

#### School of Economics and Management

# NEKG31, Economics: Econometrics, 7.5 credits Nationalekonomi: Ekonometri, 7,5 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus is an old version, approved by The Board of the Department of Economics on 2011-06-07 and was last revised on 2020-12-08. The revised syllabus applied from 2020-12-08., spring semester 2021.

#### General Information

This is a single subject intermediate course that can be a part of all specialisations within economics. The course is also an obligatory sub-course within NEKG11 'Economics: Level 2'. The course is optional within a number of undergraduate programmes at Lund University.

Language of instruction: Swedish

In some semesters the course can be taught in English, see the appropriate application catalogue.

Main field of studies Depth of study relative to the degree

requirements

Economics G1F, First cycle, has less than 60 credits in

first-cycle course/s as entry requirements

# Learning outcomes

### Knowledge and understanding

Students shall be able to:

- collect and analyse data,
- account for basic statistical concepts,
- explain how the relationship between economic variables can be analysed using statistical regression analysis,
- describe the different aspects of regression analysis
- derive and formulate testable economic hypotheses,
- give both a statistical and an economic interpretation of the results of a

- regression analysis,
- orientate themselves in more advanced econometrics methods,
- generalise their knowledge to econometric problems that haven't been treated during the course,
- understand relevant empirical and econometric research.

#### Competence and skills

Students shall have the ability to independently:

- apply basic statistical methods,
- apply regression analysis to economic problems,
- test economic hypotheses,
- evaluate whether the assumptions being used in a regression analysis are reasonable,
- implement regression analysis using econometric software.

#### Judgement and approach

Students shall be able to give an account of and discuss their econometric abilities. Students shall have developed the ability to pursue further studies in the subject and should be able to search for and evaluate information with a high degree of independence. Students shall also have developed the ability to individually write an empirically orientated paper.

#### Course content

This course starts with an introduction to descriptive statistics, probability theory and inference. Thereafter, the course treats problems connected with establishing and quantifying the relationship between different economics variables as well as basic econometric methodology. The main focus is statistical regression analysis, but more advanced methods in, for example, time series analysis are also considered. Another important part of the course is the practical applications in the form of computer exercises, using applications in microeconomics, macroeconomics and financial economics. The computer exercises are carried out using econometric software on a PC.

# Course design

1. Teaching: Tuition consists of lectures and computer exercises.

As long as decisions or guidelines from the government or Lund University restricting the scope for offering on campus teaching, various forms of digital lectures, exercises, seminars, discussions etc. will take place and replace regular teaching sessions that are nor within the scope of the decisions or recommendations. If the government's or Lund University's decisions or guidelines change during an ongoing course, the course may either carry on in the same way it has started or return to regular teaching depending on what is most suitable from a student perspective.

#### Assessment

1. Examination: Written exams take place at the end of the course. There will be further opportunities for examination close to this date. The computer exercises will be graded, and the marks carried forward to examinations taken the same term. Other forms of examination may be used to a limited extent.

As long as decisions or guidelines from the government or Lund University that examination shall not take place in physical meetings or that the number of people in such physical meetings is limited are in place, all examination that is not within the scope of the decisions or guidelines will take place in the form of take home exams, home assignments or in some cases digital seminars. If the government's or Lund University's decisions or guidelines change during an ongoing course, the examination will take place in the form that was announced at the start of the course unless it is more beneficial for the students to use the regular form of examination

2. Limitations on the number of examination opportunities: –

The University views plagiarism very seriously, and will take disciplinary action against students for any kind of attempted malpractice in connection with examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practices in examinations or assessments, includes suspension from the University for a specified period.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

#### Grades

Marking scale: Fail, E, D, C, B, A.

1. Grading: Grade (Definition), Points or percentage out of maximum points, Characteristic

A (Excellent), 85–100, A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought. B (Very good), 75–84, A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good), 65–74, The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

D (Satisfactory), 55–64, The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought. E (Sufficient), 50–54, The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U (Fail), 0–49, The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought. Students have to receive a grade of E or higher in order to pass a course.

- 2. Weighting grades from different parts of the course: –
- 3. Grading scales for different parts of the course: –

## Entry requirements

At least 20 ECTS-credits from the introductory course in economics, of which at least 7.5 ECTS-credits in microeconomics are needed for admission till all intermediate courses in economics.

#### Further information

- 1. Transitional regulations: This course replaces NEKB23 "Econometrics".
- 2. Limitations in the period of validity: -
- 3. Limitations: This course may not be included in the same degree as the sub-course in econometrics within NEKA21 "Economics: Level 2", the sub-course in econometrics within NEK231 "Economics, General Course", the sub-course in econometrics within NEKG11 "Economics: Level 2", the course NEKB26 "Quantitative Methods", the course NEKB43 "Econometrics", the course NEK613 "Quantitative Methods", the course NEK615 "Econometrics B/C" or the course NEKB23 "Econometrics".
- 4. Similar courses: This course has the same content as the sub-course in econometrics within NEKG11 "Economics: Level 2".
- 5. Limitations in renewed examination: –

# Subcourses in NEKG31, Economics: Econometrics

Applies from H11

1101 Econometrics, 7,5 hp Grading scale: Fail, E, D, C, B, A