

# Advanced Project Course in Ecosystem Service Valuation

Programme course

6 credits

Avancerad projektkurs i värdering av

ekosystemtjänster

TFBI17

Valid from: 2017 Spring semester

**Determined by** Board of Studies for Industrial Engineering and Logistics

Date determined 2017-01-25

**Offered for the last time** Autumn semester 2020

**Replaced by** NBID79 Main field of study Biology

Course level

Second cycle

#### Advancement level

A1X

#### Course offered for

- Industrial Engineering and Management International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering

#### 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

(valid for students admitted to programmes within which the course is offered) Ecology and the Environment. The course is a course within the master prophile "Biotechnology".

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.



## Intended learning outcomes

Ecosystem services is defined as the goods and services that intact ecosystems provide for free to the society. The course will give knowledge and understanding in how such ecosystem services can be estimated economically. After the course, the student should be able to:

- identify different ecosystem services for a given site, and evaluate how they are affected by different land uses, by applying knowledge of ecological principles behind ecosystem services. Describe different processes, dynamics and functionality of ecosystems.
- analyze and discuss threats and vulnerability to be able to secure important ecosystem services
- make an economic evaluation and quantification of ecosystem services for a given place and business
- independently choose and critically analyze the content in relevant scientific literature and relate this to the given subject
- 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

The project consist of a case in which ecosystem services are identified and evaluated. The project is presented in a written report and is discussed during a seminar. In connection to the seminar, the students will act as opponents, in text as well orally, on other projects. The lectures and seminars will be based on ecological processes and ecosystem services and focus upon how potential threats against ecosystem services can be identified and evaluated.

## Teaching and working methods

The course is based on two parts. The student works in groups on a project based upon a given case. In parallel, there are lectures and seminars that connects to relevant parts in the case. It is expected that the students takes a large own responsibility for the quality of the case project.

#### Examination

| UPG1 | Seminars     | 1 credits | U, G       |
|------|--------------|-----------|------------|
| PRA1 | Project work | 5 credits | U, 3, 4, 5 |

#### Grades

Four-grade scale, LiU, U, 3, 4, 5



#### Department

Institutionen för fysik, kemi och biologi

## Director of Studies or equivalent

Agneta Johansson

## Examiner

Lars Westerberg

## Education components

Preliminary scheduled hours: 0 h Recommended self-study hours: 160 h



## **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://styrdokument.liu.se/Regelsamling/Innehall/Utbildning\_pa\_grund-\_och\_avancerad\_niva.

