



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Clinical Pharmacology and Chemotherapy

1920-3-H4601D014-H4601D038M

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#### Aims

#### Contents

The program will examine the pharmacology of the main chemotherapeutic agents.

#### Detailed program

Classification of antimicrobial drugs - Spectra, mechanisms of activity, and specific targets of the main classes of bacteriostatic and bactericidal antibiotics - Drug resistance, antimicrobial drug associations, antibiotic prophylaxis - Complications of antibiotic therapy - Criteria for an appropriate antibiotic usage in relationship to the pathogenic agent and patient typology - Penicillins, cephalosporins, and other beta-lactam antibiotics – Other cell-wall antibiotics – Tetracyclines, chloramphenicol, aminoglycosides, macrolides, lincosamines – Sulphamides, trimethoprim, cotrimoxazole – Chinolones and urinary antiseptics – Antitubercular drugs – Antifungals – DNA and RNA antivirals - HIV antiretrovirals – Antimalarial drugs – Principles of anticancer chemotherapy – Antimetabolite, antibiotic, alkylating, mitotic spindle inhibitor and other chemotherapeutic agents – Steroidal and non-steroidal chemotherapeutics - Targeted anti-cancer therapy.

#### Prerequisites

Knowledge acquired during all preparatory courses indicated in the medical degree course plan.

## Teaching form

Formal  
lectures and interactive discussion of  
simulated clinical cases.

## Textbook and teaching resource

- Bertram G. Katzung e Anthony J. Trevor Farmacologia generale clinica. X Edizione italiana, Piccin Nuova Libreria, 2017.
- Derek G. Waller, Andrew G. Renwick e Keith Hillier Farmacologia medica ed elementi di terapia. III edizione, Elsevier, 2011.
- Goodman e Gilman, Le basi farmacologiche della terapia. XII edizione, Zanichelli, 2017.

## Semester

First semester.

## Assessment method

The exam is in two parts. Firstly, a written test composed of short-answer open questions, justified quizzes, and 16 multiple-choice questions is administered. The student must pass this written test to gain access to the second oral discussion aimed checking the student's general knowledge of general pharmacological principles as well as the knowledge of all specific drug classes and their therapeutic use.

## Office hours

All weekdays between 1 and 2pm.

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