



APPLIES TO ACADEMIC YEAR 2011/2012

## MET 2610 Mathematics - MAKEUP EXAM

### Programme

Re-sit examination

### Responsible for the course

Pål Lauritzen

### Department

Department of Economics

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

Norwegian

### Introduction

### 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 the basic course in mathematics of the Upper Secondary School

### Compulsory reading

#### Books:

Bjørnstad, Harald ... [et al.]. 2007. Matematikk for økonomi og samfunnsfag. 7. utg. Kristiansand : Høyskoleforlaget

### Recommended reading

#### Books:

Bjørnstad, Harald ... [et al.]. 2007. Matematikk for økonomi og samfunnsfag : Løsningsforslag til 7. utgave. 7. utg. Kristiansand: Høyskoleforlaget  
Foss, Tron. 2005. Eksamensoppgavesamling med løsningsforslag i matematikk for bedriftsøkonomer. Oslo : Handelshøyskolen BI, Institutt for samfunnsøkonomi  
Lauritzen, Pål. 2007. Slik bruker du eksamenskalkulatoren Texas Instruments BAII Plus. Oslo : Cappelen akademisk

### Course outline

- Basic algebra
- The concept of function, Functions with one variable
- Derivation with applications, Elasticities
- Exponential functions and logarithmic functions
- Series and financial mathematics
- Integration
- Functions of multiple variables
- Optimizing techniques
- Constrained optimization, Lagrange multipliers

### Computer-based tools

Computer-based tools are not used

### Course structure

The duration of the course is one year. The course is based on 84 teaching hours of lectures, 42 hours in each semester, which deal with important parts of the syllabus. Two compulsory assignments, one each semester, must be completed during the course. The students have 14 days to work with each of the

assignments. Both assignments must be passed in order to obtain final grade in the course. In addition to studying the textbooks, it is essential that students do exercises related to the syllabus. Students are also recommended to form study groups of 3 - 5 persons for the purpose of mutual help and support.

### **Examination**

The evaluation consists of four components: Two individual assignments that must be passed, a three-hour multiple choice exam after the first semester and a four-hour individual written examination concludes the course. The two individual assignments will be graded passed/failed. The multiple choice exam and the final written exam will be given ordinary grades. The multiple choice exam is weighted 20% and the final exam 80% in the final grade. The students can redo each component separately.

### **Examination code(s)**

MET 26101 - Assignment 1, graded passed/failed.

MET 26102 - Multiple Choice exam, counts 20% to obtain final grade in MET 2610 Mathematics, 6 credits.

MET 26103 - Assignment 2, graded passed/failed.

MET 26104 - Written exam, counts 80% to obtain final grade in MET 2610 Mathematics, 6 credits.

### **Examination support materials**

No aids are allowed at the multiple choice exam.

All aids + calculator TEXAS INSTRUMENTS BA II Plus™ are allowed at the final written exam.

Exam aids at written examinations are explained under exam information in our web-based Student handbook. Please note use of calculator and dictionary.

<http://www.bi.edu/studenthandbook/examaids>

### **Re-sit examination**

Due to changes in our Bachelor Programmes from autumn 2009, there also will be changes in every single course. This course was lectured for the last time in the academic year 2008/2009. Re-sit exam will be offered every term up to and even spring 2012.

### **Additional information**