

HPS 0427 Myth and Science (31118) (Cross listed as CLSAA 0330)

MW 3:00–4:15

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 0437 Darwinism and its Critics (31120)

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. Utilizing primary and secondary sources, 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 (18986) (Cross listed as HIST 0089 CRN)

MW 9:30-10:45

Sameera Singh

No course description available.

HPS 0610 Causal Reasoning (31121)

T 6:00-8:30

Brett Park

Causation is one of the most indispensable concepts we use to navigate the world. Knowing how things are causally related is of crucial importance in both ordinary and

scientific inquiry. Despite this, there is no general consensus on what causation is, or how it relates to the picture of the world given to us by the sciences. In this course, we explore the history of this concept to the present day, where a new set of tools have been developed to help scientists extract causal connections from statistical data.

HPS 0611 Principles of Scientific Reasoning (31122)

W 6:00-8:30

Zhòngháo Lù

No course description available.

HPS 0611 Principles of Scientific Reasoning (31123)

H 6:00-8:30

Hong 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). 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 (31741)

TH 2:30-3:45

Marian Gilton

This class explores the logical principles of scientific reasoning. We will systematically develop formal tools from both deductive and inductive logic. We will then use the tools to discuss the ways in which scientific reasoning coordinated deductive and inductive inference patterns. In addition to completing problem sets on inductive and deductive logic, students will read and discuss articles in philosophy of science. These readings may cover topics such as the relationship between theoretical and experimental science, the aims of science, and the intellectual virtues fitting to scientific practice.

HPS 0612 Mind and Medicine (24633, 28764, 28763)

MW 1:00-1:50

MW 11:00-11:50

2:00-2:50

Laura Matthews

No course description available.

HPS 0612 Mind and Medicine (26847, 30142, 28765)

TH 12:00-12:50

TH 9:30-10:45

TH 4:00-5:15

Nina Atanasova

No course description available.

HPS 0613 Morality and Medicine (26260)

W 6:00-8:30

TBD

No course description available.

HPS 0613 Morality and Medicine (29874)

MW 4:30-5:45

TBD

No course description available.

HPS 0613 Morality and Medicine (28356)

TH 9:30-10:45

TBD

No course description available.

HPS 0613 Morality and Medicine (28341, 28342, 31131)

MW 3:00-4:25

TH 2:30-3:45

TH 4:00-5:25

Amanda Evans

No course description available.

HPS 0613 Morality and Medicine (20083)

M 6:00-8:30

Madeleine Potoskie

No course description available.

HPS 0621 Problem Solving (27472)

H 6:00-8:30

Kyra Salomon

No course description available.

HPS 1653 Intro to Philosophy of Science (27963) (Cross listed as PHIL 1610

MW 2:00-2:50

Porter Williams

The aim of this course is to provide a broad survey of some of the most fundamental and general philosophical questions generated by scientific inquiry, and to cultivate your ability to think through these difficult questions in a clear and critical way. The course is divided in two main parts. In the first part, we consider key questions such as: "What is science?", "Is there a unique scientific method?", and "Is science aiming at true theories, or does it only aim at theories that are consistent with observable phenomena?" We tackle these questions by looking at issues such as the problem of induction and the nature of scientific explanation. We critically assess the main philosophical views surrounding these questions and issues, and we consider the relevance of historical and sociological approaches to the philosophy of science. Readings will be a mix of textbook presentations and readings from the primary literature, including some older classics and some more recent articles that showcase current approaches to these issues. Throughout the course we will be concerned with applications of these general concerns to particular issues in the physical sciences, the life sciences, and statistics.