Master/Ph.D. COURSE:

Microeconometrics using STATA

Spring semester 2017

Course credits:
7.5 ECTS

Education Cycle:
Third cycle, doctoral program course

Course managers/examiners:
Professor Andreas Stephan

Course language
English

Prerequisites:
Basic courses in Statistics, introductory course in Econometrics/Quantitative Methods is recommended, but not required

Purpose and objectives
The Microeconometrics Using STATA course is designed to help master or doctoral students in Economics to be prepared for doing empirical econometric analyses in their research using individual level data of persons, households or companies. Focus will be given to issues of identification and causality when analyzing research questions with the help of micro data. The course will provide an up-to-date overview on the most commonly used microeconometric methods, e.g., propensity score matching, instrumental variables methods, panel data methods including dynamic models, bootstrapping inference, quantile regression techniques and non-linear models for binary, multinomial or count outcomes.

Course content
The contents of this course include

(i) Experimental versus non-experimental data
(ii) STATA basics
(iii) Using simulations
(iv) Linear (dynamic) panel data models
(v) Bootstrapping inference
(vi) Quantile regression methods
(vii) Non-linear (panel) models
(viii) Robust standard errors

Intended learning outcomes:
After completing the course the student should be able to:

Knowledge and understanding
1. Understand the theoretical foundations of modern microeconometric methods
2. Describe the fundamental problem of causal inference in non-experimental situations.
3. Know about the occurrence of non-standard error issues

Skills and abilities
4. Use STATA to implement microeconometric models for a given approach
5. Transform and handle data within STATA
6. Write own codes and routines in STATA for performing non-standard tasks

Judgement and approach
7. Assess the robustness of obtained results and understand the limitations of the various methods

Course/classes methodology
Lectures (12 hours), computer labs (12 hours) and homework assignments (3).

Examination
Written examination (60%) at the end of the course, which covers ILO (1), (2) and (6). ILOs (3)-(6) are examined in the assignments and give 40% of the overall grade.

Course evaluation
A course evaluation will be conducted at the end of the course.

Schedule
Course start: March 2017
Register for the course by contacting Andreas Stephan (JIBS, Box 1026, 551 11 Jönköping/phone. 036-101760 e-mail Andreas.Stephan@jibs.hj.se).

Course Literature
• A. Colin Cameron and Pravin K. Trivedi, Microeconometrics Using Stata, latest edition, STATA press

Additional readings
• A. Colin Cameron and Pravin K. Trivedi, Microeconometrics: Methods and Applications, Cambridge University Press, latest edition
• Several articles provided when the course starts.