

PIU22032: Philosophy of Science and Epistemology

Credits: 5 ECTS
Semester: Hilary Term 2023
Contact Hours:
Lectures: 22 hours
Tutorials: 5 hours
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Office Hours: By appointment or check the Dept. website
Room: 5017
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Module Outline:

Component 1:

Science looks to be our best hope of discovering the way the world is. We use it to predict climate change, map the human genome and identify the Higgs boson. Science seems to give us an objective view on the world. How does it manage to do this? Does it succeed in its aims? How can we tell?

This course will examine the workings of science through four core topics: how we reason to science, how scientific theories explain, the role of values in science, and what scientific theories tell us about the world.

Component 2: Topics will include a selection from the following: Kinds of knowledge, defining knowledge, Foundationalism, Coherentism and relativism.

Learning Outcomes

On successful completion of this module students will be able to:

- Explain major issues in philosophy of science concerning what science is, how it works, and why should we believe it.
- Explain major issues in epistemology concerning what knowledge is, how justification works, and what provides reasons for belief.
- Think critically about philosophical problems relating to scientific practice and knowledge.
- Communicate their own ideas effectively to others, both in discussion and in writing.

Reading List:

See Blackboard

Assessment:

For the module, each student must complete:

- 1 Essay (1500 words) (60%)
- 1 Opinion Piece (1000 words) and annotated bibliography (200–300 words) (40%)

Students must complete an essay on the component they did not complete an opinion piece on. You may choose which component to write your opinion piece on.