UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Practical Class: New Technologies for Neuropsycology

2425-2-F5108P019

Learning area

Models and Techniques for the Assessment of Psychological Functioning

Learning objectives

Knowledge and understanding

- Theoretical and methodological approaches in cognitive psychology and neuropsychology
- Fundamentals of neuropsychology and cognitive rehabilitation
- Psychometric instruments for assessing cognitive impairment
- Methods of cognitive stimulation in healthy and non-adult and elderly subjects
- Specific design using new technologies
  Applying knowledge and understanding
- Diagnostic procedure in neuropsychology
- Critical discussion of neuropsychological clinical cases and planning of cognitive stimulation/rehabilitation interventions using new technologies (computerised tools, virtual reality)
- Guidelines for the management of stimulation groups

Contents

Empirical data and clinical cases illustrating the various forms of acquired, degenerative and non-degenerative cognitive disorders will be presented and discussed, accompanied by the protocols produced during evaluation.
Students will gain a concrete and realistic insight into cognitive functions and the application of stimulation and rehabilitation protocols integrating the new technologies available. Practical exercises will foster familiarisation with

the main psychometric instruments used to assess cognitive disorders. There will also be a part of acquisition and familiarisation with new technologies (use of opensesame software for creating personalised cognitive stimulation, use of virtual reality headset, etc.).

Detailed program

The theoretical foundations of clinical neuropsychology and clinical rehabilitation

- The clinical neuropsychological examination
- Cognitive function enhancement treatments
- Neuropsychological treatments in adults and the elderly
- Use of new technologies (computer-based, telerehabilitation, virtual reality)
- Programming with OpenSesame software

Prerequisites

A good knowledge of the fundamentals of neuropsychological assessment and rehabilitation will enable a more informed use of the course content.

Teaching methods

Classroom lectures, discussions, films, administration of neuropsychological instruments, practical exercises (Interactive teaching 28 hours)

Type of teaching activity: laboratory

Assessment methods

Project work, problems or exercises as a check on the practical skills acquired.
For example:

1. during the workshop, the students, divided into small groups, present and discuss among themselves, coordinated and directed by the teacher, intervention projects in the field of neuropsychological rehabilitation and the use of digital tools
2. at the end of the workshop the students, individually, present a project of cognitive stimulation aimed at specific users with the use of new technologies.

Textbooks and Reading Materials

There is no reference text but the scientific bibliography of reference will be provided in class each week.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING