## **Linnæus University**

### Course syllabus

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

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 by the Board of the School of Computer Science, Physics and Mathematics 2011-08-17

The course syllabus is valid from spring semester 2012

#### **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 also expected to have experience of practical work on modern web frameworks and to develop effective web applications 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

#### 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/