

Course Description

Course Unit

Metaphysics of Science

UC Code

N/A - Nova cadeira

ECTS Credits

7,5 ECTS

Work Hours

210H (7,5 ECTS)

Level

MA

Academic year and Semester

2024/2025, S2

Faculty

David Yates

Class

TP 1

Language of instruction

English

Class Description

The metaphysics of science is a wide-ranging discipline that can involve (1) metaphysical issues that arise in all sciences (such as the nature of laws, natural kinds, causality and properties); (2) metaphysics applied to specific sciences such as physics, chemistry, biology and psychology; and (3) issues concerning the relationship between sciences at different levels (emergence, grounding and reduction). We will cover a selection of these issues in the present course, including laws of nature; dispositional essentialist theories of scientific properties, laws and kinds; the nature of causation; space and time; and the reduction / emergence debate as it applies to the relationship between the special sciences and physics, with a focus on the metaphysics of mind. No background knowledge of

science is required, and the course will be non-technical and accessible to all.

Grading and Assessment

2 essays (first 40% / second 60%) of 2000-2500 words chosen from a list of topics circulated by the professor. The professor will provide marks and feedback for the first essay at least 6 weeks before the deadline for the second.

Bibliography

All essential readings for the course will be supplied via the Moodle platform. The following is a list of general and preparatory readings that should be useful. It is not required to read them all!

Beckermann, A., Flohr, H. & Kim, J. eds. (1993). *Emergence or Reduction? Essays on the Prospects of Nonreductive Physicalism*. De Gruyter.

Bird, Alexander. 2007. *Nature's Metaphysics*. Oxford: Oxford University Press.

Göhner, J. & Schrenk, M. "The Metaphysics of Science", *Internet Encyclopaedia of Philosophy*.
<https://iep.utm.edu/met-scie/>

Kim, J. and Sosa, E. eds. *Metaphysics: An Anthology*. Oxford: Blackwell (1999).

Mumford, S. & Tugby, M. eds. (2013). *Metaphysics and Science*. Oxford University Press. (Pretty advanced collection of essays but you might find the introduction ("What is the metaphysics of science?") by the editors useful.

Schrenk, M. (2017). *Metaphysics of Science: A Systematic and Historical Introduction*. London: Routledge.

Prerequisites (if applicable)

N/A