

Applied Microeconometrics Using Stata

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Course Duration and Credits

This is a one-semester course for all students of MSc Economics. A maximum of 10 credits can be earned within the modules *Methods*, *Economic Analysis* or *Elective*.

Course Registration

The registration procedure depends on the module this course is intended for. We will explain the Porta registration procedure in the first session.

Since the number of computers is limited, we will admit students up to full capacity on a first come first serve basis (= 30 students).

Course Description

This class is designed to give students the opportunity to apply methods learned in more theoretical statistics or econometrics courses.

By the end of this course, students will be able to produce descriptive statistics and to estimate cross-sectional and longitudinal regression models of the sort frequently employed in empirical research. The focus of the course is on learning how to start and carry out econometric analyses using the Stata statistical software package.

Prerequisites

One semester of econometrics is recommended. However, we will give a short introduction to all methods used during the course. No prior experience with Stata is assumed or required.

Textbooks

Required reading:

- Wooldridge, Jeffrey M. (2013): *Introductory Econometrics: A Modern Approach*, 5th edition. Mason, OH: South-Western CENGAGE Learning.
- Allison, Paul D. (2014): *Event History and Survival Analysis*, 2nd edition. Los Angeles, CA: SAGE.

We recommend the following textbooks:

- Angrist, Joshua D. and Pischke, Jörn-Steffen (2008): *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press.
- Baum, Christopher (2006): *Introduction to Modern Econometrics Using Stata*, Stata Press.
- Cameron, Colin A. and Pravin K. Trivedi (2010): *Microeconometrics Using Stata*, Revised Edition, Stata Press.
- Kohler, Ulrich and Frauke Kreuter (2012): *Data Analysis Using Stata*, 3rd edition, Stata Press.
- Stock, James H. and Mark W. Watson (2014): *Introduction to Econometrics*, Pearson.
- Wooldridge, Jeffrey M. (2002): *Econometric Analysis of Cross Section and Panel Data*, MIT Press.

Course Structure

The course consists of two parts. There will be a theory session in the morning (8am – 10am) and a practical part (Stata tutorials) in the afternoon (2pm – 4pm).

Grading

Final grading will be based on exam results. Please note the following:

Students can solve take-home assignments after every session and earn bonus points for the exam. For all students regular course attendance is required.

Stata

Successful completion of this course will require the use of Stata software (we recommend using one of the more recent versions: Stata 11.0, 12.0, 13.0). Stata is available on all lab computers on campus.

Topics, rooms, and expected dates of theory sessions (8 am – 10 am c.t.) and Stata tutorials (2 pm – 4 pm c.t.)

13.4.	Room E044	Introduction and Data Management (Wooldridge Ch 1-4)
27.4.	Room E044	Linear model and OLS estimation (Wooldridge Ch 5-9)
11.5.	Room E044	Linear model and OLS estimation (Wooldridge Ch 5-9)
25.5.	Room E044	Panel data (Wooldridge Ch 13-14)
15.6.	Room B121	Limited and qualitative dependent variables (Wooldridge Ch 7.5, 17)
29.6.	Room B121	Instrumental variables (Wooldridge Ch 15)
13.7.	Room B121	Duration models (Allison)

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