



Course syllabus

Faculty of Technology

Department of Informatics

1IK418 Design och konceptvisualisering, 7,5 högskolepoäng

Design- and Concept Visualization, 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 2011-08-20

Revised 2019-09-11 by Faculty of Technology. Revision of assessment methods, examination forms, literature list, standard texts have been added and objectives have been adjusted.

The course syllabus is valid from spring semester 2020

Prerequisites

10 credits in Informatics or equivalent.

Objectives

The student is expected to acquire basic knowledge of how to work with visualization of concept and design details of interfaces and products within information technology, from a user centered perspective. The aim is finding the right level, both in language and visual presentation, in order to achieve proper feedback, depending on how far a project is preceded and what type of recipient one might have. The course also has a main focus on in depth knowledge within usability prototyping.

After the course, the student should be able to:

- understand how to communicate various types of designs and concepts
- create prototypes for a specific target group with a user centered perspective
- understand what kind of feedback that is needed depending on where in the design process you are
- develop and motivate the different types of visualizations in 2D and 3D, depending on the intended receiver
- show good understanding of concepts within visualization and prototyping and apply these to real situations

Content

The course covers development of concepts and design from a user centered perspective. This perspective is applied practically through lectures and exercises in prototyping.

Further areas that are covered are how man gains, stores and process visual information in physical and digital environments as well as how to apply this knowledge with developing digital user interfaces. Graphical visualization and accessibility are core concepts.

Lastly, the aforementioned areas are examined in a home exam where theoretical knowledge is displayed in conjunction with practical, concrete design solutions.

Module 1 Graphical visualization 2.5 credits

This part covers lectures and practical exercises in visualization of digital concepts and artifacts.

Module 2 Prototyping 2.5 credits

This part covers lectures and practical exercises in prototyping of digital concepts and artifacts.

Module 3 Home exam 2.5 credits

This part covers a home exam where definitions and understanding of core concepts are displayed and applied through digital graphical designs.

Type of Instruction

The course set-up uses the Internet as a distribution forum and can be taken either on campus or as a distance learning course.

On campus teaching consists of lectures, practical exercises and a project assignment. The distance learning course consists of online studying material, coaching via skype and/or video conferencing at fixed times.

Examination

The course is assessed with the grades U, 3, 4 or 5.

Assessment of student performance is made through written exam and mandatory practical assignments.

- Graphical visualization, 2.5 hp (U/G)
- Prototyping, 2.5 hp (U/G)
- Home exam, 2.5 hp (U/G/VG)

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.

Required Reading and Additional Study Material

Required Reading

Required reading

- Coleman, Ben och Goodwin Dan. Designing UX: Prototyping (latest edition)

Reference literature

- Ware, Colin (2004) Information Visualization: Perception for Design (latest edition)

Web-based material provided on the course website.