



## Course syllabus

Faculty of Technology

Department of Informatics

1IK163 Utveckling av webbaserade applikationer, 7,5 högskolepoäng

1IK163 Development of Web Based Applications, 7.5 credits

### **Main field of study**

Informatics

### **Subject Group**

Informatics/Computer and Systems Sciences

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved 2016-09-26

Revised 2018-09-04 by Faculty of Technology. Literature list, Content and Objectives are revised.

The course syllabus is valid from spring semester 2019

### **Prerequisites**

Introduction to Object Oriented Programming, 7.5 credits (1IK143) and Database Design, 15 credits (1IK013) or similar.

## Objectives

After completing the course the student should be able to:

- explain the difference between client and server-based technologies
- create client side software with Web technologies
- set up a local application server and create software on the server side or use server side services for the same functionality
- create a Web application that uses an external database

## Content

The course aims to introduce the student in the development of web applications, which means understanding and use of both client and server technologies. Students should understand what is being done on which side (client or server), and why. For the server side either a local application server should be set up or alternatively the students

should use existing server side services. Finally, a project is implemented where an external database is used to store data needed in the web application.

### **Type of Instruction**

Instruction consists of lectures, seminars and exercises.

Exercises are solved individually. Project work will be done in groups.

### **Examination**

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Assessment of performance is made through the presentation of compulsory exercises both in written reports and through presentations. Laboratory work can be rated Fail or Pass. The Project can be graded Fail, Pass or Pass with Distinction. The course ends with a mandatory project and a written exam. Pass with Distinction is given when at least one of the project or exam has the higher grade and the second part at least Pass.

### **Course Evaluation**

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously.

The compiled report will be filed at the Faculty.

### **Required Reading and Additional Study Material**

#### **Mandatory literature**

Castro, Elisabeth; Hyslop, Bruce; HTML5 & CSS3 Visual QuickStart Guide, latest edition, Peachpit Press (500 pages of 500 pages)

#### **Recommended Reading**

Liang, Daniel Y, Introduction to Java Programming (Comprehensive Version), latest edition, Pearson Education Limited (50 pages of 1300 pages)