Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

5IK004 Systemtänkande, 7,5 högskolepoäng
Systems Thinking, 7.5 credits

Main field of study
Information Systems

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
Second Level

Progression
A1N

Date of Ratification
Approved by the Board of the School of Computer Science, Physics and Mathematics 2009-09-08

Revised 2012-06-08. Literature list is revised.

The course syllabus is valid from autumn semester 2012

Prerequisites
Bachelor's degree in Informatics, 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 infomation 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 Fail (U), Pass (G) or Pass with Distinction (VG).
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.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

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.

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.