



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Metodi Quantitativi per la Psicologia dello Sviluppo

2021-2-F5103P089

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#### Learning area

methodological knowledge and practical application of psychometric instruments

#### Learning objectives

Theoretical knowledge and comprehension

1 Analysis of variance

2 Factor Analysis

3 Regression analysis

4 Reliability and validity of tests for the school domain

Skills required to apply knowledge and comprehension

1 Analyse datasets according to the above analyses

2 Analyse the method followed in recently published articles

#### Contents

Overview of basic statistics relying on available software (SPSS, JAMOVI, Jasp); introduction to data analysis techniques for developing questionnaires in school environments; Field research with small samples.

## **Detailed program**

one way and twoways Analysis of variance, simple and repeated measures

Least squares and optimal regression

Categorical factor analysis (Correspondence analysis)

Analysis of covariance

## **Prerequisites**

Basic knowledge of statistics: factor analysis, regression analysis , one way ANOVA. Z-score; principles of statistical inference; reliability of psychometric measures

## **Teaching methods**

Prerecorded lectures on theory and examples of current literature. Hands-on exercises with software. During the Covid Emergency, lectures will be either synchrounous online or differed (with Webex or Kaltura Plattform)

## **Assessment methods**

Written examinations, with multiple choice questions, analysis with software ; comments on one ore more articles drawn from current literature.

During the Covid Emergency, only online exminations will be held, by relying on the Webex platform (or similar software, already in use).

## **Textbooks and Reading Materials**

Detailed information about learning materials will be made availables on the related e-learning course page

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