



APPLIES TO ACADEMIC YEAR 2008/2009

MET 2601 Statistics

Program

Bachelor of Science in Business (1. year).

Responsible for the course

Magne Aarset

Department

Department of Economics

Term

According to study plan

ECTS Credits

6

Language of instruction

Norwegian

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 literature

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 literature

Books:

Berry, D.A. & B.W. Lindgren. 1996. Statistics : Theory and methods. 2nd ed. Belmont, CA : Duxbury Press

Johannessen, Asbjørn. 2007. Introduksjon til SPSS. 3. utg. Oslo: Abstrakt forlag

Newbold, Paul. 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: 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

Evaluation

Written exam (4 hours)

Evaluation code(s)

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

Aids at the examination

All aids 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>

Makeup exam

Arranged every semester