

Subject card

Subject name and code	Environmental basis of spatial management – exercises, PG_00191726						
Field of study	Spatial Management						
Date of commencement of studies	October 2027		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	1		Language of instruction		Polish		
Semester of study	2		ECTS credits		3.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Barbara Korwel Lejkowska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	30.0	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		0.0		45.0	75
Subject objectives	Acquiring the ability to obtain spatial information from various analogue and digital sources, learning about thematic cartographic studies, acquiring the ability to work with maps in the field of natural environment components, including terrain topography, geomorphological and hydrological conditions, and climate.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[GPL3_W08] knows and understands the principles of operating basic equipment, devices and software used to obtain and process geographical information and spatial planning		knows the basic hardware and software necessary for environmental analyses in spatial management		[SW2] presentation/project/paper/report		
	[GPL3_K04] is ready to initiate and actively participate in activities for the benefit of spatial order and sustainable development of the region, country and Europe		explain the conditions for sustainable development and environmental protection measures in spatial planning and development		[SK2] presentation/project/paper/report [SK5] implementation of a problem task		
	[GPL3_U04] makes the correct selection of basic quantitative methods (including field research), uses them in the analysis of spatial diversity of natural, social or economic phenomena and also makes a correct interpretation of the results on the basis of the specificity of selected methods		selects and applies appropriate methods for environmental and sustainable development analyses		[SU2] presentation/project/paper/report		

Subject contents	Introduction and analysis of a topographic map Analysis of geomorphological conditions and preparation of a map of such conditions Analysis of selected conditions related to topoclimate Analysis of lithological conditions and preparation of a map based on a geological map of surface formations Analysis of a hydrographic map and preparation of a map of hydrographic conditions Analysis of the sozological map and preparation of a map of sozological conditions Analysis of the state and threats to the environment familiarisation with the results of WIOŚ/GIOŚ research Synthesis of studies threshold analysis of the content of partial maps conditions and limitations for spatial management		
Prerequisites and co-requisites	knowledge, skills and competences at the general secondary school level basics of working with GIS software, learned in semester I		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	presence	90.0%	10.0%
	accompanying tasks	100.0%	20.0%
	project	50.0%	70.0%
Recommended reading	Basic literature	Contents of legal acts: • Act on Spatial Planning and Development of 2003 • Environmental Protection Act of 2001. • Nature Conservation Act of 2004. • Water Law Act of 2017 • Geological and Mining Law Act of 2011	
	Supplementary literature	Korwel-Lejkowska B., 2016, Analysis of selected threats to the development of settlements in municipalities of the Pomeranian Province in the context of sustainable development, (in:) Problems of Landscape Ecology, vol. XLII, PAEK, pp. 87100. Racinowski R., 1987, Introduction to the physiography of settlement, PWN, Warsaw. Sołowiej D., 1992, Fundamentals of the methodology of assessing the human natural environment, Wyd. Nauk. UAM, Poznań. Szczepanek R., 2017. Spatial Information Systems with QGIS Parts 1 and 2, Tadeusz Kościuszko University of Technology in Krakow Faculty of Environmental Engineering Institute of Engineering and Water Management. Krakow.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	• spatial development conditions resulting from land cover; • spatial development conditions resulting from terrain relief; • hydrological conditions for spatial development; • spatial development conditions resulting from environmental protection.		
Work placement	Not applicable		

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