Study program: Integrated academic studies in pharmacy

Type and level of the study program: integrated academic studies

Course title: Special pharmacology II (PhIV-SPHARII)

Teacher: Velibor M. Vasović, Zdenko S. Tomić, Aleksandar L. Rašković, Isidora N. Samojlik, Olga J. Horvat, Saša N. Vukmirović, Boris T. Milijašević, Vesna M. Mijatović, Nebojša P. Stilinović

Course status: compulsory

ECTS Credits: 5

Condition: Pathophysiology; General pharmacology, Special pharmacology I (for taking of exam)

Course aim

To give students basic knowledge about the drug as a substance, its movement through the body, the ways, mechanisms and site of action, types of side effects, interactions and poisonings. In the second part of course the aim is to introduce students to all drug groups, representatives, indications and contraindications.

Expected outcome of the course

At the end of the course, students should know why, how and when to apply antimicrobial, antiparasitic, antiviral and antifungal drugs, drugs used in treatment of cardiovascular diseases, gastrointestinal and respiratory systems, their characteristics, movement through the body, place and mechanism of action and danger of their application. Student: must know how to properly read the prescription (magistral, official, ready-made drug) and to explain it; must know how to use drug registers; must know how to fill in the registration form about the adverse effects of the drug.

Course description

Theoretical education

Disinfection and antisepsis. Antimicrobial agents-an introduction, division. Resistance. Principles of dosage. Beta lactam antibiotics. Beta lactamase inhibitors. Polypeptides. Glycopeptides. Lipopeptides. Macrolides. Ketolides. Pyranosides. Aminoglycosides. Tetracycline. Glycylcyclines. Amphenicols. Spectrogramines. Oxazolidines. Inhibitors of bacterial DNA. Hinolones. Sulfonamides and trimethoprims. Anti-tuberculosis. Antibacterial azoles. Antimycotics, Antivirals, Antiparasitic drugs. Antimalarial drugs. Antitumor drugs. Immunomodulators. Drugs in the treatment of disorders and diseases of the GIT. Drugs in the treatment of disorders and diseases of the respiratory system. Drugs in the treatment of disorders and diseases of CVS. Thrombolytics, antiaggregative drugs drugs, anticoagulants. Hypolipidemics. Treatment of anemia.

Practical education: exercises, other forms of education, research related activities

Overview of registered drugs according to Pharmacotherapeutic groups discussed theoretical classes. Filling in the application form for adverse effects of drugs. Investigation of effects of drugs in experimental animals

Literature Compulsorv

Rang HP, Dale MM, Ritter JM, Moore PK. Pharmacology. Churchill Livingstone, Edinburgh, New York, 2003. 1.

2. Brenner GM, Stevens C, Pharmacology, 4th edition, Elsevier, 2012.

True BV, Dreisbach RH, Dreisbach's Handbook of Poisoning: Prevention, Diagnosis and Treatment, CRC Press; 13th ed. 3

Additional

Number of active classes					Other:	
Lectures:	Practice:	Othe	er types of teaching:	Research related activities:		
45	30					
Teaching methods	Theoretical and	practical				
		S	tudent activity assessmer	nt (maximally 100 points)		
Pre-exam activities	6		points	Final exam	points	
Lectures			5	Written*	40	
Practices			5	Oral	50	
Colloquium*			2x20			
*if the students does	s not pass both c	olloquiums h	e/she should take the exam	n in written form		