Linnæus University

Course syllabus

School of Business and Economics
Department of Economics and Statistics

4NA916 Avancerat datadrivet beslutsfattande, 7,5 högskolepoäng
Advanced Data-driven decision making, 7.5 credits

Main field of study
Economics

Subject
Economics

Level
Second cycle

Progression
A1N

Date of Ratification
Approved 2024-02-26.
Revised 2025-10-13. Revision of literature and examination.

The course syllabus is valid from autumn semester 2025.

Prerequisites
Economics 15 credits and Statistics 15 credits or course credits in time series analysis and regression analysis. or the equivalent. English 6, or the equivalent.

Objectives

After completing this course the student should be able to:

- collect and utilize data to generate insights for fact-based decision-making
- apply advanced economic and statistical tools for analysis to enhance the performance and outcomes for individuals and organizations
- critically reflect on advanced empirical methods used in problem-solving and decision-making

Content

This course is designed to equip students with the knowledge and skills necessary to:

- make informed, data-driven decisions in a variety of professional and personal contexts
- through a blend of theoretical concepts, practical exercises, and case studies, students will develop a comprehensive understanding of the role and utilization of data in decision-making processes
- to that end, the course also leverages recent advances in business analytics, including 'big data' and machine learning, at an advanced level

Type of Instruction

Teaching is carried out as distance learning via a learning platform and consists of self-studies based on instructions from the course coordinator. The teaching consists of lectures, laboratory work, and case studies. The course requires access to a computer with internet connection and a webcam.

Examination

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

The course is examined through individual written hand-in assignments with oral presentation and opposition at a final seminar 7.5 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.

Required Reading and Additional Study Material

Required Reading

Bekes, G. & Kezdi G. *Data Analysis for Business, Economics, and Policy,* Cambridge University Press. Latest edition. About 740 pages.

Scientific articles and hand-outs. About 400 pages.