

Syllabus

for course at first level

The Historical Development of Classical Mathematics
Den klassiska matematikens historiska utveckling

**7.5 Higher Education
Credits**
7.5 ECTS credits

Course code:	MM5005
Valid from:	Autumn 2014
Date of approval:	2014-03-10
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 syllabus has been approved by the Board of Faculty of Science at Stockholm University 2014-03-10.

Prerequisites and special admittance requirements

To qualify for the course knowledge equivalent to 60 ECTS credits in Mathematics, where Algebra and combinatorics, 7.5 ECTS credits (MM5003) and Mathematical Analysis III, 7.5 ECTS credits (MM5001) is included, is required.

Course structure

Examination code	Name	Higher Education Credits
HELA	The Historical Development of Classical Mathematics	7.5

Course content

The course covers the study of:

- * the history of mathematics from early cultures in Egypt and Mesopotamia up to and including the 18th century, with an emphasis on the development of mathematical concepts and ideas
- * the role of mathematics in society
- * older mathematical texts
- * mathematical problems where historical concepts and methods are used

Learning outcomes

Upon completion of the course, the student is expected to be able to:

- * describe the historical development of central concepts in algebra, geometry and mathematical analysis, up to and including the 18th century
- * give examples of prominent mathematicians and describe their accomplishments
- * comprehend older mathematical texts
- * apply the acquired knowledge in the solution of mathematical problems of historical interest

Education

Instruction is given in the form of lectures, seminars and exercise sessions.

Forms of examination

- a. The course is examined by:

- * a written exam
- * written and oral presentations of group problems and exercises

b. Grading is carried out according to a 7-point scale related to the learning objectives of the course:

A = Excellent
 B = Very Good
 C = Good
 D = Satisfactory
 E = Sufficient
 Fx = Insufficient
 F = Completely insufficient

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 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. An opportunity to make up from grade Fx to a pass grade is not given for this course.

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 within a two-year-period after the end of the course offering. 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.

Limitations

The course may not be included in a degree together with the course History of Mathematics 7.5 ECTS credits (MML302), Development of Mathematics 15 ECTS credits (MM7009), or the equivalent. A pass grade on the course History of Mathematics 7.5 ECTS credits (MML302) or equivalent may not be counted as credit on this course.

Misc

The course can be taken within the Bachelor program in Mathematics and the Teacher Education Programme in Mathematics, Science and Technology. 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.