Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1BY034 Byggnadstekniska konstruktioner, 7,5 högskolepoäng
Structural Engineering and Design, 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 Organisational Committee 2009-07-24

The course syllabus is valid from spring semester 2010

Prerequisites
Basic eligibility and Building Technology 1, 7,5 hp or the equivalent.

Expected learning outcomes
After completing the course the student is expected to:
- have acquired basic knowledge of structural elements, construction and materials
- understand the function of various components and systems
- have the ability to suggest suitable construction solutions on an overarching level
- have an understanding of the constructor's role in the building process.

Content
The course comprises the following elements:
- Common construction materials' inner structure and properties
- Construction element forms and their relation to structure composition and function
- The design of the structural system in interaction with architectural demands and ambitions as well as other demands concerning e.g. rigidity, fire safety and acoustics
- The constructor's role in the building process
- Concepts, symbols and established definitions for a common language in the building process.

Type of Instruction
The teaching consists of lectures, laboratory work, exercises and study visits. Information on compulsory elements is given at the start of the course.

Examination

The course is assessed with the grades U,3,4 or 5.
The assessment of student performances usually takes place during special examination periods and may take the form of project work, laboratory work, written assignments and written exams. The examination may be both written and oral.

Course Evaluation

When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

Required Reading and Additional Study Material

Required reading

Salvadori, Mario Why Buildings Stand up, the Strength of Architecture, W.W. Norton & Company, 1990. 200 s.

Engström, Dan Arkitektur och bärverk, Formas, 2004. 192 s.