



HS2007 Light and Humans 9.0 credits

Ljus och människa

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

Establishment

Course syllabus for HS2007 valid from Autumn 2016

Grading scale

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

Education cycle

Second cycle

Main field of study

Technology and Health

Specific prerequisites

The eligibility as required for the programme, or the equivalent knowledge in Architecture or related field.

Language of instruction

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

Intended learning outcomes

- Students should gain a basic light and lighting vocabulary.
- Students will learn and discuss the importance of light and lighting for human beings' cultural, historical and social development.
- Students should be able to solve a lighting design task using light and materials as shaping elements of the physical environment and reflect over their communicative possibilities.

Course contents

- This course is the introduction to the programme and provides terminology and fundamental concepts, placing light in a cultural, historical and social context.
- Orientation about the role of lighting for the perception of the physical surrounding.
- Introduction to design process, quantitative and qualitative characteristics of daylight and electric light.

Disposition

Content's structure:

**Daylight and artificial lighting
**(Concept, terminology, definitions)

**Human Perception
**(Visual, non visual, psychological)

**Design Basics
**(Process and Tools)

**Lighting machine
**(Mock-up)

Course literature

Tregenza, P. & Loe, D. (2013). The design of lighting, Routledge; 2 edition

Zajonc, A. (1995). Catching the Light: The Entwined History of Light and Mind. Oxford Paperbacks

Mende, K. (2010). Designing with shadow. Kajima Publishing

Tanizaki, Y. (1977). In praise of Shadows

Speirs, J. and Major, M. (2006). Made of Light - The art of light and architecture. Birkhäuser

Millet, M. (1996). Light revealing architecture. Wiley

Examination

- INLA - Workbook, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- PROA - Project, 4.5 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.

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

The course has two examination modules, a workbook (INLA) and a lighting machine project (PROA).

The course evaluation is a combination of design task and workbook grades, which reflect teamwork and individual achievements.

The design task evaluation includes: Vision and Concept, Process, End result, Presentation.

The personal learning process is assessed through the workbook in relation to these criteria: Completeness, Structure, Depth of reflections and Research.

Detailed description of assessment methodology is provided at the beginning of each course.

Other requirements for final grade

To receive a final grade for this course, grade E or higher on the workbook (report of lectures, process and reflections) and the project (process and seminars) is required, as well as 75 % attendance.

Overall course grade is based on grading scale A-F.

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.