

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Neuropsychology of Adulthood and Aging

2021-1-F5104P002

Learning area

PSYCHOLOGICAL FUNCTIONING: MODELS AND MEHODS FOR ASSESSMENT

Learning objectives

Knowledge and understanding

- Elements of history of neuropsychology
- Methodological foundations of neuropsychology
- Basic elements of neurology and neuroimaging, useful in neuropsychology.
- · Neuropsychological assessment: clinical exam and psychometric assessment.
- Main neuropsychological syndromes.

Applying knowledge and understanding

- To promote the ability to understand and use neurological knowledge and data about patients, useful for clinical neuropsychology.
- To promote the ability to set up and perform a neuropsychological assessment.

To promote the ability to make diagnostic hypotheses about neuropsychological deficits.

Contents

History and methods of neuropsychology; elements of neurology and neuroimaging; clinical neuropsychological exam and psychometric neuropsychological tests; main diseases responsible of neuropsychological disorders (elements); main neuropsychological syndromes brought about by focal and diffuse brain damage.

Detailed program

- History of neuropsychology.
- Methodological foundations of neuropsychology: simple and double dissociation between symptoms and signs; neuropsychological syndromes.
- Neurology and neuroimaging (elements)
- Neuropsychological evaluation: clinical assessment; psychometric neuropsychological tests.
- Disorders of oral language: aphasias.
- Acquired dyslexias and dysgraphias (elements).
- Dyscalculia: disorders of number processing and calculation (elements).
- · Disorders of planning of voluntary movement: apraxias.
- Deficits of identification of objects, colours and faces: agnosias.
- Deficits of attention.
- Deficits of spatial cognition: unilateral spatial neglect and other spatial deficits.
- Deficits of bodily representation.
- · Deficits of awareness of disease: anosognosia.
- Disorders of memory.
- Disorders of executive processes.
- Dementias.
- Delirium.
- · Neuropsychology of head injury, cerebral tumours, and multiple sclerosis

Syndromes of interhemispheric disconnection

Prerequisites

It is strongly advised that the CV includes having passed the following exams: Biology and Genetics, Anatomophysiological Foundations of Psychic Activity and Physiological Psychology.

Teaching methods

Room lessons, audiovisual material.

In the Covid-19 emergency period, lessons will take place remotely.

Assessment methods

- 1) **Written assessment,** that includes multiple choice-questions, and open questions on the topics of the course. An example of the organization of the written assessment is the following:
- a) 30 multiple choice 4-alternative questions, with 1 correct choice. One point is assigned for each correct answer, with no penalty. The minimum score for a successful assessment is 18 out of 30 correct answers. Example: "in Broca's aphasia oral language is: 1: fluent; 2: telegraphic (correct choice); 3: abundant; 4: a jargon.
- b) An open question to which a complete and concise response is to be provided. Example: "Briefly describe the main features of Broca's aphasia". 0-3 points are assigned to the response to the open question, based on the assessment by the teacher.
- **2) Oral assessment (optional)**, including one or more open questions, to which concise and complete responses are to be provided. Example: "What is crossed aphasia?". 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.

The students' learning may be also evaluated by a written (see above #1) in itinere assessments, at the end of the course.

During the Covid-19 emergency, exams will be conducted according to the University's regulations regarding the COVID-19 emergency situation.

Textbooks and Reading Materials

- Vallar G & Papagno C (a cura di) (2018). *Manuale di neuropsicologia. Clinica ed elementi di riabilitazione*. 3° edizione. Il Mulino, Bologna (excluding the cap. 21, pp. 501-535).
- Materials made available on the elearning site.

