

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

# Psicofisica e Percezione

2324-1-F9201P006

# **Aims**

The course will introduce the notion of measurement in psychology and the main psychophysical techniques used in experimental psychology. Issues relating to the psychology of perception will then be addressed with particular attention to visual phenomena.

# **Contents**

### First part

- Elements of psychometrics
- · Basic notions of psychophysics

# Second part

- · formation of perceptual units
- The role of illusions in experimental psychology
- Main theories
- Analyses of perceptual phenomena and processes

# **Detailed program**

The course is divided into two parts.

Part I:

- The concepts of measure and measurement
- Data and measurement scales
- Psychophysics: basic notions
- Psychophysical methods for experimental research
- Let's create an experiment, step by step

#### Part II:

- Why psychology of perception?
- The concepts of reality and illusion
- Perceptual theories
- · Segmentation of the visual field into meaningful units
- Amodal completion and anomalous figures
- A stimulus for two percepts: homochromatic figures and phenomenal transparency
- · Colors and black & white
- The third dimension
- Light
- And yet it moves: motion perception

# **Prerequisites**

None

# **Teaching form**

Frontal lesson, discussions, and exercises.

# Textbook and teaching resource

- Slides from the lessons
- Journal papers that will be made available on the course's e-learning page
- Gaetano Kanizsa (1979). *Organization in vision*, Praeger. (The book may appear out of date, but it presents main phenomena in a problematic key, and not as pre-packaged solutions to perceptual issues still widely debated)

For those wishing to learn more about psychophysics:

G.A. Gescheider (1997). *Psychophysics. The Fundamentals*, London: Lawrence Erlbaum. The book is available in ebook format at the university library.

### **Semester**

Primo semestre

# **Assessment method**

The student can choose between two assessment methods:

- A) Oral interview concerning the entire programme.
- B) Project examination consisting of the following parts:
- 1. Journal club: Classroom Presentation of a journal paper about a perceptual phenomenon, freely chosen by the student;
- 2. the design of an experiment (abstract, brief introduction, participants, psychophysical method, type of data). Note that the chosen phenomenon for part b must be different from that chosen for part the Journal Club activity.
- 3. oral interview mainly concerning parts a and b.

### Office hours

Day and modality of student reception will be communicated at the beginning of the course.

# **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY | REDUCED INEQUALITIES