

History, Philosophy & Ethics of Science | PIU22992

Year	Senior Fresher
ECTS Credits	5
Contact Hours	27 (22 x 1-hour lecture + 10 x 1-hour tutorials)
Pre-requisite	None
Semester	2
Module Leader & Lecturer	Dr. Alison Fernandes; Prof. Linda Hogan
Contact Email	asfernan@tcd.ie; LHOGAN2@tcd.ie

Module Outline:

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.

Assessment:

2 Written Responses of 750 words (1-2 pages) (50% total; 25% each)

1 In-class Writing Assignment (25%)

7 Discussion Posts (15%)

Attendance (10%)

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

- 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.