



## Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

2IL007 WWW och databaser, 7,5 högskolepoäng

2IL007 WWW and Databases, 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 2009-09-08

Revised 2010-08-20 by School of Computer Science, Physics and Mathematics.

Revision made for English translation of the syllabus, prerequisites, literature list and course evaluation.

The course syllabus is valid from spring semester 2011

### **Prerequisites**

At least 40 credits in informatics/information logistics including Internet and Web Services (1IL067), 7.5 credits and Database Management and logistics applications (1IL107), 7.5 credits or equivalent.

## Objectives

After completing the course students should:

- be able to show knowledge about the need for infrastructural changes in the organization and its global availability of databases
- have the ability to practically implement and apply the various techniques of development and design of global information systems
- understand and apply knowledge of security related to information in databases for public access in the global network.

## Content

The course covers the following topics:

- theories and methods for database applications and World Wide Web
- principles of reliable and secure database servers
- databases and its relationships in B2C and B2B applications
- design of database structures for processing in the global network
- support of the database interactions in WWW environment
- application design with connections to various database architectures
- database design and structure processing works in Internet/Intranet with ODBC/JDBC architecture
- implementation of Web-based database solutions in projects with some of the techniques CGI, ASP, PHP or Java.

## Type of Instruction

Teaching methods consists of lectures and tutoring of the mandatory assignments.

## Examination

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

Assessment of student performance is made through written test and/or oral examinations and/or presentation of mandatory assignments. The main form of examination is determined at the start of the course.

Students who do not pass the regular examination will be offered retrials close to the regular examination.

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.

## 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

Elliott, Geoff, *Website management*, Lexden Publishing, 2007. Pages 192.

Mitchell, Scott, *Sams Teach Yourself ASP.NET 3.5 in 24 Hours*, Macmillan Computer Pub, 2008. Pages 628.

DFM, Stencils, Linnæus University, Current year. Pages 150.

### Recommended supplementary reading

Connolly, T. & Begg, C., *Database Systems, 3rd Ed.*, Addison-Wesley, 2002.