UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



Study program: Integrated Academic Studies in Pharmacy

Course title: General Pharmacology

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 Jovin, Nebojša P. Stilinović

Course status: Obligatory

ECTS Credits: 6
Condition: Physiology

Course aim The aim of this course is to provide students with basic knowledge about drugs and to prepare them for a better understanding of the effects of drugs on organ systems.

Expected outcome of the course

At the end of the teaching process, the student should know why, how and when to administer a drug, general information about the movement of drugs through the organism, the targets and mechanism of action of drugs, interactions and side effects of drugs.

Course description

Theoretical education:

A History of Pharmacology. Division into disciplines. Medication and poison. Dosage of medication. Dose. Therapeutic index of the drug. Movement of the drug through the body. Drug transport through biomembranes. Drug resorption and distribution. Excretion of drugs. Metabolism of drugs. Enzyme induction and inhibition. Factors that alter drug metabolism. Modes of action of drugs. The targets of action of the drug. Mechanisms of action of drugs. Receptors. G-protein. Drug interactions. Synergism and antagonism. Administration of medicines in special conditions (children, elderly, pathological conditions, pregnant women, breastfeeding). Pharmacogenetics. Side effects of medication. Addictions. Medicines in the treatment of diseases of the respiratory and digestive tract. An interactive conversation with students on a given pharmacological problem.

Practical education:

Methods of medication administration. Dose. Drug interactions. Synergism and antagonism. Administration of medicines in special conditions (children, old people, pathological conditions, pregnant women, breastfeeding). Recipe. Drug formulations. Side effects of medication. Addictions.

Literature

Compulsory

Brenner G.M., Stevens C. Pharmacology (5th edition). London: Elsevier; 2017.

Additional

Royal Pharmaceutical Society of Great Britain. British National Formulary 78. London: Royal Pharmaceutical Society; 2019.

Number of active classes	Theoretical classes: 60	Practical classes: 30		
Teaching methods Theoretical and practical				
Student activity assessment (maximally 100 points)				

Pre-exam activities	points	Final exam	points
Lectures	5	Written	40
Practices	15	Oral	
Colloquium	40	Other	
Essay			