



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Ekometri Econometrics

EXTG65, 7,5 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED I

Date of Decision: 2023-04-14

General Information

Elective for: I4

Language of instruction: The course will be given in Swedish

Aim

The aim of the course is to introduce basic econometric theory and to provide the students with the ability to apply basic econometric methods.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- be able to collect and analyse data,
- be able to explain how relations among economic variables can be analysed using statistical regression analysis,
- be able to describe the parts of regression analysis,
- be able to derive and formulate testable economic hypotheses,
- be able to interpret the results of the regression analysis from a statistical and economic perspective,
- have some knowledge of some more advanced econometric methods,
- be able to generalize the knowledge to economic problems that are not treated in the course,
- be able to understand relevant empirical and economic research.

Competences and skills

For a passing grade the student must

be able to independently:

- apply the tools of regression analysis on various economic problems,
- test economic hypotheses,
- evaluate the plausibility of the assumptions of the regression model,
- implement the regression analysis using econometric software.

Students shall also have sufficient competence to individually write an empirically orientated paper.

Judgement and approach

For a passing grade the student must

Students shall be able to give an account of and discuss their econometric abilities. Students shall have 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.

Contents

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.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: The examination consists of a written exam and graded computer exercises. The written exam takes place at the end of the course. There will be further opportunities for examination close to this date. Points from the computer exercises can only be carried forward to examinations taken the same term.

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.

Admission

Admission requirements:

- FMS012 Mathematical Statistics, Basic Course or FMSF45 Mathematical Statistics, Basic Course or FMSF80 Mathematical Statistics, Basic Course

The number of participants is limited to: No

The course overlaps following course/s: NEKB23, NEKB26, NEKG31, TEK190

Reading list

- Supplementary material.

- One of these three softwares: EViews 8/EViews 9.5 Student version, Stata or Gretl.

Contact and other information

Course coordinator: Luca Margaritella, luca.margaritella@nek.lu.se

Course homepage: <http://www.nek.lu.se>

Further information: Corresponds to NEKG31.