

# Syllabus

for course at first level

**Introduction to Biological Statistics**  
**Introduktion till biologisk statistik**

**3.0 Higher Education  
Credits**  
**3.0 ECTS credits**

<b>Course code:</b>	BL2024
<b>Valid from:</b>	Autumn 2015
<b>Date of approval:</b>	2015-08-21
<b>Department</b>	Department of Biology Education
<b>Main field:</b>	Biology
<b>Specialisation:</b>	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
HELA	Biological Statistics	3

## Course content

The course provides an introduction statistics in biology, population and random samples, basic descriptive statistics, probability theory, distributions, and hypothesis testing.

## Learning outcomes

It is expected that the student after taking the course will

- be able to describe the role and importance of statistics in biological research and practice
- show insights in basic statistical thinking
- 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 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 an ordinary examination are entitled to sit additional examinations as long as the course is offered. There is no restriction on the number of examinations. Examinations also include other obligatory elements of the course. Students who have passed an examination may not resit it in order to achieve a higher grade.

Students who have failed on two occasions are entitled to request the appointment of a different examiner for the next examination. Any such request must be made to the departmental board.

The course has at least two examinations for each academic year in the years in which instruction is provided. Intervening years include at least one examination.

f. There is no facility to improve the grade Fx to a pass grade in this course.

#### **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 3 hp (BL3006) 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.