



Subject card

Subject name and code	SPATIAL STATISTICS, PG_00049946						
Field of study	Economic Analytics						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2023/2024		
Education level	second-cycle studies		Subject group		Optional subject group 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	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Katedra Statystyki i Ekonometrii -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Marta Kuc-Czarnecka				
	Teachers		dr Marta Kuc-Czarnecka				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	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		4.0		26.0	75
Subject objectives	To familiarize students with the possibilities of using GIS tools in the analysis of spatial phenomena. To familiarize students with the specificity of the analytical process using vector and raster data models.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_W10] has an in-depth knowledge of quantitative methods to describe and analyse socio-economic processes using information technology		can identify basic GIS tools and possibilities of their implementation in business spatial analytics.		[SW3] Assessment of knowledge contained in written work and projects		
	[K7_U08] has the ability to implement analytical methods to independently propose solutions to economic problems and verify their effectiveness		knows how to use GIS tools in practice to support business decisions.		[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools		
Subject contents	Basic GIS Concepts GIS applications in scientific research Coordinate systems and map projections Acquiring spatial data Methods of symbolization and visualization of research results Vector Data Model Raster Data Model Digital Terrain Model Spatial neighborhood Spatial modeling and interpolation Network analysis						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Group project		60.0%		100.0%		
Recommended reading	Basic literature		<ul style="list-style-type: none">• Urbański, J. (2020) STO stron GIS, Wydawnictwo Uniwersytetu Gdańskiego• Iwańczak, B. (2012) QGIS 3.14 Tworzenie i analiza map, Helion• Longley P.A. (2008) GIS. Teoria i praktyka, PWN				

	Supplementary literature	Malczewski, J., Jaroszewicz J. (2018). Podstawy analiz wielokryterialnych w Systemach Informacji Geograficznej, Wydawnictwo Politechniki Warszawskiej
	eResources addresses	Adresy na platformie eNauczenie: Statystyka przestrzenna 2023/2024 - Moodle ID: 27956 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=27956
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	