

1.	Field of study	Geology
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2025/2026 (winter term)
4.	Level of qualifications/degree	first-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

7.	General information about the module	
Module name		Mineralogy I
Module code		W2-GE-S1-020
Number of the ECTS credits		3
Language of instruction		Polish
Purpose and description of the content of education		Celem modułu Mineralogia 1 jest zwięzłe przedstawienie teoretycznych podstaw krytalografii – nauki o kryształach będącej bazą dla studiowania mineralogii, petrografii, geochemii, nauki o złożach. Studenci poznają uniwersalne pojęcia substancji krystalicznej i symetrii oraz rozpoznają symetrię kryształów zarówno zewnętrzną, jak i wewnętrzną. Ponadto poznają prawa krytalografii geometrycznej i znajdują dla nich zastosowanie w mineralogii. Celem kursu jest nauczanie studentów praktycznych nawyków pracy z kryształami, opanowanie techniki prawidłowego opisanie ich formy zewnętrznej oraz budowy wewnętrznej niezbędnej dla prawidłowej interpretacji wyników samodzielnej pracy naukowej i rozumienia literatury specjalistycznej.
List of modules that must be completed before starting this module (if necessary)		not applicable

8.	Learning outcomes of the module			
Code	Description	Learning outcomes of the programme		Level of competenc (scale 1-5)
W2-GE-S1-020_1	zna podstawowe pojęcia i prawa krytalografii geometrycznej, umie rozpoznawać operacje symetrii w kryształach	1GE_U3	2	
		1GE_U4	1	
		1GE_W5	1	
W2-GE-S1-020_2	potrafi rozpoznać 32 klasy symetrii, wie jak przekształcić symbole symetrii Grotha w symbole międzynarodowe	1GE_U3	2	
		1GE_U4	1	
		1GE_W5	2	
W2-GE-S1-020_3	rozpoznaje postaci proste w układach krytalograficznych oraz potrafi ustalić symbole ścian postaci prostych	1GE_U3	2	
		1GE_U4	1	
		1GE_W5	2	
W2-GE-S1-020_4	opanował rysowanie projekcji cyklograficznych i stereograficznych	1GE_U3	2	
		1GE_U4	1	
		1GE_W5	2	

W2-GE-S1-020_5	posługuje się programami komputerowymi CrystalShaper, Vesta	1GE_U3	1
		1GE_U4	1
		1GE_W5	1

9. Methods of conducting classes		
Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture <i>a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided</i>
a03	Lecture methods / expository methods	Description <i>a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison</i>
d01	Programmed learning methods	Working with a computer <i>e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid own by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline</i>
d02	Programmed learning methods	Working with a programmed textbook <i>working with a textbook containing instructional material covering part of or the entire curriculum of the module as well as a formula for studying the content; includes working with a subject textbook, an atlas, a catalogue, a problem book, etc.</i>
d03	Programmed learning methods	Working with another teaching tool <i>e.g. using websites in any way or according to the rules set by the teacher; or making use of other subject-specific tools</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
W2-GE-S1-020_L_1	laboratory classes	24	course work	W2-GE-S1-020_1, W2-GE-S1-020_2, W2-GE-S1-020_3, W2-GE-S1-020_4, W2-GE-S1-020_5	d01, d02, d03
W2-GE-S1-020_W_1	lecture	18	course work	W2-GE-S1-020_1, W2-GE-S1-020_2, W2-GE-S1-020_3	a01, a03

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	No
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those</i>	No

		<i>developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	
b02	Consulting the curriculum and the organization of classes	Verification / adjustment / discussion of syllabus provisions <i>consulting the content of the syllabus, possibly in the presence of the year tutor or members of the class group, and, if necessary, reassessing the provisions concerning special conditions for class participation, e.g., space and time requirements, technical and other requirements, including conditions for participation in classes outside the walls of the university, classes organized in blocks, organized online, etc.</i>	No
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion <i>a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course</i>	No
d02	Consulting the results of the verification of learning outcomes	Development of a corrective action plan as well as supplementary/corrective tasks <i>reviewing and selecting tasks and activities enabling the elimination of errors indicated by the academic teacher, their verification or correction resulting in completing the task with at least the minimum passing grade</i>	No
e01	Activities complementary to the classes	Undertaking, on one's own initiative and individually, activities aimed at expanding the scope or depth of the teaching content, also beyond the walls of the University <i>a set of activities undertaken independently and on the student's own initiative, aimed at expanding the depth and scope of knowledge and skills, their revision and repetition, retention or verification, also activities carried outside the university, e.g., in a culture promoting or educational institution, a laboratory, in the open air, etc.; also self-education</i>	No

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.