

SCIENCE AND SOCIETY

The Science and Society minor is an interdisciplinary collection of courses for students who wish to explore critical approaches to and societal implications of science, technology, health, and environment. The aim of the minor is to equip students in all fields, whether humanities, social sciences, or STEM disciplines, to critically interact with both new developments and long histories of science and technology, enabling them make sense of and intervene on societal grand challenges on individual, community, and global scales.

The Science and Society minor is informed by the existing field of Science and Technology Studies (STS), an established interdisciplinary field that leverages methods and theories from the social sciences and humanities to interrogate the impacts not only of science and technology on society and culture but also of society and culture on science and technology.

Faculty Information - To be updated Guidance for Undergraduate Students in the Department

Program Planning for all Students

The Science and Society minor is comprised of one required introductory course and additional courses offered by a variety of departments at Columbia and Barnard. For advising, consult with the Director of Undergraduate Studies, Dr. Madi Whitman.

Undergraduate Programs of Study Minor in Science and Society

- HIST/SCSO UN2972: Unsettling Science (1)
- Method or theory course (1)
 - Can be drawn from a number of departments, e.g., anthropology, sociology, history, the natural sciences
- Electives (3)
 - Students are encouraged to select electives according to chosen tracks (e.g., history of science, environmental health, race and technology) in consultation with the Director of Undergraduate Studies and affiliated Science and Society faculty. See the list of courses for the current semester for examples of elective courses.

Fall 2024

BC2385: Global Environmental History | A. Caglioti

Considers how the relationship between the environment and society in history led to the current climate crisis.

BC3244: Environmental Sociology | M. Hernandez

Examines the social roots and impacts of environmental contamination and disaster

BC3379: Water Histories | A. Caglioti

Explores the relationship between water and society in history.

BC3956: Surveillance | R. Serhan

Explores the various ways we are monitored by state authorities and corporations.

GU4425: Climate, Religion and Colonialism | R. Taylor-Seymour

Examines intersections between religion and climate through the lens of colonialism.

GU4501: History of the Climate Crisis | L. Aronowsky

Considers the historical, social, ethical, and political life of global warming in an effort to better understand the present climate age.

UN1203: The Social Animal in the Digital Age | S. Venkatesh

Considers the impact of modern technology on society.

UN2103: Architectural Design | M. Schwartzman

Explores modes of visualization, technologies of mediation, and environmental transformations.

UN2523: Health Inequality in the Modern US | S. Roberts

Explores historical and social science problems at the intersection of ethnic/racial/sexual formations, technological networks, and health politics.

UN2530: Life Beyond Emergency | A. Siddiqi

Examines constructed environments and spatial practices in contexts of displacement.

UN2972: Unsettling Science | M. Whitman

A dive into the interplay between science, technology, health, environment, and society.

UN2978: Science and Pseudoscience: Alchemy to AI | P. Smith, M. Whitman

A historical account of how science and pseudoscience developed in tandem.

UN3020: Science Saves | C. Martini

Studies the various intersections of science, technology, society, and religion.

UN3203: Power, Politics & Society | R. Serhan

Introduces students to the field of political sociology.

UN3712: African Climate and History | J. Smerdon, R. Stephens

Examines how Africa's climate has changed and the consequences for the the continent's residents

UN3811: Toxic | V. Agard-Jones

Explores the conditions that give rise to local body burdens, plumbing the history of toxicity as a category.

UN3976: Anthropology of Science | G. Jae

Examines specific debates in the history and philosophy of science.

W4308: Sexuality and Science | R. Jordan-Young

Examines research on human sexuality, from early sexology through contemporary studies.

UN3356: Earth Works | R. Morris

An anthropological analysis of extractive economies.

BC3959: How Race Gets Under Our Skin | D. Reed

Examines how institutionalized racism and the structure of health care contributes to the neglect and sometimes abuse of racial and ethnic minorities.

Spring 2024

HSAM UN2901 DATA:PAST, PRESENT AND FUTURE. 3.00 points.

Lect: 1.5. Lab: 1.5.

Data-empowered algorithms are reshaping our professional, personal, and political realities, for good—and for bad. Data: Past, Present, and Future moves from the birth of statistics in the 18th century to the surveillance capitalism of the present day, covering racist eugenics, World War II cryptography, and creepy personalized advertising along the way. Rather than looking at ethics and history as separate from the science and engineering, the course integrates the teaching of algorithms and data manipulation with the political whirlwinds and ethical controversies from which those techniques emerged. We pair the introduction of technical developments with the shifting political and economic powers that encouraged and benefited from new capabilities. We couple primary and secondary readings on the history and ethics of data with computational work done largely with user-friendly Jupyter notebooks in Python

HIST GU4588 RACE, DRUGS, AND INEQUALITY. 4.00 points.

Priority given to majors and concentrators, seniors, and juniors.

Prerequisites: the instructor's permission.

Note: Admission to this course is by application only. Please use the form found in the SSOL course message. Through a series of secondary- and primary-source readings, digital archive research, and writing assignments, we will explore the history of harm reduction from its origins in syringe exchange, health education, and condom distribution, to the current moment of decriminalization, safe consumption politics, and medically assisted treatment (MAT). At the same time, we will think about how harm reduction perspectives challenge us to rethink the histories and historiography of substance use, sexuality, health, and research science. Along with harm reduction theory and philosophy, relevant concepts and themes include syndemic and other epidemiological concepts theory; structural inequities (structural violence, structural racism); medicalization; biomedicalization; racialization; gender theory and queer theory; mass incarceration, hyperpolicing, and the carceral state; the "housing first" approach; political and other subjectivities; and historical constructions of "addiction"/"addicts", rehabilitation/recovery, what are "drugs," and the "(brain) disease model"/NIDA paradigm of addiction. Readings are multidisciplinary and include works in history, epidemiology, anthropology, sociology, psychology, and other disciplines, and the syllabus will include at least one field trip to a harm reduction organization. Students will complete a short research project. There are no official prerequisites. However, students should have some academic or professional background in public health, African-American/ethnic studies history or social science, and/or some other work related to the course material. Admission to this course is by application only. Please use the form found in the SSOL course message. Students may not enroll in this course on a pass/fail basis or as an auditor without instructor permission. Student assessment will be based on various criteria: Class discussion participation - 35# Presentation of the readings - 15# Writing assignments - 50#

HIST UN3437 CORP BEHAVIOR # PUBLIC HEALTH. 4.00 points.

Priority given to majors and concentrators, seniors, and juniors.

In the decades since the publication of Silent Spring and the rise of the environmental movement, public awareness of the impact of industrial products on human health has grown enormously. There is growing concern over BPA, lead, PCBs, asbestos, and synthetic materials that make up the world around us. This course will focus on environmental history, industrial and labor history as well as on how twentieth century consumer culture shapes popular and professional understanding of disease. Throughout the term the class will trace the historical transformation of the origins of disease through primary sources such as documents gathered in lawsuits, and medical and public health literature. Students will be asked to evaluate historical debates about the causes of modern epidemics of cancer, heart disease, lead poisoning, asbestos-related illnesses and other chronic conditions. They will also consider where responsibility for these new concerns lies, particularly as they have emerged in law suits. Together, we will explore the rise of modern environmental movement in the last 75 years