Faculty of Economic Sciences, Communication and IT
Information Systems

Syllabus

Course Approval
The syllabus was approved by the Faculty Board of Economic Sciences, Communication and IT on 14 September 2011 , and is valid from the Spring semester of 2012 at Karlstad University.

Course Code: ISGB11
Systems Implementation Techniques, 5 ECTS Credits
(Systemimplementeringsteknik, 5 Swedish credit points)
Degree Level: Bachelor
Progressive Specialisation: G1F (First cycle, has less than 60 credits in first-cycle course/s as entry requirements)

Language of Instruction
Swedish

Prerequisites
Web and Multimedia programme enrolment. The courses ISGA02 Enterprise and IT, 7.5 ECTS cr., ISGA03 Acquisition of Information Systems, 7.4 ECTS cr., ISGA04 Introductory Programming, 7.5 ECTS.cr, and ISG06 Prototyping: Exploring and Communicating Design Concepts, 7.5 ECTS cr, or equivalent.

Major Field of Study
IKA (Information Systems)

Learning Outcomes

Upon completion of the course, students should be able to:
- discuss the problem of drawing the line between program development and implementation
- explain testing procedures
- discuss testing procedures in relation to system specifications
- conduct basic tests of implementation of web based systems
- give an account of the difference between traditionally programmed and web based applications, especially as regards so called stateless environments with connectionless data transfer.

Content and Form of Instruction

The course deals with the differences between traditional program development for desktop environments and program development for web environments with an emphasis on their distinguishing features and unique challenges.

The course comprises the following components:
- web readers as application environment
- prototyping procedures for the web with an emphasis on conceptual design strategies, content management system (CMS) and graphical user interface (GUI)
- testing procedures of web implementation with an emphasis on interface, security, strain and customer specifications

- differences between web environments and desktop environments in terms of programming.

The course is a direct continuation of other courses of the Web and Multimedia Program. Hand-in assignments developed during the programming courses will be used as examples in this course. The course also contains lectures and practical seminar assignments, supervised laboratory assignments demonstrating how to translate a Java-/C# application into a web application, as well as a study visit to a commercial test center.

Reading List

See separate document.

Examination

Assessment is based on hand-in assignments and a written exam.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.