



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Pharmacology

2223-2-I0202D123-I0202D042M

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#### 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 in-depth 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

**Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

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