Science and Technology Studies

Overview

The Center for Science, Technology, Medicine, & Society (CSTMS) at UC Berkeley promotes rigorous interdisciplinary research based on the conviction that the pressing problems of this time are simultaneously scientific and social, technological, political, ethical, and economic.

As a laboratory for the 21st century University, CSTMS conducts cross-disciplinary research, teaching, and outreach on the histories and implications of scientific research, biomedicine, and new technologies. As part of this mission, the Center offers a Designated Emphasis (DE) in Science and Technology Studies.

The Center's core mission is the following:

- catalyze cross-disciplinary research on knowledge production and technological change in the past, present, and future
- train new generations of undergraduates and graduate students in multiple literacies
- generate broader impact with rapid response forums and major public events on the pressing issues of this time

CSTMS convenes students and faculty in the social sciences and humanities, the professional and medical schools, engineering, and the natural sciences to advance collaborative accounts of our complex world. The Center provide a space and dialogue on the implications of new technologies, from geo-engineering to synthetic biology. It also provides support for faculty and graduate students seeking extramural grants and seeks to integrate leading academic research in science and technology studies with the work of policy makers, communities, and non-governmental organizations. CSTMS also promotes the study of the interface of medicine, the humanities, and the qualitative social sciences. Through all of these activities, the Center seeks to place Berkeley at the leading edge of global science studies by foregrounding research and training on the transnational dynamics of knowledge production, technological innovation, and inequalities.

As a multidisciplinary field with a signature capacity to rethink the relationship among science, technology, and political and social life, Science and Technology Studies is particularly well placed to address the critical problems of the 21st century. From global climate change to the reanimation of race through genomics, from political movements galvanized through new media to efforts to improve access to medicines for the world's poor, the pressing problems of this time are simultaneously scientific and social, technological and political, ethical, and economic.

Given the complex nature of the world, entrenched disciplinary divides have become increasingly untenable as the basis for research and for the training of scholars and social actors. Science and Technology Studies is drawing the interest of ever-increasing numbers of students and faculty because of its unique ability to help people understand the complexity of contemporary and historical problems and because of its ability to help people craft intellectual projects and modes of engagement that reflect this complexity more fully. Several generations of innovative work in the philosophy, history, rhetoric, and social studies of science and technology have generated influential languages, platforms, and methods for understanding the interplay between science, technology, and social-political formations – domains that are too often treated separately. This virtue is being recognized and reflected in the growing interest in the field: Science and Technology Studies is one of the fastest growing areas in the social sciences and humanities, nationwide and internationally.

Disciplinary lines and research landscapes are starting to shift in directions anticipated by Science and Technology Studies. National directives now encourage the participation of social scientists in engineering research; medical schools increasingly require applicants to train in the humanities; and emerging fields such as 'green chemistry' demand heterodox approaches to thinking about environmental and social parameters, the properties of chemical substances, and shifting industrial horizons. Meanwhile, cutting-edge work in the humanities and social sciences has made science and technology central to the humanistic project, examining for example, the past and future of the book, historical and contemporary foundations of race and racial identity, or ethical debates over biomedicine and the boundaries of the body. Indeed, the humanities and social sciences are recognized as key fields from which crucial questions about science and technology emerge, helping people understand when and why particular research programs become dominant, attending to the effects and implications of new technologies and knowledge, and placing ethical and social inquiries at the center of scientific enterprises. Science and Technology Studies organizes and galvanizes precisely these kinds inquiries and approaches.

Undergraduate Program

There is no undergraduate program in Science and Technology Studies.

Graduate Program

Science and Technology Studies (http://guide.berkeley.edu/archive/2014-15/graduate/degree-programs/science-technology-studies) : Designated Emphasis (DE)

Science and Technology Studies

STS C100 Introduction to Science, Technology, and Society 4 Units
This course provides an overview of the field of Science and Technology Studies (STS) as a way to study how our knowledge and technology shape and are shaped by social, political, historical, economic, and other factors. We will learn key concepts of the field (e.g., how technologies are understood and used differently in different communities) and apply them to a wide range of topics, including geography, history, environmental and information science, and others. Questions this course will address include: how are scientific facts constructed? How are values embedded in technical systems?
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1.5 hours of discussion per week

Summer:
6 weeks - 7.5 hours of lecture and 3.5 hours of discussion per week
8 weeks - 6 hours of lecture and 3 hours of discussion per week

Additional Details

Subject/Course Level: Science and Technology Studies/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructors: Mazzotti, Winickoff

Also listed as: HISTORY C182C/ISF C100G

STS C200 Topics in Science and Technology Studies 3 Units
This course provides a strong foundation for graduate work in STS, a multidisciplinary field with a signature capacity to rethink the relationship among science, technology, and political and social life. From climate change to population genomics, access to medicines and the impact of new media, the problems of our time are simultaneously scientific and social, technological and political, ethical and economic.
Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Science and Technology Studies/Graduate

Grading: Letter grade.

Also listed as: ANTHRO C254/ESPM C252/HISTORY C250

STS C250 Science and Technology Studies Research Seminar 3 Units
This course will cover methods and approaches for students considering professionalizing in the field of STS, including a chance for students to workshop written work.
Rules & Requirements

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Science and Technology Studies/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

Also listed as: ANTHRO C273/ESPM C273/HISTORY C251