Linnæus University

Course syllabus

Faculty of Technology

Department of Informatics

4IK510 Grunder för informationssystem, 15 credits
Fundamentals of Information Systems

Main field of study
Informatics

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
Second Level

Progression
A1N

Date of Ratification
Approved 2020-09-14
Revised 2022-05-16 by Faculty of Technology. Assessment methods are revised.
The course syllabus is valid from spring semester 2023

Prerequisites
General entry requirements for second cycle studies and specific entry requirements:

English B/6 or the equivalent.

Objectives
Having completed the course, the student should be able to:

- describe IT's impact on society, organizations, and individuals
- explain the concept of information including relevant aspects for leading, managing and coordinating work processes
- analyse IT systems or applications and how these contribute in organisation of business activities, coordination and communication
- make use of theories and concepts in practice, i.e., for design and implementation of information processes which support coordinating and decision making
- apply methodologies for IT design and implementation and assess the relation to information systems and use of technology
- describe research traditions within informatics/information systems

Content

The aim of the course is to acquire knowledge about central areas of study in Informatics that focus on use of information, information systems and information technology for work in today's organizations, as well as for governance, management and coordination of social processes in organizations. The aim is also to present central issues and perspectives as well as applications of Informatics. The course content combines theoretical models and perspectives with practical applications.
The course comprises:

- essential concepts within informatics, such as data, information, knowledge, including quality of information and information security
- problems related to information management, such as lack of information, information asymmetry, and information overload
- business processes which depend on well functioning information systems for realising business ideas and efficiency
- the role of information in various organizational settings analysed with base in theoretical and methodological perspectives, such as systems thinking, goods-dominant logic and service-dominant logic
- information management in learning organisations
- research and development traditions within Informatics
- design processes based in systems perspective
- implementation with the help of techniques developed within Participatory Design
- IT's potential and limitations related to various applications developed for organizations and for individuals
- IT's impact on the society at large, including ethical aspects

Type of Instruction

Teaching consists of lectures, seminars, and practice based group work. For group work, each student should report on his or her individual effort. 80% of the seminars are obligatory.

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 oral examinations and presentation of mandatory assignments.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are

to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

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: 4IK501 IS/IT for Organizing, Communicating, and Coordinating I, 15 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
Informatic Compendium and digital material, Linnaeus University, 500 pages