



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez
Unię Europejską w ramach
Europejskiego Funduszu
Społecznego

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Course title		ECTS code	
Geomorphology and science of soil		7.2.0488	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	pierwszego stopnia
Wydział Chemii	Ochrona środowiska	form	stacjonarne
		specjalty	wszystkie
		specialization	wszystkie
Teaching staff			
dr Radosław Wróblewski; dr Dawid Weisbrodt			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		2	
Auditorium classes, Lecture		ECTS credits	
The realization of activities		classes - 30 h	
classroom instruction		tutorial classes – 2 h	
Number of hours		student's own work – 18 h	
Lecture: 15 hours, Auditorium classes: 15 hours		Total: 50 h - 2 ECTS	
The academic cycle			
2023/2024 summer semester			
Type of course		Language of instruction	
obligatory		polish	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
- individual work, discussion moderated - multimedia-based lecture		Final evaluation	
		Graded credit	
		Assessment methods	
		- (mid-term / end-term) test - assignment work – project or presentation - graded course credit based on individual grades obtained during the semester	
		The basic criteria for evaluation	
		Obtaining at least 50% of the points in the test - a credit for the graphical work and the presentation; - active participation in conversation; - obtaining more than 50% of the points from the colloquium.	
Method of verifying required learning outcomes			
Required courses and introductory requirements			
A. Formal requirements			
none			
B. Prerequisites			
none			
Aims of education			
Learn the main research methods used in geomorphology and soil science. To understand the general laws of genesis and evolution of relief forms			

of the Earth's surface. To get acquainted with the main processes and factors of soil formation and their spatial distribution on the globe. Learning about the conditions and negative anthropogenic transformations of the pedosphere.

Course contents

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Characteristics of factors shaping the Earth's surface forms (forms and processes: fluvial, glacial and periglacial, aeolian, processes and forms in the sea coastal zone, lake and peat accumulation sediments and forms).

Human influence on relief and geomorphological processes.

Characteristics of soil-forming processes and factors and their influence on soil formation.

Most important types, subtypes and kinds of soils in the world, their genesis, distribution, structure, agricultural usefulness.

Protection of the lithosphere, potential threats to the soil environment.

Importance of geomorphological and paleopedological studies in reconstruction of natural environment changes.

Cartographic information sources in geomorphology and soil science.

The concept of soil and its role in the environment.

Geomorphological conditions of soil cover formation.

Division of soil formations and their organoleptic identification.

The influence of soil use on its agricultural suitability.

Bibliography of literature

Bibliography of literature

Bednarek R., Prusinkiewicz Z., 1999. Geografia gleb, PWN, Warszawa

Bednarek R., Dziadowiec H., Pokojka U., Prusinkiewicz Z., 2005, Badania ekologiczno- gleboznawcze. PWN, Warszawa

Klimaszewski M., 1994, Geomorfologia, PWN, Warszawa

Lindner L. (red.), 1992, Czwartorzęd. Osady. Metody badań. Stratygrafia, Wyd. PAE, Warszawa

Schealtz R., Anderson S., 2007, Soils, Genesis and Geomorphology, Cambridge University Press

Starkel L (red.). 1999, Geografia Polski – środowisko przyrodnicze, PWN, Warszawa

Trzciński W. (red.) 1989, Systematyka Gleb Polski, Roczniki Gleboznawcze, Tom XL, nr 3-4, PWN Warszawa.

The learning outcomes (for the field of study and specialization)

Knowledge

Knowledge

Classifies techniques for protecting soils from degradation;

Recognises relations between geomorphology and soil science with other scientific disciplines;

Defines basic terms in geomorphology and soil science;

The student explains physical and chemical conditions of the most important soil-forming processes;

Characteristics of basic geomorphological processes and factors and their impact on

Soil formation;

Characterise the importance of geomorphological and palaeopedological studies in reconstructions of changes in natural environment.

Skills

The student uses geomorphological and soil science terminology to a sufficient degree to be able to the use of the literature on the subject in Polish and/or English.

Social competence

The student demonstrates readiness for individual and social actions, including those aimed at maintaining ecological balance and protecting the Earth's resources.

Contact

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