University of Gdańsk

Subject card

Subject name and code	Sedimentology - lecture, PG_00091148		
Field of study	Geology		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
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	2	Language of instruction	Polish
Semester of study	3	ECTS credits	2.0
Learning profile	academic	Assessment form	exam
Conducting unit	Department of Geophysics -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Robert Sokołowski	
	Teachers	dr Robert Sokołowski	

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	15.0	25.0	70

Subject objectives

To gain a basic understanding of the subject and research methods in sedimentology, to become familiar with the main sedimentary environments.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[GEOLL3_U01] is able to apply basic measurement and analytical techniques in the field and in the laboratory, plans to conduct research and measurements	is able to apply basic measuring and analytical techniques in the field and laboratory, plan research and sedimentological measurements	[SU4] test/exam - oral or written
[GEOLL3_W01] knows and understands the basic natural phenomena and explains their course in relation to geological processes	knows and understands basic natural phenomena and explains how they relate to sedimentary processes	[SW4] test/exam - oral or written
[GEOLL3_W04] knows and understands phenomena and processes occurring in the past and today in the interior of the Earth and on its surface, defines the methods of how to study them	knows and understands past and present sedimentary phenomena and processes and defines methods for their research	[SW4] test/exam - oral or written
[GEOLL3_U03] is able to use source information in Polish and English, including archival and electronic databases, in the field of geological issues	is able to use source information, in Polish and English, including archival and electronic databases, on sedimentological issues	[SU4] test/exam - oral or written
[GEOLL3_W02] knows and understands the terminology appropriate in science and natural sciences	has a broad knowledge and understanding of the physical, biological, chemical and geological processes and phenomena occurring in the various sedimentary environments	[SW4] test/exam - oral or written

Subject contents	Introduction: the subject of study, basic concepts Factors controlling sedimentary processes Glacial environment Aeolian environment Lake environment Fluvial environment Deltaic and tidal environments Marine evaporites Shallow Clastic Sea Coastal Zone Shallow-water carbonate environment Abyssal zone Volcanic environment Diagenesis and post-sedimentary structures
Prerequisites and co-requisites	

Assessment methods and criteria

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

Recommended reading

Basic literature	Reading, H., (red.) 1996. Sedimentary environments: Processes, Facies and Stratigraphy. Blackwell Science. Nicols G. 2009, Sedimentology and Stratigraphy. Wiley-Blackwell, pp. 419. Demicco R.V., Bridge J.S. 2008, Earth Surface Processes, Landforms and Sediment Deposits. Cambridge University Press, pp. 815. Stow D.A.V. 2005, Sedimentary Rocks in the Field. Manson Publishing, pp. 320. Gradziński R., Kostecka A., Radomski A., Unrug R. 1986, Zarys Sedymentologii. Wydawnictwa Geologiczne, pp. 628. Zieliński, T., 2014. Sedymentologia osadów rzek i jezior. Wydawnictwo Naukowe UAM.
Supplementary literature	Benn D.I., Evans D.J.A. 2010, Glaciers and Glaciations. Hodder Education, pp. 802.
eResources addresses	

Example issues/ example questions/ tasks being completed	Process and sediment characteristics of a meandering river Processes and sediments in the silicoclastic coastal environment
Work placement	Not applicable

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