

Science Studies

OFFICE: 3008 Humanities and Social Sciences Building, Muir College
http://sciencestudies.ucsd.edu/

Director, Naomi Oreskes

Professors

William Bechtel, Ph.D., *Philosophy*
Michael Bernstein, Ph.D., *History*
Geoffrey Bowker, Ph.D., *Communication*
Nancy Cartwright, Ph.D., *Philosophy*
Paul M. Churchland, Ph.D., *Philosophy*
Gerald D. Doppelt, Ph.D., *Philosophy*
Chandra Mukerji, Ph.D., *Communication and Sociology*

Andrew Scull, Ph.D., *Sociology*
Susan Leigh Star, Ph.D., *Communication*
Robert S. Westman, Ph.D., *History*

Professor Emeritus

Martin J.S. Rudwick, Ph.D., *History*

Associate Professors

Craig Callender, Ph.D., *Philosophy*
Lisa Cartwright, Ph.D., *Communication*
Steven Epstein, Ph.D., *Sociology*
Martha Lampland, Ph.D., *Sociology*
Naomi Oreskes, Ph.D., *History*
Eric Watkins, Ph.D., *Philosophy*

Assistant Professors

Marta E. Hanson, Ph.D., *History*
Andrew Lakoff, Ph.D., *Sociology*

Lecturer

Mark Himeline, Ph.D., *History*

Affiliated Faculty

Charles Briggs, Ph.D., *Ethnic Studies*
Roddey Reid, Ph.D., *Literature*

The Science Studies Program at UCSD is a Ph.D. program committed to working toward a deeper understanding of scientific knowledge and technological change, past and present. The program offers students an opportunity to integrate the perspectives developed in communication studies and the history, sociology, and philosophy of science, while receiving a thorough training at a professional level in one of the component disciplines. Students enrolled in the program choose

one of the four disciplines for their major field of specialist studies and are required to complete minor field requirements in the others. Students are also required to take the Introduction to Science Studies, and two interdisciplinary, topical "core" seminars, and to attend the program colloquium. Science studies students are encouraged to select dissertation topics that offer scope for a cross-disciplinary approach. The Ph.D. will be awarded in "Communication (Science Studies)," "History (Science Studies)," "Sociology (Science Studies)," or "Philosophy (Science Studies)." In special circumstances, students may be permitted to work for the M.A. degree.

COURSES

GRADUATE

HIGR 236A-B. Seminar in History of Science (4-4)

A two-quarter research seminar, comprising intensive study of a specific topic in the history of science. The first quarter will be devoted to readings and discussions; the second chiefly to the writing of individual research papers. The topic varies from year to year, and students may repeat the course for credit. (IP grade to be awarded the first quarter; final grade will be given at the end of the second quarter.) *Prerequisite: graduate standing.*

COGR 2011. Ethnography of Information Systems (4)

This course will survey the rapidly growing body of ethnographic analyses of information systems, to extend the basic principles of ethnographic research and to lead students in the development of projects modifying these principles for the emerging electronic environment. Students may approach the course in one (or both) of two ways—either preparing for and carrying out a pilot ethnographic study or studying the theoretical literature in depth.

HIGR 237. Topics in the History of Earth and Ocean Sciences (4)

Intensive study of specific problems in the history of the ocean sciences and of related earth and atmospheric sciences in the modern period. Topics vary from year to year, and students may therefore repeat the course for credit. *Prerequisite: graduate standing or consent of instructor.*

COGR 225A, HIGR 238, PHIL 209A, SOCG 255A. Introduction to Science Studies (4)

Study and discussion of classic work in history of science, sociology of science, and philosophy of science, and of work that attempts to develop a unified science studies approach. Required for all students in the Science Studies Program. *Prerequisite: enrollment in Science Studies Program.*

COGR 225B, HIGR 239, PHIL 209B, SOCG 255B. Seminar in Science Studies (4)

Study and discussion of selected topics in the science studies field. Required for all students in the Science Studies Program. The topic varies from year to year, and students may, therefore, repeat the course for credit. *Prerequisite: enrollment in Science Studies Program.*

COGR 225C, HIGR 240, PHIL 209C, SOCG 255C. Colloquium in Science Studies (4)

A forum for the presentation and discussion of research in progress in science studies, by graduate students, faculty, and visitors. Required for all students in the Science Studies Program. *Prerequisite: enrollment in the Science Studies Program.*

HISC 160/260. Historical Approaches to the Study of Science (4)

This colloquium course will introduce students to the rich variety of ways in which the scientific enterprise is currently being studied historically. Major recent publications on specific topics in the history of science selected to illustrate this diversity will be discussed and analyzed; the topics will range in period from the seventeenth century to the late twentieth, and will deal with all major branches of natural science. Requirements will vary for undergraduate, M.A., and Ph.D. students. Graduate students may be expected to submit a more substantial piece of work. *Prerequisites: consent of instructor; department stamp required.*

HISC 162/262. Problems in the History of Science and Religion (4)

Intensive study of specific problems in the relation between science and religion. The problems may range in period from the Renaissance to the twentieth century. Topics vary from year to year. Requirements will vary for undergraduate, M.A., and Ph.D. students. Graduate students may be expected to submit a more substantial piece of work. *Prerequisites: upper-division standing; department stamp required.*

HISC 164/264. Topics in the History of the Physical Sciences (4)

Intensive study of specific problems in the physical (including chemical and mathematical) sciences, ranging in period from the Renaissance to the twentieth century. Topics vary from year to year, and students may therefore repeat the course for credit. Requirements will vary for undergraduate, M.A., and Ph.D. students. Graduate students may be expected to submit a more substantial piece of work. *Prerequisites: consent of instructor; department stamp required.*

HISC 165/265. Topics in Twentieth-Century Science and Culture (4)

This is a seminar open to advanced undergraduates and graduate students that explores topics at the interface of science, technology and culture, from the late nineteenth century to the present. Topics change yearly; may be repeated for credit with instructor's consent. Requirements vary for undergraduates, M.A., and Ph.D. students. Graduate students are required to submit a more substantial piece of work. *Prerequisites: upper-division standing or consent of instructor; department stamp.*

HISC 166/266. The Galileo Affair (4)

Galileo's condemnation by the Catholic Church in 1633 is a well-known but misunderstood episode. Was Galileo punished for holding dangerous scientific views? Personal arrogance? Disobedience? Religious transgressions? Readings in original sources, recent historical interpretations. Graduate students will be expected to submit a more substantial piece of work. *Prerequisites: upper-division standing or consent of instructor.*

HISC 167/267. Topics in the History of Medicine (4)

Intensive study of specific problems in the history of medicine. Topics will vary from year to year, and stu-

dents may therefore repeat the course for credit. Requirements will vary for undergraduate, M.A., and Ph.D. students. Graduate students may be expected to submit a more substantial piece of work. *Prerequisite: department stamp required.*

HISC 168/268. The Extraterrestrial Life Question (4)

The changing fortunes of the belief in the existence of life beyond the Earth (pluralism) from 1750–present as it evolved from a marginal speculation to a central scientific question with wide-ranging consequences for traditional religious belief systems. *Prerequisites: upper-division standing or graduate standing or consent of instructor. Graduate students will be expected to submit a more substantial piece of work.*

Soc. 225. Madness and Society (4)

An examination of the historical and sociological literatures on the relationship between madness and society, focusing primarily on the United States and Great Britain but with some comparative reference to western Europe.

Soc. 236. Contemporary Topics in the Sociology of Science (4)

This seminar will cover current books and theoretical issues in the sociology of science. Topics will vary from year to year. May be repeated three times for credit.

Soc. 237. Historical Sociology of Science (4)

In recent years the sociology of science and the history of science have developed increasingly close links and shared projects. Those include the detailed naturalistic study of actual scientific practice, the analysis of the social construction of scientific knowledge in particular social settings, and the examination of relationships between the moral economy of scientific sites

and the status of the knowledge produced there. Particular attention will be paid to the identity of peculiarly historical and sociological perspectives. Technical problems concerning the deployment of sociological frameworks in historical study will be addressed. Students will read and assess a range of recent work in which the connection between sociology and history of science is most evident.

Soc. 238. Relativism and the Sociology of Science (4)

A critical survey of theoretical and empirical sociological work advocating a relativist perspective on scientific knowledge. Special attention is paid to the characterization of different relativist genres, to the debates between relativism, realism and rationalism, and to the empirical grounding of relativism in studies of scientific controversy and closure.

Soc. 277. The Sociology of Technology (4)

Social theory has been largely uninterested in technology. The major exceptions are to be found in the evolutionary stories concerning “man the tool maker.” The aim of the seminar is to review the literature in paleontology, philosophy of technology, and technology on the link between tools and social theory. The idea of the seminar is to test ideas coming from sociology of technology, ethology, and evolutionary scenarios, and anthropology of tool use, in order to make room in social theory for artifacts.

Phil. 204A. Core Course in Philosophy of Science (4)

An introduction to one or more central problems in the philosophy of science, or in the philosophy of one of the particular sciences, such as the nature of confirmation and explanation, the nature of scientific knowledge, reductionism, the unity of science, or realism and antirealism. May be taken for credit three times with changed content.

Phil. 212. Contemporary Topics in the Philosophy of Science (4)

This seminar will cover current books and theoretical issues in the philosophy of science. Topics will vary from year to year. *Prerequisite: Philosophy 180, or equivalent, or consent of instructor.*

Phil. 245. Philosophy of Science (4)

This seminar will cover current books and theoretical issues in the philosophy of science. May be taken for credit seven times with changed content.

Phil. 247. Philosophy of Biology (4)

Historical and contemporary perspectives on foundational issues about biology. May include questions about the nature of biological explanation, the relation of biology to chemistry and physics, the status of attributions of function, and the relation of biology to the social sciences. May be taken for credit six times with changed content.

Phil. 250A. Philosophy of the Cognitive Sciences (4)

Contemporary debates about the study of the mind-brain as studied in one or more of the empirical cognitive sciences. May include questions about the different strategies of explanation invoked, the conceptions of representation employed, the connections between theoretical models developed. May be taken for credit six times with changed content.