

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

## Neurobiology

2122-5-H4101D159

#### **Aims**

Recent neurogenetic and neurobiological discoveries have widely changed diagnostic approach and therapy for neurological diseases.

The aim of this course is to provide students a wide view of main research lines and direct experience of lab techniques to investigate bases of CNS disorders

#### **Contents**

Biological mechanisms of neurological disorders

#### **Detailed program**

Theoretical part will review biological bases of CNS disorders. Main themes will cover excitotoxic mechanisms, neuronal apoptosis, neuroimmunological diseases, epilepsy, brain ischemia, neurodegenerative disorders.

Lab activities will be devoted to learn main neurobiological techniques: neuronal glial and fibroblast cultures,

| molecular t<br>Uptake). | oiology techniques (Western blot-Northern blot-PCR) and biochemical techniques (ELISA-RIA-Binding-    |
|-------------------------|---|
| Prerequi                | sites   |
| Medical stu             | dents at 5th year and over and students of the Course in Medical Biotechnologies at 2nd year          |
| Teaching                | g form  |
| Theoric and             | d practical corse, with frontal lectures and experimental activities in the Lab of Neurobiology.      |
| Lessons wi              | Il be provided in presence, subject to any ministerial changes following the COVID pandemic situation |
| Textbook                | c and teaching resource   |
| Scientific a            | ticles  |
| Semeste                 | r   |
| Second Se               | mester, May   |
| Assessm                 | nent method   |
| Oral discus             | sion  |
| Office ho               | purs  |
| By appointr             | nent  |
|                         |   |