University of Gdańsk

Subject card

Subject name and code	Petrography of Quaternary Sediments - laboratory , PG_00205021		
Field of study	Oceanography		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2027/2028
Education level	Master'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	2	Language of instruction	Polish
Semester of study	3	ECTS credits	1.0
Learning profile	academic	Assessment form	credit
Conducting unit	Department of Geomorphology and Quaternary Geology -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Piotr Woźniak, prof. UG	
	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

Familiarization with the methodology and methods of petrographic research of Quaternary sediments. Presentation of the basic characteristics of indicator rocks allowing for their identification. Familiarization with the possibilities of using petrographic studies in comprehensive studies of Quaternary sediments.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[OCEANMU2-W05] knows and understands the principles of planning and conducting field and laboratory research as well as advanced methods and tools of scientific research, especially in the field of the studied specialty	Knows and understands basic and advanced methods of petrographic research used in comprehensive studies of Quaternary sediments.	[SW2] presentation/project/paper/ report
[OCEANMU2-U04] is ready to develop in an analytical and synthetic way research and analysis results and based on them creating conclusions	Is able to analytically and synthetically develop the results of research and analysis of Quaternary sediments and on their basis make correct conclusions.	[SU2] presentation/project/paper/ report
[OCEANMU2-U03] can plan and carry out independently advanced research and measurements, both in field and laboratory, using appropriately selected measurement and analytical techniques in the field of oceanography, adequately to the studied specialty and research problem	Can independently plan and carry out research, both in the field and in the laboratory, using appropriately selected measurement and analytical techniques in the field of petrographic research methods of Quaternary sediments.	[SU5] implementation of a problem task

<table>
<tr><td>Subject contents</td><td>1. Principles of sampling and initial preparation of gravel samples for petrographic analyses and supplementary analyses in the field.
2. Macroscopic features of indicator erratic rocks.
3. Recognition of selected indicator erratic rocks.
4. Analysis of the relationship between macroscopic features of clasts and petrographic type.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td>
<table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Implementation of the problem task</td><td>51.0%</td><td>35.0%</td></tr>
<tr><td>Presentation/project/oral speach/ report</td><td>51.0%</td><td>65.0%</td></tr>
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</td></tr>
<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>Czubla P., 2001, Eratyki fennoskandzkie w utworach czwartorzędowych Polski Środkowej i ich znaczenie stratygraficzne, Acta Geographica Lodziensia, 80: 1-174.

Harasimiuk M., Terpiłowski S. red., 2003, Analizy sedymentologiczne osadów glacigenicznych, Wyd. UMCS, Lublin.

Mycielska-Dowgiałło E. i Rutkowski J. red., 2007, Badania cech teksturalnych osadów czwartorzędowych..., Wyd SWPR, W-wa.

Smed P., 1994, Steine aus dem Norden, Gebrüder Borntraeger, Berlin Stuttgart. Schulz W., 2003, Geologischer Führer für den norddeutschen Geschiebesammler, cw Verlagsgruppe, Schwerin.

Zandstra J. G., 1999, Platenatlas van noordelijke kristallijne gidsgesteenten, Backhuys, Leiden.</td></tr>
<tr><td>Supplementary literature</td><td>Benn D.I., Ballantyne C.K., 1993, The description and representation of particle shape. Earth Surf. Proc. Landf., 18: 665-672.

Czubla P., Gałązka D., Górska M., 2006, Eratyki przewodnie w glinach morenowych Polski, Prz. Geol., 54, 4: 352-362.

Górska M., 2000, Advantages and disadvantages of petrographical analyses of glacial sediments, Geol. Quart., 43 (2): 241-250.

Ogren D.E, Waag C.J., 1986, Orientation of cobble and boulder beach clasts. Sedimentary Geology, 47: 69-76.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
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<tr><td>Example issues/ example questions/ tasks being completed</td><td>Prepare a set of indicator erratic rocks based on the specimens collected on the beach.

Analyze the relationships between clast morphology and its petrographic type.</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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