Linnæus University

Dnr: 2018/1243-3.1.2.2

Course syllabus

Faculty of Technology

Department of Informatics

1IK025 Digital hållbarhet, 7,5 högskolepoäng
1IK025 Digital Sustainability, 7.5 credits

Main field of study
Informatics

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved 2013-12-16
Revised 2018-04-23 by Faculty of Technology. Removal of ECTS-grading scale.
The course syllabus is valid from autumn semester 2018

Prerequisites
1IK001 Introduction to Informatics, 7.5 hp or equivalent.

Objectives
After completing the course, students should be able to:

- describe different perspective of sustainability, and to relate these to the design and use of IT-based support for business processes
- account for models and techniques to describe and analyze the effects of digitalization
- describe and analyze business operations from different perspective of sustainability with respect to effects of digitalization

Content
The course aims to provide an understanding of different sustainability perspectives' significance and importance to the design and implementation of IT solutions for businesses, as well as knowledge about characteristics and usability of different models and methods, e.g. life cycle analysis, to describe and analyze the effects of digitalization of business processes and value chains.

Type of Instruction

The course consists of lectures, presentations and assignments. The assignments are conducted on an individual basis or in groups. Participation in exercises, individually or in groups, and seminars are mandatory.

Examination

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

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.

Students who do not pass the regular examination will be offered retrials close to the regular examination.

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.

Required Reading and Additional Study Material

Main literature

Hållbar utveckling: Livskvalitet, beteende, teknik, H. Gulliksson och U. Holmgren, Studentlitteratur, latest edition, 300 (400).
In the bubble: designing in a complex world, J. Thackara, The MIT Press, 2006, 320 (320), ISBN 9780262701150.
Kompendium, Informatik, aktuellt år, 100.

Secondary literature

Information Technology and Sustainability: Essays on the Relationship between Information Technology and Sustainable Development, L.M. Hilty, Norderstedt, 2008, ISBN 9783837019704.