University of Gdańsk

Subject card

Subject name and code	Biogeography, PG_00198095		
Field of study	Natural Resources Conservation		
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	3.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Plant Ecology -> Faculty of Biology -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Monika Badura	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	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	4.0	41.0	75

Subject objectives

1. to increase knowledge of the factors that determine the distribution of organisms on Earth.
2. to introduce the theory of the formation of regional flora and fauna.
3. to present the principles of phytogeographic and zoogeographic regionalisation.
4. to develop the ability to make biogeographical inferences from data obtained by different methods and from different areas of the natural sciences. natural sciences.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OZPL3_W05] The graduate understands the principles and mechanisms of life at the population, biocenosis, and ecosystem levels, as well as the temporal and spatial factors that influence biodiversity.	explains the basic rules of biogeography and describes the mechanisms that determine the the distribution of organisms	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[OZPL3_U03] The graduate is able to search for and use available sources of biological information, including electronic sources, and critically analyse them	identify and use available sources of biogeographical information, including electronic sources, and critically analyse them	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written
[OZPL3_K05] The graduate is ready to understand the need to improve their own competences, update their knowledge and improve their skills	understands the need to improve his/her own competence and to update knowledge and improve his/her skills	[SK1] oral statement/conversation/ discussion [SK8] observation of student's independent or team work
[OZPL3_K08] The graduate is ready to systematically update his/her natural knowledge and to apply it in practice	systematically updates his/her knowledge of nature and knows its practical applications	[SK1] oral statement/conversation/ discussion [SK4] 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	identifies the types of plant formations and biomes and characterises them in structural and functional terms	[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion
[OZPL3_U07] The graduate is able to draw correct conclusions on the basis of analysis and synthesis of data from various sources	draws correct conclusions on the basis of analysis and synthesis of phyto- and zoogeographical data from a variety of sources	[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written

Subject contents

Introduction to the theory, methods and terminology of biogeography. Geographical ranges of organisms, their types, characteristics, methods of determination, biogeographical relicts (reasons for their origin), endemic species, vicariance species. Influence of abiotic and biotic factors on the distribution of plants and animals. Influence of major geological processes (tectonic plate theory) and climate change (role of glaciations) on the distribution of organisms and biodiversity. Dispersal of organisms. Colonisation processes and their dynamics. Natural and anthropogenic expansions. Classification of the Earth into phyto- and zoogeographical regions. Overview of plant and animal states. Statistical analysis of floras and faunas. Biomes and plant formations. Biogeography of islands. Origin of the main crops and livestock

Prerequisites and co-requisites

basics of plant and animal systematics

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
exam (test, open and multiple-choice questions)	51.0%	100.0%

Recommended reading	Basic literature	Cox B. V., Moore P. D. 2010. Biogeography: an ecological and evolutionary approach. John Wiley & Sons. Dahl E. 1998. The phytogeography of Northern Europe: British Isles, Fennoscandia and adjacent areas. Cambridge University Press, Cambridge. Kornaś J., Medwecka-Kornaś A. 2002. Geografia roślin. PWN, Warszawa. Kostrowicki A. S. 1999. Geografia biosfery. PWN, Warszawa. Lomolino M. V., Riddle B. R., Whittaker R. J., Brown J. H. 2010. Biogeography. Sinauer Associates, Massachusetts. Podbielkowski Z. 2002. Fitogeografia części świata. T. 1 i 2. PWN, Warszawa. Udvardy M.D. F. 1978. Zoogeografia dynamiczna ze szczególnym uwzględnieniem zwierząt lądowych. PWN, Warszawa. Walter H. 1976. Strefy roślinności a klimat. PWRiL, Warszawa. Whittaker R. J. 1998. Island biogeography: ecology, evolution and conservation. Oxford University Press, Oxford.
	Supplementary literature	Święta-Musznicka J., Latałowa M., Szmeja J., Badura M. 2011. Salvinia natans in medieval wetland deposits in Gdańsk, northern Poland: evidence for the early medieval climate warming. Journal of Paleolimnology, 45: 369-383 Podbielkowski Z. 1995. Wędrówki roślin. WSiP, Warszawa. Podbielkowski Z. 1997. Szata roślinna Ziemi. Wielka Encyklopedia Geografii Świata. T. 7. Wyd. Kurpisz S.C., Poznań. Umiński T. 1991. Zwierzęta i kontynenty: zoogeografia popularna. WSiP, Warszawa. Umiński T. 1986. Zwierzęta i oceany: popularna zoogeografia wód morskich. WSiP, Warszawa.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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