# Corporate Finance (options, futures and derivatives)

## Prof. Lorenzo Caprio

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The Corporate Finance (options, futures and derivatives) course covers the use in financial management of options, forward contracts, futures contracts, and swaps.

By the end of this course students will be able to:

* identify and interpret the behavioral implications of employing derivatives in the finance operations of the firm (knowledge);
* identify and interpret the theoretical and conceptual foundation for planning the use of derivatives in the hedging policy of the firm (knowledge);
* understand the ethical issues involved in the marketing of derivatives, with specific reference to the relationship between financial intermediaries and their customers (knowledge);
* analyze, interpret, and evaluate financial information concerning derivatives instruments and translate them into management decisions about their use (intellectual skill);
* apply the knowledge acquired in order to price derivatives and to forecast the risk consequences of management decisions taken (practical skill);
* critically recognize, assess, and review how choices in managing derivatives impact decision making in complex organizations (transferable skill).

***COURSE CONTENT***

Module 1

This module is devoted to understanding the mechanics of futures markets, the planning of hedging strategies using futures, the relevance of the structure of interest rates for the determination of forward and futures prices, the relevance of interest rate swaps for corporate financing.

Module 2

Securitization and the Crisis.

After the initial review of the basic properties of options, the valuation of options with the tools of binomial trees and the Black-Scholes-Merton Model will be analyzed. The knowledge obtained will be employed in the field of stock options, futures options and interest rates options, in order to understand how to employ them in the operations of the finance function. At the end of the module, economic and ethical issues related to the role of derivatives in the financial crisis of 2008 will be highlighted.

***READING LIST[[1]](#footnote-1)***

*Required readings*

J. Hull, *Options, Futures and Other Derivatives.* [*Acquista da VP*](https://librerie.unicatt.it/scheda-libro/hull-john/options-futures-and-other-derivates-global-edition-9781292410654-700020.html)

***TEACHING METHOD***

In the context of face-to-face lectures, students participation will be encouraged through discussion of real-life examples and the analysis and solution of quantitative problems. Students are required to perform self-assessment tests and exercises between classroom sessions.

***ASSESSMENT METHOD AND CRITERIA***

Students can choose between a multiple assessment route and a single assessment route.

Multiple assessment route

Students are evaluated through a mid-term term test (50%) and a final test (50%). Each test includes a part of multiple-choice questions, and a part formed by six questions, three of them require a closed-form solution of a numerical problem, and three are open questions. Multiple choice questions are weighted 20%, the other part the remaining 80% (in which the six questions are equally weighted). For a PASS in the multiple assessment route, the following conditions must be met: (i) the mid-term test and the final test are mandatory; (ii) the grades received in the two tests must greater than or equal to 18. Students who do not pass the multiple assessment are evaluated according to the single assessment. Even though attendance is not mandatory for a PASS in the multiple assessment route, it is strongly recommended.

Single assessment route

Students are evaluated through a test similar in structure, but covering the program of the whole course.

Assessment criteria

The student's preparation is evaluated according to grading scales which are published in Blackboard.

***NOTES AND PREREQUISITES***

N. ECTS - 8

Enrollment requirements - Basic knowledge of corporate finance is required. Students who do not have such knowledge are responsible for acquiring it to the extent necessary during the course.

Language of instruction - English

Attendance – Even though attendance is not mandatory, it is strongly recommended.

Associated courses – International Corporate Finance

International dimension – Real-life examples of companies in multiple national contexts are used throughout the course.

*Business connection* - The course is based on the standard format and textbook internationally acknowledged in the business world for the acquisition of the needed skills in the field of derivatives.

*Professional context* - The course is designed to allow students with basic corporate finance skills to complete the scope of knowledge that is a prerequisite for a career in finance. Furthermore, the course is also addressed to students interested in developing other managerial careers because they are supposed to be aware of the financial management issues implied by the use of options, forward contracts, futures contracts, and swaps

*Further information* – Additional information regarding the course schedule and delivery, learning assessment, expectation and policies, general announcements, and additional course materials will be posted on Blackboard.

1. I testi indicati nella bibliografia sono acquistabili presso le librerie di Ateneo; è possibile acquistarli anche presso altri rivenditori. [↑](#footnote-ref-1)