



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Econometrics

2223-1-F5602M002-F5602M004M

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#### Learning objectives

The course provides the basic skills to carry out empirical research in microeconomics and macroeconomics.

#### Contents

Students are introduced to the main issues arising in applied work for an economist.

#### Detailed program

- The simple regression model
- Multiple regression analysis: estimation, inference, asymptotics
- Multiple regression analysis: further issues
- Multiple regression analysis with qualitative information
- Heteroskedasticity
- More on specification and data problems
- Basic regression analysis with time series data
- Further issues in using OLS with time series data
- Serial correlation and heteroskedasticity in time series regressions
- Models based on Panel Data
- IV estimation and 2SLS
- Simultaneous equations models
- Models with limited dependent variables
- Advanced Time Series Topics

## **Prerequisites**

Statistics, mathematics.

## **Teaching methods**

Emphasis is placed on the use of econometric software packages as tools of quantitative and statistical analysis. Practical computer exercises are a key part of the course.

## **Assessment methods**

For those who attend lectures the assessment is based on a written individual midterms and the presentation of an empirical project (group work) in the last weeks of the course.

For those who do not attend lectures the assessment is based on an oral exam based on the whole syllabus and the presentation of an empirical project (individual work).

## **Textbooks and Reading Materials**

["Introductory econometrics: a modern approach"](#), by J.M. Wooldridge, Thompson South Western, Belmont, 5th ed.

## **Semester**

Second semester

## **Teaching language**

English

## **Sustainable Development Goals**

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