

# Study program: Integrated Academic Studies in Medicine

#### **Course title: Clinical Pharmacology**

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Course status: compulsory

ECTS Credits: 2

# Condition: -

Course aim

To apply clinical knowledge in the field of pharmacology in clinical practice.

#### Expected outcome of the course

Students should be able to analyze the existing data on drugs, analyze references for clinical trials, analyze data obtained in clinical trials, to get familiar with pharmacotherapy in target groups of patients. Students must know the ethical rules of clinical research, basic principles of pharmacoepidemiology and pharmacoeconomics. Students should be trained to write and present information to patients - participants in clinical research and to present, analyze and define the optimal pharmacotherapy for the most common diseases.

## **Course description**

Theoretical education

Drug development. Phases of clinical trials. Pharmacoepidemiology. Pharmacoeconomics. Pharmacovigilance. Clinical significance of pharmacokinetic parameters and drug interactions. Clinical toxicology. Rational use of antibacterial drugs. Guidelines and evidencebased medicine. Pharmacotherapy of psychiatric disorders. Pharmacotherapy and guidelines in the treatment of arterial hypertension, heart failure, angina pectoris, and acute coronary syndrome. Pharmacotherapy of pain. Pharmacotherapy of COPD and bronchial asthma. Pharmacotherapy of gastrointestinal disorders. Guidelines for the treatment of endocrine diseases (diabetes, osteoporosis).

# Practical education

Ethical aspects of clinical research; ethics of clinical pharmacologists. Interpretation of results of preclinical research - significance for clinical testing. Information for participants when conducting academic and sponsored research – processing, presentation and discussion. Information on drugs - a comparison of information provided by the pharmaceutical industry and independent information sources. Educational activity of clinical pharmacologists. Pharmacotherapy problems – processing a pharmacotherapy problem; presentation and discussion. Pharmacotherapy of depression. Pharmacotherapy of kidney failure. Pharmacotherapy of arterial hypertension. Pharmacotherapy of pain in outpatient facilities. Pharmacotherapy of chronic bronchitis.

## Literature

Compulsory

1.Bennet PN, Brown MJ. Clinical Pharmacology. 12th ed. London: Churchill Livingstone, 2018.

2.BNF. British Medical Association and Royal Pharmaceutical Society of Great Britain (any edition newer than 2015) Additional

1. Ritter J, Flower R, Henderson G, Loke Y.K, MacEwan D, Rang H. Rang and Dale's Pharmacology. 9th Edition, Elsevier; 2019.

2. Brenner GM, Stevens C. Pharmacology, 6th edition. Elsevier, 2022.

Number of active classes	Theoretic	al classes: 30	Practical clas	<b>sses:</b> 30
Teaching methods				
Theoretical and practical				
	Student activity assessme	ent (maximally 100 point	:s)	
Pre-exam activities	points	Final exam		points
Lectures	5	Written*		50
Practices	5	Oral		40
Colloquium	2x25	Other		-
Essay				
*if the student does not pass both collo	quiums, he/she should tak	e the exam in written for	rm	÷