

**Subject card**

<b>Subject name and code</b>	Methods of Spatial Analysis A, PG_00150880						
<b>Field of study</b>	Tourism and Hospitality						
<b>Date of commencement of studies</b>	October 2024	<b>Academic year of realisation of subject</b>			2024/2025		
<b>Education level</b>	postgraduate studies	<b>Subject group</b>			Obligatory subject group in the field of study Humanistic-social subject group		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	1	<b>Language of instruction</b>			English		
<b>Semester of study</b>	1	<b>ECTS credits</b>			6.0		
<b>Learning profile</b>	academic	<b>Assessment form</b>					
<b>Conducting unit</b>							
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr Stabak Roy				
	<b>Teachers</b>		dr Stabak Roy dr Grażyna Chaberek mgr Paweł Druet				
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	30.0	30.0	15.0	0.0	0.0	75
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	75		30.0		50.0	155
<b>Subject objectives</b>	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] 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	[SW4] test/exam - oral or written [SW2] presentation/project/paper/report [SW5] implementation of a problem task
	[THMU2_U04] 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 [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills
	[THMU2_K01] critical evaluation of knowledge and learning content	is characterized by a critical attitude in terms of knowledge and received content	[SK5] implementation of a problem task [SK8] observation of student's independent or team work
	[THMU2_U02] 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 [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills
	[THMU2_U03] select and apply appropriate methods (including statistical) and research tools, with particular emphasis on GIS software and social research tools	uses specialized GIS software	[SU2] presentation/project/paper/report [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills

<p>Subject contents</p>	<p>1. Lectures</p> <p>A1. Introduction to working in a GIS environment;</p> <p>A2. Cartography and data visualization methods;</p> <p>A3. Sources of data used in GIS and methods of obtaining them;</p> <p>A4. Spatial data analysis methods;</p> <p>A5. Methods of evaluating the tourist potential of an area;</p> <p>A6. Supporting investment decisions using spatial analyzes (multi-criteria analyzes);</p> <p>A7. Using GIS to analyze the functioning of tourist infrastructure;</p> <p>A8. Big Data as a potential source in the study of tourist activity, popularity and perception of tourist facilities;</p> <p>A9. Geosurvey and geodiscussion (ppgis) in tourism research;</p> <p>A10. Using GIS to promote tourist products, create interactive maps;</p> <p>A11. Assessment of the impact of tourism on the natural, social and economic environment.</p> <p>1. Classes / laboratory classes</p> <p>B1. Basics of working in a GIS environment;</p> <p>B2. Coordinates, models and data formats;</p> <p>B3. Cartography, data visualization methods;</p> <p>B4. Creating and editing vector data;</p> <p>B5. Collecting data from various sources;</p> <p>B6. Data exploration and preparation for work;</p> <p>B7. Georeference;</p> <p>B8. Vector data analysis - operations in the array of attributes;</p> <p>B9. Basic vector analysis tools;</p> <p>B10. Tools based on spatial relations;</p> <p>B11. Basic raster analysis tools;</p> <p>B12. Raster analysis - map algebra;</p> <p>B13. Raster analysis - movement on the terrain;</p>
<p>Prerequisites and co-requisites</p>	<p>Knowledge, skills, and competences at the general level of undergraduate studies.</p>

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	practical assignments	51.0%	25.0%
	project or presentation	51.0%	50.0%
	written test	51.0%	25.0%
Recommended reading	Basic literature	<p>Paul A. Longley, Michael F. Goodchild, David J. Maguire, David W. Rhind. 2015. Geographic Information Science and Systems, 4th Edition. Wiley</p> <p><b>A.2. Studied independently</b></p> <p>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.</p>	
	Supplementary literature	<p><b>Optional</b></p> <p>Woźniak E., Kulczyk E., Derek M. 2018. From intrinsic to service potential: An approach to assess tourism landscape potential, Landscape and Urban Planning, 170, 209-220</p> <p>Rahayuningsih, T., Muntasib, E. K. S. H., &amp; Prasetyo, L. B. 2016. Nature Based Tourism Resources Assessment Using Geographic Information System (GIS): Case Study in Bogor. Procedia Environmental Sciences, 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) Handbook of e-Tourism. Springer, Cham. https://doi.org/10.1007/978-3-030-05324-6_118-1</p> <p>Brown, G., &amp; Weber, D. (2013). Using public participation GIS (PPGIS) on the Geoweb to monitor tourism development preferences. Journal of Sustainable Tourism, 21(2), 192211. doi: 10.1080/09669582.2012.693501</p>	
	eResources addresses	Adresy na platformie eNauzanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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