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

## Syllabus

for course at first level
Mathematics, Degree Project
Matematik, självständigt arbete

### 15.0 Higher Education

Credits
15.0 ECTS credits

| Course code: | MM6010 |
| :--- | :--- |
| Valid from: | Spring 2021 |
| Date of approval: | $2020-01-13$ |
| Department | Department of Mathematics (incl. Math. Statistics) |
|  |  |
| Main field: | Mathematics/Applied Mathematics |
| Specialisation: | G2F - First cycle, has at least 60 credits in first-cycle course/s as entry |
|  | requirements |

## Decision

This course syllabus was approved by the Board of Science at Stockholm University on 2020-01-13.

## Prerequisites and special admittance requirements

Admission to the course requires at least 135 credits, including the courses Mathematics I, 30 credits (MM2001), Mathematics II - Analysis, part A, 7,5 credits (MM5010), Mathematics II - Analysis, part B, 7,5 credits (MM5011), Mathematics II - Linear Algebra, 7,5 credits (MM5012), Mathematics II - Algebra and Combinatorics, 7,5 credits (MM5013), MMathematics, science and society, 7,5 credits (MM5015), or the equivalent.

## Course structure

Examination code
HEL1

## Name

Mathematics, Degree Project

Higher Education Credits
15

## Course content

The course consists of an individual project under supervision. The content of the project is decided by the supervisor after consultation with the student. Central elements are the planning, implementation and reporting of a scientific work. Furthermore, systematic review, report writing, and practice in oral reporting of research results in the form of a final seminar, are trained.

## Learning outcomes

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

* independently plan and carry out a scientific work within the given time frame
* seek out, critically review and relate to literature which is relevant to the topic
* show in-depth knowledge in some part of the subject mathematics
* present the work in a written report, following the standards of a scientific publication
* orally present a summary of the work and answer questions about the contents of the report


## Education

Instruction consists of supervision of project work.
The student is entitled to at least 10 hours of supervision, with individual supervision constituting at least one third of the time.

Supervision is only provided within the planned course time. In the event of special circumstances, the student may be granted extended time for supervision. The request for this must be made to the department board.

## Forms of examination

a. The work should be described in a written work plan that must be approved by the supervisor.

Examination for the course is in the following manner: measurement of knowledge takes place through a written report and an oral presentation.

The examiner can decide on adapted or alternative examination formats for students with disabilities.
b. The course has no compulsory instruction.
c. Grading: The course's final grade is set according to a seven-point criterion-referenced scale:

A = Excellent
B = Very good
C = Good
D = Satisfactory
$\mathrm{E}=$ Adequate
$\mathrm{Fx}=\mathrm{Failed}$, some additional work is required
$\mathrm{F}=\mathrm{Failed}$, much additional work is required
d. The course's grading criteria are handed out at the start of the course.

Basic assessment criteria are:

1. Understanding of the assigned task
2. Execution of the task
3. Knowledge of the theoretical background
4. Interpretation and analysis of results
5. Independence
6. Ability to keep the agreed timetable for the work
7. Presentation - oral report
8. Presentation - written report
e. Students who receive a failing grade on a regular examination are allowed to retake the examination as long as the course is still provided. The number of examination opportunities is not limited. Other mandatory course elements are equated with examinations. A student who has received a passing grade on an examination may not retake the examination to attain a higher grade. A student who has failed the same examination twice is entitled to have another examiner appointed, unless there are special reasons to the contrary. Such requests should be made to the department board. Under normal circumstances, the course includes at least three examination opportunities per academic year the course is offered. For the academic years that the course is not offered, at least one examination opportunity is offered.
f. Students awarded the grade Fx are given the opportunity to improve their grade to E. The examiner decides on the supplementary assignments to be performed and the pass mark criteria. The supplementary assignments will take place before the next examination opportunity.

## Interim

Students may request that the examination be conducted in accordance with this course plan even after it has ceased to be valid. However, this may not take place more than three times over a two-year period after the course was discontinued. Requests must be made to the departmental board. The provision also applies in the case of revisions of the course syllabus and revisions of the required reading.

## Limitations

This course may not be included in a degree together with the course Mathematics, Degree Project (MM6004) or with equivalent courses.

## Misc

This course is part of the bachelor's programmes in mathematics, mathematics and economics and mathematics and comuputer science, but may also be taken as a separate course.

## Required reading

The required reading is based on scientific publications and reports in the relevant subject area identified by the student through literature searches and literature provided by the principal supervisor.

