

15.0 Higher Education

15.0 ECTS credits

Credits

Department of Biology Education

Syllabus for course at first level

Zoology - anatomy and function Zoologi - anatomi och funktion

Course code: Valid from: Date of approval: Department

Main field: Specialisation: BL5029 Spring 2017 2017-01-16 Department of Biology Education

Biology G2F - First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

Prerequisites and special admittance requirements

Admittance to the course requires knowledge equivalent to Cell and Molecular Biology 15 credits, Diversity and Phylogeny of Organisms 15 credits (including experimental animals), Physiology 15 credits (including experimental animals) and Ecology, Floristics and Faunistics 15 credits. (Three credits corresponds to approximately two weeks full-time studies).

Course structure

Examination code	Name	Higher Education Credits
DEL1	Theory	12
DEL2	Practical work	3

Course content

The course covers comparative morphology and physiology. The course includes histological methodology: practical and theoretical introduction to light-microscopic techniques and how to make preparations of different animals. Parts of the animal kingdom are presented with the emphasis on comparative morphology and on different functional adaptations. Different functional systems are studied, in particular reproduction, sense organs, nervous system and developmental biology, but also other systems are delt with. Both morphological and physiological aspects are covered. Much attention is given to comparisons between different animal groups. The neurobiology comprises the cellular organisation, development and function of the nervous system. Special attention is given to the mechanisms in signal transmission and processessing and on molecular biological aspects av the function of neural cells.

Learning outcomes

It is expected that the student after taking the course will be able to:

- explain the morphology and function of different organ systems
- reason on how different organ-systems have evolved
- reason on connections between adaptations in different organ-systems and the environment and habits of animals
- make histological prepations
- analyse the morphology of animals and organs using the microscope in an independent way

Education

The education consists of lectures, group education, laboratory exercises and demonstrations. Excursions can occur.

Participation in laboratory exercises, demonstrations, excursions and group education associated with this is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after consultation with the relevant teacher.

Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through: Written and/or oral examination

b. Grading is carried out according to a 7-point scale related to learning objectives:

- A = Excellent
- B = Very Good
- C = Good
- D = Satisfactory
- E = Sufficient
- Fx = Fail
- F = Fail

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course, together with:

•approved laboratory exercises

•approved written and oral presentations

•participation in all compulsory education

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take at least further four examinations, as long as the course is given. The term "examination" here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

Limitations

The course can not be included in a degree together with the course Zoomorphology 10 p (BI3130) or the equivalent.

Misc

The course may include compulsory elements in field, which may entail additional cost for the student. The course is a component of the Bachelor's Programmes in Biology, and it can also be taken as an individual course.

Required reading

Course literature is decided by the departmental board and is described in an appendix to the syllabus.