



Subject card

Subject name and code	NON-CLASSICAL METHODS OF STATISTICS, PG_00060710						
Field of study	Economic Analytics						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2024/2025		
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			exam		
Conducting unit	Katedra Statystyki i Ekonometrii -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Karol Flisikowski					
	Teachers	dr inż. Karol Flisikowski					
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	3.0		27.0		75
Subject objectives	Creates non-parametric estimation models and performs non-parametric verification of statistical hypotheses, taking into account the economic context, efficiently using the R package						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_U03] formulates research problems and selects appropriate analytical methods for their effective solution, using advanced IT tools, and evaluates the results critically	formulates research problems, solves them and critically evaluates them using non-classical, non-parametric methods of statistical inference using the R package			[SU3] Assessment of ability to use knowledge gained from the subject		
	[K7_W05] takes into account in the analyzes in an in-depth way both the economic, legal and ethical context, being aware of the responsibility for the consequences of its decisions	implements responsibly innovative methods of non-parametric estimation replacing the traditional approach in many practical economic applications			[SW1] Assessment of factual knowledge		
Subject contents	Non-parametric estimation of distribution parameters Estimation of the distribution function and the density function Regression function estimation Non-parametric verification of statistical hypotheses Multidimensional normality tests Compatibility tests for composite samples Tests for samples with censored data Bootstrap methods						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Final Exam	60.0%			50.0%		
	Projects and assignments	60.0%			50.0%		
Recommended reading	Basic literature	Domański Cz., K. Pruska (2000) Nieklasyczne metody statystyczne, PWE, Warszawa Silverman B.W. "Density estimation for statistics and data analysis", New York, Chapman and Hall, 1986 Nonparametric Statistical Methods, Third Edition, Myles Hollander, Douglas A. Wolfe, Eric Chicken, 2015					

	Supplementary literature	Nonparametric Statistical Methods Using R, John Kloeke, Joseph W. McKean, Chapman and Hall/CRC, 2014
	eResources addresses	Adresy na platformie eNauczenie: Nieklasyczne metody statystyki - 2024/2025 - Moodle ID: 39566 https://enauczenie.pg.edu.pl/moodle/course/view.php?id=39566
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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