



Faculty of Arts and Social Sciences
Economics

Syllabus

Scientific Methods in Economics

Course Code: NEGC47

Course Title: Scientific Methods in Economics
Vetenskapliga metoder i nationalekonomi

Credits: 15

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 2025-03-04, and is valid from the Autumn semester 2025 at Karlstad University.

Prerequisites

60 ECTS credits in Economics, including at least 30 ECTS credits at the G1F level or higher, and 15 ECTS credits in Statistics, or equivalent

Learning Outcomes

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

1. give an account of how issues of endogeneity, selection, and reverse causality affect estimated relationships,
2. conduct information searches in Swedish and international computer-based information systems,
3. analyse and apply central terms, concepts, and techniques within social science research methodology,
4. give an account of and use various scientific investigation and analysis methods at a basic level,

5. formulate well-defined research questions and independently interpret and discuss scientific studies in relation to them,
6. present and discuss one's own and others' scientific investigations orally, and
7. apply academic standards in an academic project.

Content

The course covers the fundamental steps of the research process, where students develop skills in scientific methodology. Topics include critical thinking, the use of models and concepts, collecting information, and the writing process. The course further includes studies of established scientific research methods, along with practical exercises in applying some of these methods. There is a particular emphasis on processing and analysing quantitative data using existing theories as well as theory generation based on empirical evidence. The course also addresses counterfactual models used in quantitative research, meaning models that attempt to manage endogeneity, selection, or reverse causality. Examples from current research in economics are used throughout the course. Students will also practice academic writing, group work, and oral discussion skills.

Reading List

See separate document.

Examination

Learning outcomes 1-5 are assessed based on a written exam.

Learning outcomes 1-7 are assessed 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.