

关。GDAŃSK UNIVERSITY 创 OF TECHNOLOGY

Subject card

Subject name and code	Geology I, PG_00043987								
Field of study	Civil Engineering								
Date of commencement of studies	October 2021		Academic year of realisation of subject			2021/2022			
Education level	first-cycle studies		Subject group			Obligatory subject group in the field of study Subject group related to scientific			
Mode of study	Full-time studies		Mode of delivery			research in the field of study			
Vear of study	1		Language of instruction			Polish			
Semester of study	1		ECTS credits			3.0			
Learning profile	general academic profile		Assessment form			exam			
Conducting unit	Department of Geotechnics, Geology and Marine Civil Engineering -> Faculty of Civil and Environmental Engineering								
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Maria Przewłócka, doc. PG						
	Teachers		dr inż. Maria Przewłócka, doc. PG						
			dr hab. Małgorzata Pruszkowska-Caceres						
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Project	t	Seminar	SUM	
of instruction	Number of study hours	30.0	0.0	0.0	0.0		0.0	30	
	E-learning hours included: 0.0								
	Adresy na platformie eNauczanie: Geologia I - Moodle ID: 17865 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17865								
Learning activity and number of study hours	Learning activity	Participation i classes includ plan	1 didactic Participation in ed in study consultation h		in nours	Self-study		SUM	
	Number of study hours	30		7.0		38.0		75	
Subject objectives	Student gets acquainted with internal and external geological processes, their influence on abiotic environment of men; ability to interpret geological maps and cross-sections. Learning about the impact of geological processes on subsoil. Understanding the specificity of groundwater occurrence and its impact on constractions.								

Learning outcomes	Course outcome	Subject outcome	Method of verification				
	[K6_W07] has basic knowlede on natural processes (hydrological, hydraulical or geological) and its influence on building subsoil; understands specific aspects of surface and underground water, which constraints the design and exploitation of buildings and engineering objects	Student describes internal and external geological processes; explains natural geological threats; interprets the influence of geological processes on the Earth's relief and mineral composition. Understanding the specificity of groundwater occurrence and its impact on constractions.	[SW1] Assessment of factual knowledge				
	[K6_W15] Has knowlege of construction law and environmetal impact of investment realisation	Understanding the impact of geological processes on subsoil, and is also able to assess the impact of construction projects on the environment.	[SW1] Assessment of factual knowledge				
	[K6_U14] can read geological maps and profiles, recognizes most popular rocks and minerals, recognizes the soil-water conditions of construction site	Student identifies and describes common rock forming minerals and common rocks – igneous, sedimentary and metamorphic. Student analyzes and interprets geological maps, cross-sections, measurements of layer orientation (the dip and the strike). Understanding the specificity of groundwater occurrence and its impact on constractions.	[SU2] Assessment of ability to analyse information				
Subject contents	Geological time, the Earth's origin, the Earth's layers, basis of stratigraphy; internal processes (volcanism, plutonism, metamorphism); plate tectonic theory; basis of tectonics; isostasy; the rock cycle; external processes (weathering, erosion, mass wasting); glacial, stream, marine, eolian processes.Hydrogeology.						
Prerequisites and co-requisites	geography, chemistry – level of secondary school						
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade				
	test, 20 questions	60.0%	100.0%				
Pecommended reading	Basic literature Geologia dynamiczna Mizerski W PWN						
Recommended reading	Supplementary literature	Geologia dynamiczna, Ksiażkiewicz, Wydawnictwa Geologiczne					
	eResources addresses	Geologia I - Moodle ID: 17865 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17865					
Example issues/ example questions/ tasks being completed	Indicate geological events occuring at divergent plate boundaries What are the main rock forming minerals of gabbro; indicate the stage of magma crystallization for this rock.						
	Describe conditions of granite forming What is the subduction zone ?						
	What are the main processes responsible for the Earth relief?						
Work placement	Not applicable						