



Subject card

Subject name and code	Essentials of Statistics, PG_00037171						
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	Part-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 Mariusz Kaszubowski					
	Teachers	dr Mariusz Kaszubowski dr inż. Krzysztof Świetlik					
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: 16.0 Adresy na platformie eNauczanie: Podstawy Statystyki – AGI – NST (2021_22) - Moodle ID: 19268 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=19268						
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	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_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		
	[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		

Subject contents	<p>Non-parametric description of the distribution of the sample: the ranks of distribution, histogram, empirical distribution function.</p> <p>Parametric description of the distribution of the sample: measures of location, variability, asymmetry and concentration, measurement of economic inequality: Lorenz curve, Schutz-Pietra measures of inequality, Gini coefficient, Atkinson etc., two or more dimensional nonparametric description of the distribution of the sample: frequency distribution (two-dimensional), histograms, scatter plots.</p> <p>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.</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1" data-bbox="448 490 1477 591"> <thead> <tr> <th data-bbox="448 490 794 521">Subject passing criteria</th> <th data-bbox="794 490 1141 521">Passing threshold</th> <th data-bbox="1141 490 1477 521">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="448 521 794 553">Written exam</td> <td data-bbox="794 521 1141 553">60.0%</td> <td data-bbox="1141 521 1477 553">50.0%</td> </tr> <tr> <td data-bbox="448 553 794 591">Final test</td> <td data-bbox="794 553 1141 591">60.0%</td> <td data-bbox="1141 553 1477 591">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Written exam	60.0%	50.0%	Final test	60.0%	50.0%
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Example issues/ example questions/ tasks being completed												
Work placement	Not applicable											

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