

MVET11, Environmental Science: Strategic Environmental Development, 15 credits

Miljövetenskap: Strategisk miljöutveckling, 15 högskolepoäng
Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2008-06-11 to be valid from 2008-06-11, autumn semester 2008.

General Information

The course is an elective second cycle course and can be included in a degree of Master of Science in environmental science.

Language of instruction: Swedish

Main field of studies

Environmental Science

Depth of study relative to the degree requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

The aim of the course is that students, on its completion, shall have attained the following knowledge and skills:

- Knowledge of links between production, consumption and environmental impact
- Ability to apply knowledge of methods for evaluation of environmental impact, including ecological footprint, input-output analysis and life-cycle analysis Skills to analyse a life-cycle analysis and understand significant choices made in the analysis and their impact on the final result
- Ability to make assessments about environmental problems of key parts of our production and consumption system, including: energy, housing, transport, food, tourism, water and waste Ability to integrate significant environmental aspects with central strategies to decrease environmental impact or conflicts of interest among different actors, and the incentives of the different actors

- Ability to communicate about production and consumption systems with regard to environmental problems, solution strategies, involvement of actors, and their opportunities and incentives to act.
- Ability to independently perform information searches of relevance to the field

Course content

The course consists of two parts: one concerned with evaluation methods for environmental impact caused by systems, and another focusing on different sectors of society in which environmental problems and measures are discussed from an actor perspective. The course has a clear socio-technological perspective.

The following topics are presented and discussed during the course:

How can the environmental impact of production and consumption systems be measured? The course component provides an introduction to different methods of assessing environmental impact, focusing particularly on life-cycle analyses. It is based on a major exercise on life-cycle analyses, and on lectures and minor exercises on other elements.

How are environmental problems addressed in key areas of our production and consumption systems? The fields considered include food, transport, housing, tourism, waste, water and energy. The issues include:

- Which are the most important challenges in the field?
- Which actors are involved?
- Which strategies are used by these actors?

Each field is covered by an introductory lecture, followed by exercises and student assignments, and a final discussion. Study visits and guest lecturers may also be included.

Course design

The teaching consists of lectures, individual exercises and group work. Participation in exercises and group work is compulsory.

Assessment

The assessment is based on presentation of knowledge from lectures, exercises and group work. A written exam may be included. Students who failed the regular exam will be offered a re-sit opportunity shortly thereafter.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

For a Pass on the whole course, students must have passed the exercises and group assignment and a possible exam.

Entry requirements

To be admitted to the course, students must have 90 credits from science courses including:

- MVEA01 Environmental Science: Basic Course, 15 credits

- MVEC14 Industrial Environmental Economics, 15 credits

- MVEC11 Environmental Law, 15 credits

Subcourses in MVET11, Environmental Science: Strategic Environmental Development

Applies from H07

0801 Env Sci: Strategic Environmental Development, 15,0 hp
Grading scale: Fail, Pass, Pass with distinction