



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Computational Statistics

2021-3-E4101B041

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#### 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 and classification 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

Final homework and written exam.

## Textbooks and Reading Materials

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

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## Semester

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

## Teaching language

Italian

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