# Department of Mathematics (incl. Math. Statistics)



## Syllabus

for course at advanced level Statistical Consulting Methodology Statistisk konsultmetodik

7.5 Higher Education Credits 7.5 ECTS credits

 Course code:
 MT8001

 Valid from:
 Autumn 2007

 Date of approval:
 2006-09-27

Department Department of Mathematics (incl. Math. Statistics)

Subject Mathematical Statistics

Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

## **Decision**

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University on 27 September 2006.

## Prerequisites and special admittance requirements

Prerequisites for the course is knowledge equivalent to 60 hp in mathematical ststistics, including courses Linear Statistical Models, FC, 7.5 hp (MT5001) and Categorical Data Analysis, FC, 7.5 hp (MT5006).

## Course structure

Examination codeNameHigher Education CreditsS801Statistical Consulting Methodology7.5

## **Course content**

The course provides an overview of practically useful statistical methods: methods for statistical planning, for explorative data analysis, and for statistical modelling and statistical inference. It also provides hands-on training in problem formulation, problem solving, communication and report writing within real statistical consulting.

## Learning outcomes

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

- \* communicate with clients about statistical questions and results
- \* reformulate practical problems in statistical terms
- \* select suitable models and metods for analysis of data
- \* critically judge if assumptions and results are reasonable
- \* present statistical consulting work in oral and written form

## **Education**

The education consists of seminars and project work. Participation in the seminars and project workis 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, together with approved attendance at seminars.
- 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 "Statistical Consultig Methodology" (MS 4140).

## Misc

The course can 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.