



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

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

2324-102R-12

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#### Title

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

#### Teacher

Davide Paolo Bernasconi

#### Language

English

#### Short description

##### Objectives

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 with R

Day 2:

Introduction to generalized linear models

Logistic regression model

Lab session with R

**Target audience**

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

**Maximum number of participants**

50

**Assessment method**

Test with multiple choice questions

**CFU / Hours**

1 CFU / 8 hrs

**Teaching period and mode**

13/02/24 9 am -1 pm U6-01c

15/02/24 9 am -1 pm U6-01c

**course registration on “Segreteria online”:** 22/01/24 - 07/02/24

The course will be taught in presence with the possibility of remote participation through streaming lessons and recordings.

**Sustainable Development Goals**

QUALITY EDUCATION

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