

Course title: PHARMACOLOGY AND TOXICOLOGY 3/3

ECTS credit allocation (and other scores): 9

Semester: spring

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

Branch of science: Medical and health sciences

Language: English

Number of hours per semester: 75

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 respiratory diseases

Antibiotics and chemotherapeutics:

Beta-lactams and other influencing the wall and cell membrane; Tetracyclines, macrolides

Amino glycosides and spectinomycin, clindamycin, chloramphenicol, streptogramins and oxazolidinones

Sulfonamides, Trimethoprim, quinolones, other

The clinical use of antimicrobials. Antituberculosis drugs, Antifungal drugs, Antiviral drugs,

Clinical pharmacology of drugs used in parasites, and others

Drugs used in ophthalmology,

Drugs used in dermatology

Chemotherapy of cancer

Immunopharmacology

Vaccines. Toxicology

Potential therapeutic effects and toxicity of OTC

Interaction between drugs

LECTURES:

1. Pharmacology of the respiratory drugs
2. Antibiotics
3. Drugs used in the treatment of fungal, viral and parasite infection
4. Chemotherapy of neoplastic diseases , drugs used for immunomodulation
5. Safety of pharmacotherapy
6. Principles of Toxicology



## 7. Substance dependence, interactions and drug addiction

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:**

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: 9

Contact hours with an academic teacher: 80

Student's independent work: 145