Department of Biology Education

Stockholm University

Syllabus

for course at first level

Biological Statistics
Biologisk statistik

3.0 Higher Education Credits
3.0 ECTS credits

Course code:	BL3006
Valid from:	Autumn 2007
Date of approval:	2006-09-11
Department	Department of Biology Education
Subject	Biology
Specialisation:	G1N - First cycle, has only upper-secondary level entry requirements

Decision

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

Prerequisites and special admittance requirements

Swedish upper secondary school courses Biology B and Mathematics D, or equivalent.

Course structure

Examination code	Name	Higher Education Credits
3006	Biological Statistics	3

Course content

The course covers the role of statistics in biology, basic descriptive statistics, the relationship between a population and random samples, probability theory, distributions, and hypothesis testing.

Learning outcomes

It is expected that the student after taking the course will
• be able to understand and describe the role of statistics in biological research and practice
• have obtained insights in statistical thinking and a basic understanding of the relationship between a statistical population and a sample
• be able to use basic statistics terminology
• understand the basics of stochastic approaches and hypothesis testing
• be able to perform a few basic statistical tests

Education

The education consists of lectures, exercises and computer exercises
Participation in exercises and computer 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 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
•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 Biological Statistics 2 p (BI1220) or the equivalent.

Misc

The course is a component of the Bachelor's Programmes in Biology, Marin 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.