

Syllabus

for course at first level

Biostatistics, Analysis and Presentation of Biological Data
Biostatistik, analys och presentation av biologiska data

**15.0 Higher Education
Credits**
15.0 ECTS credits

Course code:	BL4011
Valid from:	Spring 2009
Date of approval:	2008-05-19
Changed:	2008-10-13
Department	Department of Biology Education
Subject	Biology
Specialisation:	G1F - First cycle, has less than 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, Physiology 15 credits and Ecology, Floristics and Faunistics 15 credits or Cell and Molecular Biology 30 credits. (Three credits corresponds to approximately two weeks full-time studies).

Course structure

Examination code	Name	Higher Education Credits
4011	Biostatistics - analysis and presentation of biological data	15

Course content

The course covers biological statistics, experimental design, computer data processing and analysis, literature search and information retrieval, scientific publishing, as well as oral and written presentation techniques. The course aims at providing the student with a "toolbox" of skills necessary for further research studies as well as non-academic biological work.

Learning outcomes

It is expected that the student after taking the course will be able to use his/her basic knowledge of biological statistics, experimental design, computer skills, and presentation skills to be able to formulate a hypothesis, design a study, collect appropriate data, construct a database, statistically analyse, draw conclusions, and present the study and the results to a scientific audience both in writing and orally.

Education

The education consists of lectures, computer exercises and group exercises. Participation in computer exercises, group exercises 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 computer 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 may not be included in a degree together with the course Biological Statistics 10 p (BI3010) or the equivalent.

Misc

The course is a component of the Bachelor's Programmes in Biology, Marine Biology and Molecular 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.