

Subject card

Subject name and code	Soil Science and Geography - laboratory, PG_00193836						
Field of study	Geography						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study 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	4		ECTS credits		1.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Sambor Czerwiński				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	10.0	0.0	0.0	10
	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	10		1.0		14.0	25
Subject objectives	The aim of the course is to become familiar with: • soil-forming processes and factors and their influence on soil development; • methods for analysing specific soil properties, as well as soil fertility and productivity; • the importance of soils for the natural environment and agriculture; • the classification of soils in Poland; • the ability to recognise and describe the main soil types, subtypes, and groups in Poland, their genesis, structure, properties, soil quality assessment, agricultural suitability, and economic significance; • the distribution of soils in Poland and worldwide; • the role of microorganisms in terrestrial ecosystems.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GEOGRL3-U04] can apply field and laboratory methods and research tools, spatial analysis methods, and methods of presenting research results in the field of geography, assess their usefulness for tasks in which the application goal of geography can be realized	Knows the basic field and laboratory procedures used to identify and determine the main characteristics of the soil substrate.	[SU3] text preparation/written work
	[GEOGRL3-W06] knows advanced methods of acquiring, processing, and compiling geographic environmental data, as well as methods of analyzing and interpreting such data	Has knowledge and understanding of field and laboratory methods used in soil environment research.	[SW2] presentation/project/paper/report
	[GEOGRL3-W02] knows and understands key concepts and theories in geography, as well as advanced processes and phenomena related to spatial diversity and the distribution of processes and phenomena on the Earth's surface at various spatial scales, particularly in Poland	The student knows the key geographical concepts and theories and has an advanced understanding of processes and phenomena related to spatial differentiation and the distribution of phenomena across the Earth's surface at different spatial scales, with particular emphasis on Poland.	[SW4] test/exam - oral or written [SW3] text preparation/written work
	[GEOGRL3-U01] can identify and analyze basic natural and socio-economic processes and phenomena, analyze their causes and course, and formulate and discuss basic issues concerning physical-geographical conditions and the social, economic, and political situation and their changes on various spatial scales	The student is able to identify and analyse fundamental soil-forming processes and socio-economic phenomena related to soil use, examine their causes and course, and formulate and discuss key issues concerning soil properties, functioning, and transformations across different spatial scales.	[SU4] test/exam - oral or written
	[GEOGRL3-K02] is prepared to bear full responsibility for the actions taken actions and adhere to the principles of professional ethics and principles of intellectual honesty, is aware of the importance of a professional approach in professional life	Is prepared to adopt attitudes that support the protection of the soil environment and to promote scientific knowledge on the proper use of soils and the ecosystem services they provide.	[SK2] presentation/project/paper/report [SK3] text preparation/written work
	[GEOGRL3-W04] has advanced knowledge of the Earth's geographical environment, understood as a unified system of interconnected and interacting components; its diversity, functioning, and dynamics of change, including the interaction of environmental components in the area of the South Baltic Coast and Lake District	The student has advanced knowledge of the soil environment as a component of the Earth's geographical system understood as a set of interrelated and interacting components, its diversity, functioning, and dynamics of change, with particular emphasis on the South Baltic Coastal and Lakeland regions.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/report

Subject contents	• The concept of soil and ground, and their roles in the environment and the human economy. • The division and classification of soil formations and ground materials. • The role of soil microorganisms. • The concept of physical properties of soil formations. • Principles of soil environment protection. • The ability to prepare and interpret documentation concerning the properties of the soil and ground environment. • The ability to assess the suitability of the soil and ground environment for human economic activities. • The distribution of major soil types worldwide.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	presentation	51.0%	30.0%
	raport	51.0%	70.0%
Recommended reading	Basic literature	Hiller D., 2012. Gleba w środowisku. Wydawnictwo Naukowe PWN Brożek S. (red.), 2013. Gleby w środowisku przyrodniczym i krajobrazach Europy. Wydawnictwo Uniwersytetu Rolniczego w Krakowie	
	Supplementary literature	Hiller D., 2012. Gleba w środowisku. Wydawnictwo Naukowe PWN Brożek S. (red.), 2013. Gleby w środowisku przyrodniczym i krajobrazach Europy. Wydawnictwo Uniwersytetu Rolniczego w Krakowie	
	eResources addresses		
Example issues/ example questions/ tasks being completed	List and describe the main components of soil. Main soil horizons according to the Polish Soil Classification (2019). Differences between mineral and organic soils. Elementary soil-forming processes		
Work placement	Not applicable		

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