Course Title	**Financial Derivatives**				
Course Code	**ACF 320**				
Course Type	**Elective**				
Level	Undergraduate				
Year / Semester	Year 3/4				
Teacher's Name	POLINA ELLINA/PHANOS IACOVOU				
ECTS	6	**Lectures / week**	3	**Laboratories / week**	
Course Purpose and Objectives	This course focuses extensively on the pricing and analytical aspects of financial derivatives and their practical applications. Skills are developed in pricing analysis, use of derivatives pricing models, derivatives trading, and hedging strategies. This course aims to cover the theoretical background for financial derivatives providing opportunities for hands-on exercises on financial derivatives through class assignments.				
Learning Outcomes	Upon completion of this course, students will be able to: • Understand the main principles of financial derivatives (forward/futures and options). • Use derivatives for risk management purposes. • Explain the mechanics of the Futures markets. • Determine the price of forward and futures contracts. • Explain the mechanics of the Options Markets. • Analyze the various trading strategies involving options. • Determine the price of options using binomial trees and the Black-Scholes-Merton Model. • Understand the role of Greek letters in option risk management process.				
Prerequisites	ACF 120; MAT 101; ACF 210		**Required**		
Course Content	• Introduction to financial derivatives • Future Markets and their characteristics • Hedging Strategies using Futures Contracts • Valuing forward and futures prices • Types of Options and Their Characteristics				

	• Properties of Stock Options
	• Option Trading Strategies
	• Pricing and Valuation of Options
	  • Binomial Trees
	  • The Black-Scholes-Merton Model
	• The Greek Letters
	• Exotic options
	• Volatility smiles and other methods of estimating volatilities

Teaching Methodology	• Lectures coupled with case study teaching and discussion • Reading and resolving problems • Working on problem-solving and case studies • Solving unstructured questions and case studies • Brief oral presentation before starting a new chapter and reply to queries from students • Homework for revision purposes • Interaction and collaborative learning
Bibliography	• John C. Hull, 2018, Options, Futures, and Other Derivatives, 10th Edition • CFA Program Curriculum 2020 Level I, Wiley: ○ Derivatives and Alternative Investments (Reading 56, Reading 57)
Assessment	Midterm Exam: 35% Exercises and Assignments: 15% Final Exam: 50%
Language	English