



Faculty of Arts and Social Sciences
Economics

Syllabus

Causal inference

Course Code:	NEGC51
Course Title:	Causal inference <i>Kausal inferens</i>
Credits:	7.5
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Major Field of Study:
NAA (Economics)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2022-11-23, and is valid from the Autumn semester 2023 at Karlstad University.

Prerequisites

Economics 60 ECTS credits, including Econometrics, 7.5 ECTS credits, and at least 15 ECTS credits in Statistics, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

1. explain how problems of endogeneity, selection, and reverse causality affect estimated relationships,
2. discuss and evaluate different ways of estimating and interpreting causal effects,
3. use different types of data to estimate causal effects with statistical software, and
4. discuss and evaluate how the research design of a study affects what economic policy conclusions can be drawn from them.

Content

The course covers counterfactual models used in quantitative research. Counterfactual models attempt to handle endogeneity, selection, or reverse causality. The course offers practical skills in using such methods, and the theoretical competence required to understand and evaluate the results.

Research designs covered in the course include the following:

- randomized experiments
- instrument variables
- regression discontinuity
- difference in differences
- the synthetic control method

Reading List

See separate document.

Examination

Assessment is based on individual written hand-in assignments presented and discussed in seminars.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.