

Syllabus

for course at first level

Mathematics, Degree Project
Matematik, självständigt arbete

15.0 Higher Education
Credits
15.0 ECTS credits

Course code:	MM6004
Valid from:	Autumn 2016
Date of approval:	2012-11-19
Changed:	2016-02-29
Department	Department of Mathematics (incl. Math. Statistics)
Main field:	Mathematics/Applied Mathematics
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 Subject area board for science at Stockholm University 2012-11-19 and revised 2016-02-29.

Prerequisites and special admittance requirements

To qualify for the course, at least 135 ECTS credits is required. Out of these, at least 75 ECTS credits should be in mathematics containing the courses Algebra and combinatorics (MM5003), Linear algebra II (MM5004), Mathematical analysis III (MM5001) and Mathematical analysis IV (MM5002) or equivalent.

Course structure

Examination code	Name	Higher Education Credits
DEL1	Project	13.5
DEL2	Scientific Method	1.5

Course content

a. The content of the course is decided by the supervisor after consultation with the student. The course intends to provide experience and knowledge in the scientific approach and scientific work in mathematics. The course work should be given a detailed description in a work plan that shall be approved by the supervisor.

b. The course consists of the following parts:

1. Project 13.5 ECTS credits
2. Scientific method 1.5 ECTS credits

Learning outcomes

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

PART1, Project:

- gather in-depth knowledge in a mathematical subject matter
- present the gathered knowledge in a written report
- orally explain the obtained results

PART2, Scientific method:

- show insights in the scientific method

Education

Instruction consists of lectures and seminars as well as supervision of thesis work.

Participation in a seminar series about the scientific method and the therein integrated teaching is mandatory. The examiner can in exceptional cases allow the student exemption from certain mandatory tutelage after consultation with the proper teacher(s).

The student has the right to 10 hours of individual supervision. The student may swap supervisor under certain circumstances. In such cases, a request shall be made to the department board.

Forms of examination

a. Examination for the course is in the following manner:

PART1 is examined via a written report and an oral presentation at a seminar.

PART2 is examined via a written assignment.

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 = Insufficient

F = Completely insufficient

Grading of PART2 is according to a 2-point scale: pass (G) or fail (U).

c. Grading criteria for the course will be distributed at the start of the course.

The basic assessment criteria for the grading are

1. Understanding of the task.
2. Implementation of the task.
3. Knowledge of the background.
4. Interpretation and analysis of results.
5. Independence.
6. Ability to keep the established schedule of work.
7. Presentation - oral presentation.
8. Presentation - written report.

Late submission of the independent work has consequences for the final grade of the course, which is described in more detail in course grading criteria.

d. A minimum grade of E is required to pass the course as well as a pass grade on PART2.

e. Students who fail an ordinary examination are entitled to take additional examinations as long as the course is offered. There is no restriction on the number of examinations. The term "examination" here is used to denominate 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.

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. A student who receives the grade Fx will be given an opportunity to make up to grade E by successfully completing some extra task(s) assigned by the examiner, who also decides on the criteria to be fulfilled in order to pass. The completion must take place before the following examination session.

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. This provision is also valid in the case of revision of the syllabus.

Misc

The course is a component of the Bachelor programs in mathematics, in mathematics and economy, in mathematics and philosophy and in computational biology and it can also be taken as an individual course.

Required reading

The course literature is based on scientific publications and reports in the present area chosen by the student through literature search as well as literature distributed by the supervisor.