UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Econometrics and Impact Evaluation

2526-3-E3303M017

Learning objectives

Having successfully completed this module, you will be able to:

- use a range of econometric methods to investigate causal relations and study economic issues with the help of quantitative data
- Critically discuss issues related to the definition of causal claims
- Apply the different methodology to real data, using Stata software

Contents

In this module we will

1. examine what it means to assess causal effects and conduct rigorous impact evaluations
2. learn the tools that as economist we have at disposal to do that
3. look at studies that use those tools to answer important questions
   - what is the impact of reducing the minimum legal drinking age on mortality?
   - what is the economic benefit of studying for longer years?
   - is it really worth to pay more to go to more prestigious private universities?
4. put the theory into practice, by analyzing actual data from real world studies

More specifically, the module will cover the following topics:

1. Introduction to Impact Evaluation
2. Randomized Controlled Trials (RCTs)
3. Regression Analysis
4. Instrumental Variables
5. Regression Discontinuity Designs

6. Difference-in-Differences
7. Examples and Applications

The module adopts a ”hands-on” approach and will be less theoretical than other standard econometrics modules.

Detailed program

Prerequisites

Teaching methods

Lectures combining a mix of “traditional” classes, more in-depth training sessions, and practical exercises analyzing data from real datasets and studies (using Stata software)

Assessment methods

Written exam (open questions) and research proposal (optional).

Textbooks and Reading Materials

Textbook: "Mastering Metrics: The Path From Cause To Effect" by Joshia D. Angrist and Jorn-Steffen Pischke, Princeton Edition (2015)
Additional Material: lecture notes and scientific papers

Semester

First Semester

Teaching language

English

Sustainable Development Goals

NO POVERTY | QUALITY EDUCATION | REDUCED INEQUALITIES