DD1314 Programming for Interactive Media 8.0 credits

Programmering för interaktiva medier

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

Establishment

Course syllabus for DD1314 valid from Autumn 2014

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

For single course students: completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B, English corresponding to English A. Furthermore: 7,5 hp in mathematics and 6 hp in computer science or programming techniques.

Language of instruction

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

Intended learning outcomes

Overall objective: to solve problems independently and in groups by designing programs of up to five hundred lines in a modern programming language .

Objectives: After the course you should be able to

- follow the rules of the programming language syntax,
- apply and explain the rules of good programming style (such as user friendliness, comments, error handling, structuring, flexibility),
- detect and correct programming errors,
- modify a given program
- transfer data between files and programs,
- identify where control structures (conditionals and loops) are needed, and use these,
- split a large problem into manageable parts and construct functions for these,
- use built-in data structures and select data structures that are suitable for the current problem,
- use classes and construct new classes,
- review programs

to be able to

- use programming to solve problems,
- apply problem-solving methodology in other areas,
- discuss program development with experts,
- assess commercial programs

Course contents

Fundamental computer concepts.

Programming in a modern programming language (Python). Data structures and classes. Problem solving by splitting the problem into sub-problems. Program structuring. Static and dynamic web pages. Development of simple web applications. Several small programming exercises and one larger, individual programming exercise with emphasis on structuring and specification of the modules being used.

Course literature

Kurslitteratur meddelas senast 4 veckor före kursstart på kursens hemsida.

Examination

- LAB4 - Laboratory Work, 2.0 credits, grading scale: P, F
- LAB3 - Laboratory Work, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB2 - Laboratory Work, 1.5 credits, grading scale: P, F
- LAB1 - Laboratory Work, 1.5 credits, grading scale: P, 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.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: http://www.kth.se/csc/student/hederskodex/1.17237?l=en_UK.

Other requirements for final grade

Programming assignments (LAB1; 1,5 university credits).
Programming assignments (LAB2; 1,5 university credits).
Programming assignments (LAB3; 3 university credits).
Programming assignments (LAB4; 2 university credits).

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.