POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name
General pharmacology

Course

Field of study

Pharmaceutical Engineering

Area of study (specialization)

-

Level of study

first-cycle

Form of study

full-time

Year/Semester

3/6

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
30	0	0
Tutorials	Projects/seminars	
0	0	

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

Prof. Przemysław Mikołajczak, Ph.D., D. Sc.

Responsible for the course/lecturer:

Prerequisites

Student starting the course should have basic knowledge in microbiology, biochemistry, physiology and pathophysiology. Student should also be able to obtain information from indicated sources.

Course objective

Acquaintance with the basic groups of drugs used in pharmacotherapy of chronic diseases and emergencies. The purpose of education is to learn and understand the basic mechanisms of drug action, their pharmacological action, the therapeutic use and basic side and adverse effects. After completing the course student should have a basic knowledge of drugs and pharmacotherapy of selected diseases. The knowledge of currently used drug groups will enable students to understand the complexity of the disease pharmacotherapy process and the need to improve the technology for the development and manufacture of new therapeutic agents.

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Course-related learning outcomes

Knowledge

Student:

1. has basic knowledge of the point of action and mechanisms of action of drugs K_ W24

2. understands biochemical and molecular mechanisms of drugs action K_W24

3. has general knowledge about the effects of drugs (knows the pharmacological properties for individual groups of drugs) K_W25

4. has knowledge of the correct use of drugs (knows the indications and contraindications for individual groups of drugs) K_W25

5. has the general knowledge of drug metabolism and knows the basic side effects of individual groups of drugs) K_W25

Skills

Student:

1. can explain the pharmacological properties of drug based on the point of action and mechanism of action of drug K_U2

2. can predict possible side effects of drugs (knows the basics of toxicology) K-U10

3. can list indications and contraindications for selected groups of drugs K_U2

4. has the ability to self-education in the field of supplementing knowledge about new drugs K_24

Social competences

Student:

1. is prepared for professional work in the use of pharmacological knowledge and is aware of the importance of understanding the goals and effects of drugs action K_K3

2. has a habit of using information technology to search for information of drugs and understands the need for continuous training K_K1

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Final test.

Programme content

Lecture topics

General pharmacology. Drugs affecting the autonomic nervous system. Antipsychotic and antidepressant drugs. Anxiolytic and sedative-hypnotic drugs. Antihypertensive drugs. Drugs for heart failure. Dermatological and ophthalmic drugs. Antibacterial agents. Antiviral agents. Antihistaminic

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drugs and steroids. Analgesic and anti-inflammatory drugs. Drugs used for treatment respiratory diseases (antitussive, expectorants, drugs for asthma). Drugs used in gastrointestinal dysfunction. Drugs used in diabetes. Hormonal contraception.

Teaching methods

Multimedia presentations

Bibliography

Basic

1. Basic & Clinical Pharmacology. Katzung B.G. 2018, The McGraw-Hill Companies.

Additional

1. Pharmacology in a nutshell. P. Krząścik, P. Mikołajczak. Anplan, Warszawa, 2017.
2. Rang & Dale's Pharmacology, 9th Edition, James M. Ritter & Rod J. Flower & Graeme Henderson & Humphrey P. Rang, Elsevier, 2019.

Breakdown of average student's workload

	Hours	ECTS
Total workload	35	1
Classes requiring direct contact with the teacher	30	0,9
Student's own work (literature studies, preparation for test)	5	0,1