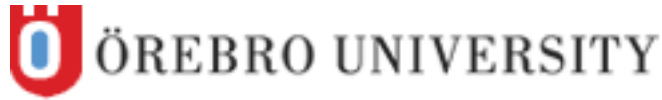

This course syllabus is discontinued or replaced by a new course syllabus.



Course Syllabus

School of Science and Technology

Computer Engineering, Java for Interfaces and Networks, Advanced Course, 7.5 Credits

Course Code:	DT3010	Subject Area:	Field of Technology
Main Field of Study:	Computer Technology	Credits:	7.5
Education Cycle:	First Cycle	Subject Group (SCB):	Computer Science
Established:	2007-03-14	Progression:	G1F
Valid from:	Autumn semester 2011	Last Approved:	2011-03-31
		Approved by:	Head of School

Aims and Objectives

General aims for first cycle education

First-cycle courses and study programmes shall develop:

- the ability of students to make independent and critical assessments
- the ability of students to identify, formulate and solve problems autonomously, and
- the preparedness of students to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

(Higher Education Act, Chapter 1, Section 8)

Course Objectives

The course objective is to give the student:

- the ability to program in Java
- a more in-depth knowledge of practical and theoretical object-oriented design
- knowledge about how to design a project where the user interfaces are important
- knowledge about how to design a project where network communication is important.

Main Content of the Course

The course has two parts:

Course Unit I: Theory, 4.5 credits

The following subjects are covered:

- differences from C++, environment variables, packages compared to libraries, global variables, character sets, data types, pointers, arrays, operators, exceptions
- object and classes in Java: creating classes, subclasses, overloaded methods, inheritance, abstract classes, interfaces
- garbage collection
- applets: creating the first applet, reading applet parameters, security restrictions on applets, handling events
- components: managing standard components in Java, graphical components, layout management
- Java I/O: files, safe input, printing

- network functionality, threaded applications
- JDBC: general, connecting to different databases, design of database applications
- user interfaces in Java.

Course Unit II: Project assignments, 3 credits

Two project assignments that apply and train the knowledge from course unit I.

Teaching Methods

missing.

Students who have been admitted to and registered on a course have the right to receive tuition and/or supervision for the duration of the time period specified for the particular course to which they were accepted (see, the university's admission regulations (in Swedish)). After that, the right to receive tuition and/or supervision expires.

Examination Methods

Theory, 4.5 Credits. (Code: 0100)

Written examination.

Project, 3 Credits. (Code: 0200)

Course unit II: Written and oral presentations of project assignments.

For further information, see the university's local examination regulations (in Swedish).

Grades

According to the Higher Education Ordinance, Chapter 6, Section 18, a grade is to be awarded on the completion of a course, unless otherwise prescribed by the university. The university may prescribe which grading system shall apply. The grade is to be determined by a teacher specifically appointed by the university (an examiner).

According to regulations on grading systems for first- and second-cycle education (vice-chancellor's decision 2010-10-19, reg. no. CF 12-540/2010), one of the following grades is to be used: fail, pass, or pass with distinction. The vice-chancellor or a person appointed by the vice-chancellor may decide on exceptions from this provision for a specific course, if there are special reasons.

Grades used on course are 3, 4, 5 or Fail (U).

Theory

Grades used are 3, 4, 5 or Fail (U).

Project

Grades used are Fail (U) or Pass (G).

For further information, see the university's local examination regulations (in Swedish).

Specific entry requirements

missing.

For further information, see the university's admission regulations (in Swedish).

Transfer of Credits for Previous Studies

Students who have previously completed higher education or other activities are, in accordance with the Higher Education Ordinance, entitled to have these credited towards the current programme, providing that the previous studies or activities meet certain criteria.

For further information, see the university's local credit transfer regulations (in Swedish).

Other Provisions

missing.

Transitional Provisions

missing.

Reading List and Other Teaching Materials

Required Reading

Skansholm Jan (2003)

Java direkt med Swing

Studentlitteratur, ISBN/ISSN: 91-44-04254-X