



Course syllabus

Faculty of Technology

Kalmar Maritime Academy

1TI04T Tillämpad matematik I, 5 högskolepoäng

1TI04T Applied Mathematics I, 5 credits

Main field of study

Mathematics

Subject Group

Mathematics

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved by Faculty of Technology 2017-04-03

The course syllabus is valid from spring semester 2018

Prerequisites

General entry requirements and Mathematics 2a / 2b / 2c, Physics 1b1 / 1a or Mathematics B, Physics A (Field-specific entry requirements 7/A7).

Objectives

Competence and skills

After completing the course the student is expected to:

- Explain and use the concept of trigonometry
- Manage and solve mathematical problems using derivatives
- Manage and solve mathematical problems using integrals

Content

- Triangular protractor
- Derivative and relevant applications
- Integrals and relevant applications

Type of Instruction

Teaching consists of lessons.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

In order to attain a Pass grade all objectives are expected to have been achieved. In order to attain Pass with Distinction, the level of Pass with Distinction must be attained in both written exam.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty and at the Kalmar Maritime Academy.

Required Reading and Additional Study Material

Susanne Gennow, Ing-Mari Gustafsson, Bo Silborn, *Exponent 3c*, Gleerups 2013, senaste upplagan (230 of 230 pages)

Månsson J., Nordbeck P. *Endimensionell analys*, Studentlitteratur, latest edition (100 of 400 pages)

Månsson J., Nordbeck P. *Övningar i endimensionell analys*, Studentlitteratur, latest edition (50 of 200 pages)

Reference Literature:

Susanne Gennow, Ing-Mari Gustafsson, Bo Silborn, *Exponent 1c*, Gleerups 2013, latest edition

Susanne Gennow, Ing-Mari Gustafsson, Bo Silborn, *Exponent 2c*, Gleerups 2013, latest edition

Corner Kevin, Embleton William, Jackson Leslie, *Mathematics For Marine Engineers*, Bloomsbury 2013, latest edition