Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1IK023 Introduktion till programmering med hjälp av C#, 7,5 högskolepoäng

Introduction to programming with C#, 7.5 credits

Main field of study
Information Systems

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by the Board of the School of Computer Science, Physics and Mathematics 2009-12-15

Revised 2010-11-26. Revision made for content, literature list and course evaluation.

The course syllabus is valid from autumn semester 2011

Prerequisites
Object-oriented analysis and process description 7.5 hec (1IK003), or the equivalent.

Expected learning outcomes

Upon completion of the course, the students should be able to:

- present basic data structures
- understand and explain programming methods
- explain similarities and differences in a present-day programming environment
- apply basic knowledge of system design and construction using the C# programming language
- conduct and understand software development
- use and develop in environments such as .NET

Content

The course includes the following theoretical elements:

- basic programming methods
- data structures as a basis for computer systems
- algorithms
- programming paradigms

The course also includes the following practical elements:

- system design and construction in a .NET environment, using C#
- building simple applications with graphical user interfaces
- programming techniques

Type of Instruction

The course consists of lectures and supervision of the mandatory assignments. The assignments can be solved individually or in groups.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Assessment of the students' performance is made through written and/or oral exams and/or presentation of the mandatory assignments. The type of assessment used in the course will be decided on at the beginning of the course.

Students who do not pass the regular examination are given the opportunity to do a re-examination shortly after the regular examination.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Other

Upon request, a Swedish University degree will be awarded upon successful completion of the full demand for that degree.

Students who receive a passing grade in the course may download a course certificate through the Student Portal. Otherwise they may request a course certificate from the school secretary.

Required Reading and Additional Study Material

Required reading

Watson, K, Nagel, C., Pedersen, J. H., Reid, J.D., Skinner, M. & White, E., *Beginning Microsoft Visual C#* 2008,
Wrox, 2008. 1346 (1346) pages.

DFM, *Compendium*, Linneus University. 150 pages.

DFM, *Distributed material*, Linneus University. 100 pages.