APPLIES TO ACADEMIC YEAR 2011/2012

EXC 2304 Statistics - RE-SIT EXAM

Programme
Re-sit examination

Responsible for the course
Fred Wenstøp

Department
Department of Economics

Term
According to study plan

ECTS Credits
6

Language of instruction
English

Introduction

Objective
The objective of the course is to teach students:

- Descriptive statistics
- To explain data analysis printouts from standard software
- The principles of statistical inference – confidence intervals and hypothesis testing
- The most important methods for two variables
- Collection and organization of quantitative data
- Choice of suitable methods
- Interpretation of results in context of real problems

In addition, the course in statistics provides the necessary foundation for other courses in the Business Candidate Program and the Bachelor of Business Administration Program.

Prerequisites
No particular prerequisites.

Compulsory reading
Books:
Ott, R. Lyman and Michael T. Longnecker. 2004. A first course in statistical methods. Belmont, Calif. : Thomson-Brooks/Cole

Recommended reading
Books:
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.	Statistics and the scientific method	Chapter 1
2.	Collecting data	Chapter 2
3.	Summarizing data	Chapter 3
4 – 5	Probability and probability distributions	Chapter 4
6.	Inferences about population central values	Chapter 5
7 – 8	Inferences comparing two population central values	Chapter 6
9.	Categorical data	Chapter 10
10 – 11	Linear regression and correlation	Chapter 11
14.	Communication and documentation	Chapter 13

Computer-based tools
The college will provide further details. Active use of software in the course will facilitate learning and save time in answering assignments. It will also enhance graphical presentations.

Moreover, practice in the use of spreadsheet is an asset in itself. Consequently, students are recommended to use software both during the course.

Recommended Software: A user should be able to use several types of software, depending on the purpose. We recommend Excel, PhStat and SPSS. It is not required that students shall use SPSS, but that they ca interpret SPSS printouts in the textbook at the exam. For those interested in SPSS, see for instance Foster, Jeremy J. 2001. Data analysis using SPSS for Windows versions 8 to 10: A beginners guide. 2nd ed. London: Sage .
Excel is a general purpose spreadsheet with powerful built-in statistical functions that can perform most of the relevant types of calculations. PhStat is used with Excel and included in the textbook.
SPSS is a powerful professional statistical package with functions that also cover more advanced courses in statistics. It is available from BI at a discount price.

Course structure
The course is based on 42 teaching hours with lectures in which selected, central topics are dealt with. The central educational objective is to teach students how to acquire information with statistical methods. The lectures, therefore, will be practical in orientation, and the discussion of statistics as a method to acquire knowledge is as important as technical skills. Emphasis is therefore placed on the students' ability to read reports that contain listings such as they will find when employing standard software.
Students are expected to study independently the parts of the textbook that are not dealt with in the lectures, and thus acquire a coherent and full understanding of statistics as defined in the syllabus. It is important that the students start to use computational tools early in the course, so that they have acquired confidence with their chosen tool in good time before the final exam.

Examination
A three-hour individual written examination concludes the course. In their preparations for the exam students are expected to have read the syllabus well, and to be prepared to interpret SPSS printouts. The chapters indicated under the course outline above are required at the 3 hour exam.

Examination code(s)
EXC 23041 - written exam which accounts for 100% of the grade in EXC 2304, 6 ECTS credits

Examination support materials
BI-approved exam calculator.
Exam aids at written examiniations 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 will also be changes in every single course. This course was lectured for the last time spring 2009. A re-sit exam will be offered every term from autumn 2009 up to and including spring 2012.

Additional information