

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

## **Pharmacology**

2021-2-I0202D123-I0202D042M

#### **Aims**

The course aims at developing the students' knowledge of the basics of pharmacology

#### **Contents**

PHARMACOLOGY: Pharmacokinetics: Pharmacodynamics: basics of neurotransmission and Pharmacological therapy.

### **Detailed program**

**PHARMACOLOGY** 

- Stages of drug development
- Pharmacokinetics: Principles of diffusion of drugs across cellular barriers. Absorption, distribution, biotransformation and excretion. Pharmacokinetics in children.
- Pharmacodynamics: receptor theory and targets for drug action. Agonists and antagonists. Quantitative response to drugs. Structural / functional classification of receptors for endogenous agonists; signal transduction mechanisms and their pharmacological modulation, variations in receptor response
- Neurotransmission: basics of general aspects. Principal systems of neurotransmission: acetylcholine, catecholamines, GABA, glutamate
- Outline of pharmacological therapy on epilepsy, anxiety, depression, attention disorders

## **Prerequisites**

Objectives of the first year courses. Objectives of the course: Neurology and Child Neuropsychiatry

## **Teaching form**

Lectures

## Textbook and teaching resource

Suggested text books: Cella, Di Giulio, Gorio, Scaglione, Farmacologia generale e speciale per le lauree sanitarie triennali, Ed. Piccin.

The Teacher will provide educational material (slides of the lessons)

#### Semester

Second year, second semester

#### **Assessment method**

The written test will consist of 33 multiple choice questions (5 answers each, only one is correct). For some multiple choice questions, a brief analysis could be required (like open question). The oral test will focus on indepth study of the written paper. For the evaluation of the written and oral test, the following criteria will be taken into account:

- correct answers
- answer relevance and
- completeness to the questions

#### Office hours

By appointment