

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **SYLLABUS DEL CORSO**

## Metodi Statistici per il Management

2223-1-F7701M093-F7701M104M

#### Learning objectives

The course aims to present to students the statistical methods, that are typically applied to multivariate data.

#### **Contents**

Multivariate statistical data analysis

#### **Detailed program**

- · Multiple linear Regression
- · Principal Components Analysis
- · Cluster Analysis
- · Correspondences Analysis
- · Dicriminant Analysis

#### **Prerequisites**

Elements of asymptotic inference and descriptive statistics

#### **Teaching methods**

35 hours of theoretical lectures, 5 cfu, in physical presence.

#### **Assessment methods**

A paper (report), written in ENGLISH or in ITALIANO on an application on a data set of one or two tools presented in the course, by producing, in SPSS softwre, the output and developing a punctual comment on it Then, the student will have a theoretical talk about the course program.

Following the guidelines for writing the syllabus, the exam consists of a CASE ANALYSIS, the description of a real situation or example of which the connection between different elements are discusse and analyzed with respect to one or more technical paradigms.

#### **Textbooks and Reading Materials**

In italian:

Slides in e-learning website

In english:

- G. Chow, ECONOMETRICS, Mc Graw Hill,

chapter on "general linear regression", only

- W. Hardle, L. Simar APPLIED MULTIVARIATE STATISTICAL ANALYSIS, Method & Data Tecnologies ed.

chapters 11, 13, 14, 15, 22 (in 2019-20 edition)

#### Semester

First Semester

#### **Teaching language**

Italian

### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | AFFORDABLE AND CLEAN ENERGY | DECENT WORK AND ECONOMIC GROWTH | INDUSTRY, INNOVATION AND INFRASTRUCTURE | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION | CLIMATE ACTION | PEACE, JUSTICE AND STRONG INSTITUTIONS