

## PIU22992 | History, Philosophy and Ethics of Science

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<b>Credits:</b>	<b>5 credits</b>
<b>Semester:</b>	<b>Hilary</b>
<b>Contact Hours:</b>	<b>22 hours of lectures + 10 hours of tutorials</b>
<b>Module Personnel:</b>	<b>Prof. Alison Fernandes (Philosophy) &amp; Prof. Linda Hogan (Ecumenics)</b>
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<b>Room:</b>	<b>5005</b>
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<b>Prerequisites:</b>	<b>N/S</b>

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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.

### Module Learning Outcomes

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

- Think critically about philosophical problems and their relevance for scientific practice.
- Communicate ideas effectively to others, both in discussion and in writing.
- Reflect on the aims and methodology of science, in ways that facilitate ongoing exploration of scientific practice.
- Demonstrate awareness of ethical issues that arise in scientific practice, and of the role of the individual and communities in upholding ethical standards.

### Recommended Reading List

*Introductory reading:*

Lewens, T. (2016) *The Meaning of Science*. Penguin.

Chalmers, A. (2013) *What is this Thing Called Science?* Hackett Publishing.

*Full reading list:* See Module Syllabus on Blackboard.

**Assessment Details:**

- 3 Written Responses of 750 words (1–2 pages) (25% each)
- 7 Discussion Posts (15%)
- Attendance (10%)