GM1134   Multivariate Data Analysis, 7.5 credits
Multivariat dataanalys, 7,5 högskolepoäng
Second Cycle

Confirmation
This course syllabus was confirmed by Graduate School on 2021-04-07 to be valid from 2021-08-29, autumn semester of 2021.

Field of education: Social Sciences 100%
Department: Graduate School

Position in the educational system
The course Multivariate Data Analysis is a course within the Master of Science programmes at the Graduate School, School of Business, Economics and Law, University of Gothenburg.

Main field of studies	*Specialization*
Marketing and Consumption	A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements
To be eligible for the course Multivariate Data Analysis the participant must fulfill the entrance qualifications for the Master of Science programme in Marketing and Consumption. For programme specific entrance requirements, see programme syllabus.

Learning outcomes
On successful completion of the course, the student will be able to:

1. discuss important aspects regarding research design, selection and select relevant multivariate methods to test different types of hypotheses
2. formulate hypotheses and apply selected multivariate methods

3. critically and constructively analyze, discuss and interpret the results from statistical methods.

Course content

The course provides an insight into quantitative scientific and methodological approaches as well as practical exercise in the design and implementation of scientific issues and research projects. This includes selection strategies, hypothesis testing, multivariate data analysis, and how to write and present quantitative scientific works. After completing the course, students should be able to identify, apply relevant methodological approaches in relation to a research problem and be able to develop an appropriate research design and carry out an analysis and interpretation in a quantitative study.

The course multivariate data analysis is based on lectures, seminars and group work. The lectures aim to give students an understanding of different quantitative methods. In seminars, students have the opportunity to apply and practice statistical analysis. The group work provides an opportunity for independent work to analyze, discuss and interpret the results from statistical methods.

Form of teaching

Lectures, seminars and group work.

Language of instruction: English

Assessment

Learning outcome 1 - 3 will be assessed through an individual written exam and group work.

The individual exam shall be written individually, cooperation in formulating text, tables, figures etc. is not allowed.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed.

The number of examinations is limited to five.

Grades
The grading scale comprises: Excellent (A), Very good (B), Good (C), Satisfactory (D), Sufficient (E) and Fail (F).

Pass is required on all examination forms. The grade (A-E) corresponds to the total score a student obtains on the individual written exam and the group work. To receive a pass grade (A-E) >= 50% points is required. The scale is tied to fixed score intervals:

A: 85-100%
B: 75-84%
C: 68-74%
D: 60-67%
E: 50-59%
F: <50%

Course evaluation
The course will be evaluated upon completion. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.