UNIVERSITY OF BORÅS

Interaction Design
Interaktionsdesign
7.5 credits

Ladok Code: NID01C
Version: 2.0
Established by: Board of the department 2010-02-18
Valid from: Spring 2010

Education Cycle: First cycle
Main Field of Study (Progressive Specialisation): Informatics (G2F)
Disciplinary Domain: Natural sciences
Prerequisites: Passed courses of at least 7.5 ECTS in Informatics. Verified knowledge of English corresponding to the course English B in the Swedish Upper Secondary School.
Subject Area: Informatics/Computer and Systems Sciences
Grading Scale: Fail (U), Pass (G) or Pass with Distinction (VG)

Content

- Human - Computer Interaction
- Usability and actability
- Use Quality
- Design of social action and community spaces
- Design Theory
- Different perspectives on computer systems during the design process
- User-Centered systems development methodologies
- Prototypes
- Scenarios, personas and storyboards
- Evaluation Methods
- Selection of users
- Design-oriented development methodology
- Design Tools
- Creativity in the design process

The course begins with some basic lectures. Then is presented a few different design tasks that are solved in group work. Design tasks are presented and discussed at seminars. In parallel with the design work, the students writes individual design diaries in which they reflect on the design process in relation to theory.

Learning Outcomes

The overall goal is that students should acquire the ability to discuss and argue for different ways to develop design work to support user-centered system. Students will also be able to apply different evaluation methods of interaction between humans and artifacts.

Knowledge and Understanding
After completion of the course students should be able to

- Discuss the essential characteristics of human - computer interaction
- Discuss interaction designer's involvement in designing for both individual human social action spaces and in society at large
- Account for basic design theory
- Discuss problems the implications of different design perspectives on the digital artifact

- Account for the concepts of usability, actability and service quality and explain how these concepts affect the design work
- Account for the different types of prototypes and determine what types can be used as a basis for evaluating the different phases of design work
- Describe the various principles, techniques, methods and tools for user centered system design
- Account for principled design, functional design and detailed design
- Account for the implementation and the advantages and disadvantages associated with the evaluation methods, user heuristic evaluation, expert heuristic evaluation, field testing, use tests, lab tests and interaction tests
- Discuss appropriate selection of users to a design project
- Applying design-oriented development methodology

Skills and Abilities
After completion of the course students should be able to
- Analyze a situation to determine appropriate system design according to user, task and artifact
- Selecting adequate users as participants in a design project
- Demonstrate practical design skills and implement principled design, functional design and detailed design
- Create scenarios, personas and storyboards that meet the requirements and needs of users in a specific situation

Judgement and Approach
After completing this course the student is expected to demonstrate an understanding of the problems that a user can experience when the interaction with the computer system does not work on reasonable usability and actability principles.

Forms of Teaching

Tuition consists of lectures, lab work, supervision and seminars.
Tuition is conducted in English.

Forms of Examination

Examination of the course consists of mandatory design tasks that are solved in groups, documented in written reports and presented at seminars with compulsory attendance. The individual skills assessment is done by a mandatory reflective design diary on an ongoing basis during the process.

The results on the design diary are the basis for grading on the full course. That is, to obtain course grade Pass it is required to have the grade Pass on both the design work and on the diary. To obtain Pass with distinction on full course it is also required to have the grade Pass with distinction design diary.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

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Literature and Other Teaching Materials

Cooper, A & Reimann, R *About Face 2.0.* Wiley

Löwgren, J. & Stolterman, E. (2005). *Thoughtful interaction design*. MIT press
alternativt: Löwgren, J. & Stolterman, E. (1998 eller 2004). *Design av informationsteknik*. Studentlitteratur

Mullet, K. & Sano, D. (1994). *Designing visual interfaces* (1994). Prentice-Hall

Föreläsningsanteckningar och kompendiematerial tillkommer

Student Influence and Evaluation

It is important that the students are given their say on the course. Course evaluations are therefore carried out through oral group interviews during the course and an anonymous questionnaire after the course. The student's opinions are then made part of the course evaluation compiled by the teacher in charge of the course. The evaluation compilation also contains the teacher's opinions and the examination results, is made public according to School policy and will be the basis for future course planning.

Miscellaneous

The course is given in the Interaction and Communication Designer Program, Master programs in Informatics, as well as for international students and as a separate course.