



GRADUATE SCHOOL

GM0702 Mathematics, 7.5 higher education credits

Matematik, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by School of Business, Economics and Law on 2010-07-02 and was last revised on 2017-05-18 by Faculty Board of the School of Business, Economics and Law to be valid from 2017-08-28, autumn semester of 2017.

Field of education: Social Sciences 100%

Department: Graduate School

Position in the educational system

The course Mathematics is a course within the Master of Science programmes at the Graduate School, School of Business, Economics and Law, University of Gothenburg.

Main field of studies

Economics

Specialization

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

Entry requirements

To be eligible for the course Mathematics, the participant must fulfill the entrance qualifications for the Master of Science programme in Economics. For programme specific entrance requirements, see programme syllabus.

Learning outcomes

By the end of the course, students should be able to:

1. Solve and analyze optimization problems in several variables, both unconstrained and constrained, including inequality constraints.
2. Solve systems of linear equations.

3. Obtain operational knowledge on Integration
4. Obtain operational knowledge of Probability Theory and main concepts in statistics

Course content

After completing the course the students will be able to understand the main mathematical concepts in Economics and Finance. The course includes the following items: (i) Linear Algebra, (ii) Differential Calculus, (iii) Integral Calculus, (iv) Static Optimization, (v) Probability

Form of teaching

The coursework mainly consists of lectures, exercises and labs.

Language of instruction: English

Assessment

The course assessment consists of a final individually written exam for learning outcomes 1-4, that accounts for 100% of the final course grade.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

The number of examinations is limited to five.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). To get a Pass in the course at least 50% of the maximum total points on the written exam is needed. To get a Pass with Distinction in the course at least 75% of the maximum total points on the written exam is needed.

Course evaluation

The course will be evaluated upon completion. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.