# Department of Mathematics (incl. Math. Statistics)



# **Syllabus**

for course at advanced level

Epidemiology 7.5 Higher Education
Epidemiologi Credits
7.5 ECTS credits

Course code:MT7008Valid from:Autumn 2007Date 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 are 60 hp in mathematical statistics including the courses Statistical inference, FC, 7.5 hp (MT5003) and Linear statistical models, FC, 7.5 hp (MT5001) or equivalent.

# Course structure

Examination codeNameHigher Education CreditsS708Epidemiology7.5

#### **Course content**

The course covers basic study designs such as prospective and retrospective studies, cohort studies, case-control studies and matched studies. Statistical models for analysing epidemiological data are also considered in particular log-linear models, Mantel-Haenszel methods, and Poisson-, Cox, and Logistic regression.

#### Learning outcomes

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

- \* account for the most commonly used epidemiological study designs
- \* apply standard statistical methods for analysing epidemiological data
- \* choose relevant statistical methods for a given applied problem and
- \* use statistical programs as an aid to perform epidemiological calculations

#### Education

The education consists of lectures, exercises and subitted work.

#### 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 "Epidemiology" (MS 4070).

#### Misc

The course is a component of the Master Program in Biostatistics, 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.