UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Psychometrics With Software Lab 2 - T2

2021-2-E2401P132-T2

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 freeware

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

Descriptives statistics (measures of central tendency and dispersion); Basics of inferential statistics;

Foundations of psychological testing

Teaching methods

Theoretical and practical classes. Practice sections in the computer labs with analyses of real data and discussion

Lessons will be held in presence or through online video lessons, according to the University’s regulations regarding the COVID-19 emergency situation. In both cases, all lessons will be video recorded and made available to the students.

Assessment methods

Written final test with multiple choices questions and open-end questions based on analyses of real data.

During the Covid-19 emergency, exams will be conducted according to the University’s regulations regarding the COVID-19 emergency situation.

Textbooks and Reading Materials

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