SCIENCE AND PUBLIC POLICY

SCPP Director: Prof. Tim Halpin-Healy (Physics & Astronomy)
504 Altschul Hall
212-854-3628
Department Assistant: Joanna Chisolm

Mission
As part of the College’s mission to prepare scientists, policy-makers, and an educated citizenry for the moral challenges presented by future scientific advances, Barnard offers a unique collection of courses focusing on issues at the frequently volatile intersection point where science, public policy, and societal concerns collide. These courses are interdisciplinary in nature, team-taught by Barnard faculty from a variety of departments, and held in seminar format with limited enrollments, typically juniors and seniors. Recent topics concern ecological vs. financial imperatives in developing Third-World biodiversity, manipulation of the human genome, privacy issues and ethical dilemmas arising from genetic testing, misguided eugenics programs and race science, the Manhattan Project, as well as the Cold War build-up of nuclear arsenals in the United States and former Soviet Union.

Professors: Tim Halpin-Healy (Physics), Brian Morton (Biological Sciences), Rajiv Sethi (Economics)

Requirements for the Science, Policy & Ethics Minor
The minor in Science, Policy & Ethics, which requires 5 courses total, can be created by complementing a selection of core SCPP seminars with relevant foundational work in the philosophy and religion departments, as follows:

Core SCPP Coursework
Select two of the following: 8

- SCPP BC3334 Science, State Power & Ethics
- SCPP BC3336 Genetics and Society 4

Philosophy Department Coursework
Introductory Level: 3
Select one of the following, to provide the necessary philosophical foundation:

- PHIL BC1001 Introduction to Philosophy
- or PHIL UN1010 Methods and Problems of Philosophical Thought

Advanced Level:
Select two of the following: 6-7

- PHIL V2593 Science and Religion
- PHIL UN2702 Contemporary Moral Problems
- PHIL V3701
- PHIL V3720 Ethics and Medicine

In years in which they are offered, an ethics course in the Religion Department, such as: RELI V3000 Buddhist Ethics may be substituted for one of the advanced level Philosophy courses listed above. In addition, with approval of the SCPP Director, other Morningside campus courses [e.g. WMST BC3131 Women and Science] bearing great relevance to issues of science & society may be substituted.

SCPP BC3334 Science, State Power & Ethics. 4 points.
Seminar
Prerequisites: Enrollment limited to 10 students.
A comparative study of science in the service of the State in the U.S., the former Soviet Union, Fascist Italy, and Nazi Germany during pivotal periods through the first half of the 20th century. Topics to be covered include the political and moral consequences of policies based upon advances in the natural sciences making possible the development of TNT, nerve gas, uranium fission and hydrogen fusion atomic bombs. Considers the tensions involved in balancing scientific imperatives, patriotic commitment to the nation-state, and universal moral principles and tensions faced by Robert Oppenheimer, Andrei Sakharov, Neils Bohr and Werner Heisenberg. Selected readings include: Michael Frayn’s play Copenhagen, Hitler’s Uranium Club by Jeremy Bernstein, Brecht’s Galileo, John McPhee’s The Curve of Binding Energy, Richard Rhodes’ The Making of the Atomic Bomb.

SCPP BC3336 Genetics and Society. 4 points.
An exploration of the growing knowledge and technological advances in genetics, with a focus on human genetics, using scientific, popular and artistic sources. The course will cover areas such as genetic testing, personalized medicine, ancestry analysis, genome editing with CRISPR-Cas9, stem cells and cloning. It will involve an examination of scientific sources, portrayals in popular culture and discussions of some of the ethical implications and social/political impacts.

SCPP BC3340 Exhibitions: Engaging Public Understanding. 1 point.
Not offered during 2019-20 academic year.
Corequisites: Enrollment limited to 18 students.
Museum exhibitions educate the public, inform discourse, and shape opinion. Students work with curators and exhibition designers on conceptualization and research, design and preparation, writing interpretative material, and developing media and ancillary programming. Students engage in the communication of learning goals through both the exhibition’s content and its physical manifestation.

Cross-Listed Courses
PHIL BC1001 Introduction to Philosophy. 3 points.
Survey of some of the central problems, key figures, and great works in both traditional and contemporary philosophy. Topics and texts will vary with instructor and semester.

PHIL UN1010 Methods and Problems of Philosophical Thought. 3 points.
Critical introduction to philosophical problems, ideas and methods.

Fall 2019: PHIL UN1010

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Spring 2020: PHIL UN1010

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PHIL V2593 Science and Religion. 3 points.
Open to all undergraduates. Not offered during 2019-20 academic year.

The course investigates what many people have viewed as a "quarrel" between science and religion. It explores what science is, and what religion is, and asks what authority can offer for the various claims they make. As the natural sciences provide increased knowledge of the cosmos, is there still a place for religion? The course has no prerequisites.

PHIL UN2702 Contemporary Moral Problems. 3 points.
Questions about how people should act have historically been central to philosophy. This course introduces students to philosophy through an examination of some important moral problems that arise in the twenty-first century. The aim is not only to offer ideas for thinking through the issues covered, but also to provide tools for general moral reflection. Topics covered will include: the legitimacy of asking migrants to abandon their traditional practices, responsibilities to distant people and to future generations, abortion and genetic testing of the unborn, the proper treatment of animals, and the permissibility of war and terrorism.

PHIL V3720 Ethics and Medicine. 3 points.
Not offered during 2019-20 academic year.

Prerequisites: Limited enrollment by permission of the instructor. First-day attendance required.
Philosophical examination of moral issues in medical theory and practice. Analysis of the ethics of the doctor-patient relationship, e.g., informed consent, truth-telling, paternalism; topics in bioethics, e.g., abortion, euthanasia, experimentation on humans; justice and access to health care; human genetics.

RELI V3000 Buddhist Ethics. 3 points.
Prerequisites: the instructor’s permission.
An investigation of the main textual sources of the Buddhist ethical tradition, with attention to their historical operation within Buddhist societies, as well as consideration of their continuing influence on contemporary developments, Western as well as Asian.

WMST BC3131 Women and Science. 4 points.
Prerequisites: Enrollment limited to 18 students.
History and politics of women’s involvement with science. Women’s contributions to scientific discovery in various fields, accounts by women scientists, engineers, and physicians, issues of science education. Feminist critiques of biological research and of the institution of science.

Spring 2020: WMST BC3131

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