Faculty of Science

NUMA41, Numerical Analysis: Basic Course, 7.5 credits

Numerisk analys: Grundkurs, 7,5 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus is an old version, approved by Study programmes board, Faculty of Science on 2016-02-25 and was valid from 2016-02-25 , spring semester 2016.

General Information

The course is an elective course for first-cycle studies for a degree of Bachelor of Science (180 credits) in mathematics.

Main field of studies	*Depth of study relative to the degree requirements*
Mathematics	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Learning outcomes

The aim of the course is that the student on completion of the course should have acquired the following knowledge and skills:

Knowledge and understanding

On completion of the course, the student must

- be familiar with the basic theory of construction of computable approximations of the most common types of mathematical models within the natural sciences.
- have acquired basic knowledge for further studies in numerical analysis.

Competence and skills

In order to pass the course, the student must

- be able to account, in writing, for the solutions of ,as well as the numerical results for, given problems.
- be able to, with adequate terminology and in a logically well-structured manner, account for the construction of basic numerical methods and algorithms.
- be able to, with adequate terminology and in a logically well-structured manner, account for the numerical solution of a problem with a mathematical formulation.

Course design

Assessment

Grades

Marking scale: Fail, Pass, Pass with distinction.

Entry requirements