GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Antibacterial Drugs, PG_00058246		
Field of study	Biotechnology		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2024/2025
Education level	second-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	Polish
Semester of study	3	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	exam
Conducting unit	Department of Pharmaceutical Technology and Biochemistry -> Faculty of Chemistry		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Andrzej Skwarecki	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	30	5.0	40.0	75

Subject objectives

The aim of the subject is to familiarize the student with the basic issues of antimicrobial drugs chemistry

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_K02] is aware of the limitations and the necessity of continuous development of knowledge and technology; understands the need for education and constant training	The student solves problems in group work. The student proposes structural modifications of antibiotics leading to their improvement in the field of stability and activity.	[SK1] Assessment of group work skills [SK5] Assessment of ability to solve problems that arise in practice
[K7_W02] has advanced knowledge of structure and activity of enzymes and biologically active compounds also in pharmacological context, knows basic instrumental methods of qualitative and quantitative analysis and activity studies of biomolecules	The student is able to divide antimicrobial drugs into specific groups. The student is able to recognize chemical structers of antimicrobial drugs. The student is able to present antimicrobial drugs' mechanisms of action	[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge
[K7_U04] is able to predict potential properties of biomolecules and biologically active compounds on the basis of knowledge of their chemical structure and apply methods of molecular modelling of biomolecules	The student knows the basic biochemical processes occurring in the human body and has basic knowledge of organic chemistry The student knows the main groups of antimicrobial drugs	[SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment

Subject contents

Antibacterial drugs. Antifungal drugs. Antiprotozoal drugs. Antiparasitic drugs. Antiviral drugs. Anticancer antibiotics

Prerequisites and co-requisites

General knowledge of organic chemistry and biochemistry

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Final exam	60.0%	100.0%

Recommended reading	Basic literature	"Chemia Medyczna. Podstawowe zagadnienia" G.L. Patrick. Wydawnictwa Naukowo-Techniczne. Warszawa 2005 "An itroduction to medicinal chemistry" G.L. Patrick. Oxford University Press. Nowy Jork 2017
	Supplementary literature	"Wybrane zagadnienia z metod poszukiwania i otrzymywania środków leczniczych" Pod redakcją Katarzyny Kieć-Kononowicz. Wydawnictwo Uniwersytetu Jagiellońskiego. Kraków 2006
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	