



## Subject card

Subject name and code	Environment protection and sustainable development, PG_00053605						
Field of study	Spatial Development						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2022/2023		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Urban Design and Regional Planning -> Faculty of Architecture						
Name and surname of lecturer (lecturers)	Subject supervisor	dr Miłosz Marciniak					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	0.0	0.0	30
	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	30	5.0		40.0	75	
Subject objectives	Discussion of the consequences of environmental threats at the ecosystem level. Developing skills to implement the principles of sustainable development by deepening the theoretical knowledge in the field of environmental protection and work on: landscape protection study and landscape audit, ecological corridor in urban space, identification of contaminated areas and ways to carry out remediation.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_W01	has structured, theoretically founded knowledge, covering key issues in the field of spatial planning, ecology and environmental protection. Has detailed knowledge of the causes of soil degradation, forest, flora, fauna and landscape degradation, and other issues related to spatial planning, including social sciences			[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects		
	K7_U07	can obtain information from literature, databases and other sources; collects, integrates and interprets empirical data in the field of spatial management, defines environmental hazards and on this basis is able to prepare a short scientific study, is able to draw conclusions and formulate and justify their opinions in detail			[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU5] Assessment of ability to present the results of task		
	K7_K03	can properly prioritize the implementation of the task specified by himself or others, is able to think and act in a creative and entrepreneurial way			[SK4] Assessment of communication skills, including language correctness [SK1] Assessment of group work skills [SK2] Assessment of progress of work		

Subject contents	<p>Structure, organization, classification and protection of landscapes (priority landscape; landscape values; principles and problems of protection of various types of ecosystems and landscapes; landscape regionalization; threats to landscape resources; ecological landscape structure and ecological landscape systems; principles for conducting a landscape protection study; European Landscape Convention; landscape audit - concept and rules of performance).</p> <p>Forms of nature protection - their environmental role and place in the region's spatial planning system (forms and programs for nature protection - management principles and conditions; ecological patches and corridors - legal basis for designation, functions, structure, typology, threats, development in the zone and around ecological corridors in urban areas).</p> <p>Degradation and protection of environmental components (causes and sources of threats to the aquatic environment - types of pollution, principles of water management and forms of protection; marine water pollution - ship waste, oil spills, exploitation of seabed resources, storage of waste in the sea, legal regulations regarding the protection of the marine environment; causes and effects of degradation of the earth's surface and atmospheric environment in urban areas; causes and effects of destruction of forest and coastal ecosystems - directions for the protection of forests and coastal areas used by tourists; reclamation and remediation of degraded and devastated areas).</p> <p>Environmental monitoring - status of surface, underground and Baltic waters; disposal site control; monitoring of port waters; monitoring of: surface of the earth, atmospheric air, noise, nature, ionizing radiation and electromagnetic fields, local monitoring systems for the state of the environment, integrated monitoring of the natural environment, National Agri-environmental program.</p>																				
Prerequisites and co-requisites	knowledge on spatial, natural, social, and economic conditions of spatial management, basics of landscape design and legal conditions of spatial management gathered at previous stages of study; biological and ecological knowledge obtained at earlier stages of education																				
Assessment methods and criteria	<table border="1" data-bbox="448 707 1487 913"> <thead> <tr> <th data-bbox="448 707 794 741">Subject passing criteria</th> <th data-bbox="794 707 1141 741">Passing threshold</th> <th data-bbox="1141 707 1487 741">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="448 741 794 775">exercise 1</td> <td data-bbox="794 741 1141 775">100.0%</td> <td data-bbox="1141 741 1487 775">20.0%</td> </tr> <tr> <td data-bbox="448 775 794 808">exercise 4</td> <td data-bbox="794 775 1141 808">100.0%</td> <td data-bbox="1141 775 1487 808">10.0%</td> </tr> <tr> <td data-bbox="448 808 794 842">exercise 2</td> <td data-bbox="794 808 1141 842">100.0%</td> <td data-bbox="1141 808 1487 842">15.0%</td> </tr> <tr> <td data-bbox="448 842 794 875">test</td> <td data-bbox="794 842 1141 875">60.0%</td> <td data-bbox="1141 842 1487 875">40.0%</td> </tr> <tr> <td data-bbox="448 875 794 913">exercise 3</td> <td data-bbox="794 875 1141 913">100.0%</td> <td data-bbox="1141 875 1487 913">15.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	exercise 1	100.0%	20.0%	exercise 4	100.0%	10.0%	exercise 2	100.0%	15.0%	test	60.0%	40.0%	exercise 3	100.0%	15.0%
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Recommended reading	<p>Basic literature</p> <p>Chmielewski T.J., Systemy krajobrazowe. Struktura - funkcjonowanie - planowanie. PWN, Warszawa, 2012.</p> <p>Żarska B., Ochrona krajobrazu. Wyd. SGGW, Warszawa, 2011.</p> <p>Europejska Konwencja Krajobrazowa, 2000.</p> <p>Zasady wykonywania audytu krajobrazowego (Rozporządzenie Rady Ministrów z dnia 11 stycznia 2019 r. w sprawie sporządzania audytów krajobrazowych - Dz.U. 2019 poz. 394).</p> <p>Symonides E., Ochrona przyrody. Wydanie nowe zmienione i uzupełnione. Wyd. Uniw. Warszawskiego, Warszawa, 2014.</p> <p>Koncepcja sieci ekologicznej województwa pomorskiego dla potrzeb planowania przestrzennego, PBPR, Gdańsk, 2014.</p> <p>Natura 2000 w planowaniu przestrzennym - rola korytarzy ekologicznych. MOŚ, 2009.</p> <p>Przewoźniak M., Czochański J., Przyrodnicze podstawy gospodarki przestrzennej. Ujęcie proekologiczne. BWN, Poznań, 2020.</p> <p>Karaczun Z.M., Obidoska G., Indeka L., Ochrona środowiska - współczesne problemy. Wyd. SGGW, Warszawa, 2016.</p> <p>Bolalek J., Ochrona środowiska morskiego - od teorii do praktyki. Wyd. Uniw. Gdańskiego, Gdansk, 2016.</p>																				

	Supplementary literature	<p>Studium ochrony krajobrazu województwa pomorskiego, Gdańsk, 2005.</p> <p>Studia przyrodniczo-krajobrazowe województwa pomorskiego, Gdańsk, 2006.</p> <p>Program ochrony środowiska województwa zachodniopomorskiego na lata 2012-2015 z uwzględnieniem perspektywy na lata 2016-2019, Szczecin, 2011.</p> <p>Plit. J., Krajobrazy kulturowe Polski i ich przemiany, Prace Geograficzne IGiPZ nr 253, 2016.</p> <p>Chmielewski T.J. i inni, Ekologiczne i fizjonomiczne koszty bezładności przestrzennej. Prace Geograficzne IGiPZ nr 264, 2018.</p> <p>Chmielewski T.J., Chmielewski S., Kułak A., Wpływ bezładności przestrzennej na krajobrazowe systemy ekologiczne. Studia KPZK, 2018, tom 182 - Studia nad chaosem przestrzennym, cz. 2 - Koszty chaosu przestrzennej. <a href="http://journals.pan.pl/skpzk/125267">http://journals.pan.pl/skpzk/125267</a></p> <p>Kistowski M., Lipińska B., Korwel-Lejkowska B., Studium ochrony krajobrazu województwa pomorskiego (<a href="http://www.kgfiks.oig.ug.edu.pl/mk/kistowski_lipinska_korwel_b_4_9.pdf">www.kgfiks.oig.ug.edu.pl/mk/kistowski_lipinska_korwel_b_4_9.pdf</a>).</p> <p>Richling A., Solon J., Ekologia krajobrazu. Wyd. PWN, Warszawa, 2011.</p> <p>Kwiatkowska-Malina J., Monitoring środowiska przyrodniczego. Wyd. Politechniki Warszawskiej, Warszawa, 2012</p> <p>dyrektywy UE, konwencje, ustawy i rozporządzenia oraz dokumenty planistyczne z zakresu ochrony środowiska i audytu krajobrazowego.</p>
	eResources addresses	Adresy na platformie eNauczenie:
Example issues/ example questions/ tasks being completed	<p>Meanings of the terms "priority landscape" and "ecological landscape system".</p> <p>Factors destabilizing landscape ecological systems.</p> <p>Criteria for assessing the value of the landscape.</p> <p>Functions and threats of ecological corridors.</p> <p>MARPOL 73/78 conventions and OPRC.</p> <p>Sources and types of pollution of the marine environment and coastal zone.</p> <p>Remediation and remediation</p>	
Work placement	Not applicable	