

DEPARTMENT OF MATHEMATICAL SCIENCES

MVA200 Perspectives in Mathematics, 7.5 credits

Perspektiv på matematik, 7,5 högskolepoäng Second Cycle

Confirmation

This course syllabus was confirmed by Department of Mathematical Sciences on 2013-06-25 and was last revised on 2021-05-17 to be valid from 2021-08-30, autumn semester of 2021.

Field of education: Science 100% *Department:* Department of Mathematical Sciences

Position in the educational system

The course Perspectives in Mathematics, 7.5 higher education credits, is compulsory within the two-year Master's Program in Mathematical Sciences, usually taken in the first semester. The course is also open for eligible students outside the program. For a (two-years) Master's degree in Mathematics or Mathematical statistics at least a pass grade in the course Perspectives in Mathematics is required. The course may not be included in the course requirements within the main field of study Mathematics or Mathematical statistics.

The course can be part of the following programme: 1) Mathematical Sciences, Master's Programme (N2MAT)

Main field of studies

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

To be eligible for the course it is necessary to be admitted to the two-year Master's Program in Mathematical Sciences, or to have completed a Bachelor's degree in Mathematics or Mathematical statistics.

Learning outcomes

After completing the course the student will be able to

Knowledge and understanding

- describe the historical development of a selection of key concepts in mathematics
- describe driving forces, processes and methods of research in mathematics
- describe the role of mathematical research in society
- describe the ethical aspects of research in mathematics

Competence and skills

• prepare and perform an oral presentation in English

• write a short report in English that nicely combines text with mathematics *Judgement and approach*

• give and receive constructive criticism of oral and written presentations

Course content

The main part of the course consists of lectures on mathematics and mathematical research that includes a historical and philosophical perspective. In addition to these lectures there will be oral presentations by students of materials related to the lectures, and also lectures on and practice of oral and written proficiency in English.

Form of teaching

Attendance is mandatory at the lectures, including those held by students.

Language of instruction: English

The language of instruction is English unless all involved are Swedish speakers.

Assessment

The examination consists of four parts:

- Active participation in the scheduled activities and in the discussion forum.
- Prepare and give an oral presentation of a subject that is related to the lectures.
- Write a report based on the material presented in the lectures.
- Provide feedback to fellow students' oral and written presentations.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). In order to pass the course you should be approved at all four parts. The grades Pass (G) or Pass with Distinction (VG) is based on the overall assessment of the oral presentation and the written report. Students who are contractually entitled to ECTS grades should inform the examiner about this no later than one week after the start of the course. Students without such entitlement will not be awarded ECTS grades. Grades will be converted into ECTS terminology according to a standard model approved by the University President.

Course evaluation

Oral and/or written course evaluation will be performed. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.