

#### Study program: Integrated Academic Studies in Medicine

## **Course title: Rational Pharmacotherapy II**

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Course status: elective

ECTS Credits: 3

Condition: -

# Course aim

The aim of this course is to inform students about basic principles and importance of pharmacotherapy.

## Expected outcome of the course

Students will learn about intensive research on the development of new drugs and development of pharmaceutical industry which have contributed to the introduction of different drugs. This requires appropriate drug choice based on individualization of therapy and implementation of rational therapy. Students are expected to have skills and knowledge on pharmacological properties of drugs, on the risk-benefit ratio, adverse effects of drugs and to follow evidence-based principles in treatment in order to implement rational pharmacotherapy.

#### **Course description**

Theoretical education:

Treatment of migraine. Pharmacotherapy of pain. Pharmacotherapy of diabetes and complications. Pharmacotherapy of ophthalmologic diseases. Ppharmacotherapy of depression. Pharmacotherapy of coronary and cardiac insufficiency. Rational drug therapy - the importance of phytotherapy. Rational pharmacotherapy in emergency medicine - treatment of acute pulmonary edema. Rational pharmacotherapy in emergency medicine – treatment of excessive and prolonged attacks of bronchial asthma (status asthmaticus). Rational pharmacotherapy in emergency medicine – treatment of excessive and prolonged seizures (status epilepticus). Student essays. Clinical significance of prebiotics and probiotics. Antibiotics and general practitioners. Benzodiazepines: Pros and Cons. Gastrointestinal disorders. Urogenital infections in pregnancy. Pharmacotherapy in paediatrics. Antiviral agents in treatment of influenza. Medications and sports.

## Practical education:

Evidence-based pharmacy – databases; ATC / DDD classification, application of antihypertensive agents; application of antibiotics in patients with impaired renal and liver function; use of antibiotics in the treatment of asthma and COPD, application of drugs in athletes, use of antibiotics in infants and children; application of hormonal contraceptives; guidelines in the application of drugs in osteoporosis; guidelines for antimicrobial agents; relevant laboratory parameters in pharmacotherapy. AMMD, RFHI, databases.

Literature Compulsory

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

Number of active classes	Theoretic	al classes: 15	Practical classes: 30	
Teaching methods				
Theoretical and practical				
	Student activity assessme	nt (maximally 100 points	5)	
Pre-exam activities	points	Final exam		points
Lectures	5	Written		
Practices	5	Oral		40
Colloquium				
Essay	50			