

PhD Course

STATA

Block course:

10.01.2018: 9:00 am - 12:30 pm and 1:30 pm - 5:00 pm

11.01.2018: 9:00 am - 12:30 pm and 1:30 pm - 5:00 pm

12.01.2018: 9:00 am - 12:30 pm and 1:30 pm - 5:00 pm

Classroom: 4029, Esplanade 36

Course Instructor: Dr. Matthias Bäuml

Course Value: 5 ECTS

Course Overview: Economics 1123 introduces students to methods for analyzing data in economics and related disciplines. Students become intimately familiar with all three components of the statistical software STATA: data management, analysis, and graphics. This course is aimed at both new STATA users and those who wish to learn techniques for efficient day-to-day use of STATA. Upon completion of the course, you will be able to use STATA efficiently for basic analyses and graphics. You will be able to do this in a reproducible manner, making collaborative changes and follow-up analyses much simpler. Finally, you will be able to make your datasets self-explanatory to your co-workers and yourself when using them in the future.

Course topics include:

STATA basics

- Keeping organized
- Knowing how STATA treats data
- Using dialog boxes efficiently
- Using the Command window
- Creating reproducible analyses, which are completely documented

Data management

- Reading in datasets of various standard formats, such as those from spreadsheets or databases
- Labeling variables and setting up encoded variables
- Generating new variables in an efficient fashion, including leading, lagging, generating statistics within groups, and working across variables
- Combining datasets by adding observations and by adding variables
- Reshaping datasets for repeated measurements

Analysis

- Using basic statistical commands
- Reusing results of STATA commands
- Using common postestimation commands, such as those that test hypotheses about linear or nonlinear combinations of coefficients, generate fitted values, or look at marginal effects
- Working with interactions and factor variables

Graphics

- Making common, simple graphs
- Building up complex graphs
- Using the Graph Editor

Prerequisites:

Basic statistical skills: Yes

Basic computer skills: Yes

STATA license: tba

General literature: The optional textbook is J.H. Stock and M.W. Watson, Introduction to Econometrics, Prentice Hall

Assessment: There will be several problem sets, each of which involves empirical analysis. The data for the problem sets will be provided in class. Students are encouraged to work with others in the class on their problem sets, but each student must write up his or her answers separately. The maximum group size is 3. Please list the name(s) of those with whom you worked on your assignment. Please append your STATA “log” files to your assignments.

Teaching language: English