HS2004 Daylight and Design Process 15.0 credits

Dagsljus och planeringsmetoder

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

Course syllabus for HS2004 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Architecture

Specific prerequisites

Eligibility for the programme

Language of instruction

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

Intended learning outcomes

The aim is to ensure that the student possesses the required knowledge of daylight planning in urban spaces, in buildings and the construction of windows, skylights and daylight distribution systems. Knowledge of daylight qualities and daylight calculation. Understanding of the methodology for co-ordination of daylight and electric lighting in buildings and ability to evaluate lighting, energy, architectural effects of the daylight design process.

Course contents

- Daylight qualities and physical and visual based definitions
- Daylight calculation, manual and computer rendering
- Sustainability effects and energy calculation
- Building typology and architectural design
- Design methods for daylight and electric light
- Workbook presentation and reflections

Course literature

H.A Löfberg, Räkna med dagsljus, SIB, Gävle 1987 (with English supplement)

M.Rea, Lighting Handbook, 9th ed., IESNA, NY, 2000

Examination

- PRO1 - Project, 9.0 credits, grading scale: A, B, C, D, E, FX, F
- RED1 - Assignments, 6.0 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

Project (PRO1; 9cr) A-F

Assignments (RED1; 6cr) A-F

Presence at mandatory lecturers and seminars

Worked out and passed laboratory experiments, tasks, exercises and projects

Passed workbook reporting lectures, the design process and personal reflections

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.