



Course syllabus

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

2DV403 Servervirtualisering, tekniker, 7,5 högskolepoäng
Server Virtualization Technologies, 7.5 credits

Main field of study

Computer Science

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by the Board of the School of Computer Science, Physics and Mathematics
2009-11-19

Revised 2011-05-13. Revision made for English translation of the syllabus and course evaluation.

The course syllabus is valid from autumn semester 2011

Prerequisites

60 credits in Computer Science including the courses 1DV424 Windows administration II, 7.5 credits, 1DV421 Linux administration II, 7.5 credits and 1DV426 Computer hardware technologies, 7.5 credits or equivalent.

Expected learning outcomes

After completing this course the student should be able to

- possess deep knowledge of different types of virtualization technologies, both software and hardware based
- create virtual server environments targeting operating systems and applications in both existing and future systems.

Content

The course includes practical and theoretical aspects such as

- virtualization techniques,
- virtualization of software and operating systems,
- creating and maintaining a virtual server environment,
- analysis of pros and cons of virtualization,
- analysis of security in virtualization

- projects based on theoretical aspects and laboratory experiments.

Type of Instruction

The course consists of lectures, seminars, and projects. It is mandatory to attend and actively participate in the laboratory exercises aiming at some of the theoretical course elements.

Course participants – individual or group – are confronted with problem solving tasks in these laboratory exercises.

Attendance at seminars and presentations is mandatory for the project element in the course.

Examination

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

For grade 3, the expected learning outcomes must be achieved.

Attendance and performance in project seminars and oral presentations are evaluated and graded. The grades are U, 3, 4, or 5 on the theoretical part and U or G on the project. Receiving a final grade on the course requires at least grade 3 on the theoretical part and 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.

Students not achieving satisfactory results in examination are permitted a second attempt within 6 weeks — during regular semester periods. The number of examinations is 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

Bibliography

Web-based materials are presented on the course website.