

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

## **Computational Statistics**

1920-3-E4101B041

#### Learning objectives

The aim of the course is to illustrate the main computational statistical tools which are fundamental for modeling and data analyzing data.

#### Contents

Resampling methods and advanced models.

### **Detailed program**

Resampling methods, Bootstrap, Jacknife. Data visualization techniques. Advanced models.

#### Prerequisites

Knowledge of the notions given in the course "Statistics III" is recommended.

### **Teaching methods**

Class lectures and lab sessions.

#### **Assessment methods**

Students are supposed to pass a written exam. The oral exam is optional; if it is requested (by the student or by the teacher), the final mark is obtained by averaging written and oral marks.

### **Textbooks and Reading Materials**

• James G., Witten D., Hastie T., Tibshirani R., An introduction to statistical learning, Springer.

Further material will be circulated via the e-learning page of the course.

#### Semester

The course is scheduled in the first part (six weeks) of the second semester.

#### **Teaching language**

Italian