



Course syllabus

Faculty of Technology
Department of Computer Science

1DV450 Webbramverk, 7,5 högskolepoäng
Web Application Framework, 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 2011-08-17

Revised 2015-11-03 by Faculty of Technology.

The course syllabus is valid from spring semester 2016

Prerequisites

1IK415 Introduction to Web Technologies, 7.5 credits, 1DV403 Web Technology I 7.5 credits, 1DV407 Object Oriented Analysis and Design using UML, 7.5 credits, 1DV408 Web Development with PHP, 7.5 credits or equivalent.

Objectives

After the course the student should be able to explain the concept of web framework and have an understanding of the contexts in which we as developers can use these to facilitate development. Students are expected to have an understanding of web APIs and their use in a web application. Students are also expected to have experience of practical work on modern web frameworks and to develop effective web applications and web APIs using these.

Content

The course deals with developing web applications using existing web frameworks.

Installation of the web frameworks used in the course

Read, create, update and delete data (CRUD) via web framework

Validation and form handling of data via web framework

Presentation of data via web framework

Developing Web APIs using the principles of REST using web framework

Type of Instruction

The course can be read on campus or as a distance learning course. The course uses a Web-based learning platform where all information and materials relating to the course is published.

Taught as a distance learning course are built completely around the material that is provided through the Internet. Because all activities such as assignments, discussions, presentations and interaction is handled via the internet no physical meetings are planned. Distance learning requires access to Internet-connected computer equipped with headset and webcam.

Instruction consists of theory, seminars and practical applications. 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 applications consist of programming assignments and a more individual work.

Examination

The course is assessed with the grades U,3,4 or 5.

For grade 3, the expected learning outcome has to be achieved. Presentation of practical work after due date affects the grading.

Grades are given after the completion of the course and based on the results of the reported results on real world scenarios.

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.

Reexamination will be offered within six weeks under the regular semester periods. The number of examinations is limited to two 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

Recommended literature

Sam Ruby, Dave Thomas, David Heinemeier Hansson, *Agile Web Development with Rails*, 2011, 451 pages.

Django Documentation on-line, <https://docs.djangoproject.com/en/1.3/>