Linnæus University

Jnr: 2014/2843-3.1.2

Course syllabus

School of Business and Economics
Department of Economics and Statistics

4NA050 Empiriska metoder inom nationalekonomi, 7,5 högskolepoäng

Empirical Methods in Economics, 7.5 credits

Main field of study
Economics

Subject Group
Economics

Level of classification
Second Level

Progression
A1N

Date of Ratification
Approved by School of Business and Economics 2014-10-01
The course syllabus is valid from autumn semester 2015

Prerequisites
General entry requirements for studies on second level and specific entry requirements: Economics 90 credits including Mathematical Economics II 7.5 credits, Econometrics 7.5 credits, Intermediate Microeconomics 7.5 credits Intermediate Macroeconomics 7.5 credits, Labour Economics 7.5 credits, and Statistics 15 credits or credits in time series analysis and regression analysis, and English B/English 6, or equivalent

Objectives

After finished course, the student is expected to be able to:

- explain the idea behind and apply the most common econometric methods to isolate causal effects
- explain how selection affects the ability to isolate causal effects and explain and use methods to solve the selection problem
- define panel data methods, explain the possibilities and limitations of panel data methods such as fixed effects and difference-in-differences, and apply panel data methods on economic problems
- define discrete choice regression models and use the models to study economic problems
- explain the idea behind, the possibilities and limitations with instrumental variable analysis
- use instrumental variable analysis to study economic problems
- define regression discontinuity (RD) design and use the design to study economic problems
- explain and use (quasi) experimental methods and explain the possibilities and

limitations associated with these methods
- value and identify strengths and weaknesses of empirical studies within economics
- both orally and in writing interpret, report and summarize results of conducted regression analyses

Content
The course includes:

- the selection problem and randomization
- panel data and panel data methods such as fixed effects and difference-in-differences
- discrete choice models
- models for categorical variables
- instrumental variable analysis
- regression discontinuity design
- experimental and quasi-experimental methods

Type of Instruction
Lectures, laboratory sessions and seminars. Obligatory parts are stated in the schedule.

Examination
The course is assessed with the grades A, B, C, D, E, Fx or F.
The assessment of the performance of the students is based on written examination, laboratory sessions and presentation of the laboratory sessions. At the compulsory laboratory sessions the students will analyze different economic problems by using statistical software packages to manage data and estimate models that have been covered during the course. The results will be reported in writing and orally at compulsory seminars. During the seminars the students will also evaluate and identify strengths and weaknesses in other empirical studies within economics.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail.

After each regular examination there will be at least one new examination in close proximity to the date the results of the regular exam were posted. A minimum of five occasions for written exams will be offered in relation to the syllabus to which the student was accepted. Usually three occasions per academic year are offered. Students that fail reports can complement after instructions from the examiner to obtain a pass grade.

Grading criteria for the A–F scale are communicated in writing to the student by the start of the course/module at the latest, as well as how grades on separate elements of examination are weighed to a final course grade.

Course Evaluation
A written course evaluation is carried out and compiled in a report, which is archived at the faculty. The results and possible measures taken are communicated by the course coordinator and presented to the students the next time the course is given, or in another way deemed suitable by the course coordinator. Other types of course evaluations, for example regular evaluations throughout the course or discussions with students, will be included and encouraged with the aim of ensuring continuous quality development.

Required Reading and Additional Study Material
Required reading
Angrist, J. D. & Pischke, J. S. *Mostly Harmless Econometrics: An Empiricist's Companion*. Latest Edition. 373 pages.

Stock, J. H. & Watson, M. W. *Introduction to Econometrics*. Latest edition. 840 pages.

Scientific articles, 300 pages.