AG2806 Environmental Aspects of the Built Environment 7.5 credits

Bebyggelsens miljöpåverkan

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for AG2806 valid from Autumn 2013

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Environmental Engineering, The Built Environment

Specific prerequisites

A Bachelor's degree (or equivalent) in architecture or landscape architecture, civil engineering in the built environment or equivalent, urban and regional planning, social or natural sciences including courses corresponding to a minimum of 30 ECTS credits in the field of urban, transport or regional planning, or environmental sciences.

Knowledge of basic environmental problems and their causes, corresponding a basic course in the subject, e.g AE1101 Natural Resourcesor Theory or equivalent.

In addition documented proficiency in English B/English 6 or equivalent (TOEFL, IELTS e g).

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The overall aim of the course is to give students understanding about the interplay between humans, buildings and the surrounding environment as well as strategies for reducing the environmental impacts from buildings.

After completing the course, you should be able to:

- Describe the potential environmental and health impacts caused by different stages in a building's life span.
- Be able to analytically discuss environmental hotspots regarding the built environment depending on local contexts and building types.
- Suggest relevant planning strategies to reduce the environmental impact both from new building developments and improvements of the existing building stock.
- Suggest relevant types of evaluation and assessment tools for decision contexts related to planning and management of buildings.
- Account for current national strategies to reduce the environmental impact of the built environment.

Course contents

The course includes lectures, labs and project assignments followed up by seminars.

Lectures cover:

- the impact of buildings on human health, environment and natural resources
- environmental management strategies in the building and property sector and their relation to city planning
- tools/methods for evaluating and assessing the environmental impact of buildings
- examples of "green building"

Labs and project assignments include using a tool for environmental building assessment as well as analysing strategies for environmental impact reduction in practical cases.

Course literature

Skall bestämmas. Artiklar inom "green building".

Examination

- PRO1 - Project Assignment, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 2.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 1.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Written exam (TEN1; 2,5 cr),
Project assignment (PRO1; 4.0 cr),
Computer lab (LAB1; 1,0 cr).

Final grade is a weighted average of the written exam and the project. "Pass" grade on the lab is required to receive a final grade.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.