Minor in the History and Philosophy of Science

(949) 824-6495
Brian Skyrms, Director

The minor in the History and Philosophy of Science is intended for students who wish to study the history of science, the philosophical foundations of scientific inquiry, and the relationship between science and other fields. The history of science explores how science is actually done and how it has influenced history. This may involve tracking down an idea’s source or its influences, evaluating the cultural forces at work in the generation of a scientific theory or the reaction of culture to science, or taking a detailed look at the work of a particular scientist or movement within science. The philosophy of science is concerned with determining what science and mathematics are, accounting for their apparent successes, and resolving problems of philosophical interest that arise in the sciences. Philosophy of science courses cover such topics as the role of logic and language in science and in mathematics, scientific explanation, evidence, and probability. These courses may also cover work that has been done on the philosophical problems in specific sciences—for example, the direction of time in physics, the model of mind in psychology, the structure of evolution theory in biology, and the implications of Gödel’s incompleteness theorems for mathematics.

The minor is available to all UCI students.

Requirements for the Minor

A. Select two of the following:
   - LPS 31 Introduction to Inductive Logic
   - LPS 40 The Nature of Scientific Inquiry
   - HISTORY 60 The Making of Modern Science

B. Select two of the following:
   - HISTORY 135B Navigation
   - HISTORY 135D History of Cartography
   - HISTORY 135E Topics in the History of Science and Technology
   - PHILOS 110–115 (when topic is science)

C. Select three of the following:
   - LINGUIS 141 Topics in Philosophy of Language
   - LINGUIS 143 Semantics
   - LPS 106 Topics in Logic
   - LPS 108 Topics in Induction, Probability, and Decision Theory
   - LPS 140 Topics in Philosophy of Science
   - LPS 141A Topics in Philosophy of Physics
   - LPS 141B Geometry and Spacetime
   - LPS 141C Philosophy of Quantum Mechanics
   - LPS 141D Probability and Determinism
   - LPS 142W Writing/Philosophy of Biology
   - LPS 143 Topics in Philosophy of Psychology
   - LPS 145 Topics in Philosophy of Language

Participating Faculty

Francisco J. Ayala, University Professor and Donald Bren Professor of Biological Sciences
Jeffrey A. Barrett, Professor of Logic and Philosophy of Science
William H. Batchelder, Professor of Cognitive Sciences
Paul C. Eklof, Professor Emeritus of Mathematics
Matthew D. Foreman, Professor of Mathematics and of Logic and Philosophy of Science
Douglas M. Haynes, Associate Vice Provost for Equity and Diversity and Associate Professor of History
Donald Hoffman, Professor of Cognitive Sciences
Karl G. Hufbauer, Professor Emeritus of History
Mary-Louise Kean, Professor Emerita of Cognitive Sciences
Stuart M. Krassner, Professor Emeritus of Developmental and Cell Biology
J. Karel Lambert, Professor Emeritus of Philosophy
Penelope Maddy, UCI Distinguished Professor of Logic and Philosophy of Science and of Mathematics
Louis Narens, Professor of Cognitive Sciences
Alan Nelson, Professor Emeritus of Philosophy
Riley Newman, Professor Emeritus of Physics
Robert Newsom, Professor Emeritus of English
Terence D. Parsons, Professor of Philosophy, UCLA
A. Kimball Romney, Professor Emeritus of Anthropology
Michael R. Rose, Professor of Ecology and Evolutionary Biology
Jonas Schultz, Professor Emeritus of Physics
Brian Skyrms, Director of the Minor in the History and Philosophy of Science and UCI Distinguished Professor of Logic and Philosophy of Science and of Economics
Norman M. Weinberger, Research Professor of Neurobiology and Behavior
Peter Woodruff, Professor Emeritus of Philosophy