



Faculty of Health, Science and Technology
Biology

Syllabus

Ecosystems in a Changing World

Course Code:	BIAD11
Course Title:	Ecosystems in a Changing World <i>Ekosystem i en föränderlig värld</i>
Credits:	15
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has only first-cycle course/s as entry requirements (A1N)

Major Field of Study:
BIA (Biology)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2023-02-15, and is valid from the Autumn semester 2023 at Karlstad University.

Prerequisites

At least 75 ECTS credits completed in Biology, including 15 ECTS credits of Ecology at the G2F level, and upper secondary level English 6, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

- give an account of the concept ecosystem services and relate these to the development of the human community,
- give an account of and explain the resilience of the ecosystems,
- explain how terrestrial and aquatic ecosystems respond to and are affected by the surrounding environment,
- explain how organisms respond to increased stress and changed environmental factors at the ecosystem level, and
- summarise, critically review, and assess current research literature and relevant ethical

aspects such as gender equality, diversity, and research ethics, in oral and written arguments.

Content

Instruction is in the forms of lectures, seminars, group work, and hand-in assignments.

The course deals with human dependence on ecosystem services and the need to discuss the concept of socioecological resilience. How organisms in terrestrial and aquatic ecosystems are affected by different types of stress and other environmental factors such as climate change, pollution, and land use now and in the future is treated. Students discuss research articles of relevance to the course content in seminars, and also complete a project on a relevant issue of their choice and present it orally and in writing.

Reading List

See separate document.

Examination

Assessment is based on an individual written exam, written hand-in assignments, oral presentations completed individually and in groups, and a seminar discussion of the student's own work.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.