

CH2014 Chemical and Microbiological Risk Management in the Work Environment 7.5 credits

Hantering av kemiska och mikrobiologiska arbetsmiljörisker

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

Establishment

Course syllabus for CH2014 valid from Autumn 2025

Grading scale

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

Education cycle

Second cycle

Main field of study

Technology and Health

Specific prerequisites

180 ECTS credits in technical, natural or medical sciences or in human resource studies. English B/English 6

Language of instruction

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

Intended learning outcomes

The course will provide knowledge regarding chemical and microbiological working environment factors and the ability to use the knowledge in problem-solving

By the end of the course, the students should be able to:

- 1. Understand and interpret the Swedish and EU legislation that concern chemical and microbiological risks
- 2. Pursue and interpret information about health hazards with chemical products and substances and use this information to assess risks when working with chemicals.
- 3. Perform measurements and risk assessments and subsequently propose appropriate control measures that eliminate or reduce the exposures (in line with the hierarchy of control).
- 4. Describe, discuss, and critically analyse the advantages and limitations of different measurement strategies and interpret and draw conclusions from measurement results.
- 5. Describe the requirements regarding chemical and microbiological risks and be able to support organisations' work with chemical risk management and adapt the methods to the organisation's needs and prerequisites.

Course contents

- Work environment regulations
- Chemical and microbiological risks
- · Risk assessment
- Measurement methods and measurement strategies
- Control measures
- Intervention

Examination

- ÖVN1 Exercises, 1.0 credits, grading scale: P, F
- RED1 Project work, 2.5 credits, grading scale: P, F
- TEN1 Written exam, 4.0 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.

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

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Intended learning outcome number 1 is examined in ÖVN1 and TEN1.

Intended learning outcome number 2 is examined in RED1 and TEN1.

Intended learning outcome number 3 is examined in ÖVN1, RED1 and TEN1.

Intended learning outcome number 4is examined in ÖVN1, RED1 and TEN1.

Intended learning outcome number 5 is examined in ÖVN1, RED1 and TEN1.

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.

Additional regulations

Compulsory attendance

Applies to all exercises conducted in the form of seminars (or webinars) and laborations included in ÖVN1. Applies also to the first two course days with lectures, which are designated as a preparation for RED1; where attendance is required to participate in the compulsory project work.