

Subject card

Subject name and code	Principles of the Baltic Sea Geology - lecture, PG_00201134						
Field of study	Marine Hydrography						
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		
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	practical		Assessment form		credit		
Conducting unit	Department of Geophysics -> Faculty of Oceanography and Geography -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Maria Rucińska				
	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		1.0		9.0	25
Subject objectives	Understanding the genesis and geological structure of the Baltic Sea and the types of bottom sediments and their distribution patterns						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[HML3-W04] knows and understands, at an advanced level, the issue of measurements related to the exploration of sea basins and inland waters and tools allowing to describe, interpret and present the results of measurements		knows and understands, at an advanced level, the analytical methods used in sediment research, as well as the statistical methods and tools for interpreting the results of laboratory analyses of Baltic Sea bottom sediments		[SW4] test/exam - oral or written		
	[HML3-W02] knows and understands, at an advanced level, selected phenomena and processes occurring in the hydrosphere, atmosphere, lithosphere and biosphere, their interconnections and relations, as well as practical applications of this knowledge in professional activities related to the field of study		knows and understands, at an advanced level, the geological structure of the Baltic region as a result of endogenous and exogenous processes; using appropriate terminology, explains the conditions of transport and deposition of marine sediments		[SW4] test/exam - oral or written		
Subject contents	Stratigraphy, genesis and lithology of sediments of the Baltic area. Development of the Baltic Sea area in the Pleistocene - glaciations and recent deglaciation. Origin and evolution of the Baltic Sea (late glacial and Holocene). Relative water levels changes of the Baltic Sea in the late Pleistocene and Holocene. Contemporary sedimentary processes in the Baltic Sea. Sediment transport and desposition conditions in the marine environment.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	zaliczenie pisemne z pytaniami otwartymi		51.0%		100.0%		

Recommended reading	Basic literature	1. GUDELIS W. K., JEMIELIANOW J. M.: Geologia Morza Bałtyckiego. Wyd. geologiczne, Warszawa 1982. 2. MOJSKI J. E. (red.): Atlas geologiczny Południowego Bałtyku. Państwowy Instytut Geologiczny, Warszawa Sopot 1995. 3. UŚCINOWICZ Sz. (red.): Geochemia osadów powierzchniowych Morza Bałtyckiego. Państwowy Instytut Geologiczny, 2011. 4. EMEL'YANOV E. M.: Geology of the Gdańsk Basin, Baltic Sea. Russian Academy of Sciences, Yantarnyskaz 2002. 5. VOIPIO A. (red.): The Baltic Sea. Elsevier Oceanography series, 1981 (chapter: WINTERHALTER B. et al.: Geology of the Baltic Sea).
	Supplementary literature	Kramarska R. (red.), 1999, Mapa geologiczna dna Bałtyku bez utworów czwartorzędowych, 1:500 000. PIG, Warszawa Szczepańska T., Uścińowicz Sz., 1994, Atlas geochemiczny południowego Bałtyku. PIG, Warszawa. Uścińowicz Sz., 2003, The Southern Baltic relative sea level changes, glacio-isostatic rebound and shoreline displacement. PIG Sp. Pap., 10. Uścińowicz Sz., Narkiewicz W., Sokołowski K., 2003, Mineralogical composition and granulometry W: Contaminants in the Baltic Sea sediment
	eResources addresses	
Example issues/ example questions/ tasks being completed	List and describe the freshwater development phases of the Baltic Sea (temporal extent, spatial extent, sediments, etc.).	
Work placement	Not applicable	

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