

HPS Undergraduate Courses
Spring 2026 (Term 2264)

HPS 0412 Newtonian Revolution (31121)

T TH 9:30 – 10:45

Marian Gilton

No course description available.

HPS 0427 Myth and Science (31122)

M W 6:00-8:30

Kabir Bakshi

Is there any difference between science and myth? Is belief in modern science similar to belief in religious mythology? What makes myths powerful? What is the place of myth in our modern life? We will explore these (and neighboring) questions in the course by reading some philosophy (of science), some history (of science), and some literature and by watching a couple of movies and listening to some music. This is a reading intensive course and is broad in scope: geographically, temporally, and pedagogically.

HPS 0427 Myth and Science (31778)

T TH 4:00-5:15

Stamatina Mastorakou

This course explores the origins of philosophy and science in the Mediterranean world. While our main focus will be on ancient Greece, we will also examine material from Egypt and Mesopotamia. We will investigate different ways of approaching and understanding the world through mythology, philosophy, science, and religion. We will investigate the fundamental questions the ancients asked—and the answers they offered—and reflect on what distinguishes a scientific approach and how it relates to other ways of knowing. Throughout the course, we will uncover diverse worldviews and connect them to modern scientific perspectives, with particular attention to cosmology, philosophy, astronomy, and medicine.

HPS 0437 Darwinism and Its Critics (31123)

M 6:00 – 8:30

Eric Anderson

This course explores the development and reception of Charles Darwin's theory of evolution in the 19th century. We will critically examine Darwin's scientific, philosophical, religious, socio-political, economic, and environmental contexts. We will trace Darwin's scientific development from his education, to his service as naturalist aboard the H.M.S

Beagle, to the origins and subsequent transformations of his theory. We will analyze the structure, logic, and strength of Darwin's argument in *On the Origin of Species*.

Understanding the attitudes of Darwin's contemporaries, and their critical responses to his (and others') evolutionary ideas, will be a point of focus throughout this course. Finally, we will examine the scientific and social impacts of Darwinism, including subsequent developments in biology and the rise of social Darwinism and eugenics in the late 19th century. Through this exploration, students will become familiar with a rich cast of characters and the world they inhabited, gaining a nuanced understanding of the origins and impacts of biology's most important, and most provocative, theory.

HPS 0515 Magic, Medicine, and Science (31124)

Cross Listed with HIST 0089

T TH 8:00 – 9:15

Sameera Singh

No course description available.

HPS 0517 Thinking About the Environment (32193)

T 1:00 – 3:30

Dana Matthiessen

In this course we will investigate the relationship between humans, non-human creatures, ecosystems, and the broader natural world from a philosophical and historical perspective. To begin, we critically examine common assumptions about notions like “nature,” “naturalness,” and “wilderness.” We then survey the history of the environment and environmental thinking in America. Throughout we will attend to the differences between conceptions of nature and relations to the natural world descending from colonial European and indigenous American ways of living. From there, we turn to more contemporary conceptual and ethical issues in ecology and environmentalism, including the role of human values in environmental science, the goals of ecological management and restoration, environmental justice, and the ethical implications of climate change. Students will develop skills needed to historically situate and critically evaluate environmental and ethical arguments, to engage with differing viewpoints about these pressing issues, and to better understand their own lived relationship to the environment as inhabitants of Pittsburgh.

HPS 0605 The Nature of the Emotions (32112)

T TH 9:30 – 10:45

Madeleine Potoskie

No course description available.

HPS 0611 Principles of Scientific Reasoning (25342)**H 6:00 – 8:30****Hung Hui Choi**

The primary goal of this course is to give you an introduction to the *nature* of science. We will begin with the big question “*what is the scientific method?*”, where we will discover that while there are many proposals, all of them are beset by counterexamples and none of them have gained universal acceptance. Nevertheless, some of these proposals—for example, hypothetico-deductivism, falsificationism, Bayesian confirmation—do seem to capture what goes on in large portions of science even if they fail to be universal criteria. We will explore the pros and cons of these *principles* of science. Special attention will be paid to *statistical hypothesis testing*, a method widely used in the social sciences and medicine but also often condemned (e.g., as a cause of psychology’s replication crisis). There will also be an emphasis on formal methods, including deductive logic. Along the way, we will be asking questions that are especially pertinent to the current anti-science climate, including: Who *funds* science? Who *conducts* science? What are the *aims* of science? It may surprise you that these seemingly straightforward questions have unexpected answers.

HPS 0611 Principles of Scientific Reasoning (32396)**T TH 4:00 – 5:15****Kyra Salomon**

The course will provide students with elementary logic skills and an understanding of scientific arguments. Ours is an increasingly scientific and technical society. In both our personal life decisions and in our work we are daily confronted by scientific results which influence what we do and how we do it. Basic skills in analyzing the structure of arguments in terms of truth and evidence are required to make this type of information accessible and useful. This course is designed to aid the student in making sense of a variety of elementary logic skills in conjunction with the application of those skills to actual cases.

HPS 0612 Mind and Medicine (27418)**M W 3:00 – 4:15****Amanda Evans**

No course description available.

HPS 0612 Mind and Medicine (31126)**T TH 4:00 – 5:15****Amanda Evans**

No course description available.

HPS 0612 Mind and Medicine (26497)

T TH 2:30 – 3:45

Amanda Evans

No course description available.

HPS 0612 Mind and Medicine (31128)

T TH 4:00 – 5:15

Dana Matthiessen

Mind and medicine deals with fundamental problems and questions that arise in considering the nature of mental health, mental illness, and branches of medicine that aim to promote mental health and treat mental illness. We will begin by considering the concepts of 'health', 'disease' and 'illness' in general, and several different models of medicine. From there we will move on to a consideration of the nature of explanation in medicine generally. We will examine some explanatory successes in the domain of physical health and disease, and consider how those successes were achieved. In the second half of the course we will look at controversies over the question of whether there is such a thing as mental illness, and if so, how one is to define, diagnose and treat it. In order to better understand what is at stake, we will explore these controversies by focusing on a specific mental illness, schizophrenia. Looking at recent research on schizophrenia will allow us to see the extent to which the kind of understanding we have achieved in physical medicine is or is not to be expected with serious mental illness. Students who successfully complete this course will be able to identify and analyze different philosophical approaches to selected issues in medicine and psychiatry; have gained insight into how to read and critically interpret philosophical arguments; and have developed skills that will enable them to think clearly about foundational questions as future or current health care providers, policy makers, and consumers. This course is also part of a core sequence leading to certification in the Conceptual Foundations of Medicine Certificate Program, and is a companion course to HPS 0613 (Morality and Medicine) but may be taken independently. The course is of particular interest to pre-medical and pre-health care students.

HPS 0612 Mind and Medicine (CGS) (24934)

TH 6:00 – 8:25

Dana Matthiessen

Mind and medicine deals with fundamental problems and questions that arise in considering the nature of mental health, mental illness, and branches of medicine that aim

to promote mental health and treat mental illness. We will begin by considering the concepts of 'health', 'disease' and 'illness' in general, and several different models of medicine. From there we will move on to a consideration of the nature of explanation in medicine generally. We will examine some explanatory successes in the domain of physical health and disease, and consider how those successes were achieved. In the second half of the course we will look at controversies over the question of whether there is such a thing as mental illness, and if so, how one is to define, diagnose and treat it. In order to better understand what is at stake, we will explore these controversies by focusing on a specific mental illness, schizophrenia. Looking at recent research on schizophrenia will allow us to see the extent to which the kind of understanding we have achieved in physical medicine is or is not to be expected with serious mental illness. Students who successfully complete this course will be able to identify and analyze different philosophical approaches to selected issues in medicine and psychiatry; have gained insight into how to read and critically interpret philosophical arguments; and have developed skills that will enable them to think clearly about foundational questions as future or current health care providers, policy makers, and consumers. This course is also part of a core sequence leading to certification in the Conceptual Foundations of Medicine Certificate Program, and is a companion course to HPS 0613 (Morality and Medicine) but may be taken independently. The course is of particular interest to pre-medical and pre-health care students.

HPS 0613 Morality and Medicine (20616)

M W 12:00 – 12:50

Nina Atanasova

No course description available.

HPS 0613 Morality and Medicine (28966)

M W 1:00 – 1:50

Nina Atanasova

No course description available.

HPS 0613 Morality and Medicine (31130)

M W 2:00 – 2:50

Nina Atanasova

No course description available.

HPS 0613 Morality and Medicine (28968)

T TH 1:00 – 1:50

Laura Matthews

No course description available.

HPS 0620 Science and Religion (REL DEPT) (21199)

T TH 9:30-10:45

Brock Bahler

Are science and religion at odds or harmonizable? Do they coincide or represent completely separate discourses? This course examines the relationship between science, rationality, faith, and religion. Special attention will be given to ancient creation narratives and their interpretation, historical dialogues regarding faith and reason in the Western monotheist faiths (Christianity, Judaism, Islam), the scientific revolution, and various approaches to evolutionary theory. We will also consider practical, contemporary issues such as neuroscience and religious practice, ecology and faith, and scientific views toward gender and race.

HPS 0626 Development of Modern Biology (32397)

M W 3:00 – 4:15

Michael Dietrich

This course will consider major episodes in the history of biology in the 19th and 20th centuries. Beginning with the Charles Darwin's theory of evolution and ending with contemporary genomics, we will place the major milestones of modern biology in their wider social, political, and cultural context. Topics may include Darwinism and its controversial reception, eugenics and the control of heredity, experimentation as a hallmark of twentieth century biology, the impact of molecular biology, and the rise of genomics and big data in biology.

HPS 1612 Philosophy of 20th Century Physics (30705)

T 6:00 – 8:30

Brett Park

Modern physics rests on three pillars: quantum mechanics, relativity, and statistical mechanics. Despite the enormous successes of each of these theories, it remains unclear what they tell us about what the world is like and our place in it. There exist many outstanding questions about how to best formulate and interpret these theories. All proposals to understand them require us to accept some deeply counterintuitive ideas about reality. In this course, we will consider metaphysical and epistemological questions that arise from quantum mechanics, relativity, and statistical mechanics. These include questions about the nature of space and time, the relation between matter and spacetime, the quantum measurement problem, 'interpretations' of quantum mechanics, quantum non-locality, the nature of probability, and the relationship between physical theories. The

discussion will take place at a largely conceptual level. There are no prerequisites. All the relevant physics and philosophy will be covered as the course develops.

HPS 1616 Artificial Intelligence and Philosophy of Science (31134)

M W 4:30 – 5:45

Dzintra Ullis

No course description available.

HPS 1616 Artificial Intelligence and Philosophy of Science (31135)

T TH 4:00 – 5:15

Tanner Leighton

This course introduces students to central philosophical issues surrounding artificial intelligence (AI). We will explore foundational questions about the nature of intelligence, consciousness, learning, and agency, and examine ethical and social concerns raised by current AI systems. Topics include classical AI and connectionism, deep learning and large language models, the Turing Test, AI and consciousness, algorithmic bias and fairness, transparency, privacy, and moral responsibility in AI. Readings are drawn from contemporary philosophy, cognitive science, computer science, and public discourse.

No prior technical background is assumed, but students should be prepared to engage critically with technical concepts when they arise.

HPS 1623 Death and Healthcare Professions (REL DEPT) (30083)

M 6:00 – 8:30

Jonathan Weinkle

No course description available.

HPS 1670 Philosophy of Neuroscience (31140)

T TH 2:30 – 3:45

Laura Matthews

No course description available.

HPS 1671 Philosophical Foundations of Cognitive Science (27434)

W 6:00 – 8:30

Mara McGuire

No course description available.

1702 Jr/Sr Seminar for HPS Majors (10755)

1703 Practicum (10756)

M 9:30-11:50

Paolo Palmieri

No course description available.

Updated 10/27/2025