**Philosophy of science**
*Vetenskapsteori*

**Credit points:** 2 ECTS  
**Course code:** 5DN002  
**Established:** 2015-03-10; rev 2019-02-26  
**Established by:** Committee for doctoral studies  
**Syllabus valid from:** 2015-03-15, 2019-02-26  
**Responsible Department:** Department of Historical, Philosophical and Religious studies  
**Main field of study:** General science  
**Grading system:** G pass, U Fail  
**Level of Education:** Doctoral course

1. **Required Knowledge**  
Admitted to studies at third cycle-level.

2. **Expected learning outcomes**  
After completing the course, students shall be able to:

   **Knowledge and understanding**  
   - understand the concepts *hypothesis, evidence, confirmation* and *refutation*  
   - have knowledge about views of the nature of science and scientific change

   **Competence and skills**  
   - be able to explain and discuss the philosophical presuppositions of some common methods in formal and empirical sciences  
   - be able to apply philosophical concepts and arguments to the research process and scientific results  
   - be able to analyze and discuss the significance of gender in science

   **Judgement and approach**  
   - be able to evaluate and critically assess problems, concepts, views, and arguments concerning scientific method and the demarcation between science and non-science

3. **Contents**  
Philosophy of Science (in Swedish *vetenskapsteori*) is the part of philosophy which deals with philosophical problems that arise in science. The course treats of philosophical problems, concepts, views, and arguments concerning: hypotheses, evidence, confirmation, and refutation; scientific method in formal and empirical sciences; views of the nature of science and scientific change; the demarcation between science and pseudo-science and other deviations from good science; the significance of gender in science.
4. Form of instruction
The instruction consists of lectures and seminars.

5. Examination modes
The examination consists of a take-home exam, in which the student is expected to apply the contents of the course to his or her field or research project, and a seminar on the significance of gender in science, in which the student is expected to give a short presentation, of which a written version shall be handed in.

6. Other regulations
Academic credit transfers are always reviewed individually according to the University’s set of rules and academic credit transfer regulations.

7. Literature


Huygens, C. (1690). *Treatise on Light.* (Excerpt from the preface.)


Further articles and excerpts from books may be added.