

Subject card

Subject name and code	Basis of GIS - lecture, PG_00201240						
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		2.0		
Learning profile	academic		Assessment form		exam		
Conducting unit	Faculty of Social Sciences -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Wojciech Staszek				
	Teachers						
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						
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		20.0	50
Subject objectives	To acquire knowledge of cartography and graphical presentation of phenomena in space with the use of specialized GIS software for analysis necessary for planning and spatial development; to acquire basic skills in operating GIS software and application to solving specific tasks in spatial management; to prepare to identify and solve cognitive problems related to the profession in accordance with the latest knowledge in spatial management.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[GPL3_W07] knows and understands the methods and tools for shaping spatial development		K_W07 lists and characterizes the tools of planning and development spatial		[SW4] test/exam - oral or written [SW3] text preparation/written work		
	[GPL3_U06] uses specialist language in a debate with specialists in the field of spatial planning and management		K_U04 , K_U06 create different types of cartodiagrams and cartograms and apply other quantitative methods in the analysis of spatial phenomena using specialized software and equipment		[SU3] text preparation/written work		
	[GPL3_W04] knows and understands at an advanced level, the aims and conditions of using basic methods of quantitative analysis and interpretation of spatial processes and phenomena		K_W04 lists the basic quantitative methods and the determinants of their application in analyzing and interpreting spatial processes and phenomena		[SW4] test/exam - oral or written [SW3] text preparation/written work		
	[GPL3_W08] knows and understands the principles of operating basic equipment, devices and software used to obtain and process geographical information and spatial planning		K_W08 lists and explains the principles of operating basic software office software and software for processing spatial information (GIS)		[SW4] test/exam - oral or written [SW3] text preparation/written work		

Subject contents	A. Problems of the lecture: Definitions, tasks and divisions; The essence of cartographic communication; Modern understanding of the terms "map", "cartography", "topography" Elements of a map Types of maps Selection of the method of presentation. Qualitative methods of cartographic presentation of data Quantitative methods B. Problems of exercises: Introduction to the principles of IT usage - network security, data archiving, Tools to support teamwork - resource sharing, use of cloud services, Google Drive. Dropbox, Onedrive Basic office software (MS Office) Basics of using GIS programs. Basic operations on maps		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	exercises (tasks)	51.0%	60.0%
	lecture (test, essay)	51.0%	40.0%
Recommended reading	Basic literature	Czarnecki K.: Geodezja Współczesna W Zarysie. Wydawnictwo Gall, Katowice 2010. Jagielski A.: Geodezja I. Wydawnictwo Geodpis, Kraków 2005. Jagielski A.: Geodezja II. Wydawnictwo Geodpis, Kraków 2005. Iwaniak A., Olszewski R., Gotlib D., 2008. GIS. Obszary zastosowań. Wydawnictwo Naukowe PWN, Warszawa. Kidner D., Higgs G., White S. (red.), 2003. Socio-Economic Applications of Geographic Information Science. Tay-lor&Francis Group, London-New York. Craig W.J., Harris T.M., Weiner D. (red.), 2002. Community Participation and Geographic Information Systems. Tay-lor&Francis Group, London-New York. Kunz M. (red.), 2007. Systemy Informacji Geograficznej w praktyce. Studium zastosowań. Wydawnictwo Uniwer-sytetu Mikołaja Kopernika, Toruń. Wang F., 2006. Quantitative Methods and Applications in GIS, Taylor&Francis Group, London-New York. Longley P., Clarke G. (red.), 1995. GIS for business and service planning. John Wiley&Sons, New-York.	
	Supplementary literature	Longley P. A. et al., Gis. Teoria I Praktyka. Wydawnictwo Naukowe PWN, 2008. Przewśłocki S.: Geomatyka. Wydawnictwo Naukowe PWN, 2008. Birkin M., Clarke G., Clarke M., Wilson A., 1996. Intelligent GIS. Location decisions and strategic planning. John Wiley&Sons, New-York.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	What is a cartogram		
	What LiDAR is all about		
Work placement	Not applicable		

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