

History, Philosophy & Ethics of Science | PIU22992

Year	Senior Freshman
ECTS Credits	5
Contact Hours	22 (11 x 2-hour seminars)
Pre-requisite	None
Semester	2
Module Leader & Lecturer	Dr Richard Teague
Contact Email	[tcd email pending]

Module Outline:

For good reasons, we have come to view science as the authority in almost every branch of knowledge and rational inquiry. But what exactly is science? What methods characterize it as a form of inquiry? Is the authority of science justified? Can it deliver certainties that will tell us everything we want to know about the world, or does it have any inherent limitations? And does science pose any distinctively *moral or ethical* challenges?

This class serves as an introduction to the history, philosophy, and ethics of science. Using a variety of historically significant examples, we will learn about some of the most influential theories of scientific method and scientific explanation, and we will evaluate debates over the role of values in science and the ethical requirements that are placed on scientific research.

Learning Outcomes:

- Detailed understanding of influential theories of scientific method
- Ability to critically assess philosophical problems and how they bear on scientific practice
- Experience in analysing and evaluating ethical issues arising in science and scientific research

Assessment:

3 Written Responses of 750 words (1–2 pages) (25% each)

7 Discussion Posts (15%)

Attendance (10%)

Recommended Reading List:

- Lewens, T. (2016) *The Meaning of Science*. Penguin
- Chalmers, A. (2013) *What is this Thing Called Science?* Hackett Publishing.