



Faculty of Economic Sciences, Communication and IT  
Economics

### Syllabus

#### Course Approval

The syllabus was approved by the Faculty Board of Economic Sciences, Communication and IT on 14 December 2010, and is valid from the Autumn semester of 2011 at Karlstad University.

**Course Code:** NEGC16

**Applied Econometrics, 7.5 ECTS Credits**

**(Tillämpad ekonometri, 7.5 Swedish credit points)**

**Degree Level:** Bachelor

**Progressive Specialisation:** G2F (First cycle, has at least 60 credits in first-cycle course/s as entry requirements)

#### Language of Instruction

The language of instruction is English if non-Swedish speaking students or teachers participate in the course. If not, instruction is in Swedish.

#### Prerequisites

Economics 60 ECTS Credits including the courses Econometrics 7,5 ECTS Credits and Statistics 15 ECTS Credits.

OR

Economics 60 ECTS Credits. Statistics 22,5 ECTS Credits including the course Econometrics 7,5 ECTS Credits.

#### Major Field of Study

NAA (Economics)

#### Learning Outcomes

Upon completion of the course, students should be able to

- select and apply appropriate statistical models pertaining to various subject areas in economics,
- estimate non-linear models,
- analyse models with a dichotomy variable as dependent variable, specifically, the LPM, Logit, and Probit models,
- use simultaneous equation models, identification, and the indirect and two-step least squares methods,
- use dynamic models with time-delayed explanatory variables,
- use the Granger causality test and
- give an account of basic theories of stationary and non-stationary models such as the ARMA and the ARIMA models.

#### Content and Form of Instruction

The course covers the use of statistical and mathematical methods for analysing economic data.

The course covers the following subject areas

- non-linear regression models,

- regression with qualitative dependent variables,
- simultaneous equation models,
- dynamic models,
- time-series analysis and
- the application of econometric methods on econometric models.

#### Reading List

See separate document.

#### Examination

Examination is in the form of written assignments and a final written exam.

#### 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 assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

#### Course Certificate

A course certificate will be provided upon request.

#### Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

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

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