

Subject card

Subject name and code	Essential biology, PG_00203421						
Field of study	Medical Biology						
Date of commencement of studies	October 2026	Academic year of realisation of subject			2026/2027		
Education level	Bachelor's studies	Subject group			Obligatory subject group in the field of study 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	1	ECTS credits			2.0		
Learning profile	academic	Assessment form			credit		
Conducting unit	Laboratory of Molecular Evolution and Bioinformatics -> Department of Evolutionary Genetics and Biosystematics -> Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Aleksandra Naczek				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		4.0		31.0	50
Subject objectives	<p>1. to learn the fundamentals of the structure, biology and classification of living organisms;</p> <p>2. to understand the biological processes determining life at different levels of its organisation;</p> <p>3. to understand the functions and importance of different groups of organisms in nature;</p> <p>4. to understand the interdependence of interactions between organisms and their environment and between these organisms and each other;</p> <p>5. to be able to recognise and classify different groups of organisms.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[BIOLMEDL3_W04] has an advanced knowledge and understanding of the characteristics, systematics and evolution of selected groups of organisms including molecular basis and describes the basic concepts and mechanisms of evolution	- presents the characteristics, systematics and evolution of selected groups of organisms	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report [SW3] text preparation/written work
	[BIOLMEDL3_W03] has an advanced knowledge and understanding of the structure of the animal or human organism, the processes and functional relationships at the cellular, tissue, organ and organismal levels, and explains their relationship to behavior and adaptation of the organism to changing environmental conditions	- explains the basic concepts of biology, demonstrates the structure and functional relationships at cellular, tissue, organ and organismal level	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report [SW3] text preparation/written work
	[BIOLMEDL3_W01] has an advanced knowledge and understanding of the differences in the structure and function of a prokaryotic and eukaryotic cell	- explains the basic concepts of biology, demonstrates the structure and functional relationships at cellular, tissue, organ and organismal level	[SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report [SW3] text preparation/written work
	[BIOLMEDL3_U14] is able to prioritize and organize the work of a small team and work effectively as part of a team	- is able to prioritise and organise the work of a small team and work effectively work in a team	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task
[BIOLMEDL3_U05] synthesises data from different sources and draws appropriate conclusions from them	- can use specialist literature, select information, draw conclusions and express himself/herself on a given subject in the field of biological sciences	[SU1] oral statement/conversation/ discussion [SU2] presentation/project/paper/ report [SU5] implementation of a problem task	
Subject contents	Exercise topics: - an overview of the most important systematic groups of organisms with respect to differentiated body plans - basics of the division of living organisms into taxa.		
Prerequisites and co-requisites	Knowledge of basic biology, within the scope of secondary school.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	worksheets	51.0%	25.0%
	written colloquium	51.0%	50.0%
	presentation	51.0%	25.0%

Recommended reading	Basic literature	<p>Futuyma DJ. 2005. Ewolucja. Wydawnictwo Uniwersytetu Warszawskiego.</p> <p>Biologia Campbella. 2016. Opracowanie zbiorowe. Dom Wydawniczy Rebis.</p> <p>Botanika t.2. 2005. Szweykowska A, Szweykowski J. PWN.</p> <p>Zoologia t. 1-3. 2013. Czesław Błaszak. PWN.</p> <p>Zoologia. Różnorodność i pokrewieństwa zwierząt. 2015. Weiner J. Wydawnictwo Uniwersytetu Warszawskiego.</p>
	Supplementary literature	<p>Kunicki-Goldfinger W.J.H. (2001): Życie bakterii. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Kopcewicz J., Lewak S. (red.) (2007): Fizjologia roślin. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Schmidt-Nielsen K. (2008): Fizjologia zwierząt. Adaptacja do środowiska. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Weiner J. (2012): Życie i ewolucja biosfery. Podręcznik ekologii ogólnej. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Jura C. (2007): Bezkręgowce. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Szweykowska A., Szweykowski J. (2008): Botanika. Wydawnictwo Naukowe PWN, Warszawa</p> <p>Szarski H. (2012): Historia zwierząt kręgowych. Wydawnictwo Naukowe PWN, Warszawa</p>
	eResources addresses	
Example issues/ example questions/ tasks being completed	<p>Why does the emergence of seeds represent such an important evolutionary advance?</p> <p>What features make ferns considered to be more highly evolved plants than bryophytes?</p> <p>Identify the originality of gametangiogamy and somatogamy as modes of sexual reproduction in fungi.</p> <p>How can it be explained that sponges are pre-tissue bilayers?</p> <p>How is the dorsal strut formed and what is its function in Chordata?</p>	
Work placement	Not applicable	

Document generated electronically. Does not require a seal or signature.