



# SF1600 Calculus I, part 1 7.5 credits

Differential- och integralkalkyl I, del 1

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

## Establishment

Course syllabus for SF1600 valid from Autumn 2007

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Mathematics, Technology

## Specific prerequisites

Advanced mathematics (NT from high school level).

## Language of instruction

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

## Intended learning outcomes

To acquire a good understanding of and ability to apply basic calculus of one variable.

## Course contents

The function concept, elementary functions. Real numbers, limits, continuity. Differentiation, extreme value problems. Vibration equations. Integrals; geometric applications. Taylor's formula. Series, convergence.

## Course literature

R. A. Adams. "Calculus. A complete Course" 6:th ed.

Råde-Westergren/Mathematics Handbook for Science and Engineering.

## Examination

- TEN1 - Examination, 7.5 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.

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

## Other requirements for final grade

Written examination (TEN1; 7,5 hp)

## 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.