Reg No: BIG004/20251



Faculty of Health, Science and Technology Biology

Syllabus

Botany

Course Code: BIG004 Course Title: Botany **Botanik**

Credits: 15

Degree Level: Undergraduate level

Progressive First cycle, has only upper-secondary level entry

requirements (G1N) Specialisation:

Major Field of Study:

BIA (Biology)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2024-01-30, and is valid from the Spring semester 2025 at Karlstad University.

Prerequisites

General admission requirements and upper secondary level Mathematics 3b/3c/C, Biology 1, and Chemistry 1, or equivalent

Learning Outcomes

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

- give an account of the diversity, structure, function, and evolutionary relationships of plants,
- provide an outline of the evolution of plants on earth,
- explain basic processes and principles of botany,
- distinguish between different cell and tissue types with the help of a microscope, and
- plan, complete, and analyse simple plant experiments and report them in writing.

Content

The course deals with the form, function, evolution, and relatedness of plants from an ecological perspective. Plants' needs of resources, their reaction to changes in the environment, the function of plant hormones and energy transformations in plant photosynthesis are treated in lectures and seminars. The course also addresses the systematic classification and morphology of fungi, algae, and plants. Their outer and inner morphology is described with a special focus on its function and importance for their systematic classification. Various types of life cycles and reproductive systems are discussed. The morphology of groups of fungi, algae, and plants is studied with the help of fresh samples and microscope slides. Students also do a multi-week experiment to study important processes in plant life, carry out experiments on plant photosynthesis, and examine cell types and tissue through the microscope.

Reading List

See separate document.

Examination

Assessment is based on a written exam and an individual written report on a long-term experiment.

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 Distinction (VG), Pass(G), or Fail (U) 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.