GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	INSURANCE STATISTICS, PG_00060738						
Field of study	Economic Analytics						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2023/2024		
Education level	second-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	2		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Katedra Statystyki i Ekonometrii -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Mariusz Kaszubowski				
	Teachers		dr Mariusz Kaszubowski				

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	8.0	0.0	16.0	0.0	0.0	24
	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	24	5.0	71.0	100

Subject objectives	Explains the functioning of the insurance market by analyzing various insurance products, presenting and convincingly interpreting the results obtained

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_U04] prepares and presents convincing, professional presentations of analysis results, with their in-depth interpretation	analyzes insurance products based on historical and demographic data and presents the results in a convincing way along with professional interpretation	[SU3] Assessment of ability to use knowledge gained from the subject
	[K7_W06] identifies reliable sources of information relevant to the analyzed issues	identifies reliable sources of information needed to analyze the insurance market by analyzing various risks using statistical tools and methods	[SW1] Assessment of factual knowledge

Subject contents	Elements of the calculus of probability especially used in insurance (conditional probability, total probability, Bayesian formula) Probability distributions used in insurance risk assessment Testing the fit of theoretical insurance risk distributions based on historical data Calculation of net premiums in various insurance variants Gross premium calculation Life expectancy tables, their construction and application Commutation functions and their application in the calculation of insurance premiums Analysis of life insurance markets in Poland and in the world

Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	60.0%	100.0%

Recommended reading	Basic literature	Ubezpieczenia na życie. Teoria i praktyka, Eugeniusz Stroiński, Wydawnictwo Poltext z serii Ubezpieczenia, Warszawa 2004 Nowe zasady ubezpieczeń majątkowych i osobowych. Poradnik, T. Jakubowski, Warszawa 1991
	Supplementary literature	Podstawy ubezpieczeń, tom II produkty, pod redakcją Jana Monkiewicza, Wydawnictwo Poltext, seria: Ubezpieczenia, Warszawa 2005 (wydanie i - 2001)

	eResources addresses	Adresy na platformie eNauczanie:
		Statystyka ubezpieczeniowa Analityka gospodarcza (WZiE), II stopnia, niestacjonarne, 2023/2024 - zimowy (obecnie sem. 2) - Moodle ID: 37965 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37965
Example issues/ example questions/ tasks being completed	Problems in the theory of probability (using e.g. the Bayes formula) Calculation of the net premium in various variants Calculation of the net premium for various insurances Application of commutation functions Theoretical questions about the functioning of the insurance market in Poland and in the world	
Work placement	Not applicable	