



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Valutazione Statistica dei Sistemi Sanitari

2324-1-F8203B046

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#### Learning objectives

The objective of the course concerns the description of health systems models and statistical evaluation in this field, with particular reference to the Italian case. The course aims at illustrating the appropriate statistical methodologies, covering simple and multilevel regression models, as well as methodologies for analysing the causal impact of health policies. At the end of the course the student will be able to know how health systems are organised, to know and use statistical methodologies for evaluation and to synthesise the results of an evaluation.

#### Contents

- The governance models of the healthcare systems and the evaluation experiences
- The quality evaluation of the healthcare systems.
- The policies evaluation in the health sector.
- Practical applications of the evaluation through the STATA software.

#### Detailed program

The aim of the course is to describe the main areas of health system evaluation, with reference to the main experiences in the national context, but without neglecting international cases. The course aims to illustrate the appropriate statistical methodologies, covering simple and multilevel regression models, as well as methodologies for the analysis of health policies with particular reference to econometric impact evaluation techniques. The graphical representation of evaluation outcomes will be addressed during the course. The student will acquire the

concepts concerning health systems and their evaluation, appropriate statistical strategies and the ability to process them using appropriate statistical software.

## **Prerequisites**

None

## **Teaching methods**

Theoretical lectures where the course topics are illustrated with a description of the elements of health policy and economics and statistical methodologies for evaluation. Some lectures are provided in lab where the use of the STATA software for application in the field of health evaluation is learnt.

## **Assessment methods**

Oral examination where learning of both the theoretical part and the applied part will be tested. This is a test consisting of questions relating to the theoretical part of the course and the practical part consisting of the discussion of a paper produced by the students and the discussion of a scientific paper.

## **Textbooks and Reading Materials**

- Slides presented during the lectures
- G. Vittadini (2012), *Manuale del Sistema di valutazione della performance degli ospedali lombardi*, Aracne editrice, Roma
- Snijders, Tom A.B., and Bosker, Roel J. *Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling*, second edition. London etc.: Sage Publishers, 2012.
- Angrist, J. D., & Pischke, J. S. (2009). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

## **Semester**

Second term - 3 cycle

## **Teaching language**

Italian

## Sustainable Development Goals

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