



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Physiological and Pathological Brain Aging

2122-3-H4101D051

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#### Aims

Objective of the course is to learn the main modifications, anatomical and functional, of the SNC, tied to the physiological ageing and also to distinguish them from those typical of clinical situations to high prevalence in the elderly (Depression, MCI, Dementia, Delirium).

#### Contents

In the formative curriculum of the future Medical Doctor and/or Nurse it is important to acquire theoretical and practical information related to cerebral aging. We aim to answer to the current demographic transition and also offer, from a practical point of view, the knowledge to face - in the future profession - one of the most specific clinical problems observed in the elderly, i.e. the differential diagnosis of cognitive impairment. We will also face the most current aspects of diagnostic neuroimaging and therapeutic opportunities to treat these disorders.

The course provides also knowledge about differences in cerebral pathophysiology between females and males in the context of gender medicine, which a growing area of research.

#### Detailed program

- Physiological cerebral ageing: anatomy and function

- The boundaries between physiological and pathological cerebral ageing
- Depression, Mild Cognitive Impairment (MCI), Dementia
- Pharmacological therapy of cognitive disorders
- The non-pharmacological treatments of cognitive disorders
- Pathophysiology of cerebral aging in males and females (gender medicine)

## **Prerequisites**

Medical students at 3rd year and over, or students of the Course in Nursing at 3rd year

## **Teaching form**

This course was previously realized through Lectures.

During the period of Covid-19 emergency, lessons will take place in mixed mode: partial presence and asynchronous videorecorded lessons, according to the ordinances issued by the authorities regarding the containment of the pandemic and the control of crowd formation.

## **Textbook and teaching resource**

Powerpoint presentations, lessons videorecorded with Kaltura Capture application.

## **Semester**

February, March

## **Assessment method**

Interactive verification at the course conclusion in order to ensure the learning of the take-home messages.

## **Office hours**

Based on appointment through e-mail contact.

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