



Faculty of Health, Science, and Technology

Doctoral Programme Course

Course Approval

The syllabus was approved by the Board of the Faculty of Health, Science, and Technology on 21 May 2013 (Reg no: HNT 2013/22) and is effective from the Autumn of 2013.

Discipline/Main field of study

Cross-faculty course

Code

0UNI007

Course Title

Philosophy and History of Scientific Thought

Higher Education Credits

7,5 ECTS credits

Language of Instruction

English

Degree Level

Doctoral

Prerequisites

Admission to a doctoral programme

Learning Outcomes

Upon completion of the course, students should be able to

- demonstrate knowledge of and ability to reflect on ethical issues related to research, especially regarding probity in research and the identification of possible need for ethical considerations in their own research,
- demonstrate deep insight into the potentials and limitations of science, its role in society and our responsibility for how it is used,

- demonstrate ability to identify their need for further knowledge and to broaden their knowledge in their subject as well as beyond it,
- demonstrate familiarity with research methodology in general,
- demonstrate awareness of different academic and historical contexts,
- demonstrate a critical approach to attitudes, routines and thought patterns in their discipline.

Course Content

Instruction is in the form of lectures, seminars and group discussions.

The course includes the following components:

- Research probity
- The ethical consequences of research and making ethical assessments in research
- Introduction to research on humans and animals
- Introduction to the philosophy of science with an emphasis on Popper's critical rationalism, Kuhn's theory on paradigms, social constructions, hermeneutics.

Course literature

See separate document

Examination

Assessment is continuous and based on the student's active participation in lectures, seminars, group discussions and on oral presentations as well as on written hand-in assignments.

Grades

One of the grades Fail (U) or Pass (G) is awarded in the examination of the course.

Course Certificate

Course certificate is issued on request.

Quality Assurance

The course convenor has a duty to encourage a continuous dialogue on learning processes and goal fulfillment. A written evaluation is carried out at the conclusion of the course combined with a joint student-teacher discussion of all aspects commented on. The result of the evaluation is collated and made available in accordance with *The Higher Education Ordinance*, Chapter 1, section 14.

Reading list

Course title: Philosophy and History of Scientific Thought, 7,5 ECTS credits (Post graduate level). The syllabus was approved by the Faculty of Health, Science and Technology on 21 May 2013. (Reg no: HNT 2013/22), valid from Autumn semester 2013. Revised on 11 June 2014, valid from Autumn semester 2014. (Reg No: HNT 2014/86)

Mandatory:

- Popper, K.R., *A Pocket Popper*, Eds David Miller, Fontana paperbacks, London. Ch. 7-15. Sv. översättning: *Popper i urval av David Miller, Thales*, Stockholm 1997.
- Kuhn, Th., *The Structure of Scientific Revolutions*, The University of Chicago Press, third edition, 1996 (or later). Ch. 1-9 + postscript 1969.
- Good Research Practice. Swedish research council publication. Available for free at www.vr.se homepage under Ethics and Publications.
- A book choice of relevance for the history and/or philosophy of your own field (discuss your choice with the course leader Claes Ugglå during the course).
If you are not able to come up with a relevant book choice you can use: Chalmers, A. F., *What is this thing called Science* (Open university press; mostly relevant for NT) or e.g. Kjörup Sören, *Människovetenskaperna*, Studentlitteratur 1999 or Jens Höyrup, *Human Sciences: reappraising the humanities through history and philosophy* (Alba-ny, NY: State University of New York Press, 2000) (both mostly relevant for HS).
Note that as part of the examination you should motivate and review your choice, see below.

