



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

### **Methods of Psychology With Research Experiences - 2**

2526-2-E2401P142-T2

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#### **Learning area**

Methods, techniques, and instruments for psychology

#### **Learning objectives**

##### **Knowledge and Understanding**

- Know the main research methodologies used in psychology and understand the reasons for their use
- Know the basic concepts of psychological measurement and understand the underlying principles

##### **Applying Knowledge and Understanding**

- Clearly and precisely articulate research questions in psychological contexts
- Explore and evaluate different types of research designs used in psychology, and understand the inferences associated with each design

##### **Autonomy of Judgment**

- Acquire practical and theoretical skills in the construction and evaluation of measurement instruments used to collect psychological data

##### **Communication Skills**

- Analyze and discuss the generalizability of findings from psychological studies
- Communicate the strengths and weaknesses of various psychological designs and measures

##### **Learning Skills**

- Understand and be able to consider the implications of different research designs and measurement properties for professional practice and future research

## **Contents**

1. development of the research question
2. types of research designs and inferences from results in psychology
3. construction of measurement instruments
4. generalizability of results

## **Detailed program**

### **The Research Question**

Precisely defining and specifying the research question, possibly articulated into multiple sub-questions.

Types of research questions.

### **The Study Design**

Experimental designs

Cross-sectional or correlational designs

Longitudinal studies

### **Measurement: A deep dive into tests and questionnaires**

Constructing a psychological measurement instrument

Evaluating reliability and validity

Choosing an appropriate instrument

Test norms

Score interpretation and measurement error

### **Limits to Generalizability**

The sample

The manipulations

The instruments used

## **Prerequisites**

Basic knowledge of psychometrics (those acquired through attending the Elements of Psychometrics with Software course).

## **Teaching methods**

The course is structured as follows:

- 16 hours of laboratory sessions (approximately divided equally between traditional teaching and interactive

teaching)

- 8 hours of practical sessions/exercises (interactive teaching)
- Participation in studies across various fields of psychological research (interactive teaching) for a total of 2 experimental CFUs

## **Assessment methods**

Learning will be assessed by requiring the writing of a scientific report based on the content learned during the laboratory activities.

## **Textbooks and Reading Materials**

Instructions will be provided via e-learning at the beginning of the course.

## **Sustainable Development Goals**

QUALITY EDUCATION

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