University of Gdańsk

Subject card

Subject name and code	Tectonics - lecture, PG_00091150		
Field of study	Geology		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2025/2026
Education level	Bachelor's studies	Subject group	Obligatory subject group 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	exam
Conducting unit	Department of Geophysics -> Faculty of Oceanography and Geography -> Rector		
Name and surname of lecturer (lecturers)	Subject supervisor	dr Agnieszka Kubowicz	
	Teachers	dr Agnieszka Kubowicz	

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

Additional information:

Lecture with multimedia presentation

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	7.0	15.0	52

Subject objectives

Recognizing the tectonic structures. Understanding the mechanisms and conditions of the formation of these structures, taking into account the differentphysical and mechanical properties of rocks.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[GEOLL3_W03] knows and identifies paleontological, mineralogical, petrographic and structural objects using appropriate methods	knows and identifies structural objects, using appropriate methods	[SW4] test/exam - oral or written
[GEOLL3_W05] knows the structure and geological development of selected regions in Poland and in the world	knows the tectonic evolution of selected regions in Poland and around the world	[SW4] test/exam - oral or written
[GEOLL3_W01] knows and understands the basic natural phenomena and explains their course in relation to geological processes	knows and understands basic tectonic phenomena and explains how they relate to geological processes	[SW4] test/exam - oral or written
[GEOLL3_W04] knows and understands phenomena and processes occurring in the past and today in the interior of the Earth and on its surface, defines the methods of how to study them	knows and understands the phenomena and tectonic processes, occurring in the past and nowadays in the interior of the Earth and on its surface, defines the methods of their study	[SW4] test/exam - oral or written
[GEOLL3_U06] is able to identify geological objects and combine them with geological processes and anthropogenic environmental transformations	is able to identify tectonic objects and connect them to geological processes and anthropogenic environmental transformations	[SU4] test/exam - oral or written
[GEOLL3_W02] knows and understands the terminology appropriate in science and natural sciences	knows and understands the terminology appropriate in the geological sciences, with particular emphasis on tectonics	[SW4] test/exam - oral or written

Subject contents

Basic definitions related to tectonics. Rock mechanics, factors causing internal and external deformation. The main elements and objectives of structural analysis. Tectonic structures - folds, faults, fractures. Evolution of tectonic structures in sedimentary and crystalline rocks. Elements of petrotectonics. Salt tectonics. Glacitectonics. Theory of plate tectonics of the lithosphere.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
final exam	51.0%	100.0%

Recommended reading

Basic literature

Dadlez R., Jaroszewski W., 1994. tectonics, Wyd. Geologiczne, Warszawa

Kuzak R., Żaba J., 2011. Fundamentals of structural geology, Wyd. Naukowe PWN, Warsaw.

Jaroszewski W., 1974. Tectonics of faults and folds, Wyd. Geologiczne, Warsaw.

Jaroszewski W., 1986. Guide to exercises in dynamic geology, Wyd. Geologiczne, Warsaw.

	Supplementary literature	Jaroszewski W. (ed.), 1985. Dictionary of dynamic geology, Wyd. Geologiczne, Warsaw, Poland. Frisch W., Meschede M., Blakey R., 2011 Plate tectonics. Continental drift and mountain building, Springer
	eResources addresses	
Example issues/ example questions/ tasks being completed	List the external and internal factors of tectonic deformation Characterize the mechanisms of folding	
Work placement	Not applicable	

Document generated electronically. Does not require a seal or signature.