HI1027 Object Oriented Programming 8.0 credits

Objektorienterad programmering

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

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

Establishment

On 2019-10-15, the Head of School of CBH has decided to establish this official course syllabus to apply from autumn semester 2020 (registration number C-2019-1877).

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Language of instruction

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

Intended learning outcomes

Course contents

- Basic concepts in object-oriented programming: abstract data types, encapsulation, reuse.
- Principles of object-oriented programming: classes/objects, relations, inheritance, polymorphism.
- Object-oriented software development: analysis, design and implementation.
- Unified Modelling Language: use cases, class diagrams and sequence diagrams.
- Syntax and implementation in an object-oriented language
- Exception-handling.
- Streams.
- Concurrent programming.
- Graphical user interfaces and event driven programming.
- Introduction to Design Patterns

Specific prerequisites

HI1024 Computer Programming, Basic Course, or corresponding course

Examination

- TEN1 - Examination, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN2 - Exercises, 4.5 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.

Written exam, TEN1, 3.5 credits (ECTS) A-F. The exam contains both theoretical and practical portions.
Lab assignments, ÖVN1, 4.5 credits (ECTS) A-F.

The final grade is based on all parts of the examination.

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.