MJ2656 Applied Ecology 6.0 credits

Tillämpad ekologi

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

Establishment

Course syllabus for MJ2656 valid from Spring 2014

Grading scale

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

Education cycle

Second cycle

Main field of study

Environmental Engineering, Mechanical Engineering

Specific prerequisites

Basic knowledge in ecology or environmental knowledge and 120 academic credits (ECTS) in a program of engineering or natural science or course or corresponding knowledge including documented proficiency in English B or equivalent.

Language of instruction

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

Intended learning outcomes

The overall aim of the course is to provide in depth knowledge about ecology and the human impact on ecosystems. The course should also show on the use of ecological knowledge for different sectors in society.

After the course the student should be able to:

- Use ecological knowledge in order to understand the distribution of individuals, populations and different distribution of species in ecosystems.
- Discuss different theories that may explain biological diversity and threats towards biological diversity.
- Understand the importance of different ecosystems services for technology, society and environment.
- Explain the ecological background to the most important environmental problems in the world.
- Use some common ecological methods and applications.
- Scientific methods used for ecological studies.

Course contents

A central part of the course is ecological theory and how ecological knowledge may be used to solve today's major environmental challenges e.g. global warming, losses of biological diversity and the spreading of organic pollutants. The course will also give a picture on how an ecological approach and methods may be used to investigate different environmental questions.

Independent group assignments in the field around different ecological questions will be the link between theory and practice.

Disposition

The course contains a mandatory field work, projekt work, lectures and a written examniation.

Maximum of participants: 30 places. In case of lack of places, students with the course as mandatory or conditional elective have precedence.

In case of less than 10 students the course may be cancelled.

Course literature

Will be announced two weeks before the course starts

Examination

- PRO1 - Project Work, 2.0 credits, grading scale: P, F
- FÄL1 - Field study, 1.0 credits, grading scale: P, 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.

Other requirements for final grade

- FÄL1 - Field Exercises, 1.0 credits, grade scale: P, F
- PRO1 - Project Work, 2.0 credits, grade scale: P, F
- TEN1 - Examination, 3.0 credits, grade scale: A, B, C, D, E, FX, F

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.