



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Medical Statistics

2324-2-I0201D139-I0201D217M

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#### Aims

Basic knowledge of typical sampling schemes, methodological tools of descriptive statistics and inferential statistics to set up studies and to analyse data, with attention to the features of rehabilitation data.

At the end of the course the student will be able to:

- 1) read and discuss scientific literature with descriptive and inferential statistical analyses
- 2) have a solid knowledge to be involved in the the design and implementation of studies in rehabilitation

#### Contents

The module is organized as follows:

- Basics of probability calculation
- Confidence interval on the parameter  $p$  probability of an event (proportion)
- Frequency tables and graphs
- Order of magnitude and dispersion indicators
- Gaussian Distribution (to approximate the trend of a histogram)
- Confidence interval on the  $\mu$  parameter
- Use of the Gaussian distribution to construct confidence intervals

#### Detailed program

The module is organized as follows:

- Basics of probability calculation
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## Prerequisites

None.

## Teaching form

Synchronous frontal lessons, asynchronous contents (clips and quizzes).

## Textbook and teaching resource

- Book: Fondamenti di statistica Micheal Sullivan III, traduzione a cura di Emma Zavarrone, Pearson 2020, disponibile anche come e-book [https://www.pearson.it/opera/pearson/0-7264-fondamenti\\_di\\_statistica](https://www.pearson.it/opera/pearson/0-7264-fondamenti_di_statistica)
- Slides
- Video clip

## Semester

First semester.

## Assessment method

Written exam.

## Office hours

Under request, via email contact with the instructor.

## **Sustainable Development Goals**

NO POVERTY | ZERO HUNGER | QUALITY EDUCATION | GENDER EQUALITY

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