UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

# COURSE SYLLABUS

# Methods of Psychology With Research Experiences - 1

**2627-2-E2403P024-T1**

## 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

Assessment consists of a written report aimed at ascertaining the ability to apply the content acquired during laboratory and exercise activities. The evaluation will take into account the correctness and completeness of the content, the capacity for methodological reasoning and clarity of exposition. Approval of the laboratory also requires attendance of at least 75% of the total 24 hours and the acquisition of 2 experimental CFU.

## Textbooks and Reading Materials

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

## Sustainable Development Goals

QUALITY EDUCATION