

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

## **Practical Class: Cognitive and Motor Rehabilitation Techniques**

2526-2-F5108P021

## Learning area

METHODS AND TECHNIQUES FOR TREATMENT AND REHABILITATION

## Learning objectives

Knowledge and understanding

- Approach to the treatment of cognitive and motor functions in patients with brain damage
- Knowledge of the main neuropsychological rehabilitation techniques based on valid scientific reference models

Applying knowledge and understanding

- · Application of specific intervention techniques based on the results of the neuropsychological assessment
- Definition of individualized neuropsychological rehabilitation programs and verification of treatment effectiveness, for both clinical and research purposes
- · Critical discussion of neuropsychological clinical cases

#### Making Judgements

The workshop favors the acquisition of skills in analyzing, integrating and autonomously interpreting clinical and anamnestic information for the programming of a tailored rehabilitation intervention. Activities proposed to develop diagnostic reasoning and critical thinking include the presentation of realistic clinical cases and the writing of proposals, individually or in groups, for in-depth testing and intervention.

Communication skills

Through the refinement and use of scientific language and the reference to valuable theoretical models, the workshop includes the definition of cognitive and motor rehabilitation pathways, individual oral presentation of the report and open discussion.

#### Learning skills

The lab encourages an attitude for continuous updating and self-learning through critical integration between proposed clinical data and the results of recent scientific articles, suggested or individually searched by the student.

#### Contents

The workshop aims to provide students with applicative skills for using the main methods and techniques of cognitive and motor rehabilitation in adult patients with brain damage. Clinical cases will be presented and discussed, allowing students to practice with the definition of individualized rehabilitation protocols, based on the results of the neuropsychological assessment. The methodological principles for defining a protocol will be addressed, and students will be able to get a concrete and realistic idea of the neuropsychological approach to rehabilitation and of the tools for evaluating the effectiveness of the intervention.

## **Detailed program**

- · Interpretation of neuropsychological assessment results after brain damage
- Methodological principles of neuropsychological rehabilitation
- Setting of rehabilitation protocols
- Rehabilitation of acquired oral and written language disorders
- Rehabilitation of visuoperceptual and visuospatial disorders and of unilateral spatial neglect
- Rehabilitation of executive, attentional and mnesic disorders
- · Rehabilitation of movement disorders
- Approach to the patient with Traumatic Brain Injury
- Approach to the patient with neurodegenerative disease
- Verification of treatment effectiveness

## **Prerequisites**

A good background on neuropsychology enables a better understanding of the topics discussed in this course.

## **Teaching methods**

Laboratory-based teaching will be totally delivered in person through face-to-face lectures in Italian (Didactics of Erogative type, about 20%) and classroom discussions, videos, case presentations and practical exercises (Didactics of Interactive type, about 80%).

The 7 lectures of 4 hours each will be conducted as face-to-face lecture in the initial part, and then engages students interactively in the subsequent part.

Erasmus students/scholars may contact the lecturer to arrange the possibility of studying on an English-language bibliography and/or the possibility of taking the practical test in English.

## **Assessment methods**

The practical test requires students to analyze a clinical case and to propose a rehabilitation protocol.

## **Textbooks and Reading Materials**

The teaching material (mainly in English) will be indicated during the course and uploaded on the E-learning page.

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING