

## Interface Development Gränssnittsutveckling

7.5 credits

**Ladok Code:** C3KGU1

**Version:** 4.2

**Established by:** Committee for Education in Librarianship, Information, and IT 2021-10-26

**Valid from:** Autumn 2022

**Education Cycle:** First cycle

**Main Field of Study (Progressive Specialisation):** Information Architecture (G1F)

**Disciplinary Domain:** Natural sciences 50%, Social sciences 50%

**Prerequisites:** General entry requirements for university studies.

In addition, developed basic skills in using JavaScript in tandem with HTML and CSS for web publication.

**Subject Area:** Informatics/Computer and Systems Sciences

**Grading Scale:** Seven-degree grading scale (A-F)

### Content

This course covers design and development of user interfaces, which is a central aspect of front-end development. The theoretical parts of the course are put into practice through implementation in a web application framework. The course also covers interface development and interaction design.

### Learning Outcomes

After passing the course the student should be able to, concerning:

#### *Knowledge and understanding*

- 1.1 discuss interface design through established theories concerning user interface and interaction
- 1.2 discuss and motivate interface design in the context of principles for interface design and interaction design

#### *Competence and skills*

- 2.1 create an interactive interface prototype, that is suited for evaluation and user testing
- 2.2 create a design system based on an interactive interface prototype
- 2.3 implement basic elements of an interactive user interface in a client based web application framework

#### *Judgement and approach*

- 3.1 evaluate an interface design with the help of established methods

### Forms of Teaching

Course instruction is in the form of lectures, practical reviews, and exercises.

The language of instruction is English when it is required, for examples when there are international students registered to the course. Otherwise, the teaching is done in Swedish. Parts of the teaching might occur in English.

The languages of instruction are English and Swedish.

### Forms of Examination

The course is being examined through the following:

Assignment: Prototype and written report (in group)

Learning outcomes: 1.1, 1.2, 2.1, 2.2, 3.1

Credits: 4.5

Grading scale: Seven-degree grading scale (A-F)

Assignment: Interface application (in group)

Learning outcomes: 2.3, 3.1

Credits: 3.0

Grading scale: Seven-degree grading scale (A-F)

For a passing grade on the course, a grade of at the minimum E is required for all assignments. A higher grade is determined as follows: the grade of each assignment is converted to a numerical value, E = 1, D = 2, C = 3, B = 4, A = 5, whereby one, with respect to the distribution of points, weighted average value is calculated which is then converted back to the nearest level on the seven-point scale and constitutes the grade of full course.

The examiner can decide that a group assignment can be replaced with individual assignments if the student does not reach passing grade or have not been a part of the group project during the course.

When the course plan is changed, students who wish to complete assignments from a course session will be examined based on the course's new content and assignments. When the course has ceased, students who wish to complete assignments can follow all or parts of another equivalent course.

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

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

### **Literature and Other Teaching Materials**

The course literature is in English.

Sharp, H., Rogers, Y. & Preece, J. (2019). Interaction design: beyond human-computer interaction (5th ed.) Chichester: Wiley (parts approx. 100 pages.) [Available online]

Tidwell, J., Brewer, C. & Valencia, A. (2020). Designing interfaces: patterns for effective interaction design. (Third edition). Sebastopol, CA: O'Reilly. [Available online]

Additional web based and student found material approximately 100 pages.

### **Student Influence and Evaluation**

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

### **Miscellaneous**

The course is part of the degree programme Web Content Manager and Designer, 180 credits, and Web Content Manager and Designer, distance education, 180 hp, as well as being offered as a freestanding course.