



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Quantitative Methods For Developmental Psychology

2122-2-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**

Lectures on theory and examples of current literature. Hands-on exercises with software.

*Lessons will be held in presence, unless further COVID-19 related restrictions are imposed.*

## **Assessment methods**

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

## **Textbooks and Reading Materials**

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

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