

#### **COURSE SYLLABUS**

19BE04

# Stata Brush-Up

Program: Economics Program

**Brush-up course** 

#### **Professors**

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## **Overview and objectives**

The course will be taught for two weeks, for a total of ten 2-hour classes. Classes will be a mix of teaching from the instructors and individual practice on exercises.

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. At the end of this course, you should be able to start doing analysis with Stata in the "Econometric Methods" course series. We will NOT teach any econometrics in these two weeks since this will be the focus of your regular courses in the following semesters.



#### **Course outline**

- **Day 1. Introduction to STATA**: the STATA environment, Help files, Data import, Describing the data, Recording sessions
  - **Day 2. Data sources**: importing data, cleaning the database
- **Day 3. Data Manipulation:** logical expressions, generating new variables, variable names and labels, dummy variables, recoding, sorting, combining datasets (merge and append)
- **Day 4**. Basic Statistical Routines: descriptives, saving results, t-test, cross tabulation, ordinary least squares (OLS)
  - Day 5. Programming: do-files, commenting, macros, loops, if condition
- **Day 6. Graphics:** scatter, line, CDF, histogram, combining graphs, kdensity, lpoly
- **Day 7. Time series and Panel data:** setting up a time series, date and time, time series operators, setting up a panel, data structure (wide vs. long), reshape
  - Day 8. Presenting Results: tables, regression results, exporting to LaTeX
  - **Day 9. Advanced Topics:** by, bysort, collapse, weights, factor variables
  - Day 10. In-class practice exam



## **Required activities**

We encourage your participation in the daily sessions because we are convinced that this course can be very useful for you both in this Program and in your future career.

#### **Evaluation**

You'll receive feedback on your Day 10 practice exam, but this will bear no consequences on your overall GPA.

### **Materials (for each session)**

We will provide the following materials:

- Overview of the Day (pdf)
- Class (pdf)
- Exercise (pdf)
- Solutions (do-file, released after the class)