UNIVERSITY OF GOTHENBURG

DEPARTMENT OF ECONOMICS

NEF1000 Mathematics, 7.5 credits

Matematik, 7,5 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation

This syllabus was confirmed by the Department of Economics on 2018-12-06, and is valid from Autumn semester 2018.

Responsible Department
Department of Economics, School of Business, Economics and Law

Entry requirements

To be eligible for the course the participant must be admitted to third cycle studies at the Department of Economics, Gothenburg University or other departments, faculties or universities.

Learning outcomes

On successful completion of the course, the third-cycle student is expected to:

Knowledge and understanding

- understand the mathematical terminology
- intuitively understand the various mathematical tools used in economic theory
- have a solid foundation for taking subsequent courses within the PhD program

Competence and skills

- be able to acquire skills in calculus, matrix algebra, optimization (static and dynamic) and probability theory

Judgement and approach

- be able to determine which methods to use when addressing a wide range of questions

Course content

The purpose of the course is to introduce students to the most central mathematical tools for economic analysis, including calculus, matrix algebra, static and dynamic optimization and probability theory.

Types of instruction

The course consists of lectures outlining the theory, illustrated by examples, and exercises where concrete problems are solved.

Language of instruction
The course is given in English.

Grades

The grade Pass (G) or Fail (U) is given in this course.

Types of assessment

The examination consists of a wrfitten exam and hand-in assignments, which are to be solved individually. The points from the assignments and the exam will be added up to give a total score for the course as a whole and this score is the basis for a grade on the grading scale. To obtain a pass grade, the student has to obtain at least 50% of the total score.

A student who has failed the examination twice has the right to change examiner, if practically possible. Such request must be submitted in writing to the Deputy Head of the Department of Economics.

Course evaluation

A written anonymized course evaluation will be carried out at the end of the course. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.

Other information

Students registered for Third Cycle studies at another faculty or university must apply for admission to the course to the Deputy Head of the Department of Economics.

Appendix 1: Reading list