



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Psychometrics With Software Lab 2

2021-2-E2401P132

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#### Learning area

KNOWLEDGE ABOUT QUALITATIVE AND QUANTITATIVE RESEARCH METHODOLOGY

#### Learning objectives

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##### *Knowledge and understanding*

- Statistics for correlation data
- Statistics for experimental data
- Simple and complex relationships among different types of variables
- Basics of measurement in psychology

##### *Applying knowledge and understanding*

- Ability to analyze data collected in different research designs
- Understanding and evaluating third-party statistics and their quality
- Estimating and understanding simple relationships among variables.
- Employing and evaluating different types of psychological measures

Use of SPSS software and other types of free software

## **Contents**

An overview of several statistical techniques and methodological concepts is provided, giving the student the ability to collect and analyze data in a wide range of research situations. Univariate statistical techniques are presented, with emphasis on the interpretation of results. Fundamental concepts related with measurement in psychology are also discussed.

## **Detailed program**

- Statistical models and inferential statistics
- Reliability analysis
- Validity of measurements
- Factor analysis

## **Practice Labs**

Practice with SPSS statistical software and hands-on exercises with real data.

## **Prerequisites**

## **Teaching methods**

## **Assessment methods**

## **Textbooks and Reading Materials**

Flebus GB (2018). *Lezioni per il corso di Psicometria*. McGraw-Hill Education

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