



DEPARTMENT OF LEARNING, INFORMATICS, MANAGEMENT AND ETHICS

C7F3073, Philosophy of Science and the Concept of Health, 1.5 credits (hec)

Vetenskapsteori och hälsobegreppet, 1,5 högskolepoäng

Third-cycle level / Forskarnivå

Approval

This syllabus was approved by The Committee for Doctoral Education on 2023-11-23, and was last revised on 2025-05-23. The revised course syllabus is valid from spring semester 2025.

Responsible department

Department of Learning, informatics, Management and Ethics, Faculty of Medicine

Prerequisite courses, or equivalent

No prerequisite courses, or equivalent, demanded for this course.

Purpose & Intended learning outcomes

Purpose

The course aim is that the doctoral student develops a theory of science approach by enabling the doctoral student to understand, employ, reflect upon and critically assess concepts and ideas of theories of science as well as their implications for in particular medical scientific practice. A further aim is to enable the doctoral student to understand, reflect upon and critically assess views on and implications of definitions of health and disease.

Intended learning outcomes

Upon completion of the course, the doctoral student should be able to:

- understand central concepts and problems of the theory of science, in particular those of relevance for the medical sciences
- identify, analyse and critically assess scientific problems, approaches and arguments from a theory of science perspective, in particular in the field of medical sciences

Course content

The course contains the following parts:

1. Theory of knowledge

Concepts such as knowledge, truth, and science, as well as the relations between them, are discussed and problematised. Verification/falsification, logical positivism, falsificationism and demarcation are other concepts and theoretical strands to be treated.

2. Theory of science

Central concepts, theories and themes within this area are paradigm, the clinical-medical paradigm, the placebo effect, scientific anomalies, and the nature of and view on knowledge within the medical sciences (e.g. randomised clinical trials). The difference and relation between science and values are also dealt with.

3. Science, pseudo-science and scientific argumentation

Demarcation in practice, the difference between science and pseudo-science, and argumentation within the sciences (in particular within the medical sciences) are in focus.

4. The concept of health

The concept of health is critically assessed, for example based on notions of objectivity/subjectivity. The consequences of using different types of definitions of health are analysed. Furthermore, the concept of disease is discussed, e.g. in relation to normality.

Forms of teaching and learning

The course is given online. The teaching and learning activities used are web lectures, written examination, individual writing exercises, an individual written assignment, and reading of course literature and other distributed materials.

Language of instruction

The course is given in English

Grading scale

Pass (G) /Fail (U)

Compulsory components & forms of assessment

Compulsory components

All parts of the course examination are mandatory.

Forms of assessment

Course examination consists of three parts:

- Written examination
- Individual writing exercises
- One written individual assignment

Course literature

Mandatory literature:

- Johansson, Ingvar, & Lynøe, Niels. *Medicine and Philosophy: A Twenty-First Century Introduction*. Frankfurt: Ontos Verlag, 2008. https://ki.se/sites/default/files/johansonlynoemedicineandphilosophy19jan2011_2.pdf
- A compilation of scientific articles, accessible through the course platform.

Recommended literature:

- Kuhn, Thomas S. *The structure of scientific revolutions*. Chicago, Ill. : University of Chicago Press, 2012.
- Popper, Karl. *Conjectures and refutations. The growth of scientific knowledge*. London, Routledge, 2002.
- Godfrey-Smith, Peter *Theory and reality: an introduction to the philosophy of science* Chicago, Ill.: University of Chicago Press, 2003. Kapitel 2-6. https://ki.se/sites/default/files/johansonlynoemedicineandphilosophy19jan2011_2.pdf

Additional publications may be added.