

CH208V Physical Risk Management 3.5 credits

En god fysikalisk arbetsmiljö - riskbedömning och utveckling

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 CH208V valid from Spring 2025

Grading scale

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

Education cycle

Second cycle

Main field of study

Technology and Health

Specific prerequisites

120 credits in technical science, natural science, medical science or human resource management. Alternatively, 2 years of professional experience in work environment development. English B/6.

Language of instruction

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

Intended learning outcomes

The aim of the course is to give the student theoretical and practical knowledge about physical work environment risks and how these risks can be assessed and remedied, in a systematic way and in accordance with current regulations.

After completing the course, the student should be able to:

- Provide an overview of legal requirements regarding physical work environment risks.
- Give examples of where in working life electromagnetic radiation, lack of ventilation and variants of thermal climate occur at levels that can cause health risks.
- Explain possible short-term and long-term health effects of the above-mentioned factors.
- Plan measurements of the above-mentioned factors and justify the choice of measurement strategy (where, how often, how long), as well as reflect on measurement data quality, assess risks based on measurements and compare measurement results with limit values.
- Propose and justify measures to eliminate or reduce the risks.

Course contents

- Legal requirements regarding physical work environment risks including practical examples.
- Physical health risks including practical examples.
- Risk assessment, different methods for risk assessment including overview of measurement strategies, measurement methods and interpretation of measurement data including practical examples.
- Measures to reduce physical risks including ventilation.

A project work is included in the course. The project work is carried out individually and is based on visiting a workplace. This is prepared by compiling questions after which the workplace information obtained is compiled into a report. The project and project report include the following points:

- Applicable regulations regarding physical risks in that workplace.
- Health and accident risks at the workplace.
- Risk assessment and suggestions for best measurements to carry out a reliable risk assessment
- Proposals for measures that would reduce exposure and reduce risks (even if the risks in the particular case in question would already be low)

Examination

- INL1 Hand in assignment, 0.5 credits, grading scale: P, F
- PRO1 Project work, 1.5 credits, grading scale: P, F

• TEN1 - Written exam, 1.5 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.

* In the event of absence from one seminar in the SEM1 module can, if the examiner deems it so, a replacement task may be assigned. In that case, this could be to submit a written reflection on the material studied before the respective seminar.

Assignment (INL1, 0.5 credits) grading scale P/F, examines course objective 4 practically and individually.

Written project report (PRO1, 1.5 credits), grading scale P/F, examines course objectives 1, 3, 4 and 5 individually.

Exam (TEN1, 1.5 credits) Grade scale A-F. Examines course objectives 1, 2, 3, 4 and 5.

The final grade is based on TEN1 obtained grade, 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.