



APPLIES TO ACADEMIC YEAR 2006/2007

GRA 6020 Multivariate Statistics

Program

Common Course, Master of Science in International Marketing and Management, Master of Science in International Marketing and Management (+1), Master of Science in Leadership and Organizational Psychology, Master of Science in Management, Master of Science in Marketing (Management), Master of Science in Marketing (Marketing), Master of Science in Political Economy

Responsible for the course

Ulf Henning Olsson

Department

Economics

Term

According to study plan

ECTS Credits

6

Objective

- To understand and be able to apply some of the most known multivariate statistical techniques to research problems in the student's discipline of interest.
- To illustrate the use of actual statistical software. It is the responsibility of the student to familiarize himself/herself with the fundamentals of this or similar statistical analysis software.
- To provide an understanding for the statistical assumptions underlying these techniques.

Prerequisites

An introductory course in statistics.

Compulsory literature

Books:

Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham and William C. Black. 2006. Multivariate data analysis. 6th ed. Upper Saddle River, N.J. : Prentice Hall
Jøreskog, Karl G. and Dag Sörbom. 1995. LISREL 8: Structural equation modeling with the SIMPLIS command language. 3rd printing, with foreword and computer exercises. Chicago : Scientific Software International

Other:

Jøreskog Karl G. 2002. Structural Equation Modeling with Ordinal Variables. (Can be downloaded: <http://www.ssicentral.com/lisrel/ordinal.pdf>)

Recommended literature

Books:

Gujarati, Damodar N. 2003. Basic econometrics. 4th ed. New York: McGraw-Hill
Kaplan David. 2000. Structural equation modeling : foundations and extensions. Thousands Oaks: Sage

Course outline

1. The idea of significance testing.
2. The linear regression model.
3. Qualitative Response Regression Models (Logit and Probit regression)
4. Factor analysis
5. Exploratory factor analysis
6. Confirmatory factor analysis
7. Structural Equation Modeling

Computer-based tools

The course uses modern statistical software. Blackboard/homepage

Course structure

Lectures and exercises

Evaluation

Term paper and a two-hour multiple-choice control exam accounts for 100% of the grade. Groups of up to three students on the term paper. The multiple-choice exam is graded and counts for 25% of the final grade and must be passed to obtain course credits.

For further information please see information placed on Blackboard and the web.

Evaluation code(s)

GRA60205 for the term paper (75%)

GRA60206 for the multiple choice exam (25%).

Aids at the examination

All aids are allowed.

Makeup exam

Re-takes are only possible at the next time a course will be held. When course evaluation consists of class participation or process elements, the whole course must be re-evaluated when a student wants to retake an exam. Retake examinations entail an extra examination fee.

Honor Code

Academic honesty and trust are important to all of us as individuals, and they are encouraged and promoted by the honor system. This is a most significant university tradition. The honor system is the responsibility of students. As faculty, we share the commitment to the ideals of the honor system.

At no time should notes or papers or personal consultations based on previous semesters of this course be used. As part of the honor code papers handed in as part of the course is, at the discretion of the professor, scanned for plagiarism. We are using Safe Assignment in Black Board for this purpose. Any violation of the honor code will be dealt with in accordance with BI's procedures on cheating. These issues are a serious matter to everyone associated with the program. They are at the heart of the Honor Code and academy integrity. If you have any questions about your responsibilities under the honor code, please ask.