

Ecosystem Service Valuation

Programme course

6 credits

Värdering av ekosystemtjänster

NBID69

Valid from: 2017 Spring semester

Determined by

Board of Studies for Chemistry, Biology
and Biotechnology

Date determined

2017-01-25

Main field of study

Biology

Course level

Second cycle

Advancement level

A1X

Course offered for

- Ecology and the Environment, Master's programme

Specific information

May not be included in the same degree as NBID66/NBID67/NBID68.

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

120 ECTS including 90 ECTS in Biology

Intended learning outcomes

Conservation biology is a scientific field that study the Earth's biodiversity and the conservation of genetic diversity, species, habitats and ecosystems. Conservation biology covers several disciplines from ecology and mathematics to economy and humanities. After the course the student should be able to:

- explain and summarize knowledge of the value of biodiversity and ecosystem services and ethical aspects of conservation of biodiversity
- analyze how biodiversity and the value of ecosystem services is affected by different land uses, by using knowledge about ecological principles and processes, dynamics and functionality of ecosystems
- exemplify and analyze how political and economic aspects affects biodiversity
- summarize and seek information for a given site and ecosystem and use knowledge and methods to analyze, discuss and evaluate effects on genetic variation, species, habitats and ecosystems of different land uses
- independently choose and critically analyze the content in relevant scientific literature and relate this to the given subject
- argue and communicate from a given standpoint in a controversial question in conservation biology
- create a project plan and run a project in a group
- criticize and evaluate its own and other students work
- communicate the project orally and in text

Course content

Effects of different land uses on biodiversity. Human impact on populations, species and environments. Protection of environments and management of reserves and populations. Value of biodiversity and ecosystem services. Politics and economics of conservation.

Teaching and working methods

The course consist of lectures, a project and a debate. The project consist of a case where the value of ecosystem services is estimated and how this is affected under different scenarios. The project is presented in a written report and also at a seminar. At the seminar, the student should also criticize the other projects at the course.

In parallel with the project a series of lectures takes place together with seminars based on primary scientific literature that is connected to the project. The course ends with a debate that is presented orally and in text.

Examination

UPG1	Debate	1.5 credits	U, G
PRA1	Project	4.5 credits	U, G

Grades are given as "Fail" or "Pass". To achieve the grade "Pass", all examination parts (i.e. project and debate) must be approved.

Grades

Two-grade scale, U, G

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Agneta Johansson

Examiner

Karl-Olof Bergman

Course website and other links

Education components

Preliminary scheduled hours: 48 h

Recommended self-study hours: 112 h

Course literature

Additional literature

Articles

Primary research articles on various topics.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.