University of Gdańsk

Subject card

Subject name and code	Derivatives and Alternative Investments, PG_00178646					
Field of study	Finance and Accounting					
Date of commencement of studies	October 2025		Academic year of realisation of subject		2027/2028	
Education level	Bachelor’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	3		Language of instruction		English	
Semester of study	5		ECTS credits		5.0	
Learning profile	academic		Assessment form		credit	
Conducting unit	Department of Investment and Real Estate -> Faculty of Management -> Rector					
Name and surname of lecturer (lecturers)	Subject supervisor	dr Michał Komorowski				
	Teachers					

Lesson types						
Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	30.0	15.0	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	61.0	125

Subject objectives	The aim of the course is to familiarize students with the theoretical and practical issues of Derivatives and Alternative Investments.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[FiRL3_U02] The student can identify, analyze or design adequate solutions to problems in finance and accounting.	The student is able to design and propose appropriate, including innovative, investment and risk management solutions using derivative instruments and alternative investment strategies. The student can address complex financial problems by selecting and applying tailored instruments that enhance portfolio performance, mitigate risk, or exploit market inefficiencies.	[SU4] test/exam - oral or written [SU5] implementation of a problem task
	[FiRL3_W02] The student has advanced knowledge and understanding of the functioning of the domestic and international financial market and financial instruments and institutions.	The student demonstrates advanced knowledge of the structure and operation of domestic and international financial markets, with particular emphasis on derivative instruments and alternative investment vehicles. The student understands the roles of financial institutions and market participants in the creation, valuation, and regulation of these instruments.	[SW4] test/exam - oral or written
	[FiRL3_U04] The student is able—from the perspective of finance and accounting—to correctly select and properly apply methods and tools from the fields of management and quality sciences, economics, and finance to analyse and forecast economic processes and evaluate economic phenomena.	The student is able to select and apply appropriate analytical tools and forecasting methods - derived from finance, economics, and management sciences—to evaluate the behavior of derivatives and alternative investments. This includes modeling financial risk, assessing performance, and projecting the impact of market developments on investment strategies.	[SU4] test/exam - oral or written [SU5] implementation of a problem task
	[FiRL3_U03] The student can obtain data and verify its accuracy from appropriately selected sources and use these data to analyse and evaluate economic processes and phenomena in management and quality sciences, economics and finance.	The student is able to identify and critically assess financial and non-financial data from reliable sources to evaluate the use and performance of derivative instruments and alternative investments. The student can interpret and present this information to analyze market behavior, assess portfolio performance, and support decision-making in financial and managerial contexts.	[SU4] test/exam - oral or written [SU5] implementation of a problem task

Subject contents	1. Introduction to estimation of investing conditions. Adjusting investment instruments to investors expectations 2. Rules of entering into transaction 3. Derivative Instrument and Derivative Market Features 4. Forward Commitment and Contingent Claim Features and Instruments 5. Derivative Benefits, Risks, and Issuer and Investor Uses 6. Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives 7. Pricing and valuation of forward contracts and for an underlying with varying maturities 8. Pricing and Valuation of Futures Contracts 9. Pricing and Valuation of Interest Rates and Other Swaps 10. Pricing and Valuation of Options 11. Yield and Yield Spread Measures for Fixed-Rate Bonds 12. Yield and Yield Spread Measures for Floating-Rate Instruments 13. The Term Structure of Interest Rates: Spot, Par, and Forward Curves 14. Curve-Based and Empirical Fixed Income Risk Measures 15. Option Replication Using PutCall Parity 16. Valuing a derivative using a one-period binomial model 17. Types of alternative investments. 18. Alternative Investment Features, Methods, and Structures 19. Alternative Investment Performance and Returns 20. Hedge Funds 21. Introduction to Digital Assets 22. Usage of alternative investments and derivatives
Prerequisites and co-requisites	Students should know the basic principles of investment management, including methods of assessing the profitability of investments divided into static and dynamic, understand the principle of the variability of the value of money over time. They should have elementary knowledge of business fundamentals and practical skills in using IT tools in management.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Tutorial & laboratory participation	90.0%	10.0%
Exam	51.0%	40.0%
Tutorial final test	51.0%	25.0%
Tutorial mid term test	51.0%	25.0%

Recommended reading	Basic literature	1. Derivatives and alternative investments, CFA Program Curriculum, Level I, Volume 6, 2019 2. B. Chambers D.R., Black K.H., Lacey N.J.: Alternative investments: a primer for investment professionals, CAIA Association, 2018. Hull J.C.: Fundamentals of Futures and Options Markets, Pearson, 2013.
	Supplementary literature	1. Fabozzi, F.J. (2006). Handbook of Alternative Investments. Wyd. Wiley, Hoboken. 2. Swedroe, L.E. , Kizer, J. (2008).The only guide to alternative investments you'll ever need . Wyd. Bloomberg Press , 3. New York.
	eResources addresses	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	

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