### BRIEF COURSE DESCRIPTION
Quantitative applied and theoretical interpretation of sociological phenomena based on quantitative data. Moreover, the student will learn the open-source statistical software R to conduct analyses in autonomy.

### REQUIREMENTS
Basic knowledge of statistics and computer science.

### COURSE AIMS
Aim of the course is to introduce students to quantitative methods to analyze social data by using the open-source software R.

### TEACHING METHODOLOGY
Theoretical lessons will be combined with the use of the statistical software R in a way to learn how to implement a quantitative analysis.

### ASSESSMENT TYPE
The evaluation will be written with a multiple-choice test. The prerequisite will be the development of a small report (maximum 10 pages) using the main arguments of the course. The student must apply the quantitative analyses (monovariate, bivariate, PCA) to a dataset that can be downloaded from the link available at: formazioneonline.unisalento.it

**The report must be sent to the instructor 5 days before the exam.**

The test will be composed of 10 questions: 1 open question about the results obtained in the report; 4 questions on R Software; 5 questions on the theoretical part.
1) Teaching objectives
Aim of the course is to introduce the students into quantitative methods to analyze social data. In details the student will learn the following arguments:
- Monovariate Analysis
- Bivariate Analysis
- Statistical Tests
- Principal Component Analysis
All the argument will be treated from theoretical/interpretation point of view. Moreover all the arguments will be treated also with the open source software R.

REFERENCE TEXT BOOKS
All the material is available at: formazioneonline.unisalento.it