# Healthy ageing

## Prof. Camillo Mara

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

Aims include: general knowledge of the ability changes that occur in various cognitive and behavioral domains during normal brain ageing; the ability to identify cognitive changes in common neurological pathologies in the elderly (cerebrovascular disease, primary and secondary dementias, parkinsonisms); the acquisition of basic strategies for rehabilitation interventions in acquired cognitive damage.

Ability to analyze the main risk factors of pathological aging. Ability to choose diagnostic tools and plan interventions capable of promoting disease prevention and the planning of deficit rehabilitation.

Ability to manage geriatric problems associated with elderly patients with and without cognitive impairment; Measurements of stress in caregivers and ability to intervene.

***COURSE CONTENT***

General considerations on healthy aging and the psychophysical well-being of the elderly

1. *Cognitive functions in normal ageing:*

- Micro- and macro-structural changes in the brain during ageing.

- Changes in the sense organs.

- Episodic memory and semantic memory in normal and pathological aging.

- “Working” memory.

- Executive and attentional functions; the "Central Executive".

- Language and other "modular" functions (praxia and perception).

1. *Cognitive functions in pathological ageing.*

- Neuropathology of neurodegenerative and cerebrovascular diseases.

- Main neurological diseases and syndromes in ageing.

- Cognitive disorders and main syndromes in cerebrovascular disease.

- Cognitive disorders and main syndromes in primary and secondary dementias.

- Cognitive disorders associated with movement control disorders (Parkinsonism).

- Classification of memory, language, spatial attention, executive control, perception, praxia, and social cognition disorders.

1. *Behavioural disorders during the course of neurological diseases.*

- Mood disorders

- Psychosis

- Depressive pseudo-dementia

- Conduction disorders

1. *Clinical diagnosis (anamnesis), neuropsychological diagnosis (neuropsychological tests and batteries), and instrumental diagnosis (interpretation of neuroimaging).*
2. *Geriatric problems associated with the management of elderly patients with cognitive impairment; caregiver stress.*
3. *Rehabilitation*

- Recovery mechanisms and neuronal plasticity phenomena

- Rehabilitationof a language deficit

- Rehabilitationof neglect

- Rehabilitationof memory

- Rehabilitationof dementia

- utility of memory aids in rehabilitation

***READING LIST***

1. *Manuale di neurologia cognitiva e comportamentale*, a cura di A Stracciari e C Papagno, [Il Mulino](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ibs.it%2Flibri%2Feditori%2Fil-mulino&data=05%7C01%7Cuff.guide%40unicatt.it%7C352f18766441470da5d008daa79fcb49%7Cb94f7d7481ff44a9b5886682acc85779%7C0%7C0%7C638006601988849165%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=fiiphFCZtXq1npaMnr%2FIZ6xGfzH34emItRXX89yWN6E%3D&reserved=0), 2021.

2. *Manuale di riabilitazione neuropsicologica*, a cura di G Vallar e C Papagno, Il Mulino, 2022.

***TEACHING METHOD***

Classroom lectures with the presentation of slides and videos. Discussions.

***ASSESSMENT METHOD AND CRITERIA***

The exam will involve the student being individually questioned on the topics covered during the course: at least three topics will be addressed, two of a clinical/diagnostic nature, one relating to rehabilitation.

Students must demonstrate their knowledge of the course contents and their ability to process these in a critical way.

The mark is expressed out of thirty. To pass the exam, a student must achieve a mark between 18 and 30 cum laude.

***NOTES AND PREREQUISITES***

Basic knowledge of clinical neuropsychology is required.