



ID1006 Java Programming 7.5 credits

Javaprogrammering

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for ID1006 valid from Autumn 2008

Grading scale

A, B, C, D, E, FX, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

For single course students not attending a regular KTH programme:

- completed, documented upper secondary education incl documented proficiency in English for applicants without proficiency in Swedish, which is one of the general entrance requisites for undergraduate studies in Sweden.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Having completed the course the students will be able to:

- * construct (design, write, compile and test) a simple(1) but fully functional Java 5 program
- * use the Java 5 SDK API documentation during program construction
- * identify and correct errors (aka 'bugs') in a simple Java program written by someone else
- * give examples with explanations of differences between Java 5 and earlier versions of Java
- * account for and reflect over some well delimited and characteristic(2) property of Java.

(1) Here, a simple Java program has less than 150 lines of source-code, has a small number of classes and a well defined and delimited primary function.

(2) As delimitations and definitions we use established constructs like packages, sections and chapters in documentation and literature, or programming language definitions according to standard documents (e.g. "The Java Language Specification").

Course contents

The course is conducted as a self-study course, by reading the literature with its associated review questions and exercises. An introducing lecture presents the course, the learning outcomes, the literature, the examination and the communication facilities (First Class and email). The examination consists of assignments with a practical and technical flavour, and an essay.

Course literature

Learning Java, Patrick Niemeyer & Jonathan Knudsen

Upplaga: 3rd Förlag: O'Reilly År: 2005

ISBN: 0-596-00873-2

Övrig litteratur

Review questions and exercises (..)

The Java 5 SDK API documentation (..)

Additional material such as articles, websites or excerpts may be added when the course starts.

Examination

- PRO2 - Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Report, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- PRO4 - Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO3 - Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

The examination consists of four assignments to be executed by the student without any further reminder, and made available to the examiner in electronic form. Assignment texts, deadlines and other practical matters are announced when the course starts.

The texts for assignments 1-3 are given, while the subject for the essay is chosen by the student (within certain limits) and must be approved by the examiner.

The grades are A/B/C/D/E/Fx/F. If any assignment has the grade F or Fx, the course grade equals the assignment with the lower grade.

For the highest grade, A, all assignments must have the grade A. In other cases (all assignments have the grade E or more) the course grade is decided by the mean of the assignment grades, weighted in such a fashion that assignment 1-3 provides of one fifth each, and assignment 4 (the essay) provides two fifths. The course grade is determined by the mean, rounded towards the lower grade.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.