Linnæus University

Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

1DV415 Grundläggande operativsystem, 7,5 högskolepoäng
1DV415 Fundamental Operating Systems, 7.5 credits

Main field of study
Computer Science

Subject Group
Informatics/Computer and Systems Sciences

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved 2009-11-19
Revised 2011-05-13 by School of Computer Science, Physics and Mathematics.
Revision made for English translation of the syllabus and course evaluation.
The course syllabus is valid from autumn semester 2011

Prerequisites
General entry requirements for university studies.

Objectives
After the course the students should be able to declare:

- What aspects of a modern operating system, classified into their respective functions
- Resource management in an operating system
- How an operating system uses hardware

Content
The course covers the basics of how an operating system works. Terms covered in the course:
Terms of hardware and software

- Signal Processing

Processes

- Threads
- Processor scheduling
- Contemporary execution

Memory

- Virtual memory organization

Files and File System Management
Processor management
Distributed Systems
Safety aspects of previously mentioned techniques.

Type of Instruction
Teaching carried out through lectures, seminars and labs. Active participation in seminars and project presentations is mandatory.

Examination
The course is assessed with the grades U, 3, 4 or 5.

For the grade 3, the expected learning outcomes has to be achieved.
Assessment of students performance is made through a written test. Active participation in seminars and project presentations is a graduate of the course element Project. The grades are G (pass) and U (fail) for course element Project. The grades are 5 (five), 4 (four), 3 (three) and U (fail) for course exam. To receive a final grade the student must achieve at least grade 3 on the exam and the grade G on the project.

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.

Reexamination will be offered within six weeks during the regular semester periods. The number of examinations are limited to five times.

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.

Required Reading and Additional Study Material
Required Reading
de Blanche, Andreas (2008) *Operativsystem-teori och praktiskt handhavande*
Studentlitteratur. ISBN: 978-91-44-01980-2