Study program: Integrated academic studies in dentistry

Type and level of the study program: integrated academic studies

Course title: General pharmacology (DII-GPHAR)

Teacher: Momir M. Mikov, Velibor M.Vasović, Ana J. Sabo, 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: Biochemistry, Physiology II (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

Expected outcome of the course: At the end of the teaching process, students should know why, how and when can be applied to a drug, its characteristics, movement through the body, place and mechanism of action and danger of its application. Student:must know how to correctly fill a prescription (Main, officinal, almost medicinal) and to explain; must know that the registers used drugs; must know to fulfill the registration form unwanted effects of the drug.

Course description

Theoretical education:

History of Pharmacology. The division of the discipline. The drug and poison. Drug administration. The dosage of drugs. Doses. Therapeutic index and therapeutic range of the drug.Moving the drug through the body. The passage of drugs through the biomembrane. Reabsorption and distribution of drugs. Excretion of drugs. Metabolism of drugs. Induction and inhibition of enzymes. Factors altering the drug metabolism. Pharmacokinetic models. Pharmacokinetic parameters. Modes of action. Action sites. Mechanisms of action of drugs. Receptors. G-protein. Interactions of drugs. Synergism and antagonism. Administration of drugs in special circumstances (children, elderly, pathological condition, pregnant women, breastfeeding). Pharmakogenetics. Adverse effects of drugs. Addiction. Toxicology. Poisons. Poisoning drugs. Transmitters and receptors in the nervous system. Vegetative nerve system. Drugs that act through receptors in the VNS. Histamine and antihistaminics. Drugs in the treatment of GIT disorders and diseases. Drugs in the treatment of disorders and diseases of the respiratory system. Drugs in the treatment of CVS disorders and diseases. Thrombolytics, antiaggregation drugs, anticoagulants. Hypolypemics. Treatment of anemia.

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

Classification of drugs. Putting drugs on the market. Names of drugs. Pharmacopoeia. Prescription scheme. Magistral and generic formulas. Readymade drugs. Solid forms of drugs. Liquid forms of drugs. Semi-solid forms of drugs. Inhalation. Bandage material. Prescribing drugs according to pharmacotherapeutic group.

Literature

Compulsory

- 1. Rang HP, Dale MM, Ritter JM, Moore PK. Pharmacology. Churchill Livingstone, Edinburgh, New York, 2003.
- 2. Brenner GM, Stevens C. Pharmacology, 4th edition. Elsevier, 2012

Additional

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	Number of active class	ses			Other:	
	Lectures:	Practice:	Other types of teaching:	Research related activities:		
	45	30				
	Teaching methods theoretical and practical					
			Student activity assessment	sment (maximally 100 points)		

Student activity assessment (maximany 100 points)					
Pre-exam activities	points	Final exam	points		
Lectures	5	Written*	80		
Practices	15	Oral			
Colloquium*	2x40				
*if the students does not pass both colloquiums, he/she should take the exam in written form					