



LUNDS UNIVERSITET
Lunds Tekniska Högskola

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 exercises, 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

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 exercises included in labs.