#### **SYLLABUS**

# **Ecology and Environmental Science 7.5 credits N0005P**

Ekologi och miljökunskap

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE 2023-02-14



# **Ecology and Environmental Science 7.5 credits N0005P**

Ekologi och miljökunskap

#### First cycle, N0005P

Education level Grade scale Subject UGVG\* First cycle Naturvetenskapligt lärande

Subject group (SCB) Educational Sciences/Theoretical Subjects

#### **Entry requirements**

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language +

Swedish upper secondary school courses General Science 1b or 1a1+1a2, Social Studies 1b or 1a1+1a2, English 6.

## Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

## Course Aim

After the course the student should:

 be able to understand, explain and analyse the life supporting and resource generating structures and functions of ecosystems

- be able to understand, explain and analyse the flow of energy and matter in ecosystems
- be able to compare and understand differences between ecosystems of varying type an size
- be able to describe and explain the interdisciplinary nature of ecology
- be able to account for basic ecological investigation methods
- be able to understand, explain and compare causes of some of the important environmental problems of today
- be able to understand and explain ecosystem effects of environmental problems

• be able to describe, explain and compare different measurements regarding ecosystem management that needs to be taken regarding some modern environmental problems

#### Contents

Ecology as scientific subject. Structure and function of the life supporting systems in ecosystems. Mechanisms that regulates flows of energy and matter in systems of varying size. Terrestrial and aquatic ecology. Ecology at the levels of individuals, populations and communities. The biodiversity and free services of nature.

Environmental science. The threats of today towards a sustainable development: global climate change, eutrophication of lakes and seas, depletion of natural resources, threats towards biodiversity.

# Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Basic theory is presented in the form of lectures, discussions, excursion/visit study and a project work which will result in a written report. The subject of the project work will be chosen by the students in dialog with the course teacher.

Eeach course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.



## **Examination**

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. The ability to reach the course aim (see above) is examined in a written exam (grade U/G/VG) as well as a project work (grade U,G) and participation in a excursion/visit study (grade U,G). Students who have failed an examination on five occasions will not be allowed further occasions.

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

## Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

## **Overlap**

The course N0005P is equal to L0001K

# **Course offered by**

Department of Health, Education and Technology

#### **Modules**

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Written exam	U G VG *	5.3	Mandatory	A14	
0002	Excursion/visit study	U G#	0.7	Mandatory	A14	
0003	Project Work	U G#	1.5	Mandatory	A14	

#### Last revised

by Anna Öqvist, Director of Undergraduate Studies at the Department of Health, Education and Technology 2023-02-14

# Syllabus established

by Monica Johansson, Head of Department at the Department of Arts, Communication and Education 2014-02-14

