



## Course Syllabus

<b>Course Code</b>	<b>Course Title</b>	<b>ECTS Credits</b>
FIN-450	Options and Futures Markets	6
<b>Prerequisites</b>	<b>Department</b>	<b>Semester</b>
FIN-266, ECON-390	Accounting, Economics and Finance	Fall/Spring
<b>Type of Course</b>	<b>Field</b>	<b>Language of Instruction</b>
Elective	Finance	English
<b>Level of Course</b>	<b>Lecturer(s)</b>	<b>Year of Study</b>
1 <sup>st</sup> Cycle	Dr. Ifigenia Georgiou	3 <sup>rd</sup> or 4 <sup>th</sup>
<b>Mode of Delivery</b>	<b>Work Placement</b>	<b>Corequisites</b>
Face to Face	N/A	None

### Course Objectives:

The main objectives of the course are to:

- Provide an overview of the key derivative markets principles.
- Understand how the principles of valuation, pricing, hedging SWAPS are used in practice in Finance.
- Show how financial markets use financial instruments (forwards, futures and options) in investments and corporate financial management.
- Develop the ability to use the above underlying concepts in financial markets.
- Use theory to address practical problem solving.

### Learning Outcomes:

After completion of the course students are expected to be able to:

1. Explain the importance and role of options and futures in finance.
2. Examine how the use of derivatives is applied in investment and corporate financial management.
3. Calculate and apply derivative techniques, to reduce corporate risk exposure.
4. Explain the use of Options Pricing Theory in corporate finance.
5. Estimate the valuation of European and American options and their underlying features.

**Course Content:**

1. Forwards and Futures.
2. Institutional Structure.
3. Pricing, Hedging, SWAPS, Commodity Futures.
4. Introduction to Options.
5. Definition and Sample hedging Strategies with Options.
6. Options Pricing Theory.
7. Distribution-Free Properties of Options.
8. Binomial Options Pricing.
9. Valuation of European and American Options.
10. The Black-Scholes Model, Characteristics of Black-Scholes Prices.

**Learning Activities and Teaching Methods:**

Lectures, Presentations, In-Class Exercises, and Discussion.

**Assessment Methods:**

Class Participation, Mid-Term, Final Examination

**Required Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
Options, Futures and Other Derivatives	Hull, John	Pearson	2021	9780136939917

**Recommended Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
Investments, 13th edition	Bodie, Z., Kane, A. and Marcus, A.	McGraw-Hill	2024	9781264412662