University of Gdańsk

Subject card

Subject name and code	Sedimentology - laboratory classes, PG_00193076		
Field of study	Geology		
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	2.0
Learning profile	academic	Assessment form	credit
Conducting unit	Laboratory of Geomorphological Reconstructions -> Department of Geomorphology and Quaternary Geology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Robert Sokołowski	
	Teachers		

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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	3.0	17.0	50

Subject objectives	Conducting laboratory sedimentological research, interpretation of depositional environments, application of sedimentological research in various fields of Earth sciences.

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	Can work individually and collaborate in laboratory groups, performing various functions and performing various tasks related to the analysis of sediment samples.	[SU8] observation of student's independent or team work
[GEOLL3_U02] has the skill of analytical and synthetic way of reasoning leading to correct inference based on the results obtained or the facts presented	Can analytically and synthetically develop, describe and present the results of research and analysis of sedimentation processes and on their basis make correct environmental conclusions.	[SU3] text preparation/written work
[GEOLL3_K05] is willing to comply with the principles of occupational safety and health, takes care of specialized equipment entrusted to them, is aware of the risk connected with the performed work	Complies with the rules of occupational health and safety, takes care of the specialist equipment entrusted to him/her, is aware of the risk of work performed in the sedimentology laboratory.	[SK8] observation of student's independent or team work
[GEOLL3_W02] knows and understands the terminology appropriate in science and natural sciences	Knows and understands the terminology appropriate for sedimentology.	[SW4] test/exam - oral or written
[GEOLL3_U04] is able to use specialized computer software and mathematical and statistical methods in the analysis of geological data	Is able to use application and specialist software, as well as mathematical and statistical methods in data analysis and description of sedimentation phenomena and processes as well as sedimentation environments.	[SU3] text preparation/written work [SU8] observation of student's independent or team work
[GEOLL3_U10] is able to work individually and cooperate in laboratory and field groups performing various functions in them and performing various tasks	Can individually or in a team plan laboratory analyses, using appropriately selected measurement and analytical techniques in the field of sedimentology, adequately to the research problem posed.	[SU8] observation of student's independent or team work

Subject contents

Introduction to laboratory methods for testing clastic sediments; granulometric analysis; analysis of the coating and surface nature of mineral grains; petrographic characteristics of sediments; statistical studies and synthesis of laboratory analysis results.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Written test	51.0%	60.0%
In-class activity	51.0%	10.0%
Preparation of report with the results	51.0%	30.0%

Recommended reading

Basic literature	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. Reading, H., (red.) 1996, Sedimentary Environments: Processes, Facies and Stratigraphy, 3rd Edition pp. 704. Gradziński R., Kostecka A., Radomski A., Unrug R. 1986, Outline of sedimentology. Wydawnictwa Geologiczne, pp. 628.
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

Explain what the phi scale of grain size is.

What are the basic fractions of sediments? Specify the intervals in millimeters.

What textural features do typical aeolian deposits have?

Work placement	Not applicable

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