University of Gdańsk

Subject card

Subject name and code	Biogeography of the Seas and Oceans - laboratory , PG_00206171						
Field of study	Oceanography						
Date of commencement of studies	October 2027		Academic year of realisation of subject		2029/2030		
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	6		ECTS credits		1.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Anna Panasiuk				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	15.0	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		1.0		9.0	25
Subject objectives	To familiarize students with the basics of the variability of flora and fauna communities in the water column and on the seabed on a global scale, with the biogeographic divisions of seas and oceans.						

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANL3-U02] is able to independently and collaboratively conduct observations and perform measurements in the field or laboratory using appropriately selected techniques, tailored to the research problem	student is able to plan research and measurements independently or under the supervision of a research supervisor, both in the field and in the laboratory, using appropriately selected measurement and analytical techniques in the analysis of the ranges of occurrence of representatives and communities of marine flora and fauna	[SU4] test/exam - oral or written
[OCEANL3-W01] has an advanced knowledge and understanding of the terminology used in oceanography and related exact and natural sciences (in Polish and a selected foreign language)	the student has an advanced knowledge and understanding of the terminology in natural sciences (in Polish, English and/or Latin), with particular emphasis on the biogeographic divisions of seas and oceans	[SW4] test/exam - oral or written
[OCEANL3-K05] is willing to take responsibility for the safety of his/ her own and others' work, is aware of the risks and threats resulting from the work performed	student is ready to comply with occupational health and safety rules, take care of the specialist equipment entrusted to them, is aware of the risks and threats resulting from the work performed	[SK4] test/exam - oral or written
[OCEANL3-K03] is ready to exercise caution and criticism in accepting information from scientific literature, the Internet and other media relating to natural sciences	student is ready to be cautious and critical in accepting information from scientific literature, the Internet and other media relating to the biogeography of the seas and oceans	[SK4] test/exam - oral or written

Subject contents

1. Marine organisms/organism communities characteristic of individual biogeographic regions, including endemic, cosmopolitan and bipolar species.

2. Vertical range and zonal distribution of macrophytobenthos; review of the distribution of selected plant organisms in individual biogeographic regions; endemic algae species and their distribution.

3. "Pathways" of species dispersal, ranges and their boundaries, transition zones.

4. Oceanic and neritic communities within marine fauna.

5. Seabed topography and species dispersal capacity.

6. Current state of biodiversity within biogeographic regions - influent species.

7. Methods of biogeographic research.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Test	51.0%	100.0%

Recommended reading

Basic literature

Lomolino M. V., Brown J. H., Riddle B. R. (2005) Biogeography, Sunderland: Sinauer Associates
Longhurst A. (2007) Ecological geography of the sea. Elsevier, Academic Press, San Diego.
Luning K. (1990) Seaweeds, Their environment, biogeography, and ecophysiology. John Wiley & Sons. Inc. New York.
Wiktor K., Węsławski J. M., Żmijewska M. I. (1997) Biogeografia Morza, Wyd. UG. Gdańsk (in polish)

	Supplementary literature	Bailey R. G. (1998) Ecoregions: the ecosystem geography of the oceans and continents. Springer, New York. Blaxter J. H. S., Southward A. J. (1997) The Biogeography of the Ocean. In: Advances in Marine Biology, Academic Press, San Diego Cox C. B., Moore P. D. (2010) Biogeography: An ecological and Evolutionary Approach, John Wiley & Sons, Hoboken Gage J. D., Tyler P. A. (1991) DEEP-SEA BIOLOGY: A natural history of organisms at the deep-sea floor. University Press, Cambridge.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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