ECONOMETRICS LAB

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Course description

The course aims to develop the skills to apply the concepts learned in a theoretical Econometrics course in a computational software. It will provide the guidance to develop the basics of R for econometrics analysis and to keep practicing yourself with a huge variety of quantitative problems. The course is supposed to broaden students' knowledge of the various econometric techniques that appear in the economics literature, their properties and the way these are applied to data in order to verify economic theory.

Learning goals

By finishing the course students will be acquainted computational analyses techniques enabling them to handle the main economic issues from an empirical point of view.

Recommended prerequisites

Although there's no formal prerequisites to enrol the course, it is expected that students are enrolled on the Advanced Econometrics course, or already have the knowledge from basic econometrics. No previous knowledge on R is required.

Grading

The final grade will be based on an assignment/exam.

Time and location

The course will be held in presence, at the MEMOTEF Informatic Lab, according to the following timetable:

Lesson	Date	Day	Time	Content
1	22-Mar	Tuesday	11:00-13:00	Introduction to R
2	29-Mar	Tuesday	11:00-13:00	Review of statistics using R
3	1-Apr	Friday	14:00-16:00	The simple regression model
4	5-Apr	Tuesday	11:00-13:00	Hypothesis tests and confidence intervals
5	8-Apr	Friday	14:00-16:00	The multiple regression model
6	12-Apr	Tuesday	11:00-13:00	Multiple regression – test for multiple hypothesis
7	15-Apr	Friday	14:00-16:00	Nonlinear regression functions
8	19-Apr	Tuesday	11:00-13:00	Regression with Panel Data
9	22-Apr	Friday	14:00-16:00	Regression with a binary dependent variable
10	26-Apr	Tuesday	11:00-13:00	Instrumental Variables
11	3-May	Tuesday	11:00-13:00	Difference-in-differences
12	10-May	Tuesday	11:00-13:00	Time Series Regression and Forecasting

References

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