



Course syllabus

Faculty of Technology

Department of Informatics

5IK504 Systemtänkande, 7,5 högskolepoäng

5IK504 Systems Thinking, 7.5 credits

Main field of study

Informatics

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2014-10-03

The course syllabus is valid from autumn semester 2015

Prerequisites

Bachelor's degree in Informatics and 30 credits at Master level, or two years of consecutive work experience, or equivalent.

Objectives

To successfully pass the course you should be able to:

- give an account of different schools in systems thinking
- give an account of different models and methodologies within the critical systems thinking approach
- make boundary judgments and analyze effects of technology based on different stakeholder perspectives
- apply appropriate systems models and methodologies in cases characterized by high complexity, uncertainty, and conflicting interests
- analyze important and current scientific articles within systems science.

Content

The course provides a basic description of the area information systems analysis and systems theory. The course includes elements on:

- comparative studies of different types of approaches to systems analysis

- analysis of critical systems theory
- current research articles in systems theory
- applications of systems theory.

Type of Instruction

The course consists of lectures, seminars and tutoring

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Written and/or oral examinations and/or mandatory work. The types of assessment used in the course will be decided on at the beginning of the course.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 5IK004 Systems Thinking, 7.5 credits

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

Checkland, P. and Poulter, J. (2007). *Learning for action : a short definitive account of soft systems methodology and its use, for practitioners, teachers and students*, Chichester: Wiley. 200 p. (200)

Jackson, M.C. (2000). *Systems approaches to management*, New York: Kluwer Academic/Plenum. 466 p. (466)

DFM, *Compendium*, Linnæus University, current year. Pages 200.