

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## **Neuro-functional Basis of Cognitive and Affective Processes**

2122-1-F5104P047-F5104P048M

Learning area	
Applied Experimental Psychological Sciences	
Learning objectives	
Knowledge and understanding	

Applying knowledge and understanding

- Acquisition of the ability to apply the acquired knowledge in order to design and carry out empirical studies in the field of social and affective neuroscience.
- Acquisition of the ability to apply the acquired knowledge in order to personally design and carry out clinical interventions focused on specific patients with socio-affective disorders.

#### **Contents**

This course provides essential knowledge concerning the main cognitive models and the neurophysiological bases of social and emotional-motivational processes in humans, in order to promote the understanding of socio-emotional and behavioral functions, both in healthy people and patients with specific social or affective disorders.

#### **Detailed program**

Perception of causality, biological motion and animacy

Mentalization

Face and gaze perception

Social attention and gaze following

Attentional biases towards social and emotional stimuli.

Embodied cognition

Neural bases of social cognition and self-referential processes

Default mode network

Conscience: free will and forensic neurosciences

Mirror neurons, empathy, intention understanding, Autism

Faces and gestures coding, the Affective and Emotional Brain

Sex differences in social cognition

Action Coding: Neuroscience of dance and movement Audio-visuomotor neurons and multimodal coding Neuroscience of music and Neuroaesthetics

#### **Prerequisites**

This course requires a basic knowledge of anatomy and physiology of the nervous system and its cognitive functions.

The understanding of textbook and scientific article in English.

#### **Teaching methods**

Frontal lessons with slides and audio/video presentations. Presentation and discussion of ongoing data and research articles.

#### **Assessment methods**

Written exam with an oral interview on demand (either by the student or by the lecturers). The written examination

Textbooks and Reading	g Materials			
Scientific papers/chapters v page.	will be provided during the	course and uploaded o	n the appropriate E-lea	rning web

consists of open questions on textbooks and handouts of the lectures.