UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Assessment and Intervention in Healthy and Pathological Ageing

2324-1-F5107P011

Learning area

2: 2: Methods and techniques for treatment and rehabilitation

Learning objectives

Knowledge and understanding
• Theoretical and Methodological Approaches in Cognitive Psychology and Neuropsychology of Aging
• Foundations of Normal and Pathological Aging Neuropsychology
• Psychometric Tools for Assessing Cognitive Decline
• Methods of Cognitive Stimulation in Healthy Individuals and patients with Dementia
• Clinical Cases of Patients with Cognitive Decline
• New Technologies Applied to Neuropsychological Practice

Applying knowledge and understanding
• Diagnostic procedure in Neuropsychology of Aging
• Critical Discussion of Clinical Cases of Cognitive Decline
• Guidelines for Managing Cognitive Stimulation Groups

Contents

The course aims to provide a theoretical overview of cognitive and psychophysiological changes associated with aging, addressing the main theoretical models and the latest research findings in the field. It will cover various forms of cognitive decline, their characteristics, and the underlying psychophysiological mechanisms.
The course will present the diagnostic process, assessment tools, and criteria for differential diagnosis between

healthy aging and pathological aging, between dementia and pseudodementia, and between primary and secondary dementias. Clinical cases will be presented to facilitate neuropsychological evaluation.
Furthermore, the course will introduce cognitive enhancement training programs for both healthy and pathological aging, highlighting the latest aids and cutting-edge techniques such as non-invasive brain stimulation and virtual reality devices.

Detailed program

• Theoretical Foundations of Normal and Active Aging
• Theoretical Foundations of Pathological Aging (Dementia)
• Clinical Neuropsychological Examination in Cognitive Decline
• Mild Cognitive Impairment
• Alzheimer's Disease and Atypical Forms
• Vascular Dementias
• Frontotemporal Dementias
• Parkinson's Disease and Atypical Parkinsonism
• Dementia with Lewy Bodies
• Cognitive Decline in Psychiatric Disorders
• Cognitive Enhancement Treatments in Healthy Aging
• Neuropsychological Treatments in Pathological Aging
• New Technologies Applied to Cognitive Enhancement in Healthy and Pathological Aging

Prerequisites

A good background on foundations of brain functioning and epistemological bases of neuropsychology will enable a more informed use of the content of the course.

Teaching methods

The course includes classroom lectures, discussions, videos, and presentations of neuropsychological tools. The course materials, including lecture slides and scientific articles for further study, will be made available on the course's e-learning website.

Assessment methods

The exam is written with oral interview upon request.
The written exam includes both multiple-choice and open-ended questions. The multiple-choice questions aim to assess the student's comprehensive preparation, while the open-ended questions evaluate their ability to think critically and make connections between acquired knowledge.

Here's an example of the exam structure:

a) 32 multiple-choice questions with 4 options, of which only one is correct. Each correct answer is awarded one

point, with no penalties for incorrect answers. The minimum score required to pass the exam is 18 correct answers out of 32 questions.

b) Two open-ended questions that require comprehensive and concise responses covering all the topics of the course. Each open-ended question is assigned a maximum of 16 points based on the evaluation by the instructor.

The Oral Exam (optional, after the written exam) consists of one or more open-ended questions that require comprehensive and concise responses. The score will be on a 30-point scale and will account for 1/3 of the final grade (with 1/3 for multiple-choice and 1/3 for open-ended questions).

Textbooks and Reading Materials

Neuropsicologia delle demenze (2020). A Cura di: Costanza Papagno e Nadia Bolognini. Il Mulino.

De Beni, R., & Borella, E. (Eds.), Psicologia dell'invecchiamento e della longevità. Bologna, Il Mulino, 2015.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING