



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Biostatistics

2425-4-H4102D089-H4102D099M

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#### Aims

The student will learn:

- the basic tools to understand scientific results in observational and experimental studies with continuous outcome, binary outcome, survival time outcome.
- how to interpret results from regression models relating aforementioned outcome to explanatory/exposure variables.

#### Contents

- Recap on Descriptive Statistics
- Linear Regression Model
- Logistic Regression Model
- Survival analysis

#### Detailed program

- Summary of descriptive statistics (main indicators and graphical representations)
- Linear regression model (with motivating examples)
- Logistic regression model (with passage from contingency table to regression)
- Survival analysis (main characteristics of survival data and non-parametric and semi-parametric modeling)

## **Prerequisites**

Basic descriptive and inferential statistics

## **Teaching form**

Standard synchronous classes

## **Textbook and teaching resource**

<https://hbiostat.org/bbr/descript>

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R studio software <https://posit.co/download/rstudio-desktop/>

## **Semester**

- First semester
- From 10 to 13, LAB in Monza

## **Assessment method**

On [esamionline.elearning](https://esamionline.elearning) platform.

Type of test: multiple choice/open questions (10 questions, 3 points for each correct answer, no penalties for wrong answers), 3 additional points scored by the offline question.

If the total score is  $\geq 18$  you pass.

## **Office hours**

Under request by the elearning email, in the Webex room of the teacher.

## **Sustainable Development Goals**

QUALITY EDUCATION | GENDER EQUALITY

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