Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Engineering

1BY008 Byggteknik 1, 7,5 högskolepoäng
Building Technology 1, 7.5 credits

Main field of study
Civil Engineering

Subject Group
Building Technology

Level of classification
First Level

Progression
G1N

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

Revised 2011-06-13. Review of Literature.

The course syllabus is valid from autumn semester 2011

Prerequisites
General entry requirements and Mathematics C or Mathematics 3b / 3c (Field-specific entry requirements 3/A3).

Expected learning outcomes
After completing the course the student is expected to have acquired:

- knowledge of building technology constructions knowledge of certain building materials
- knowledge of construction moisture and heat functionality.
- the ability to perform detailed building technology drawings

Content
The course comprises the following elements:

- Building physics: Heating, energy balance, U values, heat conduction. Moisture, moisture technology concepts, moisture transportation, moisture sources,

critical moisture conditions, moisture measuring.

- Material science: Building materials and their properties.
- Elements of building construction such as foundations, framework, additional framework components, facing, fittings and equipment.

- Drawing techniques: Basic drawing techniques.
- Laboratory work in the areas of concrete, wood and moisture
- Study visits and mentor company tasks. Study visits in accordance with teacher instructions. Programme students perform pre-determined mentor company

assignments, which are presented in writing.
Independent-course students make the corresponding written presentations of course elements and/or study visits in accordance with teacher instructions.

Type of Instruction
The teaching consists of lectures, laboratory work, exercises and study visits. Certain elements are compulsory. The extent of the compulsory parts appears from the schedule.

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 assessment of student performances generally takes place during certain examination periods and is normally written.
The assessment may also be based on submitted presentations of laboratory work and other assignments.

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.

Other
On request, a Swedish University course certificate will be awarded upon successful completion of the course. Some elements of the course may entail costs defrayed by the course participant.

Required Reading and Additional Study Material
Required reading
Bodin, Hidemark m fl Arkitektens Handbok Addera förlag, 2010 eller senare, 316 sidor
Burström, Per Gunnar , Byggnadsmaterial Studentlitteratur 2007, 562 sid
Sandin, Kenneth, 2007, Praktisk Husbyggnadsteknik, Studentlitteratur 100 sid
Avdelningens kompendier . Ca 200 sid

Recommended Literature
Hemgren & Wannfors, Husets ABC, 384 sidor
Hamrin, Byggnadsritning – ritsätt och regler, 72 sid