

Degree Course in Dentistry and Dental Prosthetics 2022/2023

Course: Pharmacology

CFU Number: 6

SSD: BIO/14

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PREREQUISITES

There are no prerequisites for teaching Pharmacology.

LEARNING OBJECTIVES

The course of Pharmacology aims to provide the student with knowledge on:

- general principles: definition of drug, medicament, poison, concept of drug, active principle, nature of drugs;
- the methodology of pharmacological research clinical and preclinical phases
- Pharmacokinetics
 - routes of drug administration
 - absorption of drugs
 - drug metabolism
 - excretion of drugs
- dose response relationship
- mechanism of action of drugs
- factors that influence the response of drugs
- adverse drug reactions
- antipyretic analgesic anti-inflammatory drugs
- drugs of the nociceptive system
- drugs in general and local anesthesia
- drugs in bone diseases
- disinfectant antiseptic chemotherapy
- drugs of the cardiovascular system and coagulation
- drugs of the nervous system
- drugs for dental emergencies
- the pharmaceutical prescription:
 - masterful recipes
 - ordinary recipes
 - restrictive recipes
 - recipes for narcotics

LEARNING OUTCOMES

Knowledge of pharmaceutical scientific methodology, pharmacokinetics, classification and use of the active ingredients in various internal and dental pathologies; the acquisition of an exhaustive orientation in the clinical use of the drug with specific references to internal and dental pathologies.

Knowledge and Understanding

At the end of this course the student will be able to:

- Know the definitions and origins of drugs, medicaments, poisons, drugs
- Describe the main pharmacokinetic characteristics and differences
- Know the methodology of clinical and preclinical pharmaceutical research
- Know the metabolism and the mechanism of action of drugs
- Learn about antipyretic analgesic anti-inflammatory drugs
- Know the drugs of the nociceptive system
- Know the general and local anesthesia drugs
- Know the drugs for bone diseases
- Know antiseptic disinfectant chemotherapy drugs
- Know the drugs of the cardiovascular system and coagulation
- Know the drugs of the nervous system
- Learn about medications for dental emergencies
- Know the rules of the pharmaceutical prescription:
 - masterful recipes
 - ordinary recipes
 - restrictive recipes
 - recipes for narcotics

Applying Knowledge and Understanding

Ability to combine knowledge and understanding of the use of the drug in both scientific research and clinical practice. Learning the scientific pharmacological method will represent the "fil rouge" of the entire course, the learners will be stimulated to develop the ability to perform precise and documented observations and to make a correct critical analysis in order to derive verifiable generalizations and appropriate clinical applicability.

Communication Skills

The student will be able to adequately describe a drug and its use, demonstrating that he has also learned an appropriate scientific and clinical language.

Making Judgements

At the end of the course the student will have analyzed and learned the methodology of pharmacological research which then leads to the correct therapeutic use of the various active ingredients.

Learning skills

The student will have acquired skills and learning methods suitable for deepening and improving their skills in the field of Pharmacology.

COURSE SYLLABUS

Definitions and origins of drugs, medicaments, poisons, drugs
Methodology of clinical and preclinical pharmacological research
Pharmacokinetics
Drug metabolism and mechanism of action
Characteristics and differences of the various pharmaceutical classes
Antalgic antipyretic anti-inflammatory drugs
Nociceptive System Drugs
General and local anesthesia drugs
Bone disease drugs
Disinfectant antiseptic chemotherapy
Drugs of the cardiovascular system and coagulation
Nervous system drugs
Medicines for dental emergencies
The pharmaceutical prescription

COURSE STRUCTURE

The 60-hour teaching is divided into lectures, exercises, any medical scientific conferences, meetings with interdisciplinary inter-professional experts; teaching uses tools such as presentations organized in powerpoint files, diagrams, illustrations and images to describe the various pharmacological notions; any videos and animations will also be used as an integration; planned exercises, including interactive ones, with exercises in the classroom, both individuals and groups. Attendance is compulsory.

COURSE GRADE DETERMINATION

The final exam costs a written test and / or an oral test. In the case of a written exam, the test consists of multiple choice questions, with only one correct answer, on topics covered in class; for example fifteen questions, nine minimum exact answers for passing the exam. The teacher, also in light of the characteristics and learning profiles of the learners, could consider possible tests in itinere.

READING MATERIALS

“Compendio di Farmacologia generale e speciale” Matilde Amico Roxas - UTET
“Farmacologia in Odontoiatria” Matilde Amico Roxas, Achille P. Caputi, Mario Del Tacca - EDRA
“Urgenze ed emergenze mediche in Odontoiatria” Giovanni Damia - Tecniche nuove
“Farmacologia” Anita Conforti et al. - SORBONA