



APPLIES TO ACADEMIC YEAR 2009/2010

## MET 2601 Statistics - MAKEUP EXAM

### Programme

Bachelor of Science in Business (1. year).

### Responsible for the course

### Department

Department of Economics

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

Norwegian

### Introduction

The use of abstract mathematical/statistical models has shown to be useful in several fields. In this course we present some well known models for practical application.

### Objective

The objective of the course is to

- collect data and presentation of the data (Excel and SPSS)
- understand how abstract models may be utilised to describe a more complex reality
- understand how probability theory can be used to describe the information in such models
- understand principles for statistical inference
- understand uncertainty principles
- learn to present knowledge based on abstract models.

The course is also a basis for several other courses within economy.

### Prerequisites

Knowledge on a level of 2MX, (2MZ + 3MZ) or 2MY.

### Compulsory reading

#### Books:

Løvås, Gunnar G. 2004. Statistikk for universiteter og høyskoler. 2. utg. Oslo : Universitetsforlaget. 390/10. Det er ikke hele boken som vil være pensum

### Recommended reading

#### Books:

Berry, Donald A. & Bernard W. Lindgren. 1996. Statistics : theory and methods. 2nd ed. Belmont, Calif. : Duxbury Press

Johannessen, Asbjørn. 2007. Introduksjon til SPSS : versjon 14, 15 og 16. 3. utg. Oslo: Abstrakt forlag

Newbold, Paul, William L. Carlson, Betty M. Thorne. 2006. Statistics for business and economics. 6th ed. Upper Saddle River, N.J. : Prentice Hall

Newbold, Paul. Student solutions manual

Pallant, Julie. 2007. SPSS survival manual : a step by step guide to data analysing using SPSS for Windows. 3rd ed. Maidenhead : McGraw-Hill ; Open University Press

### Course outline

1. Stochastic variables
2. Probability theory
3. Discrete probability distributions
4. Continuous probability distributions
5. Inference in discrete probability distributions
6. Inference in continuous probability distributions
7. Goodness of estimators
8. Covariation between stochastic variables

- 9. Simple linear regression analysis
- 10. Inference in a simple linear regression model
- 11. Goodness of fit of abstract models

**Computer-based tools**

Excel and SPSS

**Course structure**

54 hours lectures

**Examination**

Written exam (4 hours)

**Exam code(s)**

MET 26011 Statistics accounts for 100% of the grade. 6 ECTS.

**Examination support materials**

All aids + calculator TEXAS INSTRUMENTS BA II Plus™ are allowed.

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 spring 2009. Re-sit exam will be offered every term even spring 2012.

**Additional information**