Linnæus University

Dnr: 2022/2265-3.1.2.2

Course syllabus

School of Business and Economics

Department of Economics and Statistics

1ST512 Statistik för marknadsföringsbeslut, 15 högskolepoäng
1ST512 Statistics for Marketing Decisions, 15 credits

Main field of study
Statistics

Subject Group
Statistics

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved 2018-06-14
Revised 2022-06-07 by School of Business and Economics. Revision of field-specific entry requirements and update of standard texts.
The course syllabus is valid from spring semester 2023

Prerequisites
General entry requirements + Civics 1b alt. Civics 1a1 +1a2, Mathematics 2a alt. Mathematics 2b alt. Mathematics 2c and English 6.

Objectives

Module 1 7.5 credits
After completing this module the student should be able to:

- discuss the role of centrality measures vs measures of spread
- state the difference between point estimates and interval estimates estimates
- explain the concept of random samples
- explain the duality between hypothesis tests and confidence intervalls
- discuss the meaning- and use of the central limit theorem
- use SPSS to: present and summarise data graphically, calculate elementary probabilities, test statistical hypotheses concerning measures of centrality

Module 2 7.5 credits
After completing this module the student should be able to:

- recognize the scale (nominal scale, ratio scale etc) of a random variable
- explain various sampling methods
- create a questionnaire linked to a certain research question
- interpret and explain the role and meaning of point- and interval estimation and significance testing
- assess the general uses and limitations of the statistical methods treated in the course

Content

Module 1 7.5 credits
The module contains:

- descriptive statistics
- probability
- random variables
- the normal distribution
- sampling and sampling distributions
- confidence intervals,
- hypothesis testings
- practical examples from retail application areas
- statistical data processing with SPSS

Module 2 7.5 credits
The module contains:

- correlation analysis
- linear regression
- one- and two way tables
- sampling methodology
- statistical data processing with SPSS

Type of Instruction

Module 1 7.5 credits
The teaching consists of computer classes and lectures.

Module 2 7.5 credits
The teaching consists of computer classes and lectures.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

Module 1 7.5 credits
The module is examined through an individual written examination (3 credits) and a written report (4.5 credits).

Module 2 7.5 credits
The module is examined through an individual written examination (3 credits) and a written report (4.5 credits).

The following applies to all modules:
The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student’s performance is assessed as fail. Grading criteria for the A–F scale are communicated in writing to the student by the start of the

module at the latest, as well as how the weighting and weighting of grades on individual examining elements to the final course grade takes place. The basis for the student’s grade is determined by the student's fulfillment of the objectives.

The grade of the course is a combined assessment from the grades of the various course modules. The combined assessment is based on the grades and the scope of the course (number of credits). The more extensive a module is, the greater impact it will have on the final grade. Module grades with the grading scale between G-U will not be considered into the combined assessment. However, a G is required for each of the modules in order to receive a final course grade.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University. An examiner can, in exceptional cases, decide that a student who is close to the level for a passing grade may carry out supplementary assignments in order to reach the passing grade.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 1ST401 with 7.5 credits.

Required Reading and Additional Study Material

Required reading

Module 1 7.5 credits

Moore, D., McCabe, G., Craig, B. *Introduction to the practice of statistics*. Macmillan Learning. Latest edition. About 810 pages.

SPSS online manual (electronic)

Module 2 7.5 credits

Moore, D., McCabe, G., Craig, B. *Introduction to the practice of statistics.* Macmillan Learning. Latest edition. About 810 pages.

SPSS online manual (electronic)