

Subject card

Subject name and code	Innovative and Financial Derivatives, PG_00177662						
Field of study	Finance and Accounting						
Date of commencement of studies	October 2026	Academic year of realisation of subject				2026/2027	
Education level	Master's studies	Subject group				Obligatory subject group in the field of study 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	1	Language of instruction				Polish	
Semester of study	2	ECTS credits				6.0	
Learning profile	academic	Assessment form				credit	
Conducting unit	Department of Corporate Finance -> Faculty of Management -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Ewa Majerowska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	45.0	0.0	0.0	60
	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	60	4.0	86.0	150		
Subject objectives	The objective of this course is to discuss equity/corporate value and fixed income securities and derivatives from a practical perspective: construction, valuation, and application in the area of financial markets.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[FiRMU2_W02] The student possesses a comprehensive understanding of the complexities and functions of both domestic and international financial markets, as well as financial instruments and institutions.		The student knows advanced derivatives, knows the complexity of investing in them. Understands the functioning of the international financial instruments market.			[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion [SW2] presentation/project/paper/ report	
	[FiRMU2_W05] The student possesses a comprehensive understanding of advanced and innovative methods, tools, and techniques for obtaining, utilizing, and analyzing data needed to assess the financial situation of various entities in management, quality sciences, economics, and finance.		The student knows the methods of obtaining data on financial instruments from various databases. Understands the need to assess and verify the credibility of data in light of their diversity.			[SW4] test/exam - oral or written [SW1] oral statement/ conversation/discussion	
	[FiRMU2_U04] From a finance and accounting perspective, students are able to select and effectively use, adapt, or develop new methods and tools from the fields of management, quality sciences, and economics. They can analyze and forecast economic processes as well as evaluate economic phenomena.		The student is able to value and assess the risk of investing in fixed income instruments and derivatives. He/she is able to analyse financial instruments and apply methods of their valuation.			[SU1] oral statement/conversation/ discussion [SU4] test/exam - oral or written	

Subject contents	<ol style="list-style-type: none"> 1. Bond Pricing. Yields and Bootstrapping. 2. Duration and Convexity. 3. Liability Management. Fixed-Income Hedging. 4. Yield Curve Theories. 5. Derivatives Basics. Futures, Options, and Swaps. 6. Payoffs and Strategies. Put-Call Parity. 7. Option Pricing. Binomial Trees. Risk-Neutral Valuation and the Black-Scholes Model. 8. Corporate Bonds and Credit Risk. Credit Swaps. 											
Prerequisites and co-requisites	Basic knowledge of the elements of financial mathematics and the time value of money.											
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Subject passing criteria</th> <th style="width: 25%;">Passing threshold</th> <th style="width: 25%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>Project</td> <td>51.0%</td> <td>50.0%</td> </tr> <tr> <td>Written test</td> <td>51.0%</td> <td>50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Project	51.0%	50.0%	Written test	51.0%	50.0%
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Recommended reading	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;">Basic literature</td> <td colspan="2" style="vertical-align: top;"> <ol style="list-style-type: none"> 1. Fabozzi, F.J., Bond Markets, Analysis, and Strategies (9th Edition), Prentice Hall 2015 2. Jajuga K., Jajuga T.: Inwestycje: instrumenty finansowe, aktywa niefinansowe, ryzyko finansowe, inżynieria finansowa. PWN, Warszawa 2006 3. Dębski W.: Rynek finansowy i jego mechanizmy. PWN, Warszawa 2010 4. Hull J.: Kontrakty terminowe i opcje. WIG-Press; Warszawa 1997 </td> </tr> <tr> <td style="vertical-align: top;">Supplementary literature</td> <td colspan="2" style="vertical-align: top;"> <ol style="list-style-type: none"> 1. Fabozzi, F.J., The Handbook of fixed income securities, Prentice Hall, 2005 2. Sokołowska E., Alternative Investments in Wealth Management, Springer 2015 3. Zalewski G.: Kontrakty terminowe w praktyce, WIG PRESS, Warszawa 2006 </td> </tr> <tr> <td style="vertical-align: top;">eResources addresses</td> <td colspan="2"></td> </tr> </table>			Basic literature	<ol style="list-style-type: none"> 1. Fabozzi, F.J., Bond Markets, Analysis, and Strategies (9th Edition), Prentice Hall 2015 2. Jajuga K., Jajuga T.: Inwestycje: instrumenty finansowe, aktywa niefinansowe, ryzyko finansowe, inżynieria finansowa. PWN, Warszawa 2006 3. Dębski W.: Rynek finansowy i jego mechanizmy. PWN, Warszawa 2010 4. Hull J.: Kontrakty terminowe i opcje. WIG-Press; Warszawa 1997 		Supplementary literature	<ol style="list-style-type: none"> 1. Fabozzi, F.J., The Handbook of fixed income securities, Prentice Hall, 2005 2. Sokołowska E., Alternative Investments in Wealth Management, Springer 2015 3. Zalewski G.: Kontrakty terminowe w praktyce, WIG PRESS, Warszawa 2006 		eResources addresses		
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Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> 1. Explain the concept of swap and present the types of swaps. 2. Explain the differences between forward and futures contracts. 											
Work placement	Not applicable											

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