# HF1201 Sustainability and Ergonomics 6.0 credits

Hållbar utveckling och ergonomi

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 HF1201 valid from Spring 2015

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

Knowledge equivalent to the entry requirements for engineering.

## Language of instruction

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

# Intended learning outcomes

To pass in the course, you should as student be able to..

1. â€¦ discuss the concept sustainable development as well as reflect on ethics and sustainable development and the contribution of the own profession to the same.

2. â€¦ describe the influence of the most important global and national environmental problems on the ecosystem as well as suggest and justify measures at different strategic levels at a general level that you as engineer and your sector can take to reduce environmental impact from a product or activities.

3. â€¦ describe the largest working environment risks in the context in which you come to exercise your future professional role as well as express important relationships between the system man, technology and organisation for a sustainable working life in writing

4. â€¦ show insight and understanding of as well as be able to give examples of use of the most important policy instruments and tools that are used in industry society and your sector concerning environment and working environment.

5. â€¦ review critically and point at strengths and weaknesses from the perspective sustainable development and ergonomics for a for your programme typical product.

# Course contents

- Sustainable development and ethics
- Environmental problems and working environment problems
- Risk assessments and priorities in companies' environment and working environment work
- Economic incentives for environment and working environment work
- System, life-cycle perspective, life cycle principles, human-technology-organisation
- Tools and policy instruments for ecological sustainability
- The preconditions of the ecosystem and effects of human activity
- Laws, leadership and policy instrument for a good working environment
- Physical, cognitive and psychosocial preconditions related to sustainable working life

# Disposition

The teaching consists of lectures, preparatory exercises and compulsory seminars. In addition to lectures individual studies are needed.

# Course literature

Böcker:

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

"Arbete och teknik på människans villkor." Mats Bohgard m fl. Prevent.

Arbetsmiljöverkets författningssamling AFS2001:1 "Systematiskt arbetsmiljöarbete" (www.av.se)

Övrig i samband med kursen utdelad litteratur som anges vara obligatorisk.

# Examination

- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 1.5 credits, grading scale: P, F
- ÖVN2 - 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.

Compulsory attendance

Apply for enrolment, certain lectures and 4 of 5 seminars (corresponds Ã–VN 1 and Ã–VN 2).

# Other requirements for final grade

- TEN1- Written examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- Ã–VN1- Exercises, 1.5 credits, grading scale: P, F
- Ã–VN2- Exercises 1.5 credits, grading scale: P, F

Compulsory attendance

Applies for enrolment, certain lectures and all seminars (corresponds Ã–VN 1 and Ã–VN 2).

# 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.