

Subject card

Subject name and code	Animal ecophysiology, PG_00143384						
Field of study	Natural Resources Conservation						
Date of commencement of studies	October 2025		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	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		1.0		
Learning profile	academic		Assessment form				
Conducting unit	Laboratory of Avian Ecophysiology -> Department of Vertebrate Ecology and Zoology -> Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Grzegorz Zaniewicz				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	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		2.0		8.0	25
Subject objectives	Acquiring fundamental knowledge in animal ecophysiology. Developing the ability to determine the impact of stress factors on the condition of individuals, as well as understanding daily and annual cyclical metabolic changes in organisms in relation to changes in environmental conditions and habitats.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[OZPL3_W09] The graduate possesses an advanced comprehension of the current state of knowledge and the latest trends in protection of natural resources, as well as their relationship to other natural disciplines		Is familiar with the development and current state of knowledge, as well as the latest trends in animal ecology and physiology, and identifies their connections with other natural science disciplines (O_W09).		[SW4] test/exam - oral or written		
	[OZPL3_W03] The graduate understands the basic physiological processes and their relationship to the organism's adaptation to changing environmental conditions		Understands the course of basic physiological processes in animals and their relationship to the organism's adaptation to changing environmental conditions (O_W03).		[SW4] test/exam - oral or written		
Subject contents	Overview of basic physiological processes occurring in animal organisms (respiration, energy metabolism, digestion and absorption, thermoregulation, water-mineral regulation). A detailed discussion of the most plastic processes, which are modified depending on changing environmental conditions, e.g., the Dehnel phenomenon, daily and annual life cycles, and changes in the environment (adaptation to the environment). Respiration, oxygen transport, and organism performance/condition depending on the living environment, its requirements, sex, and age. Food, metabolic rate, and nutritional needs depending on the life cycle phase. Energy reserves and strategies for regulating their use, employed by both migratory and sedentary animals. Condition indicators. Body temperature regulation (endothermy and ectothermy) and the effects of temperature (torpor, hibernation). Stress responses behavioral and physiological changes as a reaction to stress factors.						
Prerequisites and co-requisites	lack						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		51.0%	90.0%
		85.0%	10.0%
Recommended reading	Basic literature	Causey Whittow G. 2000. Avian Physiology. Academic Press. Ewy Z. 1980. Zarys fizjologii zwierząt. Krzymowski T., Przła J. 2015. Fizjologia Zwierząt. Wydawnictwo Rolnicze i Leśne. Schmidt-Nielsen K. 1992. Fizjologia Zwierząt adaptacja do środowiska. Wydawnictwo Naukowe P	
	Supplementary literature	Hill W., Wyse G. A., Anderson M. 2016. Animal Physiology. Oxford University Press. Randal D., Burggren W., French K. 2002. Eckert Animals physiology: mechanisms and adaptations. W.H. Freeman and Co. Zaniewicz G., Meissner W., Ożarowska A. 2018. Estimation of fat reserves of Robins (Erithacus rubecula) migrating through the southern coast of the Baltic Sea in spring. Ornis Fennica 95	
	eResources addresses	Adresy na platformie eNauczanie:	
	Example issues/ example questions/ tasks being completed		
Work placement	Not applicable		

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