University of Gdańsk

Subject card

Subject name and code	Petrographic Analysis of Marine Sediments - lecture, PG_00205300		
Field of study	Oceanography		
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 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 Agnieszka Marcinowska	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	5.0	0.0	10.0	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

The course aims to familiarize students with the methods of petrographic analysis of marine sediments, identification of sediment types and petrographic classifications.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[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)	knows and understands at an advanced level the terminology used in petrographic descriptions of minerals and rocks, including petrographic descriptions of marine sediments	[SW3] text preparation/written work
[OCEANL3-W04] has an advanced understanding of issues and research problems in oceanography, and recognizes their connection with other scientific disciplines	knows and understands at an advanced level the issues and problems related to the petrographic analysis of marine sediments	[SW3] text preparation/written work
[OCEANL3-K03] is ready to exercise caution and criticism in accepting information from scientific literature, the Internet and other media relating to natural sciences	is ready to use a critical approach in obtaining information from scientific literature, the Internet and other media relating to the petrographic analysis of marine sediments	[SK3] text preparation/written work
[OCEANL3-U01] is able to use the current scientific terminology in the field of oceanography in various forms of expression	is able to use the current petrographic terminology used in the descriptions of marine sediments	[SU3] text preparation/written work

Subject contents

Optical features of minerals
Petrographic classifications of rocks
Petrographic analysis - identification of minerals and rocks

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<tr><td>Prerequisites and co-requisites</td><td colspan="2"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Reports</td><td>51.0%</td><td>100.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>Manecki A., Muszyński M. (red.), 2008. Przewodnik do petrografii, Uczelniane Wydawnictwa Naukowo-Dydaktyczne AGH, Kraków
Penkala T., 1971. Optyka kryształów, Wyd. Naukowe PWN, Warszawa
Borkowska M., Smulikowski K., 1973. Minerały skałotwórcze. Wyd. Geologiczne, Warszawa
Barker A.J., 2014. A Key for Identification of Rock-forming Minerals in Thin-Section, CRC Press/Balkema
Frost R.B., Frost C.D., 2014. Essentials of Igneous and Metamorphic Petrology, Cambridge University Press.
Boggs S., JR., 2009. Petrology of Sedimentary Rocks, Cambridge University Press
Klein C., Philpotts A.R., 2012. Earth Materials, Cambridge University Press</td></tr>
<tr><td>Supplementary literature</td><td>MacKenzie W.S., Adams A.E., Brodie K.H. 2017. Rocks and Minerals in Thin Section., CRC Press/Balkema
Nesse W.D., 1991. Introduction to Optical Mineralogy, Oxford University Press
Gill R., 2010. Igneous Rocks and Processes, a Practical Guide, A John Wiley & Sons, Ltd., Publication</td></tr>
<tr><td>eResources addresses</td><td>Basic
http://www.alexstrekeisen.it/english/index.php - Materials for learning petrology with photos of minerals and rocks in microscopic image.</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">Petrographic analysis - identification of minerals and rocks</td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
</table>

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