MASTER Economics
Software for economists II

Contact	Description	Information
Sarah FLECHE sarah.fleche@univ-amu.fr	Part of course. Code: PA-ME5BEC-BECBV3B Domain: Law, Economics, Management	http://formations.univ-amu.fr Department: Faculty of Economics and Management *Last modification: 04/09/2018*

CONTENT

The objective of this course is twofold. Firstly, to study how to use and manipulate databases with Stata and secondly, to perform empirical analysis in relation with the concepts learned in the time series and econometric methods of evaluation classes. After a short introduction to Stata, the course will be divided into tasks-oriented sessions (with mini-projects and exercises) during which the students will perform empirical analysis using databases such as the World Values Survey, the French Labor Force Survey, the National Supported Work data, etc.

Course outline :

Lecture 1 : Introduction to Stata and database manipulation

Why using Stata – What Stata looks like – Importing and reading data into Stata – Examining the data – Saving the dataset – Keeping track of things – Organizing datasets – Creating new variables – Panel data manipulation

Lecture 2 : Graphs and linear regressions

Histograms – Two-dimensional graphs – Linear regressions – Post-estimation – Extracting results – Hypothesis testing – Interaction terms – Non-linearity – Fixed effects

Lecture 3 : Endogeneity and public policies econometrics

Randomized control trials – Difference-in-differences – Validity checks

Lecture 4 : Time series

Stationary and non-stationary processes

PROFESSIONAL SKILLS

Through this course, students are expected to :
- master basic Stata tools used in the evaluation of public policies and the analysis of time series
- design a final project using Stata
- use the programming skills in academic research as well as outside academia

BIBLIOGRAPHY

- Angrist & Pischke (2009), 'Mostly Harmless Econometrics : An Empiricist's Companion', Princeton University Press
- Wooldridge, 'Introductory Econometrics : A Modern Approach', 4th edition (2009), 5th edition (2013)

ORGANISATION

Four hours a week over 6 weeks (24 hours).
Exercises and mini-projects to be delivered by the end of each session (30% of the final grade).
Stata project (by groups of 2 or 3 students) with session time to work on the project and instructor's help (70%). To be delivered 2 weeks after the last session.

FUNDAMENTAL PREREQUISITES

Graduate econometrics (OLS, fundamentals of statistics, public policies econometrics, time series)

VOLUME OF TEACHINGS

- Tutorials: 24 hours

TRAININGS

Master's degree: Economics
- Empirical and theoretical economics
- Economic policy analysis
- Econometrics, big data, statistics
- Quantitative finance and insurance