Linnæus University

Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

1DV409 ASP.NET MVC, 7,5 högskolepoäng
1DV409 ASP.NET MVC, 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 2009-11-19
Revised 2011-05-13 by School of Computer Science, Physics and Mathematics.
Revision made for English translation of the syllabus, prerequisites, expected learning outcomes and course evaluation.
The course syllabus is valid from autumn semester 2011

Prerequisites
1DV402 Starting Out with C#, 7.5 credits, 1IK415 Introduction to Web Technologies, 7.5 credits, 1DV403 Web Technology I, 7.5 credits, 1DV405 Database Engineering, 7.5 credits and 1DV407 Object Oriented Analysis and Design using UML, 7.5 credits or equivalent.

Objectives

This course provides knowledge and skills to create web applications with ASP.NET MVC in which persistent data in databases managed by different frameworks.

After completing the course, the student is expected to:

- Developing, deploying and configuring well-designed .NET based web applications using ASP.NET MVC and Ajax.
- Be able to manage application data using LINQ, LINQ to SQL and Microsoft Entity Framework.

Content

The theory provides the fundamental principles, which are used as the basis for the creation of self-knowledge, which is then used during the practical application. The practical application consists of an individual's work in the form of a project.

The course covers:

- Construction of the N-layer architectures.
- Improved views of HTML helper.
- Securing and Deploying the Application.
- Manage URLs.
- Create database tables and stored procedures and handling of the object's rights in a database.
- CRUD functionality using LINQ to SQL and Microsoft Entity Framework.
- TDD, Test Driven Development.

Type of Instruction

The course is offered at campus and as a distance learning course. The course uses a Web-based teaching platform where all information and materials relating to the course is published.

The course consists of lectures and a practical part, including several programming exercises and assignments. The theory provides the fundamental principles, which are used as the basis for the creation of self-knowledge, which is then used in programming assignments and a final individual project.

Teaching at a distance is built completely around the material that is provided through the Internet. Activities such as assignments, discussions, statements and interaction are conducted via the Internet why attendance or other physical presence is neither planned nor required. Students are expected to have access to an Internet-connected computer, which preferably is equipped with a headset and webcam.

Examination

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

For grade 3, the expected learning outcome has to be achieved.

Grades are given after the completion of the course and is based on the presented results of theoretical and practical assignment. The assignments consist of programming tasks, whose solution quality is of great importance for the final assessment.

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 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

Walther, Stephen *ASP.NET MVC Framework*, Sams, latest edition.

Additional Study Material
Web-based materials are provided on the course website.