UNIVERSITY OF SKÖVDE

COURSE SYLLABUS

Ecology, Nutrient Cycling and Landscape Processes G1F

7.5 credits

Course code: BV313G
Version number: 7
Valid from: 1 July 2023
Ratified by: Curriculum Committee for Bioscience
Date of ratification: 26 January 2023

1. General information about the course

The course is provided by the University of Skövde and is named Ecology, Nutrient Cycling and Landscape Processes G1F (Ekologi, kretslopp och landskapsprocesser G1F). It comprises 7.5 credits and is a first-cycle course. The level of progression is G1F.

The course is a part of the main field of study in Bioscience. The disciplinary domain of the course is Natural Sciences.

2. Entry requirements

Entry requirements for this course are the following attended courses: [KE119G Chemistry and Impacts on Environment and Health G1N or KE117G Basic Chemistry G1N] and [BV101G Biological Life Forms G1N or BV104G Biological Forms and Function G1N] (or the equivalent).

3. Course content

The course provides knowledge about the fundamentals of ecology such as the interaction between organisms and the interaction between organisms and the abiotic environment. Biogeochemical cycles, geological landscape processes, and the dynamics of populations and ecological communities are introduced. The course also deals with a number of Swedish natural and anthropological habitats and ecological aspects of utilization of natural resources as a starting point from Swedish examples in fisheries, agriculture & forestry.

4. Objectives

After completed course the student should be able to:

- explain broadly how biotic and abiotic processes, such as biogeochemical cycles, soil formation, erosion, climate, and species interactions determine and are determined by ecological dynamics such as species distributions and dispersal,
- recognize and describe a number of Swedish habitats linked to the Habitats Directive
- explain briefly and discuss simple ecological theories on individual, population, community, and ecosystem level,
- discuss ecological aspects of some current environmental problems and the utilization of natural resources in fisheries, agriculture and forestry,

- plan, implement, and analyze a simple ecological survey, and
- read, understand, and verbally present scientific articles within the course subject.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The examinations of the course consist of the following modes of assessment:

- **Supervised written examination**[1]
  4 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Exercises**
  1 credit, grades: G/U
- **Seminar assignment**
  0.5 credit, grades: G/U
- **Project**
  2 credits, grades: G/U

[1] The exam contains a part assignment in the form of a test that is mandatory and intends to enable the evaluation and proving of acquired knowledge.

Students with a permanent disability who have been approved for directed educational support may be offered adapted or alternative modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of project work, lectures, exercises and seminars/group discussions.

Depending on the study period, the language of instruction may be Swedish or English. Even if the teaching is conducted in Swedish, some English may still occur.

7. Course literature and other educational materials

Begon M., Townsend C.R. (2021). *Ecology: From Individuals to Ecosystems* (5th ed.). Hoboken, NJ: Wiley. ISBN 9781119279358.

Campbell, N.A. et al. (2020). *Biology. A Global Approach* (12th ed.). Harlow: Pearson Education Limited. ISBN 9781292341637.

Other literature, as scientific articles, may be provided and instructed by teachers.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

The content of the course corresponds completely or partially with the following course(s) and cannot be included in the required credits of a degree qualification:

- EKB131 - Ecology II 5 p
- EK319G - Ecology and Landscape Processes 15 hp
- EKA281 - Ecology I 5 p

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.