MET 2410 Mathematics

Program
Bachelor of Science in Business (1. year).

Responsible for the course
Tron Foss

Department
Economics

Term
According to study plan

ECTS Credits
9

Objective
The purpose of the course is to provide the students with mathematical knowledge and insight that will enable them to better understand and work on subjects related to business management.

Prerequisites
The course is based on mathematical knowledge corresponding to minimum two years of mathematics of the Upper Secondary School

Compulsory literature
Books:
Bjørnestad, Harald ... [et al.].. 2004. Matematikk for økonomi og samfunnsfag. 6. utg. Kristiansand: Høyskoleforlaget

Other:
Foss, Tron. 2002. Eksamensoppgavesamling med løsningsforslag i matematikk for siviløkonomstudiet. Sandvika: Handelshøyskolen BI

Recommended literature
Books:
Bjørnestad, Harald ... [et al.].. 2004. Matematikk for økonomi og samfunnsfag: løsningsforslag. 6. utg. Kristiansand: Høyskoleforlaget

Course outline
Basic subjects (Chapter 1)
Functions of real variables (Chapter 2)
Derivations with applications (Chapter 3)
Exponential and logarithmic functions (Chapter 4)
Series and applications to financial mathematics (Chapter 5.1-5.5)
Integration's (Chapter 6)
Functions of multiple variables (Chapter 7)
Linear algebra (matrixes and determinants) (Chapter 8.1-8.5)
Chapters 1,2 and 3 will be taught in the preparatory course.

Computer-based tools
Computer-based tools are not used.

Course structure
The course is organized over two terms with two parts.
- MET2411 Mathematics - Fall
- MET 2412 Mathematics - Spring

Fall term: The course is based on 30 teaching hours of lectures (10 weeks). In addition 20 hours (10 weeks) of problemsolving.

Spring term The course is based on 24 teaching hours of lectures (8 weeks). In addition 16 hours (8 weeks) of problemsolving.

Evaluation
A Three-hour indivisual Multiple Choice exam at the end of the fall term in the fist part of the syllabus.
A five-hour indivisual written examination at the end of the spring term in the hole syllabus.

Evaluation code(s)
MET 24101 Mathematics - Multiple Choice at the end of fall term, which accounts for 30% of the total grade in MET 2410 Mathematics, 9 credits.
MET 24102 Mathematics - Written exam at the end og spring term, which account for 70% of the total grade in MET 2410 Mathematics, 9 credits.

Both exams must be passed with the grade E or bether to get the final grade in the course.

Aids at the examination
All aids are allowed.

Makeup exam
At the same time as the ordinary part exams (next year).