UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Assessment and Intervention in Healthy and Pathological Ageing

2526-1-F5111P010

Learning area

Models 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

Making Judgements
Through open discussion and classroom debate on key topics related to healthy and pathological aging, the course aims to foster a critical and independent perspective in the analysis of major theoretical models and empirical evidence. It encourages the personal development of interpretative hypotheses and theoretical solutions.

Communication Skills
The exam, which consists solely of an oral interview on the topics covered in class and the materials included in the bibliography, is designed to strengthen the ability to communicate complex concepts related to healthy and pathological aging. It emphasizes the use of appropriate scientific language and the adaptation of communication

style to academic and professional contexts.

Learning Skills
The inclusion of recent scientific articles in English in the course bibliography is intended to promote independent study and the ability to critically explore course topics through the use of up-to-date scientific sources.

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 and Methodological Foundations in the Psychology of Ageing
- The cerebral, cognitive, emotive and personality changes in healthy ageing
- Neurocognitive models on healthy ageing
- 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 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

Approximately 70% of the lessons will be heldin-person (lectures) and 30% will be carried out, still in person, but in

an interactive (discussions, clinical cases, presentation of neuropsychological tools, practical exercises).

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 format is oral only.
The exam consists of an oral interview covering the topics discussed during the lectures, the textbooks, and the scientific articles included in the bibliography.
The questions asked during the exam are designed to extensively assess the student's preparation, evaluating their ability to think critically and to make connections between the knowledge acquired.
The evaluation criteria contributing to the final grade include: accuracy of the answers, adequacy of the content, logical and formal organization of responses, and the use of terminology appropriate to the academic and professional context.
Autonomy of judgment and the ability to critically reflect on the topics covered will also be assessed.

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.

Additional teaching material will be provided during the course

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING