



## Subject card

Subject name and code	INSURANCE STATISTICS, PG_00060796						
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	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			English		
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	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	5.0		50.0	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_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		
	[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		
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 Stroński, 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: Insurance Statistics Analityka gospodarcza (studia w jęz. angielskim) (WZiE), II stopnia, stacjonarne, 2023/2024 - zimowy (obecnie sem. 2) - Moodle ID: 37962 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37962">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37962</a>
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	