


KAPITAŁ LUDZKI
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez
 Unię Europejską w ramach
 Europejskiego Funduszu
 Społecznego

UNIA EUROPEJSKA
 EUROPEJSKI
 FUNDUSZ SPOŁECZNY


Course title		ECTS code	
Bacteriophages		not defined	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	first tier studies (BA), second tier studies (MA)
Faculty of Biology	Medical Biology	form	full-time
		specialty	all
		specialization	all
Faculty of Biology	Biology	type	first tier studies (BA), second tier studies (MA)
		form	full-time
		specialty	all
Faculty of Biology	Genetics and Experimental Biology	specialization	all
		type	first tier studies (BA)
		form	full-time
Faculty of Biology	Genetics and Experimental Biology	specialty	all
		specialization	all
		form	full-time
Faculty of Biology	Natural Resources Conservation	type	first tier studies (BA)
		form	full-time
		specialty	all
Faculty of Biology	Natural Resources Conservation	specialization	all
		form	full-time
		specialty	all
Teaching staff			
prof. dr hab. Grzegorz Węgrzyn; dr hab. Wojciech Pokora, profesor uczelni			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		2	
Lecture		ESTIMATION OF WORKING TIME :	
The realization of activities		Working in contact with the teacher:	
classroom instruction, online classes		Participation in lectures - 15 hours	
Number of hours		Consultations - 11 hours	
Lecture: 15 hours		The unassisted student work (studying the literature, preparing for the reports, tests and exams): 24 hours	
		TOTAL: 50 hours	
The academic cycle			
2022/2023 winter semester			
Type of course		Language of instruction	
an elective course		english	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
<ul style="list-style-type: none"> - multimedia-based lecture - problem-focused lecture 		Final evaluation	
		Graded credit	
		Assessment methods	
		•(mid-term / end-term) test	
		The basic criteria for evaluation	
		Knowledge, competences and skills according to the lecture program	
Method of verifying required learning outcomes			
(mid-term / end-term) test			
Required courses and introductory requirements			
A. Formal requirements			
B. Prerequisites			
knowledge of the basic genetic, biochemical and molecular mechanisms, the ability to analyze the processes taking place in prokaryotic cells			

Aims of education	
Understanding the mechanisms of regulation of bacteriophage development at the molecular level by the audience. Acquiring the ability to analyze biological processes occurring during the development of bacteriophages. Understanding the importance of bacteriophages in the natural environment, as well as in biotechnology and medicine	
Course contents	
History of research on bacteriophages, structure of virions, division and classification of bacteriophages, bacteriophages as model organisms in molecular studies, regulation of bacteriophage development at the molecular level (control of the choice of one of the alternative pathways, regulation of genetic material replication, control of gene expression, genetic recombination, lysis mechanisms of host cells), the use of bacteriophages in medicine, the importance of bacteriophages in the natural environment and in medicine	
Bibliography of literature	
A. Literatura wymagana do ostatecznego zaliczenia zajęć (zdania egzaminu): A.1. wykorzystywana podczas zajęć The lecture is authorial, based on original scientific publications A.2. studiowana samodzielnie przez studenta	
B. Literatura uzupełniająca The learning outcomes (for the field of study and specialization)	
The learning outcomes (for the field of study and specialization)	Knowledge understands complex natural phenomena and processes at various levels of complexity has in-depth knowledge of a selected specialization in biological sciences
	Skills is fluent in the use of scientific literature in the biological specialty
	Social competence • systematically updates biological knowledge and information about its practical applications to others
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