



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### **Introduction to statistics with R (part II): linear and logistic regression models**

2122-DOTT-MOD12

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#### **Title**

**Introduction to statistics with R (part II): linear and logistic regression models**

#### **Teacher(s)**

Davide Paolo Bernasconi

Bicocca Bioinformatics Biostatistics and Bioimaging Centre - B4, School of Medicine and Surgery, University of Milano Bicocca

#### **Language**

English

#### **Short description**

The course, through lectures and computer lab sessions, aims to illustrate the fundamentals of statistical modeling with multiple covariates focusing on the linear and logistic regression models.

At the end of the course the participants should be able to recognize when to perform a linear or logistic regression, check the validity of the assumptions required, fit the model to the data, correctly interpret the model coefficients

and evaluate the goodness of fit.

## Course program

*Day 1:*

- Correlation and simple linear model
- Multiple linear model
- Lab session

*Day 2:*

- Introduction to generalized linear models
- Logistic regression model
- Lab session

**Target audience:** Doctoral students of any discipline who are interested in the practical application of basic statistical modeling for data analysis in scientific research

**Participants (min/max):** 20/40

## CFU / Hours

1 CFU

8 hrs (4 in class + 4 in computer lab)

## Teaching period

01/02/21 9 am - 1 pm LAB 908 (U9a)

03/02/21 9 am - 1 pm LAB 908 (U9a)

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