Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1BY033 Installationsteknik och energihushållning, 7,5 högskolepoäng
Heating, Ventilation, Sanitation and Energy, 7.5 credits

Main field of study
Civil Engineering

Subject Group
Building Technology

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by the Board of the School of Engineering 2009-12-15

Revised 2010-11-29. Review of the Literature.

The course syllabus is valid from autumn semester 2011

Prerequisites
Basic eligibility and having completed at least 30 ECTS points or the equivalent in Building Technology or the course Energy systems- project (2BT002/BT9113).

Expected learning outcomes
After completing the course the studented is expected to

- have an insight into the importance of building services engineering for maintaining thermal comfort, good air

quality as well as good hygienic conditions indoors

- have knowledge of general principles for heating, ventilation, water and sanitation as well as electric wiring
- know the background to the dimensioning of the systems of building services engineering

Content
The course comprises the following elements:

- Energy demand
- Energy economics
- Thermal comfort

- Ambient air quality
- Air control
- Ventilation principles
- Heat production
- Heat distribution
- Heating equipment
- Indoor sanitation systems
- Drawing interpretation for building services engineering
- Electric installations

Type of Instruction

The teaching consists of lectures, laboratory work and exercises. Some elements are compulsory. Information on the
extent of the compulsory elements will be provided by the examiner at the beginning of the course.

Examination

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

The examination of student performances usually takes place during special examination periods, normally in writing. The assessment may also be based on written presentations of laboratory work and exercises.

Course Evaluation

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

Required Reading and Additional Study Material

Required reading

Projektering av VVS-Installationer, Catrina Warfvinge och Mats Dahlblom, Studentlitteratur.