Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1DV403 Webbteknik I, 7,5 högskolepoäng
Web Technology I, 7.5 credits

Main field of study
Computer Science

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by the Board of the School of Computer Science, Physics and Mathematics 2009-06-23

Revised 2010-08-20. Revision made for English translation of the syllabus, prerequisites and course evaluation.

The course syllabus is valid from spring semester 2011

Prerequisites
Introduction to Web Technologies (1Ik415), 7.5 credits.
Starting Out with C# (1DV402), 7.5 credits.

Expected learning outcomes

After the course the student should be able to:

- work with the JavaScript programming language
- create dynamic Web pages based on JavaScript in the Web client.
- validate data against regular expressions before data is sent from the Web client.
- understanding security threats with JavaScript
- creating accessible client-based Web applications
- create simple AJAX-based Web Applications
- understand object-oriented model of JavaScript.

Content

The course deals with the programming scripts role on the Web and provides a review of the JavaScript programming language.
The course focuses on web application development in JavaScript and thus deals with how JavaScript is used to affect the Web client.

Specific aspects covered are:

- to control the presentation with script
- management of a Web page's elements (DOM)
- data validation with regular expressions.

Furthermore, a deeper understanding of JavaScript as an object-oriented language is given.

Type of Instruction

The course can be read on site or as a distance course. The course uses a Web-based teaching platform where all information and materials relating to the course is published. On-site instruction consists of lectures and practical work with applications.

The distance course is completely built around the material that is provided through the Internet and on activities such as assignments, discussions, examinations and interaction via the Internet why no physical meetings are planned.
Distance education requires access to Internet-connected computer, preferably equipped with a headset and webcam.

The theory provides the fundamental principles, which are used as the basis for the creation of self knowledge, which is then used in practical applications. The practical application consists of the programming tasks in the form of lab reports, and more individual work.

Examination

The course is assessed with the grades U,3,4 or 5.
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.
Grades are given for completion of the course and based on submitted and approved assignments
and implemented project.
Grades on assignments are U/G and the project U/3/4/5.
A second examination is offered within six weeks under ordinary semester. The number of examinations is limited to five times.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material

Required Reading
David Flanagan. *JavaScript The Definitive Guide*, O´Reilly Media, Inc., latest edition.

Additional Study Material
Additional materials are provided by the department.

The Required Reading and Additional Study Material are subject to changes.