GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Essentials of Statistics, PG_00037123
Field of study	Economic Analytics

Date of commencement of studies	October 2021	Academic year of realisation of subject	2021/2022
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	Full-time studies	Mode of delivery	blended-learning
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	5.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Department of Economic Sciences -> Faculty of Management and Economics
Name and surname of lecturer (lecturers)	Subject supervisor — dr Dagmara Nikulin
	Teachers — dr Dagmara Nikulin; dr inż. Krzysztof Świetlik

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	30.0	0.0	0.0	60
	E-learning hours included: 30.0						
	Adresy na platformie eNauczanie: Podstawy statystyki - Moodle ID: 17704 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17704						

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	60	12.0	53.0	125

Subject objectives	1. Introduction to basic concepts of descriptive statistics. 2. Learning practical skills in statistical methods. 3. Ability to analyze statistical data and formulating the correct conclusions.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U07] Can use quantitative methods to analyse and solve economic problems using information technologies.	The student can choose the method of describing the type of data, using both accounting calculations and statistical software. He also interprets the obtained results.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
	[K6_U13] Can improve through systematic acquisition of knowledge and skills.	The student improve their knowledge and skills by statistical analysis of economic phenomena.	[SU1] Assessment of task fulfilment
	[K6_W09] Knows the ways and tools of acquiring and collecting data, including IT data, used in the analysis and explanation of socio-economic phenomena and processes.	The student has a basic knowledge of the statistical behavior of economic phenomena, knows the methods and tools, including data collection techniques appropriate to create their statistical description.	[SW1] Assessment of factual knowledge

Subject contents	Non-parametric description of the distribution of the sample: the ranks of distribution, histogram, empirical distribution function.
	Parametric description of the distribution of the sample: measures of location, variability, asymmetry and concentration, Atkinson etc., two or more dimensional nonparametric description of the distribution of the sample: frequency distribution (two-dimensional), histograms, scatter plots.
	Parametric description of the two-dimensional population: moments, covariance, correlation coefficient, partial and multiple correlation coefficient, Spearman's rank correlation coefficient, multiple regression functions, the method of least squares, introduction to time series analysis, classical decomposition of time series, Introduction to the theory of indices: dynamics' indices, price indices, equivalence scales.

Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written exam	60.0%	50.0%
	Final test	60.0%	50.0%

Recommended reading	Basic literature	Kot S.M., Sokołowski A., Jakubowski J. „Statystyka", Difin, Warszawa, 2007.
		Bartos J., Dyczka W., Krysicki W. "Rachunek prawdopodobieństwa i statystyka matematyczna w zadaniach część 1 i 2", PWN, Warszawa 2004.
		Luszniewicz A., Słaby T., "Statystyka z pakietem komputerowym STATISTICA PL", Warszawa 2008.
		Sobczak M. „Statystyka. Podstawy teoretyczne, przykłady, zadania." Wyd. UMCS, Lublin, 1998.
		Elektroniczny Podręcznik Statystyki PL, Kraków, StatSoft (2006) https://www.statsoft.pl/textbook/stathome.html
	Supplementary literature	Jóźwiak J., Podgórski J., "Statystyka od podstaw", PWE, Warszawa 2009.
		Aczel A.D., Sounderpandian J., "Statystyka w Zarządzaniu", PWN, Warszawa 2018.
		Pułaska-Turyna B., "Statystyka dla ekonomistów", Difin, Warszawa 2005.
	eResources addresses	Podstawy statystyki - Moodle ID: 17704 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=17704

Example issues/ example questions/ tasks being completed	

Work placement	Not applicable

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