



AG2806 Environmental Aspects of the Built Environment 7.5 credits

Bebyggelsens miljöpåverkan

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

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

Establishment

The course syllabus is valid from Autumn 2024 according to the Head of undergraduate education A-2024-0555 dated 2024-03-07.

Grading scale

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

Education cycle

Second cycle

Main field of study

Built Environment, Environmental Engineering

Specific prerequisites

In total 7,5 ECTS-credits within the subject environment and sustainable development, e.g. AL1301 Natural Resources Theory or AE1502 Environmental Systems Analysis for Energy and Environment, or AG2150 Sustainable Planning and Design

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 approaches 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.

Course contents

The course activities include lectures, a lab and a project work in group with seminars.

The course covers:

- the impact of buildings on human health, environment and natural resources
- Approaches in the building and property sectors to mitigate environmental impacts associated with the built environment
- Approaches, including tools and methods, for evaluating and assessing the environmental impact of buildings

Examination

- LAB1 - Laboratory Work, 1.0 credits, grading scale: P, F
- 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

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.

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.