

# Department of Mathematics (incl. Math. Statistics)

# Syllabus

for course at first level

Mathematical Statistics, Degree Project Matematisk statistik, självständigt arbete

15.0 Higher Education Credits
15.0 ECTS credits

 Course code:
 MT6001

 Valid from:
 Autumn 2007

 Date of approval:
 2007-08-28

Department Department of Mathematics (incl. Math. Statistics)

Subject Mathematical Statistics

Specialisation: G2E - First cycle, has at least 60 credits in first-cycle course/s as entry

requirements, contains degree project for BA/BSc

#### **Decision**

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University on 28 Augusti 2007.

# Prerequisites and special admittance requirements

To qualify for the course at least 135 hp is required. In addition knowledge equivalent to at least 60 credits in Mathematical Statistics is required, including the courses Linear Statistical Models, FC, 7.5 hp (MT5001) and Statistical Inference Theory, FC, 7.5 hp (MT5003) or equivalent.

# Course structure

**Examination code** Name Higher Education Credits
S601 Mathematical Statistics, Degree Project 15

# **Course content**

The content of the course is decided by the supervisor together with the student. The planning of the work should be described in a written work plan that must be approved by the supervisor. The course also contains a seminar series on scientific prospects.

# Learning outcomes

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

- \* apply mathematical statistical methods to solve a given problem
- \* show comprehension of the given problem and knowledge of the theoretical background
- \* interpret and analyse the results correctly
- \* work independently and keep the approved time plan
- \* give an oral and written presentation of a degree project
- \* show understanding of the concept scientific character

#### **Education**

The education consists of supervision of project work, own work and seminar series on scientific prospects. Participation in the seminar series on scientific prospects 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 E is required to pass the course.
- 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 "Degree Project in Mathematical Statistics I", 10 p (MS 3100).

# Misc

The course is a component of the Bachelor's Programme in Mathematics, Bachelor's Programme in Biomathematics, and Bachelor's Programme in Mathematics and Economics, and it can also be taken as an individual course.

## Required reading

The literature is constituted by scientific publications and reports within the relevant field, found by the student through literature search, and literature distributed by the supervisor.