

*Course syllabus*

# Terrester ekologi Terrestrial Ecology

**EXTA01, 10 credits, G1 (First Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED W

**Date of Decision:** 2023-03-27

## General Information

**Main field:** Technology.

**Compulsory for:** W1

**Language of instruction:** The course will be given in English

## Aim

The aim of the course is to mediate knowledge in ecology from an evolutionary perspective.

## Learning outcomes

### *Knowledge and understanding*

For a passing grade the student must

- be able to understand the structure and dynamics of ecosystems
- understand connections between biological and chemical-physical processes in the soil
- understand the connection between natural processes and anthropogenic effects of ecosystems

### *Competences and skills*

For a passing grade the student must

- develop his/her skills in verbal and written communication.
- be trained in searching and evaluating scientific literature.

## Contents

- the course contains the theoretical base of population and ecosystem ecology
- theories of biodiversity and stability of ecosystems will be connected to trophic interactions in ecosystems
- decomposition and nutrient cycling in natural and disturbed ecosystems will be viewed from the terrestrial ecosystems
- knowledge of organisms from micro organisms to plant communities, and their interactions will be taught also will practicals
- examples will be given on current environmental issues in terrestrial ecosystems, on local and global scale

## Examination details

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five)

**Assessment:** Written exam and literature project. Compulsory excercises, labs and excursions. The grade is based on written exam (80 %) and literature project (20%).

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

## Admission

**Assumed prior knowledge:** VVRA01/VVR111 Hydrology and Aquatic Ecology.

**The number of participants is limited to:** No

**The course overlaps following course/s:** TEK010

## Reading list

- Thomas M Smith and Robert Leo Smith: Elements of Ecology, 9:th edition. Pearson, 2015, ISBN: 9781292077406.

## Contact and other information

**Course coordinator:** Dimitrios Floudas, [dimitrios.floudas@biol.lu.se](mailto:dimitrios.floudas@biol.lu.se)

**Course homepage:** <http://www.biologi.lu.se/utbildning/grund-och-avancerad-utbildning/kurser/kurser-grundniva/biologiska-kurser-pa-grundniva-for-teknologer>

**Further information:** 16 hrs of field excercises included in labs.