AK2004 Philosophy of Risk 7.5 credits

Riskfilosofi

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 AK2004 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Built Environment

Specific prerequisites

The course is intended for students that have passed 120 cr in their engineering programme.

Language of instruction

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

Intended learning outcomes

To provide conceptual tools that can improve analysis and communication of risks.

Course contents

The lectures will introduce important basic concepts that are used in the analysis of social risks, such as epistemic uncertainty, risk analysis, utility maximization, hazard vs. risk, and the precautionary principle. Ethical aspects of risks and risk-taking will also be discussed. Some major themes in the lectures are.

Introduction. How thinking on technological risks has developed.

Basic theory of knowledge.

Basic decision theory.

Decision theory in risk research

Risk and uncertainty

Facts and values in technological risk assessments

The preconditions of risk analysis, its limitations and possibilities

The precautionary principle

Risk and ethics

The course consists of lectures and seminars. On the seminars, tools and concepts will be applied to some practical examples of technological risks.

Course literature

- Osäkerhetens horisonter, red. Åsa Boholm mfl., Nya Doxa, 2002. In Swedish
- a compendium and a collection of articles.

Examination

- DEL1 - Attendance, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 3.0 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.

Other requirements for final grade

Exercises (ÖVN1;3 cr)
Written exam (TEN1;3 cr)
Attendance (DEL1;1,5 cr).

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.