# Department of Mathematics <br> (incl. Math. Statistics) 

Syllabus<br>for course at advanced level<br>Mathematics, Degree Project<br>Matematik, självständigt arbete

15.0 Higher Education

Credits
15.0 ECTS credits

Course code:<br>Valid from:<br>Date of approval:<br>Department

Subject

## MM9002

Autumn 2007
2007-05-14
Department of Mathematics (incl. Math. Statistics)
Mathematics/Applied Mathematics

## Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University on 14 May 2007.

## Prerequisites and special admittance requirements

To qualify for the course a Bachelor's degree is required. In addition knowledge equivalent to 90 credits in Mathematics is required, where The foundations of analysis, 7.5 credits, Analytic functions I, 7.5 credits, Algebra III, 7.5 credits, Combinatorics II, 7.5 credits and at least two of the courses MM8001-MM8014 or the equivalent are included. Also required is a degree project in Mathematics at advanced level of 15 credits. Also required is knowledge equivalent to Swedish upper secondary course English B or equivalent to one of the following tests. Cambridge CPE and CAE: Pass, IELTS: 6.0 (with no part of the test below 5.0), TOEFL (paper based): 550 (with minimum grade 4 on the written test part), TOEFL (computer based): 213, TOEFL (internet based): 79 .

## Course structure

## Examination code

Higher Education Credits

## Course content

The content of the course is decided by the superviser in cooperation with the student. The work should be described in a written work plan that must be approved by the superviser.

## Learning outcomes

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

- independently acquire more profound knowledge of a mathematical field
- account for theoretical studies and independent investigations in an individually written report
- present acquired results in a seminar.


## Education

The education consists of seminars and supervision of project work.

## Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through a written report and a presentation in a seminar of the degree project.
b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent
B = Very Good
C $=$ Good
D $=$ Satisfactory
$\mathrm{E}=$ Sufficient
$\mathrm{Fx}=$ Fail
$\mathrm{F}=$ 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.
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.

## Misc

The course is a component of the Master program in mathematics, 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.

