

Linnæus University

Course syllabus

School of Business and Economics Department of Economics and Statistics

1ST861 Statistiska metoder för företagsekonomi och nationalekonomi, 7,5 högskolepoäng Statistical Methods for Business and Economics, 7.5 credits

Main field of study

Statistics

Subject Statistics

Level First cycle

Progression G1N

Date of Ratification

Approved 2024-06-24. The course syllabus is valid from spring semester 2025.

Prerequisites

General entry requirements + English 6, Mathematics 3b alt. Mathematics 3c and Civics 1b alt. Civics 1a1 +1a2.

Objectives

After completing this course the student should be able to

- · discuss the pros and cons of parametric and non-parametric methods
- describe the sampling methods included in the course
- carry out and interpret regression analysis using statistical software and present a statistical analysis in a document
- determine an appropriate regression model for a specific statistical research question

- choose and implement an adequate model for a given statistical problem
- detect an incorrect specified model
- critically assess the general usability and limitations of the statistical methods covered in this course

Content

The course contains

- test of goodness of fit and independence
- correlation analysis
- multiple linear regression models
- analysis of time series data
- non-parametric models
- sampling methodology

Type of Instruction

The teaching consists of lectures and computer group exercises.

Examination

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

The course is examined through an individual digital query 1 credit, a computer exercise with hand in group assignment 1.5 credits and an individual written examination 5 credits.

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.

Resit examination is offered in accordance with Linnaeus University's Local regulations for courses and examination at the first- and second-cycle levels.

In the event that a student with a disability is entitled to special study support, the examiner will decide on adapted or alternative examination arrangements.

Course Evaluation

A course evaluation should be conducted during the course or in connection with its conclusion. The results and analysis of the completed course evaluation should be promptly communicated to students who have completed the course. Students participating in the next course instance should be informed of the results of the previous course evaluation and any improvements that have been made, no later than at the start of the course.

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: 1ST061, 1ST802, 1ST904:2 and 1ST905:2 with 7.5 credits each. 1ST902 and 1ST903 with 4 credits each.

Required Reading and Additional Study Material

Anderson, D-R., Sweeney, D-J., Williams, T-A., Freeman, J. & Shoesmith, F. *Statistics for Business and Economics*. SouthWestern Cengage Learning. Latest edition. About 640 pages.

Additional study material

Statistical software online manual (this electronic resource is part of the Statistical software. The manual cannot, and should not, be bought).