

### School of Economics and Management

## INFC55, Informatics: Web Development, 7.5 credits

Informatik: Webbutveckling, 7,5 högskolepoäng First Cycle / Grundnivå

## Details of approval

The syllabus is an old version, approved by The Board of the Department of Informatics on 2014-03-10 and was last revised on 2016-06-03. The revised syllabus applied from 2016-08-29. , autumn semester 2016.

### General Information

The course may be included in the Bachelor of Science programme in Information Systems or taken as a freestanding course.

Language of instruction: Swedish and 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 aim of the course is that students who have passed the course are to have an understanding of the development of online information systems. Furthermore, students shall also demonstrate the ability to plan and develop both client-based and server-based solutions connected to underlying computer systems.

### Knowledge and understanding

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

the syntax for markup languages

- the syntax for script languages
- basic style templates
- server-based programming languages
- the basics of web publishing

## Competence and skills

For a pass on the course, students shall demonstrate competence and skills to

- use modern software as support for web development
- design and develop web systems
- test and evaluate completed web systems
- integrate different underlying computer systems with web systems

## Judgement and approach

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

- critically analyse and assess different architectural choices
- explain and justify design decisions

#### Course content

The course starts with the development of web pages using modern markup languages. In order to simplify development and maintenance, the students are introduced to style templates. The course includes script programming and the use of script libraries to enable the creation of dynamic web systems. As a complement, database systems and other web systems are used as data sources.

The course deals with

- the basics of markup languages
- style templates
- script programming
- script libraries
- client-based development
- server programming
- database use

# Course design

The teaching consists of lectures, seminars, laboratory sessions and supervision.

The course includes compulsory components. These are indicated in the timetable.

#### Assessment

The assessment is based on an exam and assignments.

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 of maximum points. Description **A** (Excellent) 85-100. An excellent result in terms of theoretical depth, practical relevance, analytical ability and independence.

**B** (Very good) 75-84. A very good result in terms of theoretical depth, practical relevance, analytical ability and independence.

**C** (Good) 65-74. A good result in terms of theoretical depth, practical relevance, analytical ability and independence.

**D** (Satisfactory) 55-64. A satisfactory result in terms of theoretical depth, practical relevance, analytical ability and independence.

**E** (Acceptable) 50-54. A result that satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independence.

**U** (Inadequate/Fail) 0-49. An inadequate result in terms of theoretical depth, practical relevance, analytical ability and independence.

To pass a course, the student must obtain the grade of E or higher.

#### **Grading rules**

Exam assessment

The grades A to E and U are applied to exams which are awarded *different passing grades*.

The grades U and G (Fail and Pass) are applied to exams which are *not awarded* different passing grades.

#### Course assessment

In order to determine the grade for the whole course, the exams with different passing grades are weighted according to the following formula:

The number of credits for the exam is multiplied with the number of points for the exam. The total value is then divided by the total number of credits for the exams included. The resulting average is then rounded off to the nearest whole number and the number indicates the relevant course grade in the table above.

Exams with different passing grades which are assigned points are graded according to the scale of A to U and the point intervals above. The exam points are used directly in the calculation.

Exams with different passing grades which are not assigned points are graded according to the scale of A to U as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams which are not awarded different passing grades are not included in the calculation of the course grade.

## Entry requirements

To be admitted to the course, students must satisfy the general admission requirements for higher education in Sweden and have passed the courses Informatics: Introduction to Information Systems, 30 credits, and Informatics: Level 2, 30 credits, or the equivalent. English 6/English B.

When the course is taught in English, students are exempted from the general admission requirements of Swedish B from Swedish upper secondary school.

### Further information

The course may be included in the Bachelor of Science programme in Information Systems, in accordance with a decision by the programme director on 7 March 2014.

Attendance is compulsory at the introductory meeting when a roll call takes place. Unjustified absence entails that the admitted student loses his or her place on the course.

Please contact the study advisor for an individual assessment with regard to transitional provisions.

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

### **Amendments**

- 5 June 2015: Amended reading list from the autumn semester 2015.
- 4 December 2015: Added standard phrase on attendance at the roll call. Editorial changes.
- 3 June 2016: New grading rule from the autumn semester 2016.

## Subcourses in INFC55, Informatics: Web Development

## Applies from H14

1401 Written Exam, 3,0 hp Grading scale: Fail, E, D, C, B, A Individual exam.

1402 Assignments, 4,5 hp Grading scale: Fail, Pass Individual and in groups.