



HF1200 Environmental Science

6.0 credits

Miljökunskap

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

Establishment

Course syllabus for HF1200 valid from Spring 2010

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Knowledge and skills corresponding to the requirements for acceptance to the engineering education

Language of instruction

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

Intended learning outcomes

After completing this course students are to:

- Know as much of current environmental problems, technologies and regulatory issues that he/she can develop and maintain products and processes in an ecologically sustainable way and be able to participate in setting and evaluation of environmental standards in public procurement and contacts with authorities in a technically and ethically correct way
- Know as much about injury prevention that he/she can prevent work-related injuries by applying knowledge of a health promotion approach.
- Student should be able to apply and develop future workplace environmental and quality systems by being able to document, measure, monitor and improve working practices and address any shortcomings

Course contents

- Environmental effects
- Environment purification technologies: gas-, air, soil- and water purification
- Comprehensive attitude to an overall view of environmental issues
- How environment matters are prioritized in a business enterprise, life cycle assessments
- The tools available to society to control environment protection, description of environmental consequences
- Waste management and recycling principles
- Physical environment: load, noise, illumination, chemical health risks etc
- How to design a work site ergonomically and psychosocial and ergonomic workplace
- To get a basic knowledge of project and usability in procurement,

Disposition

The course consists of lectures, exercises, mandatory laboratory and work presentations, Attendance is mandatory for laboratory work and similar.

Course literature

"Hållbar utveckling: en introduktion för ingenjörer och andra problemlösare." Fredrik Gröndahl, Magdalena Svanström. Liber

Utvalda kapitel ur boken: "Arbete och teknik på människans villkor", Prevent. (utvalda kapitel kan köpas som pdf av STH)

Examination

- ÖVN1 - Exercises, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Exercises, 1.5 credits, grading scale: P, 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.

Final grade, A-F, is based on all parts of the course.

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.