

Subject card

Subject name and code	Quantitative Research, PG_00132327						
Field of study	International Business						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
Education level	Master's studies		Subject group		Obligatory subject group 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		2.0		
Learning profile	academic		Assessment form				
Conducting unit	Department of Transport Market -> Faculty of Economics -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Aleksander Jagiełło				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	15.0	0.0	0.0	0.0	15
	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	15		15.0		20.0	50
Subject objectives	The goal of the subject is to acquaint the students with the contemporary, widely-used statistical methods so that they are able to understand and correctly interpret current literature and also to make sure that they are able to use the methods necessary to perform research for their thesis.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[IBMU2_U02] can interpret statistical data and economic indicators, and select and use quantitative and qualitative methods and tools developed by economic sciences, including advanced information and communication techniques	Student is able to interpret statistical data and economic indicators as well as select and use quantitative methods and tools developed by economic sciences, including advanced information techniques used in international business.	[SU1] oral statement/conversation/discussion [SU5] implementation of a problem task
	[IBMU2_K02] is ready to critically assess the level of acquired knowledge, skills and professional competence in the area of international business	Student. is ready to critically assess the level of acquired knowledge, skills and professional competencies in the field of statistical and economic techniques used to analyse and describe the phenomena of international business.	[SK1] oral statement/conversation/discussion [SK5] implementation of a problem task
	[IBMU2_W02] knows and understands methods and tools for describing economic phenomena, including data acquisition techniques, which make it possible to describe and analyse business entities functioning on the international market as well as processes and phenomena occurring in them and between them	Student knows and understands statistical and economic techniques in the field of the macro- and microeconomic description of economic phenomena, including data acquisition techniques that enable the description and analysis of economic entities operating on the international market.	[SW1] oral statement/conversation/discussion [SW5] implementation of a problem task
	[IBMU2_U04] can formulate and test hypotheses related to simple research problems in the field of international business using appropriately selected methods and tools	Student is able to formulate and test hypotheses regarding simple research problems in the field of international business using appropriately selected statistical methods and quantitative tools.	[SU1] oral statement/conversation/discussion [SU5] implementation of a problem task
	[IBMU2_W03] knows terminology in the field of international business, international economics and financial relations and complementary disciplines	Student knows the terminology in the field of statistical and economic techniques used to analyse and describe phenomena in international business.	[SW1] oral statement/conversation/discussion [SW5] implementation of a problem task
Subject contents	1) Introduction to distributions and hypothesis verification 2) Comparisons of means 3) Analysis of variance 4) Factor analysis 5) Regression (linear, logistic, survival) Any doubts arising during the implementation of individual tasks will be discussed and clarified during consultations. These meetings will serve as an opportunity to receive methodological guidance and correct errors.		
Prerequisites and co-requisites	A basic knowledge of probability theory and mathematical analysis and algebra is advised to handle the material covered in this class.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	out tasks on a class-to-class basis	51.0%	100.0%
Recommended reading	Basic literature	1. R.B. Kline, Principles and practice of structural equation modeling, The Guilford Press 2016 2. J.L. Devore, K.N. Berk, Modern Mathematical Statistics with Applications, Springer 2018 3. C. Hirotsu, Advanced Analysis of Variance, Wiley & Sons 2017	
	Supplementary literature	1. Suchanek, M., & Szmelter-Jarosz, A. (2019). Environmental aspects of generation Ys sustainable mobility. Sustainability, 11(11), 3204. 2. Adamska-Mieruszevska, J., Mrzyglód, U., Suchanek, M., & Fornalska-Skurczyńska, A. (2021). Keep it simple. The impact of language on crowdfunding success. Economics & Sociology, 14(1), 130-144.	
	eResources addresses	Adresy na platformie eNauczanie:	

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable

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