

Subject card

Subject name and code	Methods of Spatial Analysis B, PG_00201252						
Field of study	Tourism and Hospitality						
Date of commencement of studies	October 2026	Academic year of realisation of subject			2026/2027		
Education level	Master'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			English		
Semester of study	2	ECTS credits			3.0		
Learning profile	academic	Assessment form			credit		
Conducting unit	Institute of Socio-Economic Geography and Spatial Management -> Faculty of Social Sciences -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Ada Wolny-Kucińska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	45.0	0.0	0.0	45
	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	45		2.0		30.0	77
Subject objectives	The goal of the subject is to familiarize students with the basic concepts of geographic information systems (GIS) and the possibilities of using spatial analyzes for various research in the field of tourism. Students will learn how to navigate in the GIS environment, how to acquire spatial data, what tools can be useful in solving various research problems, and how to present the results of their work. The skills acquired during the course will prepare students for independent work with spatial data and will allow them to develop in the direction of their choice.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[THMU2_W04] Knows to an in-depth degree methods and tools (quantitative, qualitative, cartographic) of research used in socio-economic geography, spatial management and tourism	knows quantitative, qualitative and cartographic tools based on specialized GIS software	[SW2] presentation/project/paper/report [SW5] implementation of a problem task
	[THMU2_U02] Is able to properly select sources and information derived from them, with particular emphasis on the sources of spatial, economic and social information, perform their critical evaluation and creative interpretation in order to solve problems of contemporary tourism	is able to properly select sources of spatial information and information from them in order to solve problems in the field of tourism development	[SU2] presentation/project/paper/report [SU5] implementation of a problem task
	[THMU2_U03] Is able to select and apply appropriate methods (including statistical) and research tools, with particular emphasis on GIS software and social research tools	uses specialized GIS software for geostatistical analyses	[SU2] presentation/project/paper/report [SU5] implementation of a problem task
	[THMU2_U04] Is able to adapt the existing tools and research methods to solve complex and unusual problems of the tourism and hospitality economy	uses specialized GIS tools in proposing solutions to the problems of the tourism economy	[SU2] presentation/project/paper/report [SU5] implementation of a problem task
[THMU2_K01] Is ready to critically evaluate knowledge and learning content	is able to compare methods and evaluate them critically	[SK2] presentation/project/paper/report [SK5] implementation of a problem task [SK8] observation of student's independent or team work	
Subject contents	Laboratory classes 1. Multi-criteria analyzes - decision support; 2. Methods of evaluating the tourist potential of an area; 3. Analyzes of the functioning of tourist infrastructure; 4. Analyzes of tourist activity; 5. Methods of automating spatial analysis; 6. Advanced options for exporting work results, creating an atlas; 7. Creating interactive maps, sharing the results of work on the network.		
Prerequisites and co-requisites	Knowledge, skills, and competences at the general level of undergraduate studies.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	research and presentation of results (oral, written, during classes)	51.0%	50.0%
	written assignment: project or presentation	51.0%	50.0%
Recommended reading	Basic literature	A. Literature required to graduate from the subject A.1. Studied during classes Paul A. Longley, Michael F. Goodchild, David J. Maguire, David W. Rhind. 2015. Geographic Information Science and Systems, 4th Edition. Willey A.2. Studied independently Farsari Y., Prastacos P. 2004. GIS Applications in the Planning and Management of Tourism. [w:] A. A. Lew, C. M. Hall, A. M. Williams (ed.), A Companion to Tourism. Blackwell Publishing Ltd, Malden.	

	Supplementary literature	<p>B. Optional</p> <p>Woźniak E., Kulczyk E., Derek M. 2018. From intrinsic to service potential: An approach to assess tourism landscape potential, <i>Landscape and Urban Planning</i>, 170, 209-220</p> <p>Rahayuningsih, T., Muntasib, E. K. S. H., & Prasetyo, L. B. 2016. Nature Based Tourism Resources Assessment Using Geographic Information System (GIS): Case Study in Bogor. <i>Procedia Environmental Sciences</i>, 33, 365375. doi:10.1016/j.proenv.2016.03.087</p> <p>Magige, J.M., Jepkosgei, C., Onywere, S.M. 2020. Use of GIS and Remote Sensing in Tourism. In: Xiang, Z., Fuchs, M., Gretzel, U., Höpken, W. (eds) <i>Handbook of e-Tourism</i>. Springer, Cham. https://doi.org/10.1007/978-3-030-05324-6_118-1</p> <p>Brown, G., & Weber, D. (2013). Using public participation GIS (PPGIS) on the Geoweb to monitor tourism development preferences. <i>Journal of Sustainable Tourism</i>, 21(2), 192211. doi: 10.1080/09669582.2012.693501</p>
Example issues/ example questions/ tasks being completed	eResources addresses	
Work placement	Not applicable	

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