn core reading and analytic skills central to success in the worlds of social science, law, policy, and many other settings. But above all you'll learn to engage critically and strategically with the worlds of information and technology around you, deciding what kind of information consumer, user, producer, and citizen you want to be.

Distribution Requirements: (ETH-AG), (SCT-IL)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 1451 - Body, Mind, and Health: Historical Perspectives for Future Professionals (3 Credits)

A course in the social history of medicine that examines the ways in which medicine and its practitioners have impacted-and been impacted by-American social, political, cultural, and economic development. The course focuses on the changing nature of disease, the medical profession past and present as well as historical and contemporary issues in public health.

Enrollment Information: Open to: high school students.

Last Four Terms Offered: Summer 2025, Summer 2024, Summer 2023, Summer 2022

Schedule of Classes

STS 2011 - What Is Science? An Introduction to the Social Studies of Science and Technology (3 Credits)

Crosslisted with SOC 2100

This course introduces some central ideas in the field of S&TS. It is aimed at students from any background who are challenged to think more critically about what counts as scientific knowledge and why, and how science and technology intervene in the wider world. It also serves as an introduction to majors in Biology and Society or in Science and Technology Studies. The course mixes lectures, discussions, writing, and other activities. The discussion sections are an integral part of the course and attendance is required. A series of take-home written assignments and quizzes throughout the semester comprise the majority of the grade.

Distribution Requirements: (SBA-AG), (SCT-IL), (SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 2023 - Fighting for Our Lives: Black Women's Reproductive Health and Activism in Historical Perspective (3-4 Credits)

Crosslisted with ASRC 2023, GOVT 2022, FGSS 2023, AMST 2023, HIST 2023, SHUM 2023

This course centers Black women who have often described their reproductive health experiences as fighting for our lives. While grounded in an exploration of Black women's experiences in the US, this course also looks across the diaspora to issues of access, rights, and equity in reproductive health. Deeply inspired by the field of Black Feminist Health Science Studies, a field that advocates for the centrality of activism in healthcare and its importance for Black women's overall health and well-being, this course examines how issues of gender, race, class, ability, and power intersect to inform how reproductive health is conceptualized, practiced, and experienced. Ultimately, this course will yield a deeper understanding of how Black women have transformed existential and literal threats on their lives into a robust terrain of community-based activism and a movement for reproductive justice. We will read across a range of texts and genres from the historical and theoretical, to memoir and documentary. With what we learn together, we will craft contributions to public debates around healthcare issues impacting Black women.

Distribution Requirements: (HA-AG, SBA-AG), (HST-AS, SSC-AS)

Last Four Terms Offered: Spring 2024

Schedule of Classes

STS 2031 - Global History of Data (3 Credits)

This introductory course provides students with a critical understanding of diverse data practices across cultures and histories, incorporating critical multidisciplinary perspectives from Science and Technology Studies (STS), to Critical Data Studies, History, Media Studies, and Information Science. It focuses on how different societies have collected, processed, understood, and tooled information through various sensory, linguistic, and representational modes. Highlighting elements that embody resistance, refusal, and alternative epistemologies, this course aims to help students better understand the limits of data-centric ways of knowing, and hence become more culturally sensible about data ethics, social justice, and epistemic diversity.

Distribution Requirements: (HST-AS)

Last Four Terms Offered: Fall 2025

Schedule of Classes

STS 2051 - Ethical Issues in Health and Medicine (4 Credits)

Crosslisted with BSOC 2051

In the rapidly changing world of healthcare, complex ethical issues arise from interpersonal interactions between patients and clinicians to broad controversies that propel medicine into headline news. This course will examine ethical challenges in contemporary medicine, healthcare, and biomedical research from the bedside to health policy. Using case-vignettes, news stories, narratives, and readings from the healthcare, ethics, and social science literature we will examine issues from multiple vantage points. A range of topics will be explored including the patient-clinician relationship, health care decision-making, issues at the beginning and end-of-life, technological advances, human experimentation, healthcare systems, and distributive justice. The course will also examine the fluidity of normative ethical boundaries, and how context and point of reference influence our perceptions of and approach to ethical issues.

Distribution Requirements: (D-AG, ETH-AG, KCM-AG), (ETM-AS, SCD-AS)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 2061 - Ethics and the Environment (4 Credits)

Crosslisted with BSOC 2061, PHIL 2960

Politicians, scientists, and citizens worldwide face many environmental issues today, but they are neither simple nor straightforward. Moreover, there are many ways to understand how we have, do, and could value the environment from animal rights and wise use to deep ecology and ecofeminism. This class acquaints students with some of the challenging moral issues that arise in the context of environmental management and policy-making, both in the past and the present. Environmental concerns also highlight important economic, epistemological, legal, political, and social issues in assessing our moral obligations to nature as well as other humans. This course examines various perspectives expressed in both contemporary and historical debates over environmental ethics by exploring four central questions: What is nature? Who counts in environmental ethics? How do we know nature? Whose nature?

Distribution Requirements: (ETH-AG, KCM-AG, SBA-AG), (ETM-AS, SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 2071 - Introduction to the History of Medicine (3 Credits)

Crosslisted with HIST 2710, BSOC 2071

This course offers an introductory survey of the history of medicine (principally in Europe and the United States) from classical antiquity to the early twentieth century. Using a combination of both primary and secondary sources, students will learn about the Hippocratic Heritage of contemporary western medicine; medicine in late antiquity; faith and healing in the medieval period; medicine and knowledge in the Islamic world; medicine during the Renaissance (particularly the rise of the mechanical philosophy); medicine in the age of Enlightenment; professionalization, women-doctors and midwives, and battles over 'quackery' in the eighteenth and nineteenth centuries; the role of medicine in colonialism and empire; and the promises and perils of modern medicine (dramatic decreases in mortality on the one hand, the rise of Eugenics and the importance of Medicine to the National Socialist State on the other). As well as this temporal survey, we will consider a number of ongoing themes: race, bodily difference, and medicine; medicine and the environment; women, gender, and medicine; the history of the body; the history of sexuality; and the close connections between forms of social order and forms of medical knowledge. The course meets three times a week (for two lectures and a section) and is open to all.

Distribution Requirements: (HA-AG), (HST-AS)

Last Four Terms Offered: Fall 2024, Fall 2023, Spring 2022, Spring 2021

Schedule of Classes

STS 2131 - Science Fiction (3 Credits)

Crosslisted with COML 2035, ENGL 2035, BSOC 2131

Science fiction is not merely a literary genre but a whole way of being, thinking, and acting in the modern world. This course explores classic and contemporary science fiction from Frankenstein to The Hunger Games alongside a rich array of fiction and films from Asia, Africa, Europe, and Latin America. Our discussions will position these works vis-à-vis seminal thinkers, ranging from Plato to Descartes and Donna Haraway to Paul Crutzen, who ask the same questions as science fiction does about our selves, our world, and our future.

Enrollment Information: Enrollment limited to: undergraduates.

Distribution Requirements: (ALC-AS), (CA-AG, LA-AG)

Last Four Terms Offered: Fall 2023, Spring 2022, Fall 2020, Fall 2019

Schedule of Classes

STS 2207 - East Asian Medical and Martial Arts (4 Credits)

Crosslisted with HIST 2207, ASIAN 2278

East Asian medicinal and martial arts, whether practiced in East Asia or in other parts of the world, have been important points of contact for people within and between often marginalized communities. In this course we will study the twentieth century development of East Asian combat and healing traditions, and the transport of those disciplines to the U.S. We will examine the personal, community, national, and global stakes of East Asian arts for those who invest in suppressing, teaching, and practicing them. We will consider how East Asian martial and medical practices relate, for example, to global and local histories of orientalism, colonialism, migration, and racism, and to historical post-colonial, anti-racist, feminist, and LGBTQ movements. Over the course of the semester, we will research martial and medical arts as they have been practiced in Ithaca, and place these local histories into their broader historical contexts. (SC)

Distribution Requirements: (D-AG, HA-AG), (HST-AS, SCD-AS)

Last Four Terms Offered: Fall 2024, Fall 2023

Schedule of Classes

STS 2381 - Ten Technologies That Shook the World? (3 Credits)

Crosslisted with HIST 2881

In 1919, journalist John Reed published Ten Days That Shook the World about the 1917 Russian Revolution. Some events are so transformative, Reed argued, they change the course of history. This class examines then technologies that "shook" the world over the past half millennium. Or did they? Can technology drive history? How should we think about the relationship between technology and culture, society, politics and the environment? This course challenges many popular understandings of technology and technological change, introducing students to major concepts in the history and social studies of technology, including technological determinism, systems, infrastructure, skill, technopolitics, envirotechs, users, and maintenance repair. Technologies addressed will vary, but may include the slave ship, factory, climate control, atomic bomb, and plastic.

Distribution Requirements: (HA-AG), (HST-AS)

Last Four Terms Offered: Fall 2025, Fall 2021, Spring 2021, Fall 2016

Schedule of Classes

STS 2451 - Introduction to Bioethics (4 Credits)

Crosslisted with PHIL 2455, SHUM 2455

Bioethics is the study of ethical questions raised by advances in the medical field. Questions we'll discuss will include: Is it morally permissible to advance a patient's death, at his or her request, to reduce suffering? Is there a moral difference between killing someone and letting someone die? What ethical issues are raised by advance care planning? What is it to die? What forms of cognitive decline or physical change could you survive (and still be you)? On the flip side, were you ever a fetus? How should the rights of pregnant women be balanced against those of the fetus? Should parents be given control over the genetic make-up of their children? Are some forms of human enhancement morally troubling? Should we aim to be better than well? What is it to be disabled? How should scarce health care resources or costly therapies be allocated to those in need? Should organ sales be permitted? Should medical treatment (or health insurance!) ever be compulsory, or is mandating treatment unacceptably paternalistic? Should doctors or hospitals be permitted to refuse to provide certain medical services that violate their consciences?

Distribution Requirements: (ETM-AS), (KCM-AG)

Last Four Terms Offered: Spring 2025, Summer 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 2468 - Medicine, Culture, and Society (4 Credits)

Crosslisted with ANTHR 2468, BSOC 2468, FGSS 2468

Medicine has become the language and practice through which we address a broad range of both individual and societal complaints. Interest in this medicalization of life may be one of the reasons that medical anthropology is currently the fastest-growing subfield in anthropology. This course encourages students to examine concepts of disease, suffering, health, and well-being in their immediate experience and beyond. In the process, students will gain a working knowledge of ecological, critical, phenomenological, and applied approaches used by medical anthropologists. We will investigate what is involved in becoming a doctor, the sociality of medicines, controversies over new medical technologies, and the politics of medical knowledge. The universality of biomedicine, or hospital medicine, will not be taken for granted, but rather we will examine the plurality generated by the various political, economic, social, and ethical demands under which biomedicine has developed in different places and at different times. In addition, biomedical healing and expertise will be viewed in relation to other kinds of healing and expertise. Our readings will address medicine in North America as well as other parts of the world. In class, our discussions will return regularly to consider the broad diversity of kinds of medicine throughout the world, as well as the specific historical and local contexts of biomedicine.

Distribution Requirements: (CA-AG, D-AG), (GLC-AS, SCD-AS)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 2561 - Medicine and Healing in China (4 Credits)

Crosslisted with HIST 2562, BSOC 2561, ASIAN 2262, CAPS 2262

An exploration of processes of change in health care practices in China. Focuses on key transitions, such as the emergence of canonical medicine, of Daoist approaches to healing and longevity, of scholar physicians, and of traditional Chinese medicine in modern China. Inquiries into the development of healing practices in relation to both popular and specialist views of the body and disease; health care as organized by individuals, families, communities, and states; the transmission of medical knowledge; and healer-patient relations. Course readings include primary texts in translation as well as secondary materials. (SC)

Distribution Requirements: (ALC-AS, HST-AS), (CA-AG, HA-AG, LA-AG)

Last Four Terms Offered: Fall 2024, Fall 2023, Fall 2022, Fall 2020

Schedule of Classes

STS 2641 - The Technology of Ancient Rome (3 Credits)

Crosslisted with CLASS 2641, ARKEO 2641

In this course we will study the technologies - aqueducts, automata, catapults, concrete and more - that allowed the Roman Empire to prosper and expand. Technical and historical background will accompany hands-on work and discussion of philosophy of technology.

Distribution Requirements: (ALC-AS, HST-AS), (CA-AG, HA-AG, LA-AG)

Last Four Terms Offered: Fall 2022, Fall 2016, Fall 2014, Fall 2013

Schedule of Classes

STS 2643 - The Birth of Science: Discovering the World from Antiquity to Today (3 Credits)

Crosslisted with CLASS 2643

What can Aristotle, Archimedes, Hippocrates and other ancient scientists teach us about science as we know it today? In this course we will study the origins of scientific thought and experiment in mathematics, biology, medicine, astronomy and more in the ancient Mediterranean, comparing them to modern approaches as well as examples from classical China, the medieval Islamic world, Mesoamerica, and Africa. We will discuss questions about the philosophy of science and its socio-historical context and engage actively with ancient problem-solving methods.

Distribution Requirements: (ALC-AS), (CA-AG, LA-AG)

Last Four Terms Offered: Fall 2021, Fall 2020

Schedule of Classes

STS 2810 - Science, Nature, and Knowledge: 1500-1800 (3 Credits)

Crosslisted with HIST 2811

This course investigates the history of science in early modern Europe (ca. 1500 to 1800), a period in which new understandings of the natural world emerged while traditional forms of knowledge fell into crisis.

Students will examine texts and images, objects and instruments from the history of science as a lens onto the intellectual, religious, and political transformations of the period. Why did our knowledge of nature witness profound changes? How was science carried out and by whom? Where did scientific authority serve the interests of colonial empires?

Key themes include the study of the earth, climate, and environment; the circulation and censorship of scientific knowledge; and the relationship of ancient thought to modern experiment and observation.

Distribution Requirements: (HA-AG), (HST-AS)

Last Four Terms Offered: Fall 2025

Schedule of Classes

STS 2812 - Hieroglyphs to HTML: History of Writing (3 Credits)

Crosslisted with CLASS 2812, NES 2812, ARKEO 2812, VISST 2812, SHUM 2812, LING 2212

An introduction to the history and theory of writing systems from cuneiform to the alphabet, historical and new writing media, and the complex relationship of writing technologies to human language and culture. Through hands-on activities and collaborative work, students will explore the shifting definitions of writing and the diverse ways in which cultures through time have developed and used writing systems. We will also investigate the traditional divisions of oral vs. written and consider how digital technologies have affected how we use and think about writing in encoding systems from Morse code to emoji.

Distribution Requirements: (ALC-AS, HST-AS), (CA-AG, HA-AG, LA-AG)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 2813 - History of Scientific Images (3 Credits)

Crosslisted with HIST 2812

Science produces images. Natural history books are filled with illustrations; physics and mathematics textbooks with models and diagrams. But what makes these images “scientific”? Why aren’t they just a work of art? In this course, students will investigate this problem historically, examining many different scientific images that were produced between the 16th and 19th centuries. Guiding questions will be: When did scientific publications begin to include images? What value and function were scientific images meant to have? How have scientific images changed over time? Students will learn who the makers of scientific images are and how technology has shaped the process of production. The course is addressed to anyone interested in history, science, medicine, art, or the visual aspects of knowledge.

Distribution Requirements: (HST-AS)

Schedule of Classes

STS 2831 - Introduction to the Philosophy of Science (3 Credits)

Crosslisted with PHIL 2810

We will look at some central questions about the nature of scientific theory and practice. What makes a discipline a science? Does science discover the objective truth about the world? How, and why, do scientific theories change over time? To what extent do observation and experiment determine which theories we accept? What is a good scientific explanation? What are laws of nature? Does physics have a special status compared to other sciences?

Distribution Requirements: (ETM-AS), (KCM-AG), (SCT-IL)

Last Four Terms Offered: Spring 2024, Spring 2023, Fall 2020, Fall 2013

Schedule of Classes

STS 2851 - Communication, Environment, Science, and Health (3 Credits)

Crosslisted with COMM 2850

Environmental problems, public health issues, scientific research-in each of these areas, communication plays a fundamental role. From the media to individual conversations, from technical journals to textbooks, from lab notes to the web, communication helps define scientifically based social issues and research findings. This course examines the institutional and intellectual contexts, processes, and practical constraints on communication in the sciences.

Distribution Requirements: (SBA-AG)

Last Four Terms Offered: Summer 2025, Spring 2025, Summer 2024, Spring 2024

Learning Outcomes:

- Students will be able to identify the role and opportunities of communication in science, environment, and health.
- Students will be able to recognize the institutional and practical constraints on communication in science, environment, and health.
- Students will be able to compare and contrast science, environmental, and health communication theories to general communication, science and technology studies, sociology, and psychology.
- Students will be able to demonstrate application of communication theories.

Schedule of Classes

STS 2921 - Inventing an Information Society (3 Credits)

Crosslisted with INFO 2921, ENGRG 2980, HIST 2920, AMST 2980

Provides an introduction to the role computing and information technologies played in political public life, from tabulating machines used to calculate the census to Big Tech’s impact on democratic procedures, the future of labor, and the environment. Though organized around four thematic units (Recognizing and Representing, Knowing, Working, and Belonging), the course pays attention to the chronological trajectory of technologies and political practices and students will develop the skills necessary for historical analysis. While focusing on the US experience the course also highlights the international flow of labor, materials, and ideas. By studying the development of computing historically, we will grapple with the effects of computing and data sciences on society today, paying special attention to critiques of economic, racial, and gender injustice. The course will meet twice a week, and each meeting will include a lecture followed by a discussion.

Distribution Requirements: (HA-AG), (HST-AS)

Last Four Terms Offered: Spring 2023, Fall 2021, Fall 2019, Fall 2017

Learning Outcomes:

- Knowledge of ethical issues regarding political representation, workplace compensation, and access to information technology.
- Ability to make sound arguments about major themes in the history of information technology. Ability to discuss these themes orally with the professor and other students.
- Understanding of the complex, mutual relationship between technological changes introduced by engineers and their embeddedness in larger political movements.
- An appreciation of how the ways we tell histories of technological innovation shape political outcomes and the ability to critically evaluate such historical narratives.

Schedule of Classes

STS 3011 - Life Sciences and Society (3 Credits)

Crosslisted with BSOC 3011

Biology and biotechnology are major influences on modern life. In addition, socio-political and historical conditions have shaped biological research and its applications in medicine, agriculture, environmental science, etc. Life science research is itself a social process involving complex human dynamics, different kinds of work and an array of social and natural systems. The course aims to introduce students to critical science and technology studies (S&TS) perspectives on the knowledge and practices of life sciences. The course is designed to prepare students for more advanced courses in the Biology & Society and S&TS majors, but students who do not plan to take further courses in those subjects can get critical insight into biology’s profound role in both science and society.

Enrollment Information: Enrollment limited to: seniors, juniors, and sophomores.

Distribution Requirements: (D-AG, SBA-AG), (SCT-IL), (SSC-AS)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Fall 2021

Schedule of Classes

STS 3020 - Science Writing for the Media (3 Credits)

Crosslisted with COMM 3020

How to write about science, technology, and medicine for the media. Writing assignments focus on writing news for web sites, blogs, magazines, and other media.

Prerequisites: completion at least one college-level writing course.

Enrollment Information: Enrollment limited to: sophomores or higher.

Distribution Requirements: (SSC-AS), (WRT-AG)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Learning Outcomes:

- Students will be able to define science news.
- Students will be able to identify audiences for science news and target your writing to them.
- Students will be able to write basic science news stories.
- Students will be able to report and write science feature stories.
- Students will be able to explain key constraints on and opportunities for science journalism, including changes in science journalism as it adapts to a new media world.
- Students will be able to investigate current topics of concern to the science journalism community.
- Students will be able to discuss the social context in which science journalism operates.

Schedule of Classes

STS 3042 - The Politics of Technology (4 Credits)

Crosslisted with GOVT 3042

This course will examine the politics of technology, with an emphasis on dual use technologies such as social media, artificial intelligence, and facial recognition. It will look at political consequences of those technologies, including the way that social media can be manipulated in an electoral context, how AI and automation can affect public policies (e.g., predictive policing) and ways to mitigate algorithmic biases embedded in these technologies, and questions of whether the United States and China are locked in a technology arms race and if global governance proposals can defuse the adverse consequences of great power competition over technology.

Distribution Requirements: (ETM-AS), (KCM-AG)

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020

Schedule of Classes

STS 3111 - Social Studies of Medicine (3 Credits)

Crosslisted with SOC 3130, GDEV 3111, BSOC 3111

This course provides an introduction to the ways in which medical practice, the medical profession, and medical technology are embedded in society and culture. We will ask how medicine is connected to various sociocultural factors such as gender, social class, race, and administrative cultures. We will examine the rise of medical sociology as a discipline, the professionalization of medicine, and processes of medicalization and demedicalization. We will look at alternative medical practices and how they differ from and converge with the dominant medical paradigm. We will focus on the rise of medical technology in clinical practice with a special emphasis on reproductive technologies. We will focus on the body as a site for medical knowledge, including the medicalization of sex differences, the effect of culture on nutrition, and eating disorders such as obesity and anorexia nervosa. We will also read various classic and contemporary texts that speak to the illness experience and the culture of surgeons, hospitals, and patients, and we will discuss various case studies in the social construction of physical and mental illness.

Enrollment Information: Enrollment limited to: seniors, juniors, and sophomores.

Distribution Requirements: (D-AG, SBA-AG), (SCT-IL), (SSC-AS)

Last Four Terms Offered: Spring 2024, Fall 2021, Fall 2020, Fall 2019

Schedule of Classes

STS 3181 - Living in an Uncertain World: Science, Technology, and Risk (4 Credits)

Crosslisted with HIST 3181, BSOC 3181, AMST 3185

This course explores the history, sociology, and ethics of risk. In particular, we will focus on the complex and often ambiguous relationship between science, technology, and risk. A historical perspective shows how science and technology have generated risks while they have also played key roles in managing and solving those very risks. By examining several case studies, including 19th-century mining, the 1911 Triangle fire, nuclear science, the space shuttle disasters, asbestos litigation, Hurricane Katrina, and the contemporary financial crisis, we will consider how risk and ideas about risk have changed over time. By exploring different historical and cultural responses to risk, we will examine the sociopolitical dimensions of the definitions, perceptions, and management of risk both in the past and the present.

Distribution Requirements: (HA-AG), (HST-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020, Spring 2018

Schedule of Classes

STS 3231 - Global Health Security and Diplomacy (4 Credits)

Crosslisted with BSOC 3231

Exploratory Studies: (EAAREA)

Last Four Terms Offered: Fall 2021, Fall 2020, Fall 2019, Fall 2018

Schedule of Classes

STS 3241 - Environmental Sociology (3 Credits)

Crosslisted with GDEV 3240, SOC 3240

Humans have fraught relationships with the animals, plants, land, water-even geological processes-around us. In this course, we will examine how people make and respond to environmental change and how groups of people form, express, struggle over, and work out environmental concerns. We will probe how environmental injustices, demographic change, economic activity, government action, social movements, and varied ways of thinking shape human-environmental relationships.

Through our conversations, we will explore possibilities for durable ways of living together in our social and material world. Our goal in this course is to give you knowledge, analytical tools, and expressive skills that help you feel confident to address environmental concerns as a social scientist and a citizen.

Distribution Requirements: (SBA-AG)

Exploratory Studies: (CU-SBY); (EUAREA)

Last Four Terms Offered: Summer 2025, Spring 2024, Spring 2023, Spring 2022

Learning Outcomes:

- Explain different perspectives about how people create and address environmental concerns.
- Discuss key debates in the sociology of environmental change, communicating the theoretical claims and empirical evidence one can use to test those claims.
- Use sociological concepts and tools to analyze the emergence, dynamics, and outcomes of environmental controversies.
- Express your knowledge and reasoning in engaging written communication.

Schedule of Classes

STS 3311 - Environmental Governance (3 Credits)

Crosslisted with NTRES 3311, BSOC 3311, GDEV 3311

Environmental governance is defined as the assemblage of institutions that regulate society-nature interactions and shape environmental outcomes across a range of spatial and temporal scales. Institutions, broadly defined, are mechanisms of social coordination including laws (formal) and social norms (informal) that guide the behavior of individuals. Participants in the course will explore the roles of governments, markets, and collective action in environmental management and mismanagement. We will emphasize interactions among leading environmental policy strategies: public regulation, market-based incentives, and community-based resource management. The course is focused around a set of analytic perspectives. These theoretical frameworks allow us to synthesize empirical observations and material changes in ways that inform our understanding of contemporary evolution of environmental policy and management.

Distribution Requirements: (SBA-AG, SCH-AG), (SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Learning Outcomes:

- Students will gain familiarity with the concepts, theories, and applications of institutional analysis applied to environment.
- Students will develop critical awareness of the strengths and weakness of states, markets, and collective structures as resources for social regulation.
- Students will develop an historical appreciation of environmental policy in order to reflect critically on contemporary status and trends.
- Students will develop an interdisciplinary understanding of environmental policy through exploration of economic, sociological, and political scientific perspectives.
- Students will be exposed to a broad range of environmental problems and policy and management responses. Coverage includes national and international cases, and analyses at multiple scales.
- Students will develop capacity to conduct institutional analysis including the specification of a research question, policy research, synthesis, and communication.
- Students will build generic competencies including reading of scientific and popular texts, writing, oral communication, group work, and critical analysis.

Schedule of Classes

STS 3440 - Data Science and Society Lab (3 Credits)

Last Four Terms Offered: Fall 2021, Spring 2021, Spring 2020

Schedule of Classes

STS 3460 - Anthropology of the Body (3 Credits)

Crosslisted with ANTHR 3465, BSOC 3460, SHUM 3465

This class considers the relationship between the body, knowledge and experience. We investigate the production and reproduction of the body across different times and spaces. Students examine specific histories through which the physical body came to be the purview of science, and its meaning the purview of social science and the humanities. In addition, students study other ways of knowing and being that capture the relations through which bodies emerge as simultaneously material and social. Ethnographies concerning healing and medicine, discipline and labor, governance and religion, aesthetics and desire offer alternative ways of approaching the body as both subject and object. Together, we will consider the historicity of the body, and in so doing explore questions of gender, race, class, sexuality, and coloniality.

Distribution Requirements: (D-AG, SBA-AG), (SCD-AS, SSC-AS)

Last Four Terms Offered: Fall 2023, Fall 2015, Fall 2012, Fall 2010
Schedule of Classes

STS 3474 - Infrastructure (3 Credits)

Crosslisted with ANTHR 3474

Infrastructure! It's the hardware and software that undergirds transportation, energy, water, and security systems. This course asks what we can learn about infrastructure when we approach it not as a neutral set of technologies but as a context-dependent social and political force. Taking a critical approach to (among others) natural resources, labor, housing, and security, the course will trace how infrastructures have both served and obstructed colonial and contemporary projects for social change.

Prerequisites: ANTHR 1101.

Distribution Requirements: (SBA-AG), (SSC-AS)

Exploratory Studies: (CU-ITL)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2021
Schedule of Classes

STS 3561 - Computing Cultures (4 Credits)

Crosslisted with INFO 3561, VISST 3560, COMM 3560, ANTHR 3061

Last Four Terms Offered: Spring 2021, Spring 2020, Spring 2019, Spring 2018

Schedule of Classes

STS 3601 - Ethical Issues in Engineering Practice (3 Credits)

Crosslisted with ENGRG 3600, PHIL 2471

This course surveys a range of ethical issues that arise in professional engineering, and provides discussion-based practice in analyzing and addressing them. Using normative frameworks from professional codes, philosophical ethics, value-sensitive design, feminist theory, and science & technology studies, the course engages with a series of historical, current, and fictional case studies, across a wide variety of engineering disciplines. Specific topics to be discussed may include: privacy, consumer rights, smart cities, geoengineering, artificial intelligence, and cloning. Instruction is through a mix of lectures and discussions.

Prerequisites: For engineering students, completion of one First-Year Writing Seminar (FWS).

Enrollment Information: For engineering students, enrollment limited to: sophomores, juniors, and seniors.

Distribution Requirements: (KCM-AG, SBA-AG)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Learning Outcomes:

- Be familiar with and able to identify a range of ethical and social issues in professional and academic engineering practice.
- Understand some of the major normative theories in philosophy, science and technology studies, feminist theory, and other approaches.
- Be able to apply normative theories to specific cases in engineering, from a variety of different stakeholder perspectives, including the perspectives of historically marginalized social groups.
- Be able to analyze, evaluate, and produce normative arguments using evidence and techniques of philosophical argument.
- Have improved their research skills and written communication skills, particularly in argumentative writing.

Schedule of Classes

STS 3605 - Ethics of Computing and Artificial Intelligence Technologies (3 Credits)

Crosslisted with ENGRG 3605, PHIL 2473

Computing is ubiquitous in modern life, and essential to professional work in engineering and many other disciplines. However, computing technologies, especially artificial intelligence, raise distinctive normative issues. This course surveys a variety of social, ethical, and political issues that arise in connection with computing technologies, including artificial intelligence, from a philosophical perspective. Specific topics may include: hacking, privacy, intellectual property, forms of deception and manipulation enabled by computing technologies, social injustices that are reinforced by algorithmic systems, machine ethics, and science fiction issues such as robot rights or existential risks posed by superintelligent computer systems. Content delivery will be through a mix of lectures, readings, and in-class discussion.

Enrollment Information: Enrollment limited to: sophomores, juniors, and seniors.

Distribution Requirements: (ETM-AS)

Last Four Terms Offered: Fall 2025, Fall 2024

Learning Outcomes:

- Students will be able to identify and describe a variety of social, ethical, and political issues that arise distinctively from the use and development of computing technologies.
- Students will be able to use normative theories from the humanities and social sciences to make sense of ethical issues in computing.
- Students will be able to reason about, critique, defend, and develop specific opinions on social, ethical, and political issues that arise in connection to computing technologies.
- Students will have improved their written and oral communication skills and academic research skills.

Schedule of Classes

STS 3650 - History and Theory of Digital Art (3 Credits)

Crosslisted with ARTH 3650, VISST 3650, INFO 3660

In this course, we will examine the role of electronic and digital technologies in the arts of the late 20th and 21st centuries with emphasis on Europe and North America. Beginning with the cybernetically and systems-inspired work of the late sixties, we will explore early uses of computer technology, including early experiments in synthetic video in the 1970s. An overview of pre-internet telematic experiments will lead to an investigation of net art and later currents of digital art. The ongoing development of behavioral art forms will be a central theme. Critical evaluation of various attitudes concerning technology will be encouraged.

Distribution Requirements: (ALC-AS), (CA-AG, LA-AG)

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Fall 2024, Fall 2022, Fall 2021, Fall 2020

Schedule of Classes

STS 3651 - Freud and Psychoanalysis (3 Credits)

Crosslisted with FREN 3560, COML 3781, FGSS 3651, GERST 3561, ROMS 3560

Psychoanalysis considers the human being not as an object of treatment, but as a subject who is called upon to elaborate an unconscious knowledge about what is disrupting her life, through analysis of dreams, symptoms, bungled actions, slips of the tongue, and repetitive behaviors. Freud finds that these apparently irrational acts and behavior are ordered by the logic of the fantasy, which provides a mental representation of a traumatic childhood experience and the effects it unleashes in the mind and body-effects he called drives. As unbound energies, the drives give rise to symptoms, repetitive acts, and fantasmatic stagings that menace our health and sometimes threaten social coexistence, but that also rise to the desires, creative acts, and social projects we identify as the essence of human life. Readings will include fundamental texts on the unconscious, repression, fantasy, and the death drive, as well as case studies and speculative essays on mythology, art, religion, and group psychology. Students will be asked to keep a dream journal and to work on their unconscious formations, and will have the chance to produce creative projects as well as analytic essays.

Distribution Requirements: (ETM-AS, SSC-AS), (KCM-AG, SBA-AG)

Last Four Terms Offered: Fall 2024, Spring 2021, Spring 2019, Fall 2016

Schedule of Classes

STS 3911 - Science in American Politics (3 Credits)

Crosslisted with AMST 3911, GOVT 3091

This course reviews the changing relations between science, technology, and the state in America, focusing on the period from 1960 to the present. We will explore science-intensive policy controversies. We will also look at how science and technology are used in different institutional settings, such as Congress, the court system, and regulatory agencies. Among other issues, we will examine the tension between the concept of science as an autonomous system for producing knowledge and the concept of science as entangled with interest groups.

Distribution Requirements: (SBA-AG), (SCT-IL), (SSC-AS)

Last Four Terms Offered: Fall 2025, Spring 2025, Spring 2024, Fall 2019

Schedule of Classes

STS 3991 - Undergraduate Independent Study (1-4 Credits)

Applications for research projects are accepted by individual STS faculty members. Students may enroll for 1-4 credits in STS 3991 with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Information on faculty research, scholarly activities, and undergraduate opportunities are available in the Science & Technology Studies office, 303 Morrill Hall. Independent study credits may not be used in completion of the major requirements.

Exploratory Studies: (CU-UG)

Last Four Terms Offered: Fall 2025, Spring 2025, Fall 2024, Spring 2024

Schedule of Classes

STS 4020 - Science, Medicine, and Media Technologies in East Asia (3 Credits)

Crosslisted with BSOC 4020

This seminar course introduces students to the studies of science, technology, and medicine in East Asia, aiming to cultivate a foundational understanding of the field while exploring key topics relevant to the region. Each year, the course themes vary; this year, we focus on environments, media, and bodies. As a reading and writing intensive course, it challenges students to engage deeply with the material and articulate their insights through rigorous analysis. In doing so, students learn to appreciate the complex power dynamics at play as science and technology interact with a diverse range of actors, tracing intricate trajectories across national, transnational, and global networks.

Distribution Requirements: (SBA-AG), (SSC-AS)

Last Four Terms Offered: Spring 2025

Schedule of Classes

STS 4040 - Digital Due Process Clinic (3 Credits)

Automated scoring systems play an increasingly important role in ordering our lives. Whether we want to obtain a loan, rent an apartment, be found in search results, qualify for government assistance, or make the shortlist for a job - all of these decisions involve a range of computational techniques, including large-scale data analytics and predictive algorithms. So what to do when things go wrong and individuals feel mistreated by these systems? The Due Process Clinic focuses on the capacities of ordinary people to cope with, understand, and challenge automated scoring systems. It involves a mixture of hands-on fieldwork and seminar discussions, ranging from social and technical analyses of scoring practices to the ethical challenges of representing data subjects.

Distribution Requirements: (D-AG, SBA-AG), (SCD-AS, SSC-AS), (SCT-IL)

Exploratory Studies: (CU-CEL)

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020

Schedule of Classes

STS 4041 - Controversies in Science, Technology and Medicine: What They Are and How to Study Them (3 Credits)

Scientists and medical researchers try to avoid controversy whilst STS scholars argue that controversy can be a motor of scientific and medical change. There is a lengthy tradition of research into different forms of controversies within science, technology, and medicine. We will read selectively and discuss critically this literature particularly focusing upon controversies in medicine. Controversies we will examine include, how best to run clinical trials, alternative medicine, anti-vaxxers and the role of patients in developing new disease categories. We will also look at the ethics of carrying out medical research on the incarcerated and other disadvantaged groups. We will cover historical cases as well as contemporary ones. Students will critically evaluate the main analytical approaches towards controversies and will choose one controversy to focus upon in their final paper.

Distribution Requirements: (SBA-AG), (SSC-AS)

Last Four Terms Offered: Spring 2024, Fall 2021, Fall 2020, Fall 2019

Schedule of Classes

STS 4101 - The Entangled Lives of Humans and Animals (4 Credits)

Crosslisted with ANTHR 4101, BSOC 4101

One animal behaviorist speculates that big brains develop when species are social; that is, when they must read cues from members of their group to understand when to approach, when to flee, when to fight, when to care. This course looks not only at animals in their social lives, but also at animals in their lives with us. We ask questions about how species become entangled and what that means for both parties, about the social lives of animals independently and with humans, about the survival of human and animal species, and about what it means to use animals for science, food, and profit. The course draws on readings from Anthropology, Science & Technology Studies, and animal trainers and behaviorists.

Distribution Requirements: (SBA-AG), (SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Fall 2022, Fall 2021, Fall 2020, Fall 2018

Schedule of Classes

STS 4127 - The Body Politic in Asia (4 Credits)

Crosslisted with HIST 4127, ASIAN 4415, FGSS 4127, CAPS 4127, BSOC 4127, SHUM 4127

Visions of bodily corruption preoccupy ruler and ruled alike and prompt campaigns for moral, medical, and legal reform in periods of both stability and revolution. This seminar explores the links between political, sexual, and scientific revolutions in early modern and modern Asia. The focus is on China and Japan, with secondary attention to South Asia and Korea. Interaction with the West is a major theme. Topics include disease control, birth control and population control, body modification, the history of masculinity, honorific violence and sexual violence, the science of sex, normative and stigmatized sexualities, fashion, disability, and eugenics. The course begins with an exploration of regimes of the body in traditional Asian cultures. The course then turns to the medicalization and modernization of the body under the major rival political movements in Asia: feminism, imperialism, nationalism, and communism. (SC)

Distribution Requirements: (D-AG, HA-AG), (HST-AS, SCD-AS)

Exploratory Studies: (SAAREA)

Last Four Terms Offered: Spring 2024, Fall 2021, Spring 2020, Fall 2017

Schedule of Classes

STS 4131 - Comparative Environmental History (3 Credits)

Crosslisted with BSOC 4131, HIST 4131

One of the most troubling realizations of the 20th century has been the extent to which human activities have transformed the environment on a global scale. The rapid growth of human population and the acceleration of the global economy have meant that the 20th century, in environmental terms, has been unlike any other in world history. This course takes a comparative approach, examining crucial themes in the environmental history of the 20th-century world in different times, places, and ecologies.

Distribution Requirements: (HA-AG, SCH-AG), (HST-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Spring 2024, Fall 2020, Fall 2016, Fall 2012

Schedule of Classes

STS 4168 - Race and Asia in World History (4 Credits)

Crosslisted with HIST 4168, ASIAN 4417

This course explores the development of the concept of race as applied by and to Asian populations and societies. We also examine the idea of Asia and its others in global discourse, including through lenses such as Orientalism, Occidentalism, Pan-Asianism, and Afro-Asianism. Our focus is on the history of East Asia and trans-Pacific entanglements with Western empires from the early modern era to the present. A major theme is race science, or the scientific investigation and construction of race, as it was practiced on and by East Asian peoples. We also explore intersections of race with nationalism, imperialism, warfare, law and citizenship, and sex and the family. (SC)

Distribution Requirements: (D-AG, HA-AG), (HST-AS, SCD-AS)

Last Four Terms Offered: Fall 2024, Spring 2022

Schedule of Classes

STS 4200 - Information Policy: Applied Research and Analysis (3 Credits)

Crosslisted with INFO 4200, COMM 4201

This course will address a wide range of information policy issues such as privacy, security, antitrust, intellectual property, algorithmic fairness, net neutrality, risk mitigation strategies, and other legal and policy compliance concerns in a simulated project management environment. Patterned on life cycle project management for products and services in contemporary large-scale technology companies, students will adopt specific topic areas for applied research and analysis working dynamically with other team members. Course outcomes include conducting upper-level research in specific information policy domains, experiential group dynamics, persuasive analytic presentations, fundamentals of project management in the technology sector, and insights into corporate hierarchies, organization, and functionalities.

Prerequisites: INFO 1200 or INFO 1260, or permission of instructor.

Last Four Terms Offered: Spring 2022, Spring 2021, Fall 2013, Spring 2013

Schedule of Classes

STS 4231 - Gender and Technology in Historical Perspectives (4 Credits)

Crosslisted with FGSS 4231, HIST 4231

Why are some technologies such as cars and computers associated with men and masculinity? How did vacuums and sewing machines become gendered female? How do technological artifacts and systems constitute, mediate, and reproduce gender identities and gender relations? How do technologies uphold gender hierarchies and thus social inequalities?

This class explores the relationship between gender and technology in comparative cultural, social, and historical perspective. Specific themes include meanings, camouflage, and display; socializations; industrialization, labor, and work; technologies of war; the postwar workplace; sex and sexuality; and reproductive technologies. Most course materials focus on Western Europe and the United States since the late 18th century, but the issues raised in this class will prepare students to think about the relationship between gender and technology in other contexts including our own.

Distribution Requirements: (D-AG, HA-AG), (HST-AS, SCD-AS)

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Spring 2022, Fall 2015, Spring 2013, Spring 2012

Schedule of Classes

STS 4240 - Designing Technology for Social Impact (4 Credits)

Crosslisted with INFO 4240

The social impact of technologies is typically thought about fairly late, if ever, in the design process. Indeed, it can be difficult at design time to predict what effects technologies will have. Nevertheless, design decisions can inadvertently lock in particular values early on. In this course, we will draw on science & technology studies, technology design, and the arts to analyze the values embodied in technology design and to design technologies to promote positive social impact. What social and cultural values do technology designs consciously or unconsciously promote? To what degree can social impact be built into a technology? How can we take social and cultural values into account in design?

Distribution Requirements: (SBA-AG), (SCT-IL), (SSC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 4260 - Computing On Earth: Planetary Dimensions and Consequence of Computing (3 Credits)

Crosslisted with INFO 4260

This experimental, collaborative and seminar-based class will explore the material ethics of computing - the ways in which computing rests upon, emerges from, and ultimately returns to the earth, with deep and sometimes negative implications for sustainability, equity and justice in a rapidly changing world. Drawing on journalistic sources and academic fields ranging from anthropology, philosophy, public policy and environmental ethics to law, science and technology studies and human-computer interaction, the course will examine problems of computing-related sourcing and extraction, energy and consumption, and waste and repair, and how these are distributed and experienced in vastly different ways by different social groups and actors. Cases and examples will be drawn from near-to-hand and around the world.

Prerequisites: INFO 1200 or INFO 1260 or CS 1340 or permission of instructor.

Distribution Requirements: (SCH-AG)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023

Learning Outcomes:

- Explain and critically assess the material foundations and implications of computing, including as these relate to locations and communities around the world.
- Examine and explain your own values and policy preferences around the material ethics of computing, and offer reasoned arguments to support them (including in dialogue with the potentially differing positions of others).
- Discuss and appraise the key institutional, regulatory, and legal processes shaping questions of computing and sustainability in the U.S. and in other jurisdictions.

Schedule of Classes

STS 4280 - Health and Environmental Justice (4 Credits)

Crosslisted with AMST 4280, BSOC 4280

Last Four Terms Offered: Spring 2021, Spring 2020

Schedule of Classes

STS 4351 - Postcolonial Science (3 Credits)

Crosslisted with ANTHR 4435, BSOC 4351

Scientific knowledge and practice enacted colonial divisions and served postcolonial struggles. How then might we understand the work of science in the struggles that shape our world today? This class considers science outside Europe and the United States. We take the postcolonial as a dynamic space reworking the dichotomies that structured colonial power and knowledge, including western-indigenous, modern-traditional, global-local, centers-peripheries, and developed-underdeveloped. In the process, students confront the complex histories embodied in institutions, identities, bodies, and landscapes. Through controversies over the environment, medicine, and indigenous knowledge, we investigate the processes through which claims to the universal emerge and the effects of such claims. We attend to the collaborations and alliances through which substance is articulated, and the world in all its multiplicities is apprehended.

Distribution Requirements: (CA-AG, SBA-AG), (GLC-AS, SSC-AS)

Last Four Terms Offered: Fall 2023, Fall 2017, Fall 2012, Spring 2011
Schedule of Classes

STS 4412 - Conceptions of the Body in Medicine and Healing (3 Credits)

Crosslisted with BSOC 4412

The working of the human body is a universal phenomenon, yet different medical traditions have vastly different conceptions of what a body is. How can something so intimate and tangible like the body be understood so contrastingly in medicine across the world? With examples from classical Greek and ancient Chinese medicine to contemporary practices in biomedicine, Ayurveda, Unani and others, the course questions the everyday, taken for granted assumptions like the distinction between mind and the body, or what counts as a healthy body. It then explores how these multiple perceptions of the body in medicine are often culturally informed and are deeply linked with experiences of personhood and identity.

Distribution Requirements: (D-AG, KCM-AG), (ETM-AS, SCD-AS)

Last Four Terms Offered: Spring 2025, Fall 2023, Fall 2022

Schedule of Classes

STS 4413 - Environments, Disasters, Health (3 Credits)

Crosslisted with BSOC 4413

Environments shape who we are. Environment is omnipresent, and sometimes seems timeless, yet what we experience around us is an outcome of centuries of making, reworking, and reconstructing. This course begins with readings that familiarize students with historically informed meanings and descriptions of the environment. By using examples drawn from different parts of the world, it then interrogates how relations between environmental disasters and health are mediated through social categories like class, gender, race, or caste. Broad topics include social justice and the environment, multispecies relations, nature-culture debates, slow violence, and environmental disasters and catastrophes.

Enrollment Information: Priority given to: seniors.

Distribution Requirements: (D-AG, SBA-AG, SCH-AG), (SCD-AS, SSC-AS)

Last Four Terms Offered: Fall 2023, Spring 2023

Learning Outcomes:

- Familiarity with key concepts and current debates around the environment and environmental disasters
- Understand the relation between theory/concepts and practice/empirical examples, and learn how concepts are contextual and how they change over time.
- Identify how "scientific", "cultural", "political" ideas, and practices are co-constituted.
- Read/experience inter-disciplinary materials and value knowledge from different sources.
- Develop tools to think critically and be able to write complex ideas in structured and legible ways.
- Be able to identify one's own research topic and learn how to write a thesis statement/ argument.

Schedule of Classes

STS 4416 - It's the End of the World As We Know It (4 Credits)

Crosslisted with ANTHR 4416, AMST 4416

Living in the contemporary moment means living with reminders that the end of the world - at least as we know it - is looming. From the global ecological crisis to evangelical apocalyptic visions, and from nuclear threats to the changes wrought by automated work, people are brushing up against the limits of human knowledge and experience. In this course, we will consider how anthropologists have grappled with the end of the world, drawing the discipline's boundaries liberally. Working with ethnography, science fiction, film, and more, we will ask: What does it mean to adopt the uncertain future as an object of study? And might the end of the world as we know it also mean the start of a more speculative anthropology?

Distribution Requirements: (SBA-AG), (SSC-AS)

Last Four Terms Offered: Fall 2023, Fall 2021

Schedule of Classes

STS 4426 - Science and the Making of Modern Palestine (3 Credits)

Crosslisted with NES 4426

This course explores how the physical sciences have played a central role in the making of territory, citizenship, and rights in Palestine and for Palestinians for the past hundred years. From chemistry and climatology to archaeology and astronomy, these sciences have not only conditioned how humanity grasps the universe, but they have been key projects, strategies, and blueprints for communities in both historical and contemporary Palestine to claim legitimacy, authority, and power over land and the humans that populate it. It is through these physical sciences that political regimes have turned Israel/Palestine into the explosive terrain that we know today, and by tracking the co-evolution of science and society therein we will reapproach classic debates about equity, repair, and human rights that are central to the question of Palestine.

Distribution Requirements: (D-AG, SBA-AG), (SCD-AS, SSC-AS)

Exploratory Studies: (CU-ITL)

Schedule of Classes

STS 4440 - Feminist Science Studies (3 Credits)

Crosslisted with FGSS 4441

How does gender, sexuality, race, and class matter in natural, medical, and technical sciences? How might orangutans, surgery, and digital imaging all be feminist subjects of interest? This seminar will examine foundational ideas in feminist science and technology studies and engage its emerging scholarship.

Distribution Requirements: (D-AG), (SCD-AS)

Last Four Terms Offered: Spring 2025

Schedule of Classes

STS 4442 - Toxicity (3 Credits)

Crosslisted with ANTHR 4442

Identifying and managing the toxic is critical to medical and environmental sciences as well as techniques of governing and resisting. This course takes up the subject of toxicity as a field of expertise, an object of knowledge and ethical substance. We will consider the specific histories of industrialization and of the sciences that shape modern engagements with toxicity, and we will explore other ways that the sorts of harms, poisons, and powers glossed as toxicity have been articulated. Over the course of the semester, students will develop the skills to provincializing relations between toxicity, remedy and memory. Texts will draw from social theory, anthropology, science and technology studies and history as well as art and activism.

Prerequisites: a previous class in the humanities or interpretive social sciences, preferably in anthropology or science and technology studies.

Last Four Terms Offered: Fall 2024, Fall 2022, Spring 2020

Schedule of Classes

STS 4451 - Making Science Policy: The Real World (3 Credits)

Crosslisted with GOVT 4451

This course focuses on what happens when science meet the policy-making world. We will discuss theoretical and empirical studies in Science & Technology Studies that analyze the interactions between science, society and politics. We will specifically investigate the mechanisms by which science may impact policy-making by focusing on: the rise of science diplomacy, initiatives to use science in order to further development goals, and efforts to produce evidence-based foreign policy. We will also focus on currently hotly debated political issues in government affairs, including the politization and militarization of space, the rise of big data, the politics of climate change, and the construction of border walls. As part of this course we will hear from experts in the federal government on how they attempt to integrate science into the everyday workings of governance.

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020, Spring 2019

Schedule of Classes

STS 4460 - Lightscares (3 Credits)

Crosslisted with HIST 4466, BSOC 4460, VISST 4460

Sunset, polar night, Times Square, satellites in space—these are just four lightscares. Light is essential to humanity in multifaceted ways. It both reflects and shapes human interactions with the environment. Yet light is also complex, multiple, and contested. This seminar explores diverse lightscares in varied contexts. How do we know light? How does light define and shape landscapes and nightscapes? How have people managed, transformed, and valued different lightscares over time? This course draws primarily from the history of science and technology, STS, and environmental history with forays into anthropology, environmental humanities, geography, media studies, and more. We will examine texts and images, and engage with lightscares at Cornell and in Ithaca. The seminar culminates in a class project centered on student-selected lightscares.

Last Four Terms Offered: Spring 2020

Schedule of Classes

STS 4476 - Carceral Worlds: Policing, Prisons, and Securitization (3 Credits)

Crosslisted with ANTHR 4476

Grounded in anthropological and interdisciplinary analyses of policing, prisons, and security, this course aims to account for how carcerality shapes our worlds. Attentive to specificity and variability across place and time, we will consider how carceral logics take hold and expand, and how they are contested and reimagined. We will pay particular attention to the interrelatedness of race and carcerality; lived experiences of carcerality, including those of people imprisoned in various contexts and those engaged in carceral work; the intersections between carcerality and science and technology; and abolitionist frameworks that address the limitations and constitutive oppressions of carcerality as they radically reimagine other possibilities.

Distribution Requirements: (CA-AG, D-AG), (GLC-AS, SCD-AS)

Last Four Terms Offered: Spring 2025, Spring 2021

Schedule of Classes

STS 4511 - Topics in Media Arts (3 Credits)

Crosslisted with ARTH 4151, VISST 4151

From the 20th-century to the present, artists have made art using live entities including plants, animals, cells, tissue cultures and bacteria. They have designed habitats, plants, body organs, imaged new species and attempted to salvage extinct ones. Some artists also have produced works in traditional media such as painting, sculpture, and photography. While artists always have depicted and sometimes directly engaged with aspects of the natural world in their art, bio art responds to recent developments in biology and information technologies. Because of its foundation on the life sciences this art entails significant ethical, social and political dimensions. In this seminar students will explore multiple areas of bio art with attention to pertinent artistic and critical literature and to the scientific practices in which the works are based. These interdisciplinary investigations will prepare students for a grounded assessment of bio art.

Distribution Requirements: (ALC-AS), (CA-AG, LA-AG)

Last Four Terms Offered: Spring 2024, Fall 2020, Fall 2018, Fall 2016
Schedule of Classes

STS 4561 - Evaluation and Society (3 Credits)

Crosslisted with SOC 4560, INFO 4561, SHUM 4561

Evaluation is a pervasive feature of contemporary life. Professors, doctors, countries, hotels, pollution, books, intelligence: there is hardly anything that is not subject to some form of review, rating, or ranking these days. This senior seminar examines the practices, cultures, and technologies of evaluation and asks how value is established, maintained, compared, subverted, resisted, and institutionalized in a range of different settings. Topics include user reviews, institutional audit, ranking and commensuration, algorithmic evaluation, tasting, gossip, and awards. Drawing on case studies from science, technology, culture, accounting, art, environment, and everyday life, we shall explore how evaluation comes to order our lives - and why it is so difficult to resist.

Enrollment Information: Enrollment preference given to: seniors, STS/BSOC majors.

Distribution Requirements: (SBA-AG), (SSC-AS)

Last Four Terms Offered: Fall 2025, Spring 2023, Spring 2022, Spring 2019

Schedule of Classes

STS 4634 - Curating the British Empire (3 Credits)

Crosslisted with ARTH 4720, BSOC 4634, HIST 4634

During Europe's colonial era, the modern museum emerged as a site of cultural and scientific authority. This course investigates the history of imperial collections and collectors, with a focus on Britain and the East India Company in the nineteenth century. Examples of topics include: the supply chain for artifacts and knowledge resources; changing conceptions of intellectual property, ownership and access; household versus public versus for-profit collections; museums and the narration of social values and cultural identities; debates over the function or aims of museums and related institutions; the collections and the administration of the empire; the collections and the growth of the sciences; the postcolonial legacies of colonial collections.

Distribution Requirements: (CA-AG, HA-AG), (GLC-AS, HST-AS)

Last Four Terms Offered: Fall 2022, Spring 2022, Spring 2019

Schedule of Classes

STS 4650 - Advanced Topics in Clinical Ethics (4 Credits)

Crosslisted with BSOC 4650

Last Four Terms Offered: Spring 2023, Fall 2022, Spring 2022, Spring 2021

Schedule of Classes

STS 4661 - Public Communication of Science and Technology (3 Credits)

Crosslisted with COMM 4660

Explores the structure, meanings, and implications of public communication of science and technology (PCST). Examines the contexts in which PCST occurs, looks at motivations and constraints of those involved in producing information about science for nonprofessional audiences, and analyzes the functions of PCST. Ties existing ideas about PCST to general communication research and leads to developing new knowledge about PCST.

Prerequisites: COMM 2850 or ENGRC 3500, or permission of instructor.

Distribution Requirements: (SBA-AG)

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2021, Spring 2019

Learning Outcomes:

- Students will be able to identify scholarly literature relevant to analysis of public communication of science and technology.
- Students will be able to identify and analyze recurrent themes in the scholarly literature on public communication of science and technology.
- Students will be able to produce scholarly writing (including appropriate documentation) about public communication of science and technology.

Schedule of Classes

STS 4667 - Sonic Remains: Media, Performance, and Material Culture (4 Credits)

Crosslisted with SHUM 4667, MUSIC 4667

Last Four Terms Offered: Spring 2022

Schedule of Classes

STS 4670 - Race and Justice After DNA (4 Credits)

Crosslisted with SHUM 4670, ANTHR 4470, ASRC 4670

Last Four Terms Offered: Spring 2022

Schedule of Classes

STS 4675 - Pandemics Past and Pending (3 Credits)

Crosslisted with SHUM 4675, ANTHR 4472, FGSS 4675

Last Four Terms Offered: Fall 2022

Schedule of Classes

STS 4691 - Food, Agriculture, and Society (3 Credits)

Crosslisted with BIOEE 4690, BSOC 4691

Multidisciplinary course dealing with the social and environmental impact of food production in the United States and developing countries. Agroecosystems of various kinds are analyzed from biological, economic, and social perspectives. The impacts of traditional, conventional, and alternative agricultural technologies are critically examined in the context of developed and developing economies. Specific topics include biodiversity and ecosystem services in agriculture, transgenic crops, land use for energy production, urban agriculture, and sustainable development.

Prerequisites: introductory ecology course or permission of instructor.

Distribution Requirements: (AFS-AG, CA-AG, OPHLS-AG, SCH-AG), (BIO-AS, GLC-AS)

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Spring 2024, Spring 2023, Spring 2022, Spring 2021

Learning Outcomes:

- Use conceptual and analytical knowledge to understand the complexity of food systems.
- Identify biological, environmental, and social processes that influence agricultural systems.
- Improve ability to develop and articulate a position on a controversial agricultural topic.
- Participate actively in debate and appraisal of agricultural issues with peers.
- Analyze, synthesize, and write about diverse disciplinary perspectives on agricultural issues.

Schedule of Classes

STS 4721 - Peace Building in Conflict Regions: Case Studies Sub-Saharan Africa Israel Palestinian Territories (4 Credits)

Crosslisted with ASRC 4721, GOVT 4723, JWST 4721, NES 4721, GDEV 4721

Last Four Terms Offered: Spring 2022, Spring 2021, Spring 2020, Spring 2019

Schedule of Classes

STS 4780 - Truth and Media: Searching for Epistemological Certainty (4 Credits)

Crosslisted with ENGL 4780

This course focuses on questions both timely-How can news be fake?- and timeless-What counts as the truth? Each of our four course units will present scenes in the history of technology that complicate the answers to these questions. How, for example, has Big Data revived the idea of theological omniscience that Nietzsche pronounced dead in 1882? How did atlases and encyclopedias inform the notion of scientific objectivity in the 19th century? How has photography and film complicated the truism, I'll believe it when I see it? Focusing on these and other moments of historical certainty and doubt, we will return to contemporary debates about the role of communication technology in presenting facts (alternative or otherwise) to an informed public. We will end our course by questioning what type of hope, confidence or resistance we can find in a world without a solid epistemological foundation for truth.

Distribution Requirements: (HA-AG), (HST-AS)

Schedule of Classes

STS 4902 - Environmental Humanities: Theories and Methods (3 Credits)

Crosslisted with COML 4902

The environmental humanities pose a radically different set of questions to texts, materials, and contexts that were previously approached in terms of human intentions and actions alone. This seminar explores the theoretical and methodological potentials of this rapidly emerging and constantly evolving field from the interdisciplinary, comparative perspective that it also axiomatically demands. Together we will discuss seminal works that tackle four foundational concepts imperative for reframing the traditional concerns of the humanities under the sign of anthropogenic planetary change – scale, form, matter/ energy, and distribution. The seminar will develop ways to configure these focal points to the theoretical and practical concerns of various disciplinary approaches and, especially, to participants' individual interests and research projects.

Distribution Requirements: (ALC-AS), (CA-AG, LA-AG)

Last Four Terms Offered: Spring 2024, Fall 2019

Schedule of Classes

STS 4911 - Vitality and Power in China (4 Credits)

Crosslisted with HIST 4931, CAPS 4931, ASIAN 4429, BSOC 4911, RELST 4931

Chinese discourses have long linked the circulation of cosmic energies, political power, and bodily vitalities. In these models political order, spiritual cultivation, and health are achieved and enhanced through harmonizing these flows across the levels of Heaven-and-Earth, state, and humankind. It is when these movements are blocked or out of synchrony that we find disordered climates, societies, and illness. In this course, we will examine the historical emergence and development of these models of politically resonant persons and bodily centered politics, reading across primary texts in translation from these otherwise often separated fields. For alternate frameworks of analysis as well as for comparative perspectives, we will also examine theories of power and embodiment from other cultures, including recent scholarship in anthropology and critical theory. (SC)

Distribution Requirements: (D-AG, HA-AG), (HST-AS, SCD-AS)

Exploratory Studies: (EAAREA)

Last Four Terms Offered: Fall 2025, Fall 2020, Spring 2019, Spring 2013

Schedule of Classes

STS 4991 - Honors Project I (4 Credits)

Crosslisted with BSOC 4991

Students must register for 4 credits each semester (4991-4992) for a total of 8 credits. After the first semester, students receive a letter grade of R; a letter grade for both semesters is submitted at the end of the second semester whether or not the student completes a thesis or is recommended for honors. Minimally, an honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements. If students do not complete the second semester of the honors project, they must change the first semester to independent study to clear the R and receive a grade. Otherwise, the R will remain on their record and prevent them from graduating.

Enrollment Information: Enrollment limited to: senior Biology and Society majors with overall GPA of 3.3.

Exploratory Studies: (CU-UG)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 4992 - Honors Project II (4 Credits)

Crosslisted with BSOC 4992

Students must register for the 4 credits each semester (BSOC 4991-BSOC 4992) for a total of 8 credits. After the first semester, students receive a letter grade of R; a letter grade for both semesters is submitted at the end of the second semester whether or not the student completes a thesis or is recommended for honors. Minimally, an honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements. If students do not complete the second semester of the honors project, they must change the first semester to independent study to clear the R and receive a grade. Otherwise, the R will remain on their record and prevent them from graduating.

Enrollment Information: Enrollment limited to: senior Biology and Society majors with overall GPA of 3.3.

Exploratory Studies: (CU-UG)

Last Four Terms Offered: Fall 2025, Spring 2025, Fall 2024, Spring 2024

Schedule of Classes

STS 5051 - Foundations of Ethics (3 Credits)

Aimed firstly at introducing students to the moral dimension of medicine, and secondly at fostering reasoning and problem-solving competencies in clinical ethics, the course combines a discussion seminar format with a number of weekly clinically-oriented activities that range from problem-based-learning exercises, to laboratory exercises, to in-hospital observerships. It will prepare premedical students for growingly demanding integrated medical curricula, by developing the corresponding knowledge, attitudes, skills and habits. The format promotes deliberation and helps students develop analytical attitudes and skills through observation and experience. It explores topics ranging from the nature of medical knowledge, to the world of the patient, to the family of the patient's dynamics, to the world of the doctor and the hospital, to the morality of human subject research.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 6020 - Science, Medicine, and Media Technologies in East Asia (3 Credits)

Crosslisted with BSOC 6020

This seminar course introduces students to the studies of science, technology, and medicine in East Asia, aiming to cultivate a foundational understanding of the field while exploring key topics relevant to the region. Each year, the course themes vary; this year, we focus on environments, media, and bodies. As a reading and writing intensive course, it challenges students to engage deeply with the material and articulate their insights through rigorous analysis. In doing so, students learn to appreciate the complex power dynamics at play as science and technology interact with a diverse range of actors, tracing intricate trajectories across national, transnational, and global networks.

Last Four Terms Offered: Spring 2025

Schedule of Classes

STS 6042 - Making Experts (3 Credits)

Experts have long been essential to societies around the world. Experts wield power not by physical force or popular mandate, but by credible claims to specialized skills and knowledge that others lack. Yet this power is ambivalent. Work in science and technology studies demonstrates that expert knowledge is fundamentally political, raising questions about how to integrate such knowledge with democratic processes that aim to ensure equality of representation and participation. This graduate seminar will examine different theoretical and methodological approaches to studying the making of experts and expertise, including institutional, experiential, and interactional approaches. We will discuss differences and similarities in the ways that disciplines such as sociology, anthropology, history, and science and technology studies conceptualize and research experts and systems of expertise.

Last Four Terms Offered: Fall 2023

Schedule of Classes

STS 6061 - Science, Technology and Capitalism (3 Credits)

Crosslisted with HIST 6065

This course examines the relationship between scientific development, technological innovation and maintenance, and the capitalistic forces that support and benefit from these activities.

Distribution Requirements: (LH-IL, OCE-IL)

Last Four Terms Offered: Fall 2025, Fall 2023, Spring 2022, Fall 2019

Schedule of Classes

STS 6100 - Borders Belonging Technoscience (3 Credits)

Crosslisted with ANTHR 6100

This seminar considers technologies of placemaking, with an emphasis on borders and belonging. It takes technology as something that is not self-evident as a category or form: rather, technology is approached as a concept that must be interrogated. For this reason, while much of the course focuses on technoscience and its intersections with borders and belonging, we begin instead with how ideas like the West, modernity, the nation-state, and borders work in and of themselves as technologies of place, belonging, exclusion, and violence. Topics include technologies of power, making and crossing borders, and placing technoscience.

Last Four Terms Offered: Fall 2025, Fall 2020

Schedule of Classes

STS 6101 - Sense, Movement, Sociality (4 Credits)

Crosslisted with ANTHR 6101

This course begins from the premise that bodies and sensing are the ground of sociality. Drawing on texts from Anthropology, Science & Technology Studies, Disability Studies, and Animal Studies, as well as some classics of social theory, this course brings bodies and senses to the fore in thinking about how humans live, work, relate, and create together. It considers all the senses from the big five (sight, hearing, touch, smell, taste) to the hidden senses (balance, kinesthesia, proprioception, and affect). The goal is to read and think materially, semiotically, and theoretically about how humans, as a social species, interact with our own and other species through our bodies, our senses, and our movements.

Last Four Terms Offered: Spring 2022, Spring 2018

Schedule of Classes

STS 6115 - History of Knowledge (4 Credits)

Crosslisted with HIST 6115

What is the history of knowledge? Over the last decades, historians of science have examined a range of figures from artisans and scholars to itinerant healers and household experimenters. This body of scholarship has inquired into the nature of knowledge, asking whether this is a more appropriate historical rubric than "science". In this graduate seminar, we will investigate this development in historiography by studying books published over the last thirty years in the history of science (ca. 1500 to 1900). Drawing on various approaches – global, social, food, visual, and gender history – students will explore the newest approaches in the field. The seminar addresses graduate students from different fields who seek a grounding in recent methods and concepts in the history of science.

Enrollment Information: Enrollment limited to: graduate and professional students.

Schedule of Classes

STS 6127 - The Body Politic in Asia (4 Credits)

Crosslisted with HIST 6127, ASIAN 6615, FGSS 6127

Visions of bodily corruption preoccupy ruler and ruled alike and prompt campaigns for moral, medical, and legal reform in periods of both stability and revolution. This seminar explores the links between political, sexual, and scientific revolutions in early modern and modern Asia. The focus is on China and Japan, with secondary attention to South Asia and Korea. Interaction with the West is a major theme. Topics include disease control, birth control and population control, body modification, the history of masculinity, honorific violence and sexual violence, the science of sex, normative and stigmatized sexualities, fashion, disability, and eugenics. The course begins with an exploration of regimes of the body in traditional Asian cultures. The course then turns to the medicalization and modernization of the body under the major rival political movements in Asia: feminism, imperialism, nationalism, and communism. (SC)

Exploratory Studies: (SAAREA)

Last Four Terms Offered: Spring 2024, Fall 2021, Spring 2020, Fall 2017

Schedule of Classes

STS 6168 - Race and Asia in World History (4 Credits)

Crosslisted with HIST 6168, ASIAN 6617

This course explores the development of the concept of race as applied by and to Asian populations and societies. We also examine the idea of Asia and its others in global discourse, including through lenses such as Orientalism, Occidentalism, Pan-Asianism, and Afro-Asianism. Our focus is on the history of East Asia and trans-Pacific entanglements with Western empires from the early modern era to the present. A major theme is race science, or the scientific investigation and construction of race, as it was practiced on and by East Asian peoples. We also explore intersections of race with nationalism, imperialism, warfare, law and citizenship, and sex and the family. (SC)

Last Four Terms Offered: Fall 2024, Spring 2022

Schedule of Classes

STS 6181 - Confluence: Environmental History and Science and Technology Studies (4 Credits)

Crosslisted with HIST 6181

Last Four Terms Offered: Fall 2021, Spring 2017, Spring 2014, Spring 2011

Schedule of Classes

STS 6211 - Environmental Bodies in Science and Technology Studies (3 Credits)

Crosslisted with FGSS 6211

Given the porosity of bodies, where does the environment begin or end? How are the bodies we call environmental more than resources for extraction and exploitation? How might they be sources of enchantment, wonder, pain, or other forms of knowledge? This class engages current ethnographies and histories of how environmental knowledges are differently experienced and embodied.

Last Four Terms Offered: Fall 2025

Schedule of Classes

STS 6261 - Seminar in the History of Technology (3 Credits)

Crosslisted with HIST 6190

Graduate-level survey of the history of technology, which introduces some key questions, concepts, and approaches within the field since the 1980s. Typical themes include social construction of technology; technological systems and infrastructure; technopolitics; race, class, genders, disability, and technology; users; envirotech; maintenance and repair; colonialism and decolonizing technology; and public and engaged #histtech.

Last Four Terms Offered: Fall 2024, Spring 2021, Fall 2015, Spring 2013

Schedule of Classes

STS 6301 - Social Theory (3 Credits)

Crosslisted with ANTHR 6301

Sociologist C. Wright Mills challenged his readers to develop their sociological imagination to understand the social and historical forces at work in seemingly individual events, such as the receipt of a pink slip, a draft card, or a drug prescription. Within science and technology studies, scholars have documented how social issues can become scientific, technological, or medical, often appearing to leave the social realm naturalized, normalized, or pathologized. This course introduces graduate students to classic texts and concepts in social theory with a focus on how scholars apply such theories to empirical research. It will consider major thinkers and schools of social thought, such as Marx, Weber, Durkheim, Mannheim, Foucault, and the Frankfurt School. It will also consider how a nuanced interplay of theory and empirical data can bring critically important insights to both theoretical and empirical understandings of the world. The course is relevant for students in sociology, history, and anthropology who are interested in social theory.

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Spring 2024, Spring 2021, Fall 2018, Fall 2016
Schedule of Classes

STS 6311 - Qualitative Research Methods for Studying Science, Technology, and Medicine (3 Credits)

Crosslisted with SOC 6310

In this Graduate seminar we will discuss the nature, politics and basic assumptions underlying qualitative research. We will examine a selection of qualitative methods ranging from interviewing, oral history, ethnography, participant observation, archival research and visual methods. We will also discuss the relationship between theory and method. All stages of a research project will be discussed - choice of research topic and appropriate methods; human subject concerns and permissions; issues regarding doing research; as well as the process of writing up and publishing research findings.

Last Four Terms Offered: Spring 2025, Spring 2024, Spring 2023, Spring 2022

Schedule of Classes

STS 6321 - Inside Technology (4 Credits)

Crosslisted with SOC 6320

Last Four Terms Offered: Fall 2021, Fall 2019, Fall 2018, Spring 2017
Schedule of Classes

STS 6426 - Science and the Making of Modern Palestine (3 Credits)

Crosslisted with NES 6426

This course explores how the physical sciences have played a central role in the making of territory, citizenship, and rights in Palestine and for Palestinians for the past hundred years. From chemistry and climatology to archaeology and astronomy, these sciences have not only conditioned how humanity grasps the universe, but they have been key projects, strategies, and blueprints for communities in both historical and contemporary Palestine to claim legitimacy, authority, and power over land and the humans that populate it. It is through these physical sciences that political regimes have turned Israel/Palestine into the explosive terrain that we know today, and by tracking the co-evolution of science and society therein we will reapproach classic debates about equity, repair, and human rights that are central to the question of Palestine.

Schedule of Classes

STS 6440 - Feminist Science Studies (3 Credits)

Crosslisted with FGSS 6440

How does gender, sexuality, race, and class matter in natural, medical, and technical sciences? How might orangutans, surgery, and digital imaging all be feminist subjects of interest? This seminar will examine foundational ideas in feminist science and technology studies and engage its emerging scholarship.

Last Four Terms Offered: Spring 2025

Schedule of Classes

STS 6445 - German Media Theories (3 Credits)

Crosslisted with GERST 6445, PMA 6445

This seminar examines German media theories from the Frankfurt School to the Kittler Network and beyond. We will discuss influential concepts associated with this work (e.g., the culture industry, the public sphere, discourse networks), along with related concepts in media and cultural studies (e.g., space and time, analog and digital, old and new media). Theoretical readings address questions about media aesthetics, intermediality, and media change; automation, mechanization, and standardization; and communication, command, and control. Engaging with scholarly debates about interdisciplinarity and theory transfer, we will also revisit and revise reductive stereotypes about media critique, technological determinism, and the Germanness of German media theories.

Last Four Terms Offered: Fall 2024

Schedule of Classes

STS 6460 - Bodies and Bodiliness (4 Credits)

Crosslisted with ANTHR 6465

In this graduate level course, we will take the body and bodiliness as spaces of ethnographic engagement and questioning. Discussion, text and other materials in this class will invite students to consider the ways that the body (as an epistemological and ontological object) is transformed through a variety of scientific, economic and political projects. Because meditations on the body have rested – implicitly or explicitly – on theoretical and methodological approaches to experience, students will find themselves exploring histories of bodily senses, appetites, and capacities. Ultimately, our inquiry into contests over and reflections on the body and bodiliness aim to open up broader anthropological questions about knowledge, authority, agency, sovereignties, and material life.

Exploratory Studies: (CU-ITL)

Last Four Terms Offered: Fall 2021, Fall 2015, Fall 2012, Fall 2010

Schedule of Classes

STS 6474 - Infrastructure (3 Credits)

Crosslisted with ANTHR 6474

Infrastructure! It's the hardware and software that undergirds transportation, energy, water, and security systems. This course asks what we can learn about infrastructure when we approach it not as a neutral set of technologies but as a context-dependent social and political force. Taking a critical approach to (among others) natural resources, labor, housing, and security, the course will trace how infrastructures have both served and obstructed colonial and contemporary projects for social change.

Exploratory Studies: (CU-ITL)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2021

Schedule of Classes

STS 6511 - Topics in Media Arts (3 Credits)

Crosslisted with ARTH 6151, VISST 6151

Topic - Biological Art (Bio Art): From the late 20th-century to the present, artists have made art using live entities including plants, animals, cells, tissue cultures and bacteria. They have designed habitats, crops, body organs, created new species and attempted to salvage extinct ones. Some artists also have produced works in traditional media such as painting, sculpture and photography. While artists always have imaged and sometimes directly engaged with aspects of the natural world in their art, bio art responds to recent developments in genetics and information technologies. Because of its foundation on the life sciences this art entails significant ethical and political dimensions. In this seminar students will explore multiple areas of bio art with attention to pertinent artistic and critical literature and to the scientific practices in which the works are based. For this purpose the class will consult with specialists and visit laboratories on campus relevant to the art covered in the course. We expect these interdisciplinary investigations to prepare students for a grounded assessment of bio art.

Last Four Terms Offered: Spring 2024, Fall 2020, Fall 2018, Fall 2016
Schedule of Classes

STS 6561 - Technologies of Valuation (3 Credits)

Crosslisted with INFO 6561

Valuation is a pervasive feature of contemporary life. Professors, start-ups, immigrants, intelligence, insurance premiums, and human lives: almost everything these days is subject to some form of more or less methodical assessment. This seminar examines valuation as a socio-technical phenomenon and asks how value and values are established, co-produced, maintained, subverted, institutionalized, and resisted. Through a mix of reading, writing, and activities, we shall engage with theoretical, historical, and contemporary studies of (e)valuation in science & technology studies (STS), but also draw on related areas like economic sociology, critical accounting studies, anthropology, and information science. Taken together, these ideas provide a powerful lens for analyzing what counts in cultures, organizations, and other forms of social life.

Last Four Terms Offered: Spring 2025, Spring 2016, Spring 2015
Schedule of Classes

STS 6634 - Curating the British Empire (3 Credits)

Crosslisted with ARTH 6720, HIST 6634

During Europe's colonial era, the modern museum emerged as a site of cultural and scientific authority. This course investigates the history of imperial collections and collectors, with a focus on Britain and the East India Company in the nineteenth century. Examples of topics include: the supply chain for artifacts and knowledge resources; changing conceptions of intellectual property, ownership and access; household versus public versus for-profit collections; museums and the narration of social values and cultural identities; debates over the function or aims of museums and related institutions; the collections and the administration of the empire; the collections and the growth of the sciences; the postcolonial legacies of colonial collections.

Exploratory Studies: (SAAREA)

Last Four Terms Offered: Fall 2022, Spring 2022, Spring 2019
Schedule of Classes

STS 6661 - Public Engagement in Science (3 Credits)

Crosslisted with COMM 6660

In recent years, the scientific community has increasingly referred to public engagement in science. This seminar explores the scholarly literature addressing that move; the links between public engagement and earlier concerns about sciences literacy, public understanding of science, and outreach; and the intersections between literature in communication and in science studies on issues involving the relationships among science(s) and public(s).

Exploratory Studies: (CU-SBY)

Last Four Terms Offered: Fall 2021, Spring 2020, Spring 2018, Spring 2016

Learning Outcomes:

- Students will be able to identify scholarly literature relevant to analysis of public communication of science and technology.
- Students will be able to identify and analyze recurrent themes in the scholarly literature on public communication of science and technology.
- Students will be able to produce scholarly writing (including appropriate documentation) about public communication of science and technology.

Schedule of Classes

STS 6667 - Sonic Remains: Media, Performance, and Material Culture (4 Credits)

Crosslisted with SHUM 6667, MUSIC 6667

Last Four Terms Offered: Spring 2022

Schedule of Classes

STS 6670 - Race and Justice After DNA (4 Credits)

Crosslisted with SHUM 6670, ANTHR 7470, ASRC 6670

Last Four Terms Offered: Spring 2022

Schedule of Classes

STS 6902 - Environmental Humanities: Theories and Methods (3 Credits)

Crosslisted with COML 6902

The environmental humanities pose a radically different set of questions to texts, materials, and contexts that were previously approached in terms of human intentions and actions alone. This seminar explores the theoretical and methodological potentials of this rapidly emerging and constantly evolving field from the interdisciplinary, comparative perspective that it also axiomatically demands. Together we will discuss seminal works that tackle four foundational concepts imperative for reframing the traditional concerns of the humanities under the sign of anthropogenic planetary change – scale, form, matter/ energy, and distribution. The seminar will develop ways to configure these focal points to the theoretical and practical concerns of various disciplinary approaches and, especially, to participants' individual interests and research projects.

Exploratory Studies: (SAAREA)

Last Four Terms Offered: Spring 2024, Fall 2019, Fall 2018
Schedule of Classes

STS 6991 - Graduate Independent Study (1-4 Credits)

Applications and information are available in 303 Morrill Hall.

Last Four Terms Offered: Fall 2025, Spring 2025, Fall 2024, Spring 2024
Schedule of Classes

STS 7001 - Science Studies and the Politics of Science (3 Credits)

The field of Science & Technology Studies (STS) has called attention to the contingent and socially embedded character of knowledge and technology. This seminar explores the consequences of these findings for the analysis of politics, considering such issues as trust and skepticism, political and legal agency, knowledge ordering the politics of democratic societies. What role does technical knowledge play in underwriting democracy? What problems of legitimacy arise from the interpretive flexibility of knowledge? How are stable settlements (sometimes) achieved in contexts of contingency? How are science and technology implicated in structuring power relations and shaping relationships between citizens and the state? This year the special focus of the seminar will focus on questions about the allocation of control over knowledge.

Last Four Terms Offered: Spring 2025, Spring 2020, Fall 2016, Spring 2013

Schedule of Classes

STS 7005 - STS Perspectives (1 Credit)

This one-credit seminar is designed to introduce PhD students in Science & Technology Studies (STS) to the faculty in the STS graduate field and their scholarly interests and work. Faculty members will be invited to lead one week of the course during the fall semester. Course leaders will set the agenda for their week (e.g., discussing a reading of their choice, introducing their research agenda, or discussing emerging issues the field). Reading assignments will be minimal; no more than 40 pages each week.

Enrollment Information: Enrollment limited to: STS graduate students.

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 7006 - STS Research I: A Course for Second-Year PhD Students in the Field (2 Credits)

The goal of this year-long course is to train students in the process of conducting research in STS, providing hands on experience and discussions of the research process. Students will plan and execute an appropriately scaled empirical research project in STS and complete a second-year paper by the end of the Spring semester. They will refine initial research concepts into more specific research questions; review literature relevant to their topic; identify data sources and collect data and materials; address research ethics and obtain IRB approval (if needed); manage the inevitable contingencies of research; and write and revise their second-year papers.

Enrollment Information: Enrollment limited to: second-year STS Ph.D. students.

Last Four Terms Offered: Fall 2025, Fall 2024

Schedule of Classes

STS 7007 - STS Research II: A Course for Second-Year PhD Students in the Field (2 Credits)

The goal of this year-long course is to train students in the process of conducting research in STS, providing hands on experience and discussions of the research process. Students will plan and execute an appropriately scaled empirical research project in STS and complete a second-year paper by the end of the Spring semester. They will refine initial research concepts into more specific research questions; review literature relevant to their topic; identify data sources and collect data and materials; address research ethics and obtain IRB approval (if needed); manage the inevitable contingencies of research; and write and revise their second-year papers.

Enrollment Information: Enrollment limited to: second-year Ph.D. students.

Last Four Terms Offered: Spring 2025

Schedule of Classes

STS 7111 - Introduction to Science and Technology Studies (3 Credits)

Crosslisted with HIST 7110

Provides students with a foundation in the field of science and technology studies. Using classic works as well as contemporary exemplars, seminar participants chart the terrain of this new field. Topics for discussion include, but are not limited to, historiography of science and technology and their relation to social studies of science and technology, laboratory studies, intellectual property, science and the state, the role of instruments, fieldwork, politics and technical knowledge, philosophy of science, sociological studies of science and technology, and popularization.

Exploratory Studies: (EUAREA)

Last Four Terms Offered: Fall 2025, Fall 2024, Fall 2023, Fall 2022

Schedule of Classes

STS 7201 - Studying Emerging Technologies (3 Credits)

This course will examine the peculiar speculative world of emerging technologies—a social and technical space, found at the edges of expanding technological systems, where new technologies are being most actively constructed and transformed. In this dynamic world, emerging technologies exist in a state of flux as a mixture of blueprint and hardware, plan and practice, the nearly on-line and the almost obsolete, surrounded by speculation and speculators, who make often-contested claims about their promises, perils, and possibilities. Among the characteristics of this space are: the frequent appearance of unverifiable claims about technologies that have yet to materialize; an entrepreneurial drive for commercial implementation; ongoing institutional innovation; frequent public controversies; and problems of political legitimacy. The course will examine the epistemic, discursive, institutional, and political dimensions of emerging technologies in an effort to understand the social worlds that shape technological change. Open to graduate students in the social sciences, sciences, and humanities.

Last Four Terms Offered: Fall 2025, Spring 2023, Spring 2021, Fall 2018

Schedule of Classes

STS 7213 - Sound and Modernity (3 Credits)

Crosslisted with MUSIC 7213

This seminar will investigate themes in the interdisciplinary field of inquiry known as sound studies. We will read texts from diverse disciplines with a focus on historical rather than ethnographic approaches to sound; therefore, we will treat such topics as listening, material culture (instruments, architectures), audio technologies, and sonic embodiment from the perspective of music history and its attendant methods. Rather than attempting a chronological history of sound, this syllabus groups the assigned readings around topic areas, allowing seminar participants to recognize sympathetic methodological concerns among disparate scholars, and to register important differences about how to research and write the history of sound.

Last Four Terms Offered: Fall 2023, Spring 2014

Schedule of Classes

STS 7416 - It's the End of the World As We Know It (4 Credits)

Crosslisted with ANTHR 7416, AMST 7416

Living in the contemporary moment means living with reminders that the end of the world - at least as we know it - is looming. From the global ecological crisis to evangelical apocalyptic visions, and from nuclear threats to the changes wrought by automated work, people are brushing up against the limits of human knowledge and experience. In this course, we will consider how anthropologists have grappled with the end of the world, drawing the discipline's boundaries liberally. Working with ethnography, science fiction, film, and more, we will ask: What does it mean to adopt the uncertain future as an object of study? And might the end of the world as we know it also mean the start of a more speculative anthropology?

Last Four Terms Offered: Fall 2023, Fall 2021

Schedule of Classes

STS 7442 - Toxicity (3 Credits)

Crosslisted with ANTHR 7442

Identifying and managing the toxic is critical to medical and environmental sciences as well as techniques of governing and resisting. This course takes up the subject of toxicity as a field of expertise, an object of knowledge and ethical substance. We will consider the specific histories of industrialization and of the sciences that shape modern engagements with toxicity, and we will explore other ways that the sorts of harms, poisons, and powers glossed as toxicity have been articulated. Over the course of the semester, students will develop the skills to provincializing relations between toxicity, remedy and memory. Texts will draw from social theory, anthropology, science and technology studies and history as well as art and activism.

Prerequisites: a previous class in the humanities or interpretive social sciences, preferably in anthropology or science and technology studies.

Last Four Terms Offered: Fall 2024, Fall 2022, Spring 2020

Schedule of Classes

STS 7476 - Carceral Worlds: Policing, Prisons, and Securitization (3 Credits)

Crosslisted with ANTHR 7476

Grounded in anthropological and interdisciplinary analyses of policing, prisons, and security, this course aims to account for how carcerality shapes our worlds. Attentive to specificity and variability across place and time, we will consider how carceral logics take hold and expand, and how they are contested and reimagined. We will pay particular attention to the interrelatedness of race and carcerality; lived experiences of carcerality, including those of people imprisoned in various contexts and those engaged in carceral work; the intersections between carcerality and science and technology; and abolitionist frameworks that address the limitations and constitutive oppressions of carcerality as they radically reimagine other possibilities.

Last Four Terms Offered: Spring 2025, Spring 2021

Schedule of Classes

STS 7937 - Proseminar in Peace Studies (2 Credits)

Crosslisted with GOVT 7937, HIST 7937

The Proseminar in Peace Studies offers a multidisciplinary review of issues related to peace and conflict at the graduate level. The course is led by the director of the Judith Reppy Institute for Peace and Conflict Studies and is based on the Institute's weekly seminar series, featuring outside visitors and Cornell faculty.

Last Four Terms Offered: Fall 2025, Spring 2025, Fall 2024, Spring 2024

Schedule of Classes