

COURSE SYLLABUS

Light for Health and Well-being, 7.5 credits

Ljus för hälsa och välmående, 7.5 högskolepoäng

Course Code: TLVN17	Education Cycle: First-cycle level
Confirmed: Sep 01, 2025	Disciplinary domain: Technology
Valid From: Jan 18, 2027	Subject group: Other Subjects within Technology
	Specialised in: G2F First cycle, has at least 60 credits in first-cycle course/s as entry requirements
	Main field of study: Built Environment

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and understanding

- show familiarity with human factors and diseases in relation to visual and non-visual effects of daylight and electrical lighting.
- display knowledge of eye diseases and their particularities in terms of lighting as well as of preventive and supportive visual ergonomics.
- demonstrate comprehension of well-being in relation to user types and the light environment.
- show familiarity with (ongoing) research on effects of lighting on health and well-being.

Skills and abilities

- demonstrate skills in recognising a research problem and interpreting and transcribing results from research.
- demonstrate proficiency in formulating, motivating, and applying proposals for integrative lighting design and lighting installations based on identified issues and user requirements.

Judgement and approach

- demonstrate the ability to assess the quality level and suitability of a lighting situation according to human well-being requirements and the impact on human well-being and performance.
- demonstrate the ability to select, motivate, and apply current principles to create lighting solutions based on requirements for human well-being and performance.

Content

This course is an introduction to *Light and Health*. It provides information to understand the various functions of the human body affected by light, as well as several ways light can be used to support human health and well-being. In addition, the course provides insight into how scientific and applied methods can be used to design and study lighting in environments that support human health and well-being.

The course includes the following elements:

- Human factors in lighting
- Visual discomfort and prevention methods
- Execution and analysis of scientific experiments
- Application of results of (ongoing) light and health research in a lighting design project

Type of instruction

Lectures, seminars, and exercises.

Language of instruction is Swedish or English.

Entry requirements

General entry requirements and taken courses 60 credits in first cycle, including Basics in Light Source and Luminaire Proficiency (or the equivalent).

Examination and grades

The course is graded 5, 4, 3 or U.

Registration of examination:

Name of the Test	Value	Grading
Examination	2 credits	G/U
Assignment ¹	5.5 credits	5/4/3/U

¹Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

Aries, M. (2025), Light for Health and Well-being, Edition 5.0 Course booklet Spring2025, Course TLVN12 'Light for Health and Well-being' [English] *or more recent version if available*

Weinzaepflen, C. & Spitschan, M. (Ed.) (2021). Enlighten your clock: How your body tells time. (C. Weinzaepflen, Illus.). DOI: 10.17605/OSF.IO/ZQXVH (also available in Swedish!)