



DN1242 Numerical Analysis, Supplementary Course 1.5 credits

Numerisk analys, tilläggskurs

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 DN1242 valid from Autumn 2008

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

The goal of the course is to give the students

- extended knowledge of numerical analysis of scientific and engineering problems,
- practice in using Matlab to solve large problems

so that they will be able to

- formulate and use numerical methods to simulate the solution of some partial differential equations by computer,
- present problems and results so that they are easily understood.

Course contents

The same as in 2D1240/DN1240 Numerical Methods Basic Course II, partly more analytical, and large sparse systems of linear equations, numerical methods for the Laplace and Poisson equations in two and three spacedimensions, methods for the heat equation.

Course literature

To be announced at the web page for the course at least 2 weeks before the course starts.

Examination

- TEN1 - Examination, 1.5 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

All requirements of 2D1240/DN1240 fulfilled, and computer assignments with oral and written presentation (TEN1; 1,5 university credits).

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.