

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# **Visual Perception**

2324-2-E3002Q040

#### **Aims**

The class aims to provide the basic psychological and psychophysiological knowledge necessary to understand the functioning of visual perception. It provides the tools for a fruitful interaction with other professional figures (psychologists, psychophysiologists and neuropsychologists) for clinical and research purposes.

#### **Contents**

#### Psychological bases of visual perception:

- Research methods in psychology of visual perception
- Theories and psychological models of visual perception
- Visual-spatial attention and eye movements

#### Psycho-physiological bases of visual perception:

- Psycho-physiological bases of visual perception of characteristics (color, clarity, shape, depth, movement) and of visual recognition of objects
- Anatomo-functional bases of vision, perception, and attention
- Neuropsychology of vision, perception, and attention

### **Detailed program**

#### Psychological bases of visual perception:

- Research methods in visual perception: Psychology is a science. What does doing research in visual perception mean: identification of problems; use of the experimental method (variables definition, validity and control); the main psychophysical methods for the study of visual facts.
- Theories and psychological models of visual perception. The cognitivist approach. How do we built a stable world: perception of color, movement, space and objects.
- \*-Visual-spatial attention and eye movements. How v\*isual perception, attention, and eye movements interact with each other. Reading.

#### Psychophysiological bases of visual perception:

- Psychophysiological bases of visual perception: cerebral processes and mechanisms underlying the perception of color, brightness, shape, depth, movement, the recognition of objects and scenes.
- *Neuropsychology of vision, perception, and attention*: disturbances of visual perception and visual attention due to brain injury; differential diagnosis between peripheral and central disorders of the dorsal visual route; evaluation and rehabilitation of the visual field defect; pseudo-hemianopsia; congenital and acquired reading disorders.

### **Prerequisites**

Receptive and productive language skills Analytical abilities in understanding and reasoning The capacity of synthesis and content processing

#### **Teaching form**

During lectures instructors will a) present and explain the contents with the help of slides and videos; b) answer questions; c) discuss together with students theoretical/methodological issues of particular interest.

Short self-evaluation questionnaires will be made available on some of the topics. Filling the questionnaires is not mandatory, but encouraged.

## Textbook and teaching resource

Although this course is held in Italian, for Erasmus students, a textbook can also be made available in English, and students can take the exam in English if they wish to do so.

#### Semester

Il year, I semester

#### Assessment method

The exam consists of a written assessment, including

- a) multiple-choice questions to check thoroughly student's preparation on all topics
- b) short open questions on the course topics to assess preparation, communication skills and development of independent thought

It is always possible for students and instructors to ask to complete the evaluation with an *Oral assessment* (optional). The oral assessment will include a discussion of the results f the written part and additional questions on the course topics. The evaluation of the oral assessment may result in a modification of the final score of the exam with a positive or negative sign, or in no change.

#### Office hours

Prof. Roberta Daini: see https://www.unimib.it/roberta-daini

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#### **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING