



Subject card

Subject name and code	ESSENTIALS OF STATISTICS, PG_00058545							
Field of study	Economic Analytics							
Date of commencement of studies	October 2022	Academic year of realisation of subject			2022/2023			
Education level	first-cycle 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	Part-time studies	Mode of delivery			at the university			
Year of study	1	Language of instruction			Polish			
Semester of study	1	ECTS credits			5.0			
Learning profile	general academic profile	Assessment form			assessment			
Conducting unit	Faculty of Management and Economics							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Dagmara Nikulin					
	Teachers		dr Dagmara Nikulin					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM	
	Number of study hours	16.0	0.0	16.0	0.0	0.0	32	
	E-learning hours included: 0.0							
Podstawy statystyki Nikulin (niestacjonarne) - Moodle ID: 25207 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25207								
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	32		10.0		83.0	125	
Subject objectives	Selects an appropriate methodology for testing regularities occurring in mass processes, using statistical software to process data and interpret obtained results.							
Learning outcomes	Course outcome		Subject outcome			Method of verification		
	[K6_W02] demonstrates comprehensive preparation in the field of methods, techniques for formulating and solving problems		formulates the problem appropriately, obtains the data, selects methods necessary for solving the given problem, and interprets the results correctly.			[SW3] Assessment of knowledge contained in written work and projects		
[K6_U07] uses information technologies to improve data analysis and decision-making processes		uses statistical software that facilitates the analysis of mass data and supports decision-making processes			[SU1] Assessment of task fulfillment [SU4] Assessment of ability to use methods and tools			
Subject contents	Stages of statistical investigation. Sampling methods. Statistical variables and measuring scales. Random variables and their theoretical distributions. Non-parametric description of the distribution of the. Classical and positional measures of central tendency. Classical and positional measures of differentiation. Classical and positional measures of asymmetry and kurtosis. Correlation analysis. Introduction to regression analysis. Analysis of the association between categorical variables. Dynamic analysis index method. Dynamic analysis trend method Grouping and presentation of statistical material. The most common mistakes in statistical research.							
Prerequisites and co-requisites								
Assessment methods and criteria	Subject passing criteria		Passing threshold			Percentage of the final grade		
	Tutorial exam		60.0%			50.0%		
	Written exam		60.0%			50.0%		

Recommended reading	Basic literature	Barrow, M. (2012), Statistics for Economics, Accounting and Business Studies, Harlow: Prentice Hall. Newbold, P., Carlson, W.L., Thorne, B. (2019). Statistics for Business and Economics, New York: Pearson Education.
	Supplementary literature	Agresti, F. (2012). Statistics. The Art and Science of learning from data, Boston: Pearson Education. Aczel, A. (2008). Complete Business Statistics, New Jersey: Wohl Publishing.
	eResources addresses	
Example issues/ example questions/ tasks being completed	<p>Explain the difference between random and convenient selection. Describe briefly the measurement theory. Make a complex structure analysis of the households income in the Pomeranian Voivodeship in 2019. Check if there is a correlation between gender and consumer behaviour. On the basis of the data from the "Exam" file, calculate and interpret the dynamic measures of emigration in Poland. Was the pace of change higher in 1990-2000 or 2000-2010? Justify your answer. Based on the data from the "Exam" file, estimate the regression function for TFR using unemployment as a regressor. Write down the estimated model in the form of an equation. Interpret the structural parameters of the model and the goodness-of-fit measures. Does the estimated model fit well with the real data? Justify your answer.</p>	
Work placement	Not applicable	