01 catalogul disciplinei farmacologie englez

Name of discipline	Pharmacology			
Type	Compulsory		Credits	8
Academic year	IIII		Semester	V-VI
Number of hours	Course	60	Laboratory work	50
	Seminar	40	Self-training	90
Component	Fundamental			
Course holder	Pogonea Ina, Coreţchi Ianoş			
Location	Str. Testemiţanu, 27, et. II			
Preconditions and requirements of:	Program: basic knowledge in related disciplines such as: human anatomy, physiology, biochemistry, molecular biology, microbiology, pathophysiology, morphopathology, internal diseases - semiology, surgical diseases - semiology.			
	Abilities: basic digital (internet use, document processing, use of text editors, electronic tables and presentation applications), communication skills and teamwork.			
Aim of the discipline	The main goal of this subject is to study the fundamental principles of pharmacokinetics and pharmacodynamics of drugs, their interaction with the human body, formation of knowledge about prescribing and correct administration, effective and harmless treatment of multiple diseases and pathological conditions. Achieving the goal will allow you: the formation of a theorethical basis about drugs; developing a logic way of thinking for the application of the obtained information; highlighting the importance of pharmacology as a medical- biological discipline to achieve a rational, effective and harmless treatment. Knowledge about pharmacology and its continuous perfection is very important since medicine of the 21st century is a more personalized medicine.			
Overview of the topics	General prescription. General pharmacology. Drugs influencing the peripheral innervations. Drugs influencing the CNS. Drugs influencing effector organs and systems. Drugs influencing inflammatory, metabolic and immune systems. Antimicrobal and antiparasitic drugs			
Outcomes	Upon completion of studying the discipline, the student will be able to: • To define the principles of classification of drugs; • To know the particularities of prescribing drugs in all forms of delivery; • To know the general principles of pharmacokinetics, pharmacogenetics and pharmacodynamics; • Demonstrate abilities to characterize drug groups by pharmacodynamic and pharmacokinetic properties • To apply knowledge in the selection of drugs in various diseases and pathological conditions; • To integrate the material in resolving the tests, tables and problem situations, as well as their implementation in the research activity.			
Clinical skills	**at the level of knowledge and understanding:** • To define the structure of the prescription and the principles of drugs in different forms; • To identify the concept of raw drug material, substance, form and nomenclature;			

	• To identify drug interactions and incompatibilities; • To list the basic principles of general drug classification; • To describe basic principles of general and special pharmacokinetics, pharmacodynamics, chronopharmacology and pharmacogenetics; • To memorize the groups of drugs, the obligatory drugs with their prescription in different medicinal forms; • To list the classification, mechanism of action, effects, indications, contraindications and side effects of groups of drugs and specific drugs; • To name the groups of drugs: definition, classification; • To recognize the affiliation of the drugs to certain groups of chemical compounds; pharmacodynamics of substances (mechanism and site of action, effects, indications, contraindications, side effects and toxicity), pharmacokinetics of substances (route of administration, elimination), comparative characteristics of drugs; • To find possibilities of using drugs for medical purposes based on the knowledges of their properties. **at application level:** • To select and prescribe drugs in different diseases and pathological conditions; • To demonstrate pharmacological effects in experimental studies; • To implement the principles of cause and effect (dose-effect), benefit – injury; • To solve tests and problematic cases; • To be able to solve emergencies; • To select the most effective ways of drug administration based on their pharmacokinetic and pharmacodynamic properties, preventing interaction, incompatability and complications of the medical treatment; • To apply rules of prescription and the prescription of drugs in all their medical forms; • To prescribe the medication of choice in various diseases and first of all in states of emergency, and depending on the pathogen agent, etc.; • Apply the dosing principles and determine the routes of administration of age-dependent drugs; • To estimate pharmacogenetically which drugs pose a risk to the patient in various enzymopathies; • To estimate the clinical picture and the basic symptoms in drug intoxications, first aid measures, antidotes and general principles of treatment, methods of neutralization of the toxic absorbed in the body and correction of disordered functions; • To sketch the biological standardization of the drugs; • To use the concomitant administration of several drugs without risk of incompatibility; • To administer the correct medicine depending on the biological

	rhythms; • To apply the theoretical knowledge to solve the situation problems, of the case - clinical problems; • Expressly modify a drug with another drug substance in the same group to minimize side effects and perform effective treatment; • To apply the method for determining the therapeutic index of the drug substance in experimental and clinical conditions, renal and hepatic clearance; • To demonstrate the dose-effect relationship and the bioavailability of the drugs; • To operate optimally in the provision of emergency assistance in situations of overdose or inadequate drug reactions. **at the integration level:** • To assess the importance and role of pharmacology in the context of general medicine and its integration into related disciplines; • To integrate medical and biological knowledge in learning pharmacology; • To distinguish the correlations between physiological and pathological processes and pharmacological properties of drugs; • To form basic principles of ethics and deontology in medical treatment (pharmacotherapy); • To propose research programs to develop new drugs and study further known medical substances; • To integrate the acquired knowledge of pharmacology in clinical disciplines; • To be able to acquire pharmacological news.
Evaluation form	Current assessments and final exam