

School of Economics and Management

# INFC25, Informatics: Human - Computer Interaction, Analysis, 7.5 credits Informatik: Människa-dator-interaktion, analys, 7,5 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2013-09-20 and was last revised on 2016-06-03. The revised syllabus applies from 2016-08-29, autumn semester 2016.

# **General Information**

The course can be taken as part of the BSc Programme in Information Systems Design, or as a separate course.

Language of instruction: English

Main field of studies	Depth of study relative to the degree requirements
Informatics	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements
Information Systems	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

# Learning outcomes

The overall aim of the course is for the students to gain a solid general knowledge of how to evaluate and analyse different types of computer application. The course gives starting points for the design of computer applications and knowledge of values and judgements.

Usability has become an increasingly important evaluation criterion for interactive computer systems. Good usability and a positive experience of an interactive computer system now provide a crucial competitive advantage.

Human-computer interaction is the study of the design, evaluation and implementation of interactive computer systems. The purpose of the course is to give the participants a good insight into different methods for and approaches to design, methods and approaches in the evaluation of interfaces, tools, prototype methods and architectures for the implementation of interactive systems.

#### Knowledge and understanding

For a pass on the course, the student shall demonstrate knowledge of and understanding of

- different evaluation methods and conceptualisation methods
- different methods in relation to an artefact that is to be redesigned
- the term 'user'
- ergonomic and psychological demands and requirements
- different media can be integrated into different types of computer application
- different interaction models can be used in different types of computer application.

#### Competence and skills

For a pass on the course, students shall demonstrate competence and skills individually or in groups to

- contribute to a system's usability based on analyses of users' demands and needs
- explain system limitations within interaction design
- analyse and evaluate different types of computer application with the help of established methods.

#### Judgement and approach

For a pass on the course, students shall demonstrate the ability to

- explain and evaluate the role of the designer in interaction-related processes
- evaluate the pros and cons of methods of interaction design and determine how the methods can provide a basis for the development of real-world solutions
- critically evaluate methods of analysis and design of interactive systems from a user-centred perspective.

### Course content

The course covers central ideas within the area of human-computer interaction, as well as theory and methods. The course also covers questions of methods that concern the planning and carrying out of studies in the context of construction/design of a program/system and the evaluation of such.

During the course, the following topics are addressed:

- user-centred design
- perspectives on human-computer interfaces
- design of information systems and interaction
- interaction models for different types of computer application
- standards and guidelines for dialogue construction
- reflection on system development trends
- methods and techniques for analysis and evaluation.

## Course design

The teaching consists of lectures, workshops, supervision and laboratory sessions. The course includes compulsory components, which are stated in the schedule.

## Assessment

The assessment is based on a written exam, evaluation exercise and design exercise.

Re-examinations are offered in close conjunction with the first examination.

*Cheating* such as plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 8 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the University.

Subcourses that are part of this course can be found in an appendix at the end of this document.

# Grades

Marking scale: Fail, E, D, C, B, A.

Grade (Definition) Points or percentage out of maximum points. Characteristic.

**A** (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**B** (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**C** (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

**D** (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**E** (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

**F** (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

### Grading rules and definitions

Grades are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or F (Fail) will be applied.

#### Course grades

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above. For exams/assignments which are graded and scored, the grades A to F will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to F will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or F (Fail) will not be included in the calculation of the course grade.

## Entry requirements

To be admitted to the course, the student must have passed the general requirements and the courses: "Informatics: Introduction to Information Systems, 1-30 cr" and "Informatics: Level 2, 31-60 cr" or the equivalent. English 6/English Course B.

An exception for the general entry requirement in Swedish will be granted when the course is given in English.

## Further information

The course may be included in the BSc programme in Design of Information Systems, according to a decision by the programme director on 1 June 2011.

INFC25 may not be included in a degree together with INFC14 or the equivalent.

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose his/her seat on the course.

For transitional provisions with regard to previous courses, please contact the study advisor for an individual assessment.

If the course is discontinued, there may be limited opportunities for re-examination. Please contact the study advisor for information.

#### Amendments

2012-05-03: General editorial changes.
2112-06-08: Change of literature.
2015-12-04: Added that the course includes compulsory components and that attendance on the introduction meeting is compulsory.
2016-06-03: New grading rules from Autumn term 2016.

# Subcourses in INFC25, Informatics: Human - Computer Interaction, Analysis

Applies from H11

- 1101 Written Exam, 3,0 hp Grading scale: Fail, E, D, C, B, A1102 Evaluation Exercise, 1,5 hp
- Grading scale: Fail, Pass
- 1103 Design Exercise, 3,0 hp Grading scale: Fail, E, D, C, B, A