
COURSE NAME	Review Course STATA
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PROGRAM	<i>Brush-up Courses 2019-2020 - Master Program in Economics</i>

STRUCTURE

The course will be taught for two weeks with 2 hours a day in the afternoons. There will be 2 parallel groups in order to enable each of you to follow the course material on a computer and do some exercises in the classroom on your own.

AIM

The aim of this course is to make you familiar with using Stata. We will teach in a very applied way using real-world datasets. In the end, you should be able to start doing analyses with Stata in the “Econometrics Methods” courses from day 1. We will NOT teach any econometrics in these two weeks, since this will be the subject of your regular courses in the following trimesters.

EXAM

At the end of the course, we will give you a short in-class exam and discuss the solutions together.

CONTENTS

Day 1. Introduction to STATA

- Working with STATA: the STATA environment
- Help files, online PDF documentation since Stata 11
- Data import: different ways of importing data
- Describing the data
 - describe
 - summarize
 - tabulate
- Recording sessions

Day 2. Data sources

- Import data from main public data sources: World Bank (WDI), Penn Tables, Eurostat, ECB, ...
- Cleaning the database:
 - Missing values: “.” vs. “99”
 - Changing variable type
 - Variable names

Day 3. Data manipulation

- Logical expressions
- Generating new variables
- Dropping variables and observations
- Variable name and label
- Dummy variables
- Recode
- Sorting
- Combining datasets

Day 4. Basis statistical routines

- Descriptive statistics
- Saving results
- Mean, standard deviation, correlation
- (t-)Test
- Cross-Tabulation and Chi-squared Test
- Ordinary Least Square

Day 5. Programming

- Do-files
- Commenting
- Macros
- Loops
- If condition

Day 6. Graphics

- Scatter plot
- Line plot
- CDF plot
- Histogram
- Combining graphs: “twoway”, e.g. scatter with regression line
- Kdensity
- lpoly

Day 7. Time Series and Panel data

- Time series
 - Tsset
 - Date and time
 - Time series operators
- Panel Data
 - Data structure: Wide vs. long

- Reshape
- Xtset and Xtdes

Day 8. Presenting results

- Tables
- Regression results
- Exporting to LaTeX

Day 9. Advanced Topics

- Advanced commands
 - By
 - Collapse
- Weights
- Factor variables

Day 10. In-class exam