GRA 6036 Multivariate Statistics with Econometrics

Program
Core Course, Master of Science in Business and Economics, Master of Science in Financial Economics

Responsible for the course
Ulf Henning Olsson

Department
Department of Economics

Term
According to study plan

ECTS Credits
6

Language of instruction
English

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Learning outcome
- To understand and be able to apply some of the most known and modern multivariate statistical techniques.
- 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 software.
- To provide an understanding for the statistical assumptions underlying these techniques.

Prerequisites
Basic Statistics, Linear Algebra and an Introductory Course in Econometrics

Compulsory literature
Books:
Kaplan, David. 2009. Structural equation modeling: Foundations and extensions. 2nd edition. Thousand Oaks, Calif.: Sage. Approximately 130 pages

Collection of articles:
Articles and book chapters in two compendiums

Recommended literature

Course outline
- The Logit and The Probit Models
- Panel Models
- Factor Analysis
- Simultaneuous Equations
- Structural Equation Models
- Estimation and Distribution Theory
- (Multilevel models with latent variables)

Computer-based tools
The course uses modern statistical software e.g. LISREL, SPSS, STATA,SAS, EVIEWS etc.,

Course structure
Lectures and exercises.

Specific Information regarding student evaluation will be provided in class. Please note that while attendance is not compulsory in all courses, it is the student's responsibility to obtain any information provided in class that is not included on the course homepage/Blackboard or text book.

Evaluation
Term paper and a two hour multiple choice control exam. Groups of up to three students on the termpaper. The control exam must be passed to obtain course credits.The termpaper counts for 75% of the grade and the multiple choice control exam counts for 25% of the final grade.
 For further information please see information placed on Blackboard and the web

Evaluation code(s)
GRA 60361for the termpaper (75%)
GRA60362 for the multiple choice exam (25%)

Aids at the examination
All aids are allowed. 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

Makeup exam
Re-takes are only possible at the next time a course will be held. When the course evaluation has a separate exam code for each part of the evaluation it is possible to retake parts of the evaluation. Otherwise, the whole course must be re-evaluated when a student wants to retake an exam. Retake examinations entail an extra examination fee.

Please note that students who only retake the control exam need to be aware that the exam may be based on the termpaper given this semester. Students should therefore regard the termpaper as a part of the course literature, even if the students already have a passing grade in the termpaper.

Honor Code
Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honor code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honor code system, to which the faculty are also deeply committed.

Any violation of the honor code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and 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.