

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

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

2223-DOTT-MOD10-2

Title

Introduction to statistics with R (part I): data description and basic in-ference

# Teacher(s)

Prof. Davide Paolo Bernasconi

# Language

English

# **Short description**

#### Objectives

The course, through lectures and computer lab sessions, aims to illustrate the fun-daments 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 per-form 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

Participants Min 10 Max 40

# **CFU / Hours**

1 CFU / 8 hrs

# **Teaching period**

31/01/2023 9 am -1pm lab907 02/02/2023 1.30 pm - 5.30 pm lab907

course registration on "Segreterie online": from 10/01/2023 to 25/01/2023

# **Sustainable Development Goals**

QUALITY EDUCATION