INFL01, Web and Systems Development, 30 credits
Webb- och systemutveckling, 30 högskolepoäng
First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2017-02-03 to be valid from 2017-02-06, spring semester 2017.

General Information

The course is offered as a commissioned education.

Commissioned education in informatics.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Informatics	GXX, First cycle, in-depth level of the course cannot be classified

Learning outcomes

Upon finishing the course, the student will have knowledge of relevance for practical work as web and systems developer. Special focus is given in the following areas: software development, web development (client and server side), software architecture, database design, interaction design and agile systems development.

Knowledge and understanding
In order to pass the course, the student must be able to demonstrate knowledge of and understanding of

- object-oriented programming
- client and server based web development
- principles and methods of architectural design of IS systems
- database design: analysis, design and implementation
- interaction design: analysis and design

- agile systems development and
- relevant methods and techniques for analysis, design, implementation and testing while developing an information system.

Competence and skills

In order to pass the course, the students must be able to demonstrate competence and skills individually or in groups to

- based on specific quality and design criteria apply an object-oriented programming approach
- apply the course relevant theories and be able to plan, implement, document and report the design of an IS artifact. The development will be done in accordance with modern and tested technologies and practices.

Judgement and approach

In order to pass the course, the students must be able to demonstrate the ability to

- critically analyse and evaluate various architectural choices in web development
- evaluate different architectures and technologies for the realisation of a system's software architecture
- assess a database system based on quality and design criteria
- evaluate different methods and techniques in interaction design and
- critically evaluate and adapt the development methods and relevant technologies for the situation.

Course content

The object of the course is for the participants to develop a practical approach to basic web and systems development. The object is achieved through teaching that to a large extent focuses on practical sessions where participants get the chance to apply leading quality and design criteria.

Sub courses
Software development,
Web development,
Software architecture,
Database design,
Interaction design,
Agile systems development.

Course design

The course deals with web and systems development from a practical perspective.

The tuition consists of lectures, seminars, workshops, laboratory sessions and supervision.

The different components of the course is divided into four teaching modules:

Module 1: Basic software development (includes the sub courses Software development and Database design)

Module 2: Software architecture (includes the sub course Software architecture)

Module 3: Basic web development (includes the sub courses Interaction design, Agile systems development and Web development)

Module 4: Practical project

Assessment

The assessment is based on continuous knowledge tests. These tests can be carried out in groups or individually. Each test is graded Pass (G) or Fail (U). To pass the course, students must have passed all the knowledge tests.

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

Academic misconduct such as cheating, 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 (and all the faculties of 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, Pass.

Grade (Definition) Characteristic.

G (Pass) The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

U (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 G (Pass).

Entry requirements

Foreign graduates with postsecondary IS/IT education (or the equivalent). Programming knowledge is a merit.

Further information

INFL01 is a course intended for commissioned education.

It is compulsory to attend all sessions of the course. Absence without notification means that the admitted student will lose his/her seat on the course.

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

Subcourses in INFL01, Web and Systems Development

Applies from V17

1701   Web and Systems Development, assignments, 30,0 hp
         Grading scale: Fail, Pass