



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

General pharmacology [S1IFar1>FO]

### Course

Field of study

Pharmaceutical Engineering

Year/Semester

3/6

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

30

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

1,00

### Coordinators

prof. dr hab. Przemysław Mikołajczak  
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### Lecturers

### 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.

### 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:

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 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. Krząciak, 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	1,00
Classes requiring direct contact with the teacher	30	0,90
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	5	0,10