

Subject card

Subject name and code	Ecology, PG_00103624						
Field of study	Environmental Protection						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
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	2		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
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 hab. Agnieszka Ożarowska				
	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		2.0		33.0	50
Subject objectives	1. Understanding the principles of population and ecosystem functioning based on specific examples and methods. 2. Understanding the principles of nature resources management. 3. Acquiring the ability to use basic statistical tools to describe selected ecological problems.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[OŚL3_U11] Uses statistical methods as well as algorithms and IT techniques, including application software packages to describe environmental experiments and analysis of typical data in socio-economic activities based on science and natural sciences.	The student applies basic mathematical, statistical and computer technologies to describe phenomena and analyze data used in ecology	[SU3] text preparation/written work
	[OŚL3_W05] Explains the course of natural and anthropopressional physical, chemical and biological processes and phenomena occurring in nature at various levels of matter organisation.	The student can characterize and explain basic ecological phenomena and processes	[SW3] text preparation/written work
	[OŚL3_K02] Works individually demonstrating initiative and independence in actions, and effectively cooperates in a team, performing various roles in it.	The student can work individually and in small teams	[SK8] observation of student's independent or team work
	[OŚL3_U04] Uses specialist language in the discussion and properly uses the nomenclature in the field of environmental protection and individual disciplines related to it.	The student demonstrates a clear understanding of the terminology used in ecology	[SU3] text preparation/written work
	[OŚL3_W06] Characterises levels of life organization, biodiversity and the interaction of organisms and the environment.	The student can determine the mutual relations in the organism-environment system and explain their basis	[SW3] text preparation/written work
	[OŚL3_U09] Prepares in Polish/English a short description of research, observation or problem task carried out during classes using appropriate scientific terminology.	The student can present the results of his/her own experiments and field research, compare them with those obtained by others and interpret the differences	[SU3] text preparation/written work
Subject contents	Methods of assessing basic population parameters (abundance, spatial, age and sex structure of the population). Population dynamics. Interspecies interactions in biocenosis. Population exploitation. Ecological bioenergetics.		
Prerequisites and co-requisites	Basic knowledge of biology		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final grade is based on partial grades received during the semester	51.0%	50.0%
	attendance at classes	85.0%	50.0%
Recommended reading	Basic literature	1. Weiner J. Życie i ewolucja biosfery. PWN W-wa 2020 2. Krebs C.J. Ekologia eksperymentalna analiza rozmieszczenia i liczebności. PWN W-wa 2015	

	Supplementary literature	1. Begon M., Mortimer M., Thompson D.J.. Ekologia populacji : studium porównawcze zwierząt i roślin. Wydawnictwo. Naukowe PWN. 1999 2. Kozłowski S. 2000. Ekorozwój : wyzwanie XXI wieku. Wydaw. Naukowe PWN, 2000 3. Mackenzie A., Ball A.S., Virdee S.R. Ekologia. Krótkie wykłady. PWN W-wa 2015 4. Pullin A.S.. Biologiczne podstawy ochrony przyrody. Wydawnictwo Naukowe PWN. 2004 5. Futuyma D.J. Ewolucja. Wyd. Uniwersytetu Warszawskiego 2008 6. Wolański N. 2016. Ekologia człowieka. PWN (tomy I i II) 2016
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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