

History and Philosophy of Science Major

www.pitt.edu/~hpsdept

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The study of the history and philosophy of science affords a broad appreciation of science, its nature and fundamentals, its origins and its place in modern politics, culture, and society. In the history of science, traditional historical methods are used to develop an understanding of how the sciences originated, how they were practiced, how they developed, and how they are related to their intellectual and social contexts. In philosophy of science, the sciences themselves are brought under philosophical scrutiny. We investigate the nature of science in general; what distinguishes scientific activity; how theories explain; how they are confirmed; whether they should be read literally; and the moral dilemmas raised by the sciences. We also investigate the fundamental content of individual sciences, and how it bears on the ancient philosophical questions: what is the nature of space, time, and matter; what is life; and what is thought. History and philosophy of science is distinctive in integrating history, philosophy, and science, with investigations in each that are often closely interwoven.

The Department of History and Philosophy of Science (HPS) at Pitt is a world leader in its field. Historians and philosophers of science worldwide come to Pitt for study and research. The undergraduate courses reflect the conviction that science and technology pervade every aspect of our lives, and have played a central role in cultural, religious, and philosophical development of our society.

A major in HPS is an excellent choice for students who wish to combine course work in the sciences with work in more humanistically inclined disciplines. Because HPS majors are expected to complete 15 hours of science credits, a double major in HPS and one of the sciences is especially attractive.

Required courses for the History and Philosophy of Science major

This major requires the completion of 36 credits distributed as follows:

One of the following

HPS 0611 Principals of Scientific Reasoning
PHIL 0500 Introduction to Logic

Both of the following

HPS 1653 Introduction to the Philosophy of Science
HPS 1702 Junior/Senior Seminar for HPS Majors

HPS electives

Students must complete four HPS elective courses, one of which must be at the 1000-level.

Natural and/or Social Science electives

Students are required to complete 15 elective credits in the natural sciences, social sciences, or a combination of both. At least one course taken in fulfillment of this requirement must be **non-introductory**. Students are **strongly encouraged** to choose these courses in consultation with the major advisor.

Grade requirements: A minimum GPA of 2.0 in courses that count toward the major is required for graduation.

Satisfactory/No Credit option: No course that counts toward the major can be taken on an S/NC basis.

Writing (W) requirement: Students must complete HPS 1703 Writing Workshop for HPS Majors in conjunction with HPS 1702.

Declaring the major: Before students officially declare the History and Philosophy of Science major, they must have:

- completed two HPS courses with a grade of B- or better, and
- completed HPS 0611 or PHIL 0500 with a grade of B- or better.

Students must receive the permission of the major advisor to declare if both of these requirements have not been met.

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Checklist for the History and Philosophy of Science major

Required Courses

- _____ HPS 0611 or PHIL 0500
- _____ HPS 1653
- _____ HPS 1702

HPS Elective Courses

- _____ HPS _____
- _____ HPS _____
- _____ HPS _____
- _____ HPS 1_____ (1000-level course)

Natural and/or Social Science Electives *

- _____
- _____
- _____
- _____ (non-intro course)

* **Note:** These courses should be chosen in consultation with the major advisor. It is possible to satisfy this 15-credit elective requirement with fewer than five courses.