



APPLIES TO ACADEMIC YEAR 2013/2014

## GRA 6437 Marketing Research and Multivariate Analysis

### Programme

Master of Science in Business (Marketing), Master of Science in Strategic Marketing Management, Specialization Course

### Responsible for the course

Auke Hunneman

### Department

Department of Marketing

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

English

### Introduction

In this course you will learn to analyze and interpret multivariate analysis techniques with the purpose to reduce the uncertainty and increase the profitability of marketing decisions. This course builds on knowledge the students are assumed to have acquired in previous marketing research and data analyses courses.

The focus in the course is to teach the students to use data analyses tools in selected cutting-edge multivariate analysis techniques along with the ability to understand where each technique can best be used.

This is not a statistics course - even though all the techniques are based on the theory of statistics, the approach taken here is managerial-based, rather than formula-based. Therefore, you will not be a statistics expert at the end of this course. The course focuses in training students to know and apply the techniques in a practical manner.

Students are expected to have working knowledge of SPSS or an equivalent software (e.g. JMP) before the course starts.

### Learning outcome

The overriding learning outcome is to be able to see the particular benefits of analysis-based decision-making in marketing. Closely related to this ability is the ability to discern and choose between various possible analysis techniques as well as the ability to apply the chosen technique appropriately, given the need to solve a particular marketing problem. A relevant marketing problem would typically be the research questions the students address in their master thesis.

To achieve this general learning outcome, the students must be able to the following:

Explain the differences and similarities between key techniques.

Understand each technique in terms of:

- The underlying design providing the data
- Its statistical principles
- Its assumptions
- Its output

Interpret the outputs (results)

Communicate/write up the results

### Prerequisites

A Bachelor's degree, qualifying for admission to the MSc programme.

### Compulsory reading

#### Books:

Janssens, Wim ... [et al.]. 2008. Marketing research with SPSS. Prentice Hall/Financial Times

Malhotra, Naresh K. 2010. Marketing research : an applied orientation. 6th ed. Pearson

### Collection of articles:

A collection of scientific articles

### Other:

During the course there may be hand-outs and other material on additional topics relevant for the course and the examination.

## Recommended reading

### Course outline

- Problem definition, design (experimental and survey-based) and data sources
- Data analysis
- Data interpretation
- Presentation of results

### Computer-based tools

SPSS and/or an equivalent software (e.g. JMP)

Lisrel

It's learning

### Learning process and workload

A course of 6 ECTS credits corresponds to a workload of 160-180 hours.

The learning process of this course involves learning the principles underlying various important statistically based techniques in practical marketing research and theoretical research in marketing and hands-on practice with these methods. In particular,

Part 1 - Identify and design the project, prepare data for analysis and consider the quality of the data

Part 2 - Analyse data using appropriate statistical techniques:

1. ANOVA for testing experimental data
2. MANOVA for testing experimental data with multiple dependent variables
3. OLS regression analysis for prediction purposes and hypothesis testing
4. Logistic regression analysis for prediction purposes
5. Factor analysis for customer segmentation
6. Correspondence analysis for geometrical presentation of products/brands
7. Conjoint analysis for designing optimal product and service offerings

This list may be subject to change.

Part 2 will be taught partly in ordinary class sessions and partly in data laboratory classes

Part 3 - Interpret the results

Part 4 - Write-up of results

Please note that while attendance is not compulsory in all courses, it is the student's own responsibility to obtain any information provided in class that is not included on the course homepage/It's learning or text book.

### Examination

One Term paper (40%), one 3 hour written examination (40%), and two assignments (counting 20% together).

Students work on the assignments individually and hand them in before specified deadlines. Solutions to the assignments are subsequently discussed in class/lab.

Each of these components will be evaluated on a point scale (0-100) and the obtained points will be weighted according to the weight of component (see over). The sum of these weighted points will then be translated into a single final letter grade (A-F) for the course. The term paper and written exam can be given any point from 0 to 100.

The assignments will be given 0 point if not passed and 100 points if passed.

Each component needs to be passed in order to get a grade in the course.

Physical attendance in data laboratory class will not be registered, but is highly recommended as questions related to the data analysis assignments will be answered exclusively in these classes.

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for term papers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation.

This is a course with continuous assessment (several exam elements) and one final exam code. Each exam element will be graded using points on a scale (e.g. 0-100). The elements will be weighted together according to the information in the course description in order to calculate the final letter grade for the course. You will find detailed information about the point system and the cut off points with reference to the letter grades on the course site in It's learning.

**Examination code(s)**

GRA 64371 continuous assessment accounts for 100% of the final grade in the course GRA 6437.

**Examination support materials**

A bilingual dictionary.

Exam aids at written examinations are explained under exam information in the student portal @bi. Please note use of calculator and dictionary in the section on examaids

**Re-sit examination**

It is only possible to retake an examination when the course is next taught.

The assessment in some courses is based on more than one exam code.

Where this is the case, you may retake only the assessed components of one of these exam codes.

Where this is not the case, all of the assessed components of the course must be retaken.

All retaken examinations will incur an additional fee.

**Additional information****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 academic integrity. If you have any questions about your responsibilities under the honor code, please ask.

We hand out, discuss in class, and distribute electronically a variety of materials related to the assigned cases. We do this to provide additional feedback and insight about each case and what should be learned from working on the case, and we make no effort to restrict access to these materials. However, obtaining and using such previous materials in any assignments is a direct and serious violation of the honor code.

At no time should notes or papers or personal consultations based on previous semesters of this course be used. Similarly, you or the other members of your team should not consult with anyone else (or material prepared by anyone else including information from the Internet, computer network, or other on-line news service) in preparing a case for class discussion or written submission or in preparing marketing game-related assignments.