



Course syllabus

Faculty of Technology

Department of Physics and Electrical Engineering

4TE008 Yrkeskunnandets kunskapsteori, 15 högskolepoäng

Skill and Epistemology, 15 credits

Main field of study

Skill and Technology

Subject Group

Other Interdisciplinary Studies

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2015-08-18

The course syllabus is valid from autumn semester 2016

Prerequisites

General entry requirements for studies at second-cycle level.

Objectives

After completing the course the student should:

- Have acquired an understanding of his/her own professional skill informed by the history of ideas and the philosophy of knowledge
- Be able to problematize and have a critical approach to trends of current interest concerning formalization of professional skill
- Be able to conduct a critical discussion about the idea that the computer can be looked upon as a metaphor of the cognitive capacity of the human being
- Show ability to consider of how his/her professional skill can be related to different traditions of knowledge

Content

- Concepts of case study, dialogue, tacit knowledge, the dream of the exact language
- The importance of the history of ideas and philosophical perspectives in connection to the understanding of the about the exact language and the computer as a metaphor for the brain and the cognitive capacity of the human being
- The paradoxical meeting between the theoretical and the practical tradition of knowledge
- The difference between human expertise and AI-models based on rules and

regulations

- The consequences of formalization in connection to professional skill

Type of Instruction

The education is carried out through assemblies at campus on two occasions each semester, consisting of lectures and dialogue seminars. Each assembly last two days. In addition to these assemblies there is a third one-day assembly scheduled for examination.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

The student is assessed individually at a seminar. At the seminar there is opposition, discussion and defense.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Required Reading and Additional Study Material

Obligatory Literature

Coverage of reading of mandatory literature are determined in consultation with the examiner.

- Collins, Harry (2010). Tacit&Explicit Knowledge. Chicago: The University of Chicago Press
- Göranson, Bo (2009) Det praktiska intellektet, Stockholm, Santérus förlag
- Göranson, Bo, Hammarén, Maria, & Ennals Richard (eds) (2006) Dialogue, Skill and Tacit Knowledge, London: JohnWiley
- Hammarén, Maria(2005) Skriva en metod för reflektion, Stockholm: Santérus förlag
- Janik, Allan, Toulmin, Stephen (2014), Wittgensteins Wien, Santérus
- Ratkic, Adrian (2006) Dialogseminariets forskningsmiljö, Stockholm, Dialoger
- Tillberg, Peter (red) (2002) Dialoger om yrkeskunnande och teknologi, Stockholm: Dialoger

Författare till följande artiklar finns inspelade på DVD och kommer att visas kompletterat med artiklar av samma författare som finns i ett kompedium

- Dreyfus, Hubert, Is Socrates to Blame for Cognitivism,
- Gyllensten, Lars, Intelligens och kreativitet
- Searle, John, Kognitiv vetenskap och datorn som metafor
- Toulmin, Stephen, The Dream of an Exact language
- von Wright, Georg Henrik, Intet är fördolt

Additional material supplied by the department might be added.