COURSE SYLLABUS

Preliminary, not confirmed

Microeconometrics using STATA, 7.5 credits

Microeconometrics using STATA, 7,5 högskolepoäng

Course Code:	FJMST37	**Education Cycle:**	Third-cycle level
Confirmed by:	Not confirmed	**Research subject:**	Economics
Valid From:	Spring 2017		
Version:	1		

Purpose

The purpose of the course is to prepare PhD students in Economics, or related subjects, for doing
empirical econometric analyses in their research using individual level data of persons, households or
companies.

Intended Learning Outcomes (ILO)

On completion of the course, the students will be able to:

Knowledge and understanding

1. Demonstrate a broad understanding of the theoretical foundations of modern microeconometric
methods
2. Demonstrate an understanding of the fundamental problem of causal inference in nonexperimental situations, including the estimation of treatment effects.
3. Demonstrate knowledge about the occurrence of non-standard error issues.

Skills and abilities

4. Demonstrate the skills to use STATA to implement microeconometric models for a given approach, and to transform and handle data within STATA.
5. Demonstrate the ability to write own codes and programs in STATA for performing non-standard
tasks.
6. Demonstrate the ability to perform simulations in STATA in order to investigate the small sample
properties of various estimators.

Judgement and approach

7. Demonstrate ability to critically assess the robustness of obtained results and understand the limitations of the various methods.

Contents

The course will provide an up-to-date overview on the most commonly used microeconometric methods, e.g., propensity matching, instrumental variables methods, panel data methods including
dynamic models, simulation, bootstrapping inference, quantile regression techniques and non-linear
models for binary, multinomial or count outcomes.
The contents of this course include
(i) Regression basics
(ii) Simulation basics
(iii) Experimental versus non-experimental data
(iv) STATA basics including introduction to STATA programming
(v) Linear (dynamic) panel data models including diff-in-diff methods
(vi) Bootstrapping inference
(vii) Regession discontinuity designs
(viii) Quantile regression methods
(ix) Non-linear (panel) models

Type of instruction

Lectures, computer labs, and homework assignments.

The teaching is conducted in English.

Prerequisites

Admitted to a doctoral programme in Economics or a related subject of a recognized business school
or university. Basic courses in Statistics, introductory course in Econometrics/Quantitative Methods is
recommended, but not required

Examination and grades

The course is graded Fail (U) or Pass (G).

The course will be examined in the following way:
• Written examination at the end of the course fulfill ILOs 1, 2 and 7
• Written assignments fulfill ILOs 3-6
The grades are ‘pass’ or ‘fail’

Course evaluation

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

Course literature

See separate literature list.
• A. Colin Cameron and Pravin K. Trivedi, Microeconometrics Using Stata, Stata press
• Christopher F. Baum, An Introduction to Stata programming, Stata press, latest edition
Additonal readings:

• Badi Baltagi, Econometric Analysis of Panel Data, 4th Edition, Wiley, latest edition.
• A. Colin Cameron and Pravin K. Trivedi, Microeconometrics: Methods and Applications, Cambridge University Press, latest edition
• Joshua Angrist and Jörn-Steffen Pischke, Most harmless Econometrics. An Empiricist's Companion. Princeton university press, latest edition.
• Several articles provided when the course starts.