UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Pharmacology and Chemotherapy

2122-3-H4601D014-H4601D038M

Aims

At the end of the course the student will know the pharmacological properties of the different groups of the chemotherapeutic agents commonly employed in dentistry, particularly their mechanisms of action and fate in the organism.

Contents

The program will examine the pharmacological properties of the main chemotherapeutic agents used in dentistry.

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 dentistry degree course plan.

Teaching form

The teaching will be performed in attendance, except for ministerial changes due to the COVID pandemic situation. Formal lectures and discussions of clinical cases will be utilized. All lectures will be video recorded and uploaded on the e-learning platform.

Textbook and teaching resource

F.J. Dowd, B.S. Johnson e A.J. Mariotti “Pharmacology and Therapeutics for Dentistry”, VII edizione, Elsevier, 2017.

Goodman & Gilman “Le Basi Farmacologiche della Terapia”, XIII Edizione, Zanichelli, 2019.

Goodman & Gilman “Le basi farmacologiche della terapia – Il manuale”, II Edizione, 2015.

Semester

First semester.

Assessment method

The final evaluation will be performed through an oral exam aimed to assess whether students have acquired the exact terminology of the subject, the application of the critical reasoning developed in class and knowledge of the notions studied on the most important classes of drugs currently available in dentistry. It will be performed in attendanceexcept for ministerial changes due to the COVID pandemic situation.

Office hours

On appointment.