



Course syllabus

Faculty of Technology

Department of Informatics

4IK503 Introduktion till informatik på avancerad nivå, 7,5 högskolepoäng

4IK503 Introduction to Informatics at the advanced level, 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 or equivalent.

Objectives

After the course, the student should:

- be able to give an account of IT and its impact on the society and its development
- be able to give an account of some applications and research traditions in Informatics
- acquire foundational understandings of the relationship between business and organizational change and use of information technology
- possess a general understanding of the new research field information logistics and its focus on information management
- have basic knowledge of the Scandinavian tradition and its emphasis on the impact on systems design and services
- be able to give a general account of different schools in systems thinking
- be able to critically analyse important and current research articles within informatics.

Content

This course provides an introduction to informatics. The purpose is to present an overview on some applications areas in informatics. The course will also introduce some research traditions developed and used in some application areas within informatics.

The course deals with the following topics:

- Information Technology and Society
- Business Development
- Systems Design – the Scandinavian Tradition
- Systems Thinking

Module 1 Information Technology and Society

Information technology and its impact on society and its development will be presented. Democracy, participation and particularly the vision of an information society for all will also be introduced. The increased development and use of e-services and its impact on social, organizational and individual level is also presented.

Module 2 Business Development

The module provides an introduction to the use and development of information technology and how it is used in analysis and development of businesses and organisations. The purpose is to provide an overall understanding of the relationship between organizational change and use of information technology. The new field information logistics is introduced through its focus on information management and rationalisation of information flows.

Module 3 Systems Design – the Scandinavian tradition

The Scandinavian tradition of systems design - participatory design, will be presented in a historical and contemporary perspective. The aim is to provide basic knowledge and understandings of the importance to include use, and the use contexts in systems design and services. Current research articles will be used and presented.

Module 4 Systems Thinking

Systems thinking is also a tradition in the Scandinavian research within informatics. The purpose is to provide a general orientation of the different schools in the area of systems theory. Current research articles in systems theory will be used and presented.

Type of Instruction

The course consists of lectures, seminars and assignments.

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).

Assessment of student performance is made through written test and/or oral examinations and/or presentation of mandatory assignments. The assessment method is decided at the start 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: 4IK003 Introduction to Informatics at the advanced level, 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

DFM, Compendium, Linnæus University, 100 pages.