



MJ2681 Applied Environmental Systems Analysis II 6.0 credits

Tillämpad miljösystemanalys II

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

Establishment

Course syllabus for MJ2681 valid from Autumn 2008

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

MJ2680 Applied Environmental Systems Analysis

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 student shall be able to:” Describe the most important environmental systems analysis methods (Material and Substance Flow Analysis, Life Cycle Assessment, Life Cycle Costing, Ecological Footprint, Environmental Impact Assessment, Strategic Environmental Assessment and Integrated Sustainability Assessment), their strengths and weaknesses and their suitability in different types of decision situations.” carry out either (i) a Life Cycle Assessment by aid of a simple computer based tool, (ii) a simple environmental Impact assessment by aid of a specific EIA guideline or (iii) a Cost-Benefit Analysis for a pre-defined concrete decision situation” demonstrate an ability to judge between good and bad data and information to be selected and used for environmental systems analysis

Course contents

• Applied Environmental Systems Analysis – basic concepts and application• Life Cycle Assessment – demonstration of a computer based tool for LCA• Environmental Impact Assessment – demonstration of a EIA guideline• Cost-Benefit Analysis and the use of a broader perspective in CBA• Data generation and data quality in Applied Environmental Systems Analysis• Group task – to carry out either an LCA, an EIA or a CBA for a specific predetermined case in a group of 3-4 students.

Examination

- PRO1 - Project Work, 4.0 credits, grading scale: P, F
- NÄR1 - Active Participation in Lecture and Group Task, 2.0 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.

Other requirements for final grade

The examination is based on active participation in the course and on the quality of the group task report according to the following:NÄR1: Active participation in lectures, seminars and group task work: 2 credits ECTSPRO1: Approved group task report: 4 credits ECTS

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.