



Subject card

Subject name and code	Finance Management, PG_00023764						
Field of study	Mathematics						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2024/2025		
Education level	first-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	4		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Division of Differential Equations and Applications of Mathematics -> Institute of Applied Mathematics -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Krzysztof Świetlik				
	Teachers		dr inż. Krzysztof Świetlik				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	0.0	0.0	45
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie:						
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		2.0		3.0	50
Subject objectives	Acquiring knowledge in the field of managing assets and liabilities of the enterprise. Acquiring skills in designing the optimal capital structure, calculating the cost of capital, defining investment strategies, profit dynamics and growth of the company's balance sheet value.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_W03		The student uses functions to demonstrate cause and effect relationships describing the company's liabilities and assets		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	K6_U10		Student uses MS Excel formulas to calculate WACC value.		[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information		
	K6_U05		The student determines the optimal capital structure depending on various criteria		[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information		

Subject contents	1. The essence and subject of financial management. Enterprise assets.		
	2. Enterprise revenues, costs and financial result.		
	3. Sources of financing of enterprise operations. Cost of capital and its structure.		
	4. Problems of managing working capital (liquidity shaping) and fixed capital.		
	5. Shaping the optimal capital structure.		
	6. Cash management in the enterprise. Management of receivables and liabilities.		
	7. Inventory management.		
	8. Enterprise investment decisions.		
	9. Analysis of cash flows and investment profitability in the context of the cost of capital and economic uncertainty.		
Prerequisites and co-requisites	Basics of Economics		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Lecture test	60.0%	50.0%
	Seminar test	60.0%	50.0%
Recommended reading	Basic literature	1. J. Jaworski, Teoria i praktyka zarządzania finansami przedsiębiorstw, Wyd. CeDeWu, Warszawa 2021	
		2. J. Czekaj, Z. Dresler, Zarządzanie finansami przedsiębiorstw, PWN, Warszawa 2008	
		3. D. G. Luenberger, Teoria inwestycji finansowych, PWN, Warszawa 2003	
	Supplementary literature	1. W . Dębski, Rynek finansowy i jego mechanizmy. Podstawy teorii i praktyki., PWN, Warszawa 2014	
		2. W. Bień, A. Bień, Kalkulacja ceny pieniądza w lokatach, pożyczkach i kredytach, Difin, Warszawa 2009	
		3. B. Pomykalska, P. Pomykalski, Analiza finansowa przedsiębiorstwa, PWN, Warszawa 2007	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Calculate and interpret WACC		
	Calculate and interpret selected profitability, liquidity and debt ratios.		
	Calculate and interpret NPV and IRR.		
	Calculate and interpret the DOL, DFL and DTL levers and determine their effect.		
Work placement	Not applicable		

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