



Subject card

Subject name and code	Antibacterial Drugs, PG_00058246						
Field of study	Biotechnology						
Date of commencement of studies	February 2023		Academic year of realisation of subject		2023/2024		
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	1		Language of instruction		Polish		
Semester of study	2		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		dr inż. Andrzej Skwarecki				
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_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		[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject		
	[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 structures of antimicrobial drugs. The student is able to present antimicrobial drugs' mechanisms of action		[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[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.		[SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills		
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 introduction 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	