

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **SYLLABUS DEL CORSO**

## **Statistica Computazionale**

2122-3-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**

Mixture-based clustering, classification and regression methods.

#### **Detailed program**

Mixture models. Model-based clustering. Model-based classification. Mixture of experts models. Data visualization.

#### **Prerequisites**

Knowledge of the notions given in the courses "Multivariate Statistics" and "Statistics III" is recommended.

## **Teaching methods**

Class lectures and lab sessions.

#### **Assessment methods**

The exam consists of an intermediate homework, a final project work and an oral exam.

## **Textbooks and Reading Materials**

- McLahan-Peel (2000) Finite\_Mixture\_Models
- Kabacoff (2018) Data Visualization with R

**Semester** 

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

## **Teaching language**

Italian