















# History & Science Studies

Faculty Advisor: Cathy Gere

## COURSE WORK

- HIGR 238: Introduction to Science Studies: Part I
- HIGR 241: Introduction to Science Studies: Part II
- HIGR 239: Core seminar in Science Studies (taken twice)
- HIGR 240: Science Studies Colloquium –Students must attend the colloquium series for their entire first and second years. They receive course credit in one quarter each year. This course should be taken for a “S/U” grade option only. Students are required to make a colloquium presentation prior to their final defense.
- Two seminars from SSP member departments other than History
- Five courses in History
- Two two-quarter research seminars

The major field for SSP-History students should be one of the following: Science in the early Modern Europe, Science in the eighteenth and nineteenth centuries, Science in the twentieth century, or another field of comparable breadth, defined in consultation with the major field advisor

SSP-History students also must prepare two minor fields, one being Science Studies and the other selected from the other fields offered by the department: a field of history of science not chosen as the major field; a second field of history, provided that it is concentrated on a period or region other than that chosen for the first minor field; or a related discipline, offered through another department (may be in the physical or life sciences).

## QUALIFYING EXAM

- The examining committee will be made up of at least five members, three of whom must be faculty members in the History Department. At least one outside member must be senior faculty. At least two internal members and at least one external member should be faculty of the Science Studies Program. Exceptions to this policy require permission from the director of the Science Studies Program. Students should refer to departmental and university policies for additional rules concerning the composition of committees.
- Students take their oral qualifying exam after they have passed their minor field exams and have prepared a bibliography and prospectus for their major field.



# Philosophy & Science Studies

Faculty Advisor: Kerry McKenzie

Students enrolled in the program choose one of the component disciplines for their major field of specialist studies (for students enrolled in the Department of Philosophy, this major field is, of course, philosophy), and are required to complete minor field requirements in the others. The core of the program, however, is a yearlong seminar in science studies, led by faculty from all participating departments.

Students may apply for admission to the interdisciplinary program at the same time that they apply to the Department of Philosophy, or at some point after entering UC San Diego. (All students wishing to transfer into any interdisciplinary program must do so prior to the end of the fifth quarter of residency.)

Students in philosophy/science studies are required to complete all of the requirements for the PhD in philosophy with the following seven amendments:

1. The student must attend the Science Studies Colloquium series for his or her entire first and second years. He or she will receive course credit (course 209C) in any two quarters of his or her choice (once in the first year and once in the second year, with exceptions to be considered by the director of science studies). This course is taken for an S/U grade option only.
2. Before defending his or her prospectus, the student must take Introduction to Science Studies I (209A), Introduction to Science Studies II (209D), and two iterations (with changed content) of the Core Seminar in Science Studies (209B). (These courses are required in addition to the proseminar in philosophy, which is required of all PhD students in philosophy.)
3. The student must, prior to defending his or her prospectus, take two additional science studies courses outside philosophy drawn from a list of approved courses available each year from the Science Studies Program office. (One course in one of the sciences may be substituted for one of these courses as part of an approved program of study.)
4. The distribution requirement is amended as follows: Before advancing to candidacy, a philosophy/science studies student must have completed nine seminars in philosophy distributed across the areas of (A) philosophy of science, (B) philosophy of mind and philosophy of language, (C) ethics and political philosophy, (D) metaphysics and epistemology, and (E) history of philosophy. Students must take at least one seminar from each of these five areas and at least two seminars from any four of these areas.
5. The course work requirement is amended as follows: Over the first two years, a philosophy/science studies student will normally take at least three courses/seminars per quarter. Besides graduate seminars in philosophy and science studies, these may include up to two independent studies in philosophy, upper-division courses in philosophy (those numbered 100–199), approved upper-division or graduate courses in science studies and affiliated departments, and, if the student is a teaching assistant, Philosophy 500 (Apprentice Teaching). (It should be noted that philosophy/science studies students who complete all the other requirements for science studies and who complete the amended distribution requirements for philosophy are thereby deemed to have completed the fourteen graduate seminars required of students prior to their advancing to candidacy.)
6. The student's program of study must be approved by the Department of Philosophy faculty adviser for science studies.
7. At least two internal members and at least one external member of the student's dissertation committee should be faculty of the Science Studies Program. Exceptions to this policy require permission from the director of the Science Studies Program.

# Sociology & Science Studies

Faculty Advisor: Dan Navon

## COURSE WORK

(Effective September 2016)

- Soc/G 255A (Introduction to Science Studies);
- Soc/G 255D (Advanced Approaches to Science Studies);
- Soc/G 255B (Core Seminar in Science Studies -- special topic each year);
- Soc/G 255C Science Studies Colloquium (Two years of attendance is required). Students must attend the colloquium series for their entire first and second years. They receive course credit in one quarter each year. This course should be taken for a “S/U” grade option only.
- Soc/G 200 (Intro/Foundational Methods).
- Two quarters of sociological theory:
  - Soc/G 201 (Classical Sociological Theory),
  - Soc/G 202 (Contemporary Sociological Theory).
- One quarter of quantitative methods (Soc/G 205 and Soc/G 206), Students may take either 205 or 206 depending on their existing proficiency demonstrated to the faculty teaching the quantitative sequence that year. Students who demonstrate a background in quantitative methods may alternatively petition to opt out of this requirement and would in that case take an additional Sociology elective.
- Three additional quarters of methods. These may be chosen from Soc 203 (Field Methods), 204 (Text and Discourse Analysis), 207 (Comparative Historical Methods), and 227 (Ethnographic Film: Media Methods), 211 (Introduction to Computational Social Science), Soc/G206 Quantitative Methods II (if not taken to satisfy item 8 above), Research Practicum Soc/G252 and Soc/G 253 (this is a two quarter sequence). The second quarter of the two-quarter research seminar in history of science also counts toward this requirement.
- One seminar in the “sociology of science” here construed to include the sociology of medicine, technology, and knowledge. For example: Soc/G 234 Intellectual Foundations of the Study of Science, Technology, and Medicine, Soc/G 238 Survey of the Sociology of Scientific Knowledge, Soc/G 234 Contemporary Biomedicine, Soc/G 288 Knowledge Capitalism), Soc/G 247 Madness and Society, Soc/G 232 Advanced Approaches in the Sociology of Knowledge.
- One course in Communication, History, or Philosophy of science, technology, or medicine. Alternatively, students may take Soc255B for a second time
- Two elective courses in sociology, one of which may be a course in sociology of science, technology, medicine.

In addition, the Sociology Department requires that all of its students take Soc/G 208 (Faculty Research Seminar), and the Science Studies Program requires students to complete an internship requirement and to make a presentation in the colloquium series.

## FIELD EXAMS, PAPERS, and PROSPECTUS GUIDELINES

SSP students will defend two field exams, to be completed by end of Winter quarter of Year 3.

Like all other Sociology students, Science Studies students in Sociology will defend two field exams in Year 3. The subject of each exam must match an ASA section name. Science Knowledge and Technology will almost certainly be one of the exams that all SSP students select. Then, they will choose a second exam in, for example, Economic Sociology, Political Sociology, Medical Sociology, Theory, etc. The reading lists for the two exams should be unique and separate. The 2 members of each committee must not overlap—please see the general [Sociology Field Exam Guidelines](#) for more information on format/timing/organization.

SSP students must hand in two papers by the end of Spring Quarter Year 3, one of which must be endorsed as “publishable.”

SSP students have two options for completing the paper requirement. They can *either* write:

- A publishable paper in the sociology of science + a secondary interdisciplinary paper completed with input from a non-sociology SSP faculty member. The second paper may simply be a research paper completed as part of a class taught by SSP faculty in another department.

**OR**

- A publishable interdisciplinary science studies paper + a secondary sociology paper. The sociology paper may simply be a research paper completed as part of a class taught by a sociology faculty member.

SSP students, like all Sociology students, must defend their prospectus by the end of Spring Quarter Year 4 and be prepared to submit their “publishable paper” from the previous year.

Again, please see the general Sociology guidelines for more information on preparing the prospectus and holding the defense.

# Evaluation of Academic Work

The Science Studies Program expects all graduate students to perform at an “A” level and requires that they receive a B+ or better to meet requirements. All required courses must be taken for a letter grade. Students must maintain a GPA of a 3.5 or higher.

## Language Requirements

SSP students with a departmental language requirement generally must demonstrate reading competency, meeting the MLA exam requirements or equivalent.

Communication: The student can take the COMGR280 sequence, or show proficiency either in a natural language or a technical language useful for studying science or engineering. Advisors must approve the language choice.

History: Advisors must approve the language choice

Philosophy: German, French, Latin or Classical Greek

Sociology: No language requirement

## Examination/Dissertation

Home departments determine qualifying exams; generally this means two oral examinations: the qualifying exams and a dissertation defense. Students must take examinations within the time limits set by the department and the Office of Graduate Studies. Students must take the qualifying exams to advance to candidacy before the end of their fourth year. After passing the exam, the student can then work full-time on dissertation research (insofar as other commitments allow). Students cannot receive funding after their sixth year in Communication and Sociology, or after their seventh year in History and Philosophy, and can only be registered for a total of eight years. When the dissertation is completed, the doctoral committee examines it; there is a dissertation defense, and the committee recommends whether to award the Ph.D. degree. Students are required to have two SSP faculty from their department and one SSP faculty member from another department on both of their examining committees.

# Internship Requirement

Internship Advisor: Cathy Gere

SSP students are required to do at least one month of an internship before they take their qualifying exams. With the help of the SSP faculty, they find placement in labs, research institutions, policy groups, museums, archives, environmental organizations, and science classes where they can follow the development and use of science or technology. Originally, these placements were meant to give students first-hand experience of scientific or engineering practice as part of their graduate studies. These types of internship include bench work in a scientific laboratory, curatorial experience in a science museum or archive, participation in field experimentations on a scientific expedition, working at a preservation laboratory, following public health workers at a hospital, making observations at an ICU, working on policy papers at a regulatory agency, etc. More recently, in order to accommodate the range of disciplines and approaches in Science Studies, we have expanded the definition of this requirement to include conducting archival work, taking a class to advance one's understanding of a field, or organizing a directed readings class with a faculty member on a specific branch of science, a method, or a technical language. Most students would fulfill this requirement before qualifying, but in special cases a student may choose, in consultation with his/her advisor, to do so later.

The science studies faculty internship coordinator will meet with students to discuss a plan for their projects. Students need to submit a 1 page abstract and a brief report (approximately 10 double-spaced pages) about their internship. This can be a journal written during the internship or a paper based on the internship experience. The student's research advisor or mentor, or the internship advisor will read the journal or report, and a copy of the abstract must be submitted to the science studies program coordinator. It is the student's responsibility to find a suitable advisor, and the advisor's responsibility to see that the student submits the internship report. For students whose internship is unpaid, the program will provide a \$500 honorarium. Students must apply for these funds in the quarter prior to the internship. Students who have had substantial practical experience in some aspect of scientific work before enrolling in the Program may be excused from doing an internship with permission of the program director.

# Colloquium Series

**2017-2018 Colloquium Coordinators:** Cathy Gere (History) & Dan Navon (Sociology)

The Colloquium in Science Studies is built around a program of special lectures given by communication scholars, historians, sociologists and philosophers of science from other universities. Along with guest speakers, there are talks by students in the program and faculty from UCSD (both in SSP and from departments in science and engineering). These discussions give students an opportunity to hear some leading scholars in the science studies field talk about their current research, learn from local scientists about their research and fields, and to meet informally with visitors. The colloquia take place every Monday of each quarter. Attendance is required during your first two years of residency. SSP students are required to present a colloquium talk prior to their final defense (typically after they advance to candidacy). This course should be taken for a S/U grade option only. This fulfills the colloquium course requirement.

## Financial Support

Various forms of financial assistance are offered to graduate students in the Science Studies Program. Many incoming students are offered multi-year funding packages that include some teaching as well as fellowship money. Students may also receive research assistantships from particular faculty, or traineeships and readerships. The program has limited funds for travel grants, internships, fellowships, and full or partial remission of fees and tuition.

## Conference Participation

Students in the science studies program are strongly encouraged to participate in professional conferences and workshops, and to give talks as soon as their work is sufficiently advanced to merit it. The Program will attempt to defray costs for students attending science studies meetings, (4S, HSS, PSA, or other relevant meetings, as judged by the director), as funds permit. As a general guideline, we will try to cover 50% of the cheapest available airfare, up to a maximum cost of \$500. Although we strive to help students as much as possible, funds are extremely limited and there is no guarantee that funding requests will be fulfilled. Students should note that although in some cases attending scientific conferences may be appropriate as part of an internship experience, attending conferences per se does not qualify to fulfill the internship requirement.

Students should send a request for conference funding via email to the program coordinator by the fall, winter or spring quarter deadlines (usually the end of the first week of each quarter).

# Science Studies Program Faculty

**Science Studies Program Director: Cathy Gere**

## **Communication Department**

Morana Alac, [alac@ucsd.edu](mailto:alac@ucsd.edu)

Lisa Cartwright, [lisac@ucsd.edu](mailto:lisac@ucsd.edu)

Kelly Gates, [kagates@ucsd.edu](mailto:kagates@ucsd.edu)

Lilly Irani, [lirani@ucsd.edu](mailto:lirani@ucsd.edu)

David Serlin, [dserlin@ucsd.edu](mailto:dserlin@ucsd.edu)

## **History Department**

Claire Edington, [cedington@ucsd.edu](mailto:cedington@ucsd.edu)

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Tal Golan, [tgolan@ucsd.edu](mailto:tgolan@ucsd.edu)

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## **Philosophy Department**

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Eric Watkins, [ewatkins@ucsd.edu](mailto:ewatkins@ucsd.edu)

## **Sociology Department**

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## **Affiliated Faculty**

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Kamala Visweswaran, Ethnic Studies, [kvisweswaran@ucsd.edu](mailto:kvisweswaran@ucsd.edu)

## **Science Studies Program Coordinator**

Jennifer Dieli, [ssadmin@ucsd.edu](mailto:ssadmin@ucsd.edu), (858) 534-0491

# Sciences Studies Program Assignments

## ***Faculty Assignments***

Director: Cathy Gere

*WI 18 Interim Director - Bob Westman*

Colloquium Coordinators: Cathy Gere & Charlie Thorpe

Faculty Advisors:

Communication:	David Serlin
History:	Cathy Gere
Philosophy:	Kerry Mckenzie
Sociology:	Dan Navon

Internship Coordinator: Cathy Gere

Admissions Committee:

Communication:	David Serlin
History:	Cathy Gere
Philosophy:	Kerry Mckenzie
Sociology:	Charlie Thorpe

## ***Student Assignments***

GSA Reps:

Carolina Mayes, Sociology

Veronica Uribe del Aguila, Communicaton

Student Choice Speaker:

Rachel Fox, Communication

Alanna Reyes, Communication



# Science Studies Courses

The following is a list of Science Studies courses from the UCSD General Catalog. Students should review the quarterly schedule of classes to find out which courses will be offered during a particular quarter.

## SCIENCE STUDIES CORE COURSES

COGR 225A, HIGR 238, PHIL 209A, SOCG 255A. Introduction to Science Studies: Part I  
Study and discussion of classic themes and texts in history of science, sociology of science, and philosophy of science, and of work that attempts to develop an interdisciplinary science studies approach.  
Prerequisite: Enrollment in Science Studies Program or consent of instructor.

COGR 225D, HIGR 241, PHIL 209D, SOCG 255D. Introduction to Science Studies: Part II  
Continuing the introduction developed in Part I, this course examines recent key topics and problem situations in Science Studies. Emphasis is on recent theoretical perspectives and empirical studies in Communication, History, Philosophy, and Sociology of science and technology, and the interplay between them. Prerequisites: completion of COGR 225A, HIGR 238, PHIL 209A, or SOCG 255A; or instructor's permission. Formerly "Advanced Approaches to Science Studies."

COGR 225B, HIGR 239, PHIL 209B, SOCG 255B. Seminar in Science Studies  
Study and discussion of a selected topic in the science studies field, with an emphasis on the development of research and writing skills. The topic varies from year to year.  
Prerequisite: enrollment in Science Studies Program or permission of instructor.

COGR 225C, HIGR 240, PHIL 209C, SOCG 255C. Colloquium in Science Studies  
A forum for the presentation and discussion of research in progress in science studies, by graduate students, faculty, and visitors. Students must attend the colloquium series for their entire first and second years. They receive course credit in one quarter each year.  
Prerequisite: enrollment in Science Studies Program

## COMMUNICATION

COGR 201I. Ethnography of Information Systems.  
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.

## HISTORY

HIGR 235. Science, Empire and Exploration  
Examines links between scientific work, particularly expeditions and exploration, and political programs of empire in the 17-20th centuries. Topics: collecting expeditions as expressions of empire; role of colonial administrative networks in facilitating field-based investigations; relation between European and non-European knowledge systems.

#### HIGR 236A-B. Seminar in History of Science

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.

#### HIGR 242. Topics in the History of Earth and Life Sciences

Intensive study of specific problems in the history of the life sciences and earth sciences, ranging in period from the Renaissance to the 21st century. Topics vary from year to year.

#### HIGR 243. Historical Scholarship in Technology

An introduction to the historiography of technology. This reading seminar provides an overview of scholarly approaches to the history of technology by critically examining classic and contemporary works in the field.

#### HISC 260. Historical Approaches to the Study of Science

Major recent publications in the history of science will be discussed and analyzed; the topics will range in period from the seventeenth century to the twentieth, and will deal with all major branches of natural science. Special topics. Topics will vary from year to year.

#### HISC 262. Problems in the History of Science and Religion

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.

#### HISC 266. The Galileo Affair

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.

#### HISC 270. Topics in the History of Science and Technology

This seminar explores topics at the interface of science, technology, and society, ranging from the seventeenth century to the twentieth.

#### HISC 273. Darwin and Darwinisms

Examines evolutionary theory before Darwin, the development of the theory of natural selection, the ongoing challenge from Lamarckism, nineteenth-century social Darwinism, the emergence of the neo-Darwinist synthesis, and the recent controversies over evolutionary psychology and creationism.

#### HISC 277. Science and the Enlightenment

In 1784, Kant asked, "What is Enlightenment?" In this course we will pursue this question, which has remained hotly debated ever since.

#### HISC 280. Science and Public Policy

This course will explore the evolution of the institutions, ideologies, procedures, standards, and expertise that modern democratic societies have used in applying science to generate and legitimate public policy.

### PHILOSOPHY

#### PHIL 204A. Core Course in Philosophy of Science

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 245. Philosophy of Science

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 246. Philosophy of Physics

Systematic problems and historical and contemporary perspectives on foundational issues in physics. May include issues in the philosophy of space and time, the interpretation of relativity theory and quantum mechanics, or the foundations of statistical mechanics and probability. May be taken for credit six times with changed content.

#### PHIL 247. Philosophy of Biology

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

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.

#### 280. Philosophy of Science Topics and Methods

This course meets weekly to discuss recent books or articles in philosophy of science. The reading is designed both for students doing active research in the field and for those seeking to gain some familiarity with it. Can be taken nine times for credit with changed content.

### SOCIOLOGY

#### SOCG 234. Intellectual Foundation of the Study of Science, Technology, and Medicine.

This course focuses on some classic methodological and theoretical resources upon which the sociology of science, technology, and medicine all draw. It gives special attention to relationships between knowledge and social order, and between knowledge and practice, that are common to science, technology, and medicine.

#### SOCG 238: Feminist Science Studies

This course introduces foundational work and new trends in the field of feminist science and technology studies. Feminist work has been crucial to the intellectual vibrancy of science studies, but is often not given credit for its wide-ranging impact on current scholarship. A selection of articles and monographs are chosen to review.

#### SOCG 247. Madness and Society

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.

#### SOCG 249. Technology and the Human

This course explores the ethical and political implications of technological interventions into human life. Approaches from science studies, the sociology of the body, and philosophy. Topics include transformations in domains of life such as work, health, childhood, and death.

**SOCG 283. The Making of Modern Medicine**

An examination of the intellectual, social, cultural, and political dimensions of the Transformation of Western medicine from 1750 to 1900, with a primary focus on Anglo-American developments.

**SOCG 284. Contemporary Biomedicine**

Develops central themes in medical sociology in order to understand twentieth- and twenty-first-century medical practice and research. Topics include authority and expertise; health inequalities; managed care; health activism; biomedical knowledge production; and the construction of medical objects and subjects.

**SOCG 288. Knowledge Capitalism**

This seminar examines the place of scientific knowledge and information and communication technology in the transformation of capitalist economy and society. The class explores new interactions between science studies and the social theory of advanced capitalism.