



Syllabus for Human-Computer Interaction

Människa-datorinteraktion

5 credits

Course code: IMD016

Education cycle: First cycle

Main field(s) of study and in-depth level: Computer Science G1N, Technology G1N, Sociotechnical Systems G1N

Grading system: Fail (U), Pass (3), Pass with credit (4), Pass with distinction (5)

Established: 2008-03-18

Established by:

Revised: 2018-08-30

Revised by: The Faculty Board of Science and Technology

Applies from: week 30, 2019

Entry requirements: General entry requirements

Responsible department: Department of Information Technology

LEARNING OUTCOMES

To give the student:

- basic knowledge on theories of psychology and on how the human being interacts with (computer) systems.
- give insight on how knowledge of the human capabilities can influence the way in which we construct technical systems.
- methods and techniques for design and construction of user interfaces.

CONTENT

The course focuses on a few theoretical blocks and a few practical assignments. The course emphasises to complement knowledge on practical systems development with knowledge on how one can and should design and construct good user interfaces.

- Psychology and human computer interaction

A walkthrough of theories within cognitive and perceptual psychology, human decision making and actions in computer supported situations. Description, analysis, design and construction of interaction between humans and computerised technical systems.

- User interface design as a part of practical systems development

Analysis of different (functioning and non-functional) development processes, development in large projects, iterative systems development, user centred development. User interface design as a part of the systems development process.

- Design and construction

Methods, techniques and heuristics for design of the user interface. Standards, style guides and guidelines. Methods for evaluation of usability.

Methods and techniques for user interface construction.

- Assignments

Assignments meaning design and construction of user interfaces.

ASSESSMENT

Lecture-based course instances are examined by projects (3 credits) and assignments (2 credits)

Web-based course instance are examined by home exams (3 credits) and assignments (2 credits)

If there are special reasons for doing so, an examiner may make an exception from the method of assessment indicated and allow a student to be assessed by another method. An example of special reasons might be a certificate regarding special pedagogical support from the disability coordinator of the university.

READING LIST

Applies from: week 30, 2019

Main course book

Choose one of the below editions

Benyon, David; Turner, Phil; Turner, Susan

Designing interactive systems : people, activities, contexts, technologies

Harlow: Addison-Wesley, 2005

Benyon, David

Designing interactive systems : a comprehensive guide to HCI, UX and interaction design

3., [rev.] ed.: Harlow: Pearson Education, 2014

Benyon, David.

Designing interactive systems : a comprehensive guide to HCI and interaction design

2nd ed.: Harlow, England ; a N.Y.: Addison Wesley, 2010

Additional articles are given in Studentportalen