



AE2502 Natural Resources Management 7.5 credits

Naturresursförvaltning

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 AE2502 valid from Spring 2014

Grading scale

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

Education cycle

Second cycle

Main field of study

Built Environment, Environmental Engineering

Specific prerequisites

Proficiency in English (English B or equivalent). Bachelor's degree in the field of civil engineering, environmental engineering, or another subject with clear relevance to the course, of at least 180 higher education credits, which includes the following: Basic knowledge in mathematics for at least 20 higher education credits; Basic knowledge in numerical analysis, programming, or equivalent, for at least 6 higher education credits; Environmental Data (course AE2503), 7.5 credits.

Language of instruction

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

Intended learning outcomes

After completion of the course, the students should be able to:

- use Geographic Information Systems (GIS) for providing management relevant information about natural resources and environmental issues
- review and give examples of other techniques and tools for increasing availability and accessibility of environmental information such as indicators
- understand the significance of data and environmental information in planning, management and other decision-making and policy-making processes, for solving environmental problems and for sustainable use of natural resources.

Course contents

The course deals with the various aspects related to the broad issue of information and data for decision-making in the context of environmental and natural resources management. It covers aspects related to the provision of new data and information (increasing information density) inter alia by means of Geographic Information Systems, expert systems and multi-criteria evaluation, and means and tools, such as indicators and the Internet to communicate new and existing information to various types of end users, ranging from the general public via scientists to the decision-makers (increasing information accessibility).

The course will devote much time and emphasis to GIS through a number of compulsory exercises that demonstrate how this particular tool together with others related can be applied to derive new, relevant information within various planning and management contexts.

Course literature

Annonseras på kursens hemsida före kursstart

Examination

- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 4.5 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

Written examination (TEN1; 4 credits), GIS-laborations, seminar and report writing (ÖVN 1; 3.5 credits).

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.