

Subject card

Subject name and code	Animal and human physiology, PG_00207405						
Field of study	Biology						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
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	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Jolanta Orzeł-Gryglewska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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		2.0		18.0	50
Subject objectives	1. Learning about basic life processes, in particular the mechanisms of their regulation and integration in animal and human organisms. 2. Practical acquaintance with basic physiological phenomena, methods of their research and demonstration, respecting the principles of bioethics. 3. Acquiring laboratory group work competences and the ability to independently deepen and transfer knowledge.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[BIOLL3_W07] knows the development of biology as a science, its connections with other disciplines and the principles of using biological knowledge in the economy and social life, including ways that are entrepreneurial		
	[BIOLL3_W01] knows and understands at an advanced level the structure and functioning of organisms at all levels of the organization of life - from the cell (prokaryotic and eukaryotic), through tissues, organs, to the organism - as well as the relationships between them and their adaptations to the environment		
	[BIOLL3_U03] is able to search for, select and critically analyze information from various sources, including scientific literature and electronic databases, as well as read and understand scientific texts in Polish and English		
	[BIOLL3_U01] is able to use basic research techniques and tools appropriate for the biological sciences and perform physical, chemical and biological observations and measurements in the laboratory and in the field, individually and in a team, while organizing her/his work appropriately and in a maintained way		
	[BIOLL3_K05] is ready to perform professional roles responsibly, both individually and in teams, including organizing the work of small teams and taking joint responsibility for the implementation of assigned tasks and the results achieved.		
	[BIOLL3_K01] is ready to critically evaluate her/his biological knowledge and continuously update and develop it, taking into account scientific advances and the needs of practice		
Subject contents	Learning methods for recording and visualizing physiological processes in animals and humans. Observation of muscle spasms, symptoms of muscle fatigue. Basics of electrophysiology. Features of reflex activity. Neurological reflexes in humans. Brain stem functions and symptoms of its damage. ECG and blood pressure recording. Exercise tests in humans. Red- and white-cell system, determination of blood groups. Hemostasis and mechanisms blood clotting. Familiarization with the methodology of selected clinical tests and medical laboratory techniques.		
Prerequisites and co-requisites	basic knowledge of human anatomy		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	entrance/exit tests	51.0%	20.0%
	tests/colloquia	51.0%	55.0%
	reports	51.0%	15.0%
	presentations/essays	51.0%	10.0%
Recommended reading	Basic literature	Lewandowska D., Orzeł-Gryglewska J., Jurkowlaniec E. 2019. Fizjologia zwierząt i człowieka, Wydawnictwo Uniwersytetu Gdańskiego. Ganong W. F., 2007. Fizjologia. Wydawnictwo Lekarskie PZWL, Warszawa. Felten D.L. Józefowicz R. 2007. Atlas neuroanatomii i neurofizjologii Nettera. Urban & Partner, Wrocław. Konturek S. J. 2007. Fizjologia człowieka. Podręcznik dla studentów medycyny. Elsevier Urban & Partner, Wrocław	
	Supplementary literature	Traczyk W., Trzebski A. 2015. Fizjologia człowieka z elementami fizjologii stosowanej i klinicznej. PZWL, Warszawa.	
	eResources addresses		

Example issues/ example questions/ tasks being completed	Types of muscle contractions. Preparation and analysis of an ECG recording. Blood pressure measurement. Measurement of lung volume and capacity. Blood count. Blood clotting. Blood groups.
Work placement	Not applicable

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