

AK2206 Analysing Sustainability: a Multi Disciplinary Perspective 7.5 credits

Det hållbara samhället: en multidisciplinär analys

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

Establishment

Course syllabus for AK2206 valid from Autumn 2012

Grading scale

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

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

One of the following courses: AK1202 History of Science and Technology 7,5 hp; AK2003 Technology and Ethics 7,5 hp; AK2030 Theory and Methodology of Science (Natural and Technological Science) 4,5 hp; AK2032 Theory and Methodology of Science (Social Science) 4,5 hp ; AK2036 Theory and Methodology of Science with Applications (Natural and Technological Science) 7,5 hp; AK2038 Theory and Methodology of Science with Applications (Social Science)7,5 hp;or equivalent.

Language of instruction

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

Intended learning outcomes

After the course the students should be able to:

* give a general account of the most important environmental problems and their causes

*give an account of the different sustainability concepts there are and the practical differences in choosing between them

 \ast analyse conlicts of interest between sustainable development and other societal goals, both long term and short term

* give an account of central ethical issues concerning sustainable development

* give an account of different types of scenarios and whether they are relevant to different types of questions

* discuss implications of some exemplified future scenarios

 \ast describe a number of tools with which sustainability assessments can be carried out and say what kind of questions they fit

* account for characteristic traits in societal and technological development in post world war II Sweden

* discuss how ideas of the environment have changed over time

* analyse interest groups and aims in building the society

* reflect on the expert role and on the relation between science and policy from an ethical and societal perspective

Course contents

Some of the most important environmental problems and their causes, in part globally, in part for Europe and Sweden. The development of environmental issues. Central societal processes that have affected the environment, like industrialisation, urbanisation, automobiles, general economic development and the changes in worklife.

The term sustainability, its roots and variants as well as its connection to ethical issues connected both to the environment and the society. The view on the responsibility for future generations. Central ethical aspects on sustainable development.

Environmental goals. The Swedish environmental goals. Conflicts of interest between sustainability and other societal goals, both in short term and long term perspective. Tools for sustainability assessments and their use. Scenarios and their relevance to different kinds of questions. Central examples of future images and their importance to the discourse on sustainability.

The changing view on environment, the formation of society and technological development past world war II, primarily in Sweden. The interests of specific groups and their aims and goals. What can be learned from historical futures.

Relation between science and policy in the area of environment from the perspectives of history, theory of science and ethics. The expert roles of the engineers.

Course literature

The literature will be announced no later than three weeks before the course starts.

Examination

- SME1 Seminars, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- INL1 Written Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 Examination, 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.

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

Assignment (3 hp), Exam (3 hp), Seminars (1,5 hp)

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.