



Faculty of Arts and Social Sciences  
Economics

# Syllabus

## Economics - continuation course

**Course Code:** NEGB01

**Course Title:** Economics - continuation course  
*Nationalekonomi - fortsättningskurs*

**Credits:** 30

**Degree Level:** Undergraduate level

**Progressive Specialisation:** First cycle, has less than 60 credits in first-cycle course/s as entry requirements (G1F)

**Major Field of Study:**

NAA (Economics)

### Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2025-01-28, and is valid from the Spring semester 2026 at Karlstad University.

### Prerequisites

Economics 30 ECTS credits and Statistics 15 ECTS credits, or equivalent

### Learning Outcomes

Module 1 Quantitative Methods in Economics

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

1. analyse the functions of one and two variables and differentiate the functions to derive extreme values, and
2. solve optimisation problems with and without subsidiary conditions for functions of one and two variables.

Module 2 Microeconomics

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

1. apply basic neoclassical method to microeconomic problems,

2. analyse and give an account of decision-making situations for consumers and companies,
3. use basic concepts for analysing optimisation problems over time and in uncertainty, and
4. give an account of the conditions under which pure market solutions are not socioeconomically optimal.

### Module 3 Macroeconomics

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

1. give an account of the terms, concepts, definitions, methods, and models used in modern macroeconomics,
2. give an account of macroeconomic problems using the central terms, concepts, definitions, methods, and models of modern macroeconomics,
3. apply macroeconomic models and describe the results and consequences in economic terms,
4. understand relationships at the macroeconomic level and use these to explain causal links, and
5. understand the how and why of economic policy.

### Module 4 Econometrics

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

1. give an account of the principles for and apply the least squares method in practice to estimate linear regression models, and
2. analyse regression models with dummy variables and evaluate the adapted models with respect to heteroskedasticity, multicollinearity, and autocorrelation.

### Module 5 Essay

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

1. independently plan and complete a study in a chosen area of the micro- or macro economy using mathematical, statistical, and econometric methods.

## **Content**

The course comprises five modules.

### Module 1 Quantitative Methods in Economics, 6 ECTS cr

The module starts with a mathematical component, revising basic arithmetic and equation solutions and continuing with one-variable analysis, differential calculation and optimisation. Multivariate analysis, optimisation, and optimisation with subsidiary conditions are briefly treated. Instruction focuses on aspects of relevance to economics, applied mathematics, and skills in practical problem-solving.

### Module 2 Microeconomics, 7.5 ECTS cr

Students develop deeper and broader knowledge of microtheory compared to previous courses. They study consumption, production, and general equilibrium theory with the help of analytical methods. Areas studied are, for example, individual demand function, disclosed preferences, income and substitution effects, intertemporal choice, choice under uncertainty, game theory, partial and general market equilibrium. Welfare theory and a thorough study of why the market can fail due to external effects are also included as are collective utilities and information deficit (asymmetric information).

### Module 3 Macroeconomics, 7.5 ECTS cr

The module starts with a revision of basic financial accounting concepts and definitions of different macroeconomic entities such as gross and net national products, national income, trade and exchange balance, consumer price index, inflation, and rate of unemployment. Then follow discussions of the relation between the real and monetary side of the economy and how monetary demand and supply determine price and interest levels. The relation between growth in money supply and the rate of inflation is treated and the social costs of

inflation discussed. The next theme is the conditions for monetary and fiscal policy in a small open economy combined with a discussion of different types of exchange rate regime and the consequences on efficiency in various fiscal measures. The module also treats the unemployment problem, long-term growth, and the consequences of permanent deficit in the public sector budget.

#### **Module 4 Econometrics, 6 ECTS cr**

Students acquire further knowledge of the statistical methods applied in the field of economics. Different types of models, primarily the regression models and simple time series models, are presented, as are different methods of inference theory and diagnostic techniques to evaluate the models. In regression analysis, simple linear regression, multiple regression, multicollinearity, heteroskedasticity, and autocorrelation are treated.

#### **Module 5 Essay, 3 ECTS cr**

The module runs parallel with the other modules to allow students to conduct their own study of a micro or macroeconomic problem with the help of econometry. Students draw on all modules while also developing skills for future thesis projects.

#### **Reading List**

See separate document.

#### **Examination**

##### **Module 1**

Learning outcomes 1-2 are assessed based on a written exam.

##### **Module 2**

Learning outcomes 1-4 are assessed based on a written exam.

##### **Module 3**

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

##### **Module 4**

Learning outcomes 1-2 are assessed based on a written exam.

##### **Module 5**

Learning outcome 1 is assessed based on an individual hand-in assignment, presented orally and in writing.

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.