



Research
Education
Outreach

CCA

Econometric Theory II

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Instructor

[Michele Belloni](#)

Contact information:

ESt Department michele.belloni@unito.it

Office hours: by appointment

Course Description

This course covers the basics for doing sound empirical work at the postgraduate level. It is particularly aimed at students and researchers who plan on doing applied work for their thesis. The identification issue of causal relationships when analysing experimental and non-experimental data represents the unifying topic of the course. We will cover the most common approaches to identifying causal relationships: conditional independence assumption, matching, instrumental variables, random assignment, regression discontinuity, synthetic control approach, difference-in-differences, and two-way fixed effects models. I will discuss graphical methods to present the main evidence.

Empirical papers will serve as examples and should give a taste of how to perform a convincing empirical analysis. The ideal experimental setting is often going to serve as a benchmark case. Empirical exercises using STATA with real data will be part of the module. Some tasks might involve replicating empirical results of published papers.

Prerequisites

This class builds on prior exposure to statistics and econometrics.

There will be a written exam.

Textbooks

The main textbooks for the course are:

- Angrist and Pischke (2009) Mostly Harmless Econometrics
- Wooldridge (2002) Econometric Analysis of Cross Section and Panel Data
- Cameron and Trivedi (2005), Microeconometrics
- Cunningham (2020), Causal Inference: The Mixtape
Available online at: <https://mixtape.scunning.com/>

Some topics may be covered by reading research papers.