School of Economics and Management

NEKN31, Economics: Advanced Econometrics, 7.5 credits

Nationalekonomi: Avancerad Ekonometri, 7,5 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by The Board of the Department of Economics on 2011-06-07 and was last revised on 2015-11-04. The revised syllabus applies from 2015-11-04, autumn semester 2016.

General Information

This is a single subject master course in economics. The course is either obligatory or optional within a number of master programmes at Lund University.

Language of instruction: English
Teaching may be in Swedish if all registered students have a good knowledge of Swedish.

Main field of studies	*Depth of study relative to the degree requirements*
Economics	A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

1. Knowledge and understanding

Students shall:

- have a deeper understanding of linear regression models, including the representation using matrix algebra,
- be able to estimate linear and nonlinear models using least squares, generalised least squares, maximum likelihood and instrumental variables, and have an understanding of when these methods should be used,
- be able to formulate and test linear and nonlinear hypotheses,
- be able to analyse cross-sectional models with limited dependent variables,
- be able to analyse stationary and non-stationary time series models,
- be able to analyse panel data models,
- be able to generalise their knowledge to econometric problems that haven't been treated during the course,

- be able to understand relevant empirical and econometric research.

2. Skills and abilities

Students shall have the ability to independently:

- apply advanced econometric tools to economic problems,
- evaluate whether the assumptions made by the chosen model are reasonable,
- apply rational modelling strategies even when basic assumptions must be rejected,
- implement econometric analyses using econometric software,
- give an account of and discuss their econometric abilities.

3. Applying knowledge and making judgments

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 essay at the master level.

Course content

This course gives the basis that is needed to enable students to empirically analyse economic data without making unrealistic assumptions. Modern econometric techniques are treated, and at the same time considerable emphasis is placed on fundamental econometric thinking. Theoretical studies are interwoven with practical applications in the form of computer exercises, which are carried out using econometric software on a PC.

Course design

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

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.

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.

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 60 ECTS-credits in economics at the undergraduate level are needed for admission till all master courses in economics. To be admitted to this particular course these credits must include a course in intermediate econometrics (*e.g.*, NEKG31) or an equivalent course.

Further information

1. Transitional regulations: This course replaces NEKM23 "Advanded Econometrics".

2. Limitations in the period of validity: –

3. Limitations: This course may not be included in the same degree as NEK711 "Econometrics D" or NEKM23 "Advanced Econometrics".

4. Similar courses: –

5. Limitations in renewed examination: –

Subcourses in NEKN31, Economics: Advanced Econometrics

Applies from H11

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