



APPLIES TO ACADEMIC YEAR 2006/2007

## MET 2410 Mathematics

### Program

Bachelor of Science in Business (1. year), Bachelor of Science in Marketing (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:

Bjørnstad, Harald ... [et al.]. 2004. Matematikk for økonomi og samfunnsfag. 6. utg. Kristiansand: Høyskoleforlaget

#### Other:

Foss, Tron. 2005. Eksamensoppgavesamling med løsningsforslag i matematikk for siviløkonomstudiet. Oslo: BI Forlag

### Recommended literature

#### Books:

Bjørnstad, 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)
- Integrations (Chapter 6)
- Functions of multiple variables (Chapter 7)
- Linear algebra (matrixes and determinants) (Chapter 8.1-8.5)
- Chapters 1,2 and part of 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.

- MET 2411 Mathematics - Fall
- MET 2412 Mathematics - Spring

Fall term: The course is based on 36 teaching hours of lectures (12 weeks). In addition 24

hours (12 weeks) of problemsolving.

Spring term The course is based on 42 teaching hours of lectures (14 weeks).

**Evaluation**

A Three-hour individual Multiple Choice exam at the end of the fall term in the first part of the syllabus.

En individuell innlevering i vårsemestret med karakter bestått t/ ikkebestått .

A five-hour individual written examination at the end of the spring term in the whole syllabus.

**Evaluation code(s)**

MET 24103 Mathematics - Multiple Choice at the end of fall term, which accounts for 30% of the total grade in MET 2410 Mathematics, 9 credits.

MET 24104 Mathematics - Assignment pass/fail, springterm

MET 24105 Mathematics - Written exam at the end of spring term, which account for 70% of the total grade in MET 2410 Mathematics, 9 credits.

All exams must be passed to obtain 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).