



LUND
UNIVERSITY

Faculty of Science

BIOB01, Biology: Botany, 12 credits

Biologi: Botanik, 12 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by on 2007-04-12 and was last revised on 2015-01-19 by Study programmes board, Faculty of Science. The revised syllabus applies from 2015-01-19, spring semester 2015.

General Information

The course is a compulsory first-cycle course for a Degree of Bachelor of Science in Biology.

Language of instruction: Swedish

Main field of studies

Biology

Depth of study relative to the degree requirements

G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

On completion of the course the student shall be able to:

- account for the biological diversity and systematics of algae, fungi, and green plants, with emphasis on phylogenetic relationships, adaptations, and economically important groups of plants
- explain the structure and life processes of higher plants
- describe how the structure of plants and life processes are influenced by abiotic and biotic factors
- present an advanced knowledge within a subject area of plant biology

Competence and skills

On completion of the course the student shall be able to:

- carry out experimental studies on plants
- present acquired knowledge, partly orally and partly in the form of a scientific poster
- carry out information and literature search in biological databases

Judgement and approach

On completion of the course the student shall be able to:

- evaluate acquired information and knowledge

Course content

The course includes the following topics: Overview of algae, fungi and plants. Phylogeny based on structural and molecular data. The biological variation and adaptations in plants, life forms and symbiosis elucidated from an evolutionary and phylogenetic perspective. Life cycles and reproductive biology. Species concepts and evolutionary processes in plants. Economically important plants (including cultivated plants). The structure and function of higher plants. Regulation of growth and development. Photosynthesis and metabolism. Uptake and transport of water and nutrients. The interplay between the plant and the environment. Biotechnological methods and applications.

Course design

The teaching consists of lectures, laboratory sessions, group work and projects with poster making. Participation in laboratory sessions, group work, projects, poster presentations, and thereby other integrated teaching, is compulsory.

Assessment

Examination takes place through a written examination at the end of the course and through compulsory parts. For students who have not passed the regular examination, an additional examination in close connection to this is offered.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.

To pass the entire course, approved examination and approved compulsory parts are required.

The final grade is decided through a weighing of the results of the parts that are included in the examination.

Entry requirements

For admission to the course, knowledge corresponding to MOBA01 Cell Biology 15 credits, and BIOA01 Genetics and Microbiology 15 credits, is required.

Further information

The course may not be included in a degree together with BIO575 Botany 10 p (15 credits), BIO501 Organism Biology 1 10 p (15 credits), or BIO503 Botany 8 p (12 credits).

Subcourses in BIOB01, Biology: Botany

Applies from V13

- 0702 Physiology and Systematics, 8,0 hp
Grading scale: Fail, Pass, Pass with distinction
- 0703 Laboratory Work and Group Assignments, 4,0 hp
Grading scale: Fail, Pass, Pass with distinction

Applies from H07

- 0701 Botany, 12,0 hp
Grading scale: Fail, Pass, Pass with distinction