



Course syllabus

School of Business and Economics
Department of Economics and Statistics

4NA080 Avancerade empiriska metoder i nationalekonomi, 7,5
högskolepoäng

Advanced Empirical Methods in Economics, 7.5 credits

Main field of study

Economics

Subject

Economics

Level

Second cycle

Progression

A1F

Date of Ratification

Approved 2020-06-24.

Revised 2025-05-12. Revision of prerequisites and literature and update of standard texts.

The course syllabus is valid from spring semester 2026.

Prerequisites

Specific entry requirements:

a minimum of 7.5 credits Economics at the second-cycle level,

a minimum of 15 credits Statistics, at the first-cycle level, or 15 credits acquired in time series analysis and regression analysis, and English 6, or the equivalent.

Objectives

After completing this course the student should be able to:

- explain the idea behind econometric methods to isolate causal effects in the

analysis of economic problems

- apply the most common econometrics methods on economic problems
- explain how selection affects the ability to isolate causal effects and explain and use methods to solve the selection problem;
- reflect critically on ethical issues in empirical studies in economics
- value and identify strengths and weaknesses of empirical studies within economics
- both orally and in writing interpret, report and summarize results of conducted regression analyses

Content

The course covers the following areas and concepts:

- the selection problem and randomization
- panel data and panel data methods such as fixed effects and difference-in-differences
- instrumental variable analysis
- regression discontinuity design
- experimental and quasi-experimental methods

Type of Instruction

The teaching consists of lectures and seminars.

Examination

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

The course is examined through an individual written examination 5 credits and a series of individual laboratory sessions that are oral presented 2.5 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:

4NA050 and 4NA070 with 7,5 credits each.

Required Reading and Additional Study Material

Required reading

Huntington-Klein, Nick (2021). *The Effect: An Introduction to Research Design and Causality*. 2nd edition. Chapman & Hall/CRC. About 600 pages.

Scientific articles. About 300 pages.