

Epistemology & Philosophy of Science | PIU22032

Year	Senior Fresher
ECTS Credits	5
Contact Hours	27 (22 x 1 hour lectures + 5 x 1 hour tutorials)
Pre-requisite	None
Semester	2
Module Leader & Lecturer	Professor Paul O'Grady and Dr Richard Teague
Contact Email	pogrady@tcd.ie

Module Outline:

Component 1 (Philosophy of Science):

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 (Epistemology):

Topics will include a selection from the following: Kinds of knowledge, Defining Knowledge, Foundationalism, Coherentism and Relativism.

Assessment:

1 x Essay (1500 words) (60%)

1 x 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.

Recommended Reading List:

An extensive and detailed reading list will be made available at the start of the module. But among the essential readings for the early weeks of the course will be:

Component 1:

- Chalmers, Alan. 2013. What is this thing called science? 4th ed. Indianapolis, Cambridge: Hackett Publishing. Introduction and Ch. 1, pp. 1–4.
- Lewens, T. (2016) The Meaning of Science. Penguin. pp. 3–6, 11–13.

Assessment:

1 Essay (end of module) 50%: 1 Examination (end of module) 50%.