



# SF1659 Mathematics, Basic Course 4.5 credits

Matematik, baskurs

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for SF1659 valid from Autumn 2010

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

Having completed the course, you will be able to:

- Use basic logical arguments in order to interpret the result of calculations or given data
- Present your calculations and arguments in such a way that they are easy to follow even for someone who is not already involved with the problem.
- Read mathematical text and get to master new applications, described in a mathematical way.
- Assess correctness, accuracy and relevance of mathematical models and computations
- Use and derive basic relations between elementary functions
- Use elementary functions to describe behaviour of certain models, for example, oscillations and growth phenomenon.
- In addition, the student should have acquired learning technique that simplifies further mathematical studies.

## Course contents

Trigonometric functions and their inverses, potential, exponential and logarithmic functions, absolute value function, binomial theorem, sums and sigma-notation.

## Course literature

A.Persson, L.-C.Böiers, *Analys i en variabel*;  
A.Persson, L.-C.Böiers, *Övningar i analys i en variabel*.

## Examination

- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

Written exam, possibly with the possibility of continuous examination.

## Ethical approach

- All members of a group are responsible for the group's work.

- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.