



School of Economics and Management

EEH006F, Econometrics I, 7.5 credits

Ekonometri I, 7,5 högskolepoäng

Third Cycle / Doktorandnivå

Details of approval

Approved by the Board of the Department of Economic History, Lund University School of Economics and Management 2021-03-09. Revised on 2023-01-17, to be valid from autumn semester 2023.

General Information

This is an optional course at the PhD programme.

The language of instruction is English.

Learning outcomes

The student will acquire an understanding of essential underlying statistical concepts for basic and more advanced econometrics. The student will also learn the assumptions underlying multivariate linear regression (OLS), as well as obtaining a thorough understanding regarding how to appropriately model various associations, using continuous and categorical variables, nonlinear associations and interactions. Furthermore, the student will learn various model specification tests as well as how to interpret results from quantitative analyses using OLS regression. Additionally, the student will acquire knowledge in a statistical software through own hands-on empirical analyses.

More specifically, students will be able to:

Knowledge and understanding

- demonstrate knowledge about essential statistical concepts for econometrics;
- have a solid understanding of OLS regression and the assumptions that need to be fulfilled for it to be used in empirical research;

Competence and skills

- be competent in how to appropriately model relationships using continuous and categorical variables, as well as how to model nonlinear relationships and interaction effects;

- competently interpret OLS regression results, from individual regression parameters to predictions based on the full model output;
- implement and interpret parameters and statistical tests for model fit;
- proficiently use computer software for data management and OLS regression (e.g. Stata);

Judgement and approach

- individually perform and present an analysis of research questions relevant to economic history using OLS regression on empirical data, and interpret and discuss the results in the light of relevant theory.

Course content

The course is intended for students with limited experience with quantitative methods, providing the student with sufficient skills to competently conduct their own analysis of empirical data using OLS, as well as providing a solid foundation for more advanced level courses in econometrics. The instruction consists of lectures and labs, the latter allowing the students to learn how to implement applied skills in practice. The course places an emphasis on acquiring an intuitive understanding of essential underlying statistical concepts rather than being able to provide their algebraic proof. The student will learn the fundamental statistical theory underlying multivariate linear regression, as well as obtaining a thorough understanding regarding how to implement and interpret results from analyses common to Economic History.

The content of the course is delimited of both teaching and literature.

Course design

The course is designed as a series of lectures, exercises and work with projects reports. Grading is based on individual performance, via written exams, paper, presentations and other mandatory activities. All such exams will be assessed according to regular procedure. Attendance at no less than three of four teaching occasions is required.

Assessment

Grading is based on individual performance, via written exams, papers, presentations, and other mandatory activities. Examination may draw on information presented in class as well as the course literature.

The University views plagiarism very seriously and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.

Grades

Marking scale: Fail or Pass

Entry requirements

PhD students applying for this course should have at least 60 credit points in either economic history, business administration, economic and social geography, economics, history, sociology or the equivalent knowledge.

Further information

This course cannot be included in the same degree as EKHM12, EKHM21, EKHM25, EKHM62 and EKHM65.