

# Mathematical Methods in Economics, continuation course

Single subject and programme course

7.5 credits

Matematiska metoder i nationalekonomi,  
fortsättningskurs

730G77

Valid from:

**Determined by**  
The Quality Board at the Faculty of Arts  
and Sciences

**Date determined**  
2011-03-25

**Replaced by**  
770G17

## Main field of study

Economics

## Course level

First cycle

## Advancement level

G2X

## Course offered for

- Master programme in Economics
- Bachelor´s Programme in Political science and economics
- Business and Economics Programme - International - French
- Business and Economics Programme - International - Spanish
- Business and Economics Programme - International - German

## Entry requirements

Completed Economics, basic course comprising 30 ECTS credits on first cycle level, or the equivalent, with at least 15 ECTS credits approved.

## Intended learning outcomes

On completion of the course, the student should be able to

- account for the mathematical methods that are used in the economics to solve equilibrium - and optimization problem
- solve mathematical problems of the kind that is covered in the course.

## Course content

The course contains the following parts:

- Static equilibrium analysis; basic linear algebra
- Comparative static analysis; derivatives and differentials for functions with an and several variables
- Optimisation problems; extreme values for functions with one and multiple variables, optimisation under constraints
- Dynamic analysis; integrals, basic differential and difference equations

## Teaching and working methods

The teaching is given as full-time studies and comprises lectures and teacher-supervised exercises. Independent studies are a necessary complement to the teaching.

## Examination

Final written examination.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

Three-grade scale, U, G, VG

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

## Department

Institutionen för ekonomisk och industriell utveckling