University of Gdańsk

Subject card

Subject name and code	The ecology of urban habitats, PG_00198132		
Field of study	Natural Resources Conservation		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2028/2029
Education level	Bachelor's studies	Subject group	Obligatory subject group in the field of study Optional subject group 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	4.0
Learning profile	academic	Assessment form	credit
Conducting unit			
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	45.0	0.0	0.0	0.0	45
	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	45	6.0	49.0	100

Subject objectives
• Getting the knowledge and understanding of the basic biotic and abiotic factors shaping the functioning of the natural environment in urban areas. • Understanding the causes of human settlement. • Knowledge of species inhabiting urban areas. • Ability to assess the impact of anthropopressure on the synurbization of species. • Ability to valorise urban environment.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OZPL3_W14] The graduate understands the relationship between the achievements of natural sciences and their potential applications in socio-economic contexts, while considering the sustainable use of biodiversity	The student explains the relationships between the achievements of natural sciences and their possible use in socio-economic life in urban areas, taking into account the sustainability and biodiversity	[SW4] test/exam - oral or written [SW2] presentation/project/paper/ report
[OZPL3_K08] The graduate is ready to systematically update his/ her natural knowledge and to apply it in practice	The student systematically updates her/his knowledge of anthropocenose ecology and knows its practical applications	[SK2] presentation/project/paper/ report [SK4] test/exam - oral or written
[OZPL3_U04] The graduate is able to plan and carry out simple research tasks in the biological sciences under the guidance of a supervisor	The student, under the supervision of a teacher, plans and performs simple research tasks in urban areas	[SU2] presentation/project/paper/ report
[OZPL3_K02] The graduate is ready to work effectively in a team, taking on different roles within it	The student can work effectively in a team	[SK8] observation of student's independent or team work
[OZPL3_U07] The graduate is able to draw correct conclusions on the basis of analysis and synthesis of data from various sources	The student draws correct conclusions based on the analysis and synthesis of data from various sources to predict the impact of human activities on the development and formation of biocenoses of urban environment	[SU2] presentation/project/paper/ report [SU4] test/exam - oral or written
[OZPL3_W06] The graduate has an advanced understanding of the names and types of natural environments, including their structural and functional characteristics	The student names the types of anthropogenic environments and characterizes them in terms of structure and functionality	[SW4] test/exam - oral or written [SW2] presentation/project/paper/ report

Subject contents

History of creation and development of urban areas. Abiotic conditions of the urban environment (climate, landscape, soils, water). Hydrographic conditions of urban areas. Concept: urban heat island. Fauna and flora of the town/city (history of settlement, biodiversity of the town/city). The role of plant communities in the urban ecosystem. The town/city as an ecosystem (ecological system). Ecological processes taking place at the species, population, community, ecosystem levels in response to urbanization.The role of man as a species in the urban ecosystem. The Anthropocene the epoch of man. The impact of urban conditions on human health. Protecting urban biodiversity. Scientific research in urban areas.

Prerequisites and co-requisites

Knowledge of the identification of basic, Polish species of cryptogams, vascular plants, and vertebrates.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
attendance at classes	85.0%	40.0%
interim reports	51.0%	20.0%
written test	51.0%	40.0%

Recommended reading	Basic literature	Andrzejewski R. 1980. Fizjografia i ekologiczne kształtowanie środowiska biotycznego na obszarach zurbanizowanych. Człowiek i Środowisko, t.4, nr 4. Luniak M. (red.) 1990. Urban Ecological Studies in Central and Eastern Europe. Ossolineum, Wrocław. Przewoźniak M. 2002. Kształtowanie środowiska przyrodniczego miast. Przykłady z regionu gdańskiego. Wyd. Politechniki Gdańskiej, Gdańsk. Richling A. Solon J. 1996. Ekologia krajobrazu. Wydawnictwo Naukowe PWN, W-wa, ss. 318. Szponar A. 2003. Fizjografia urbanistyczna. Wydawnictwo Naukowe PWN, W-wa, ss.260. Wolański N. 2006. Ekologia człowieka. Wydawnictwo Naukowe PWN, Warszawa. Zimny H. 2005. Ekologia miasta. W-wa, ss. 233.
	Supplementary literature	Fudali E. 2009. Antropogeniczne zmiany w ekosystemach. Transformacje roślinności. Wyd. Uniwersytetu Przyrodniczego we Wrocławiu, Wrocław. Hall M.H.P., S.B. Balogh. 2019. Understanding Urban Ecology. An Interdyscyplinary Systems Approach. Springer Gaston K.J. (ed.) 2010. Urban Ecology. Cambridge University Press, Cambridge. Kopiec K., Ożarowska A. 2012. The origin of Blackcaps *Sylvia atricapilla* wintering on the British Isles. Ornis Fennica 89: 254-263. Luniak M. (red.) 1990. Urban Ecological Studies in Central and Eastern Europe. Ossolineum, Wrocław. Niemela J., Breuste J. H., Guntenspergen G., McIntyre N. E., Elmqvist T., James P. 2011. Urban Ecology: Patterns, Processes, and Applications. Oxford University Press, Oxford. Parris K.M. 2016. Ecology of urban environments. Wiley Blackwell, Oxford. Werner N., Kelcey J.G. 2010. Urban Biodiversity and Design. John Wiley & Sons, Oxford. Wheater C.P. 1999. Urban habitats. Routledge, London and New York.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	