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Course title: PHARMACOLOGY AND TOXICOLOGY 2/3

ECTS credit allocation (and other scores): 4

Semester: autumn

Level of study: ISCED-7 - second-cycle programmes (EQF-7)

Branch of science: Medical and health sciences

Language: English

Number of hours per semester: 60

Course coordinator/ Department and e-mail: Piotr Jakubowski, PhD, : Department of Pharmacology and Toxicology, piotr.jakubowski@uwm.edu.pl

Type of classes: classes and lectures

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Substantive content

CLASSES: Drugs used in the treatment of Hypertension:

- Antihypertensive Agents
- Diuretic Agents
- Vasoactive Peptides

Vasodilators & the Treatment of Angina Pectoris

- Agents Used in Dyslipidemia
- Vasodilators and the treatment of Angina Pectoris
- Nitric Oxide
- Therapy of acute myocardial infarction

Drugs used to treat diseases of blood

- Agents Used in Anemias; Hematopoietic Growth Factors
- Drugs Used in Disorders of Coagulation

Drugs used in the treatment of Heart Failure and Cardiac Arrhythmias

- Drugs Used in Heart Failure
- Agent Used in Cardiac Arrhythmias

Special aspects of Perinatal, Paediatric & Geriatric Pharmacology

- Aspects of Perinatal and Pediatric Pharmacology, Special Aspects of Geriatric Pharmacology
- The Eicosanoids: Prostaglandins, Thromboxanes, Leukotrienes and related Compounds
- Nonsteroidal Anti-Inflammatory Drugs, Disease-Modifying Antirheumatic Drugs, Nonopioid Analgesics and Drugs Used in Gout

Opioids and the Drug abuse: Opioids Analgesics and Antagonists, Drugs of Abuse

- Serotonin and Ergot Alkaloids. Drugs Used in Treatment of Headache

Drugs used in the treatment of gastrointestinal diseases

ENDOCRINE DRUGS – Hypothalamic pituitary hormones Thyroid Antithyroid drugs I

- Hypothalamic and Pituitary Hormones

- Thyroid and Antithyroid Drugs

– Gonadal hormones , Pancreatic hormones and antidiabetic

- Adrenocorticosteroids and Adrenocortical Antagonists

- Agents that Affect Bone Mineral Homeostasis

ENDOCRINE DRUGS III – Bone mineral homeostasis and vitamins

- The Gonadal Hormones and Inhibitors

- Pancreatic Hormones and Antidiabetic Drugs

LECTURES:

Drugs used in the treatment of hypertension, heart failure and angina pectoris

Drugs used in the treatment of cardiac arrhythmias and diseases of the blood.

Pain therapy – NSAIDs and opioids

Treatment of endocrine disease

Drugs of the gastrointestinal system Learning purpose:

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On completion of the study programme the graduate will gain:

Knowledge: The student is able to discuss the mechanisms of drug action, side effects, toxic effects, as well as possible interactions that may arise during polytherapy. Has knowledge of indications, contraindications and dosage of drugs. He knows the rules of using antimicrobial drugs, rules of procedure in the treatment of poisoning. Has knowledge of developmental and geriatric pharmacology.

Skills: The student demonstrates the ability to use drugs in the treatment of specific diseases. Can save drugs ready. Knowing the main groups of drugs that interact, he is able to apply the drug in a given group of patients, e.g. elderly people, children.

Social Competencies: The student is able to establish and maintain a deep and respectful contact with the patient. He is guided by the good of the sick person, putting them first. Adheres to medical confidentiality and patient rights. Is aware of his own limitations and the ability to constantly learn. Basic literature:

Basic literature: 1. Katzung, Basic and Clinical Pharmacology 13th edition

2. Rang & Dale's Pharmacology – 7th edition

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The allocated number of ECTS points consists of: 4

Contact hours with an academic teacher: 60

Student's independent work: 38