

# Derivatives

EM054U5P

## Semester

B

## Discipline

Finance

## Contact hours

27 H

## Number of spots

45

## Open to visitors

Yes

## Language



## Coordinator

Ali ÖZDAKAK



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## List of lecturers

Lecturer(s)	Email	Contact hours - lecture
Ali ÖZDAKAK	<a href="mailto:ali.ozdakak@em-strasbourg.eu">ali.ozdakak@em-strasbourg.eu</a>	27 h

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**Pedagogical contribution of the course to the program**

No educational contribution associated with this course for this program.

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## Description

Derivates are actively traded on many exchanges around the world and used for several practical purposes. The derivatives market is huge and has become increasingly important in Finance over the past.

The objective of this course is to understand how derivatives work, how they are used, and how they are priced. Students will learn the mechanics and properties of options, useful trading strategies as well as financial engineering techniques. Along with this, basic valuation methods will be introduced.

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## Teaching methods

### Face-to-face

- Lectures
- Tutorials

### In group

- Exercises

### Interaction

- Discussions/debates

### Others

No items in this list have been checked.

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## Learning objectives

### Cognitive domain

Upon completion of this course, students should be able to

- - (level 1) Define derivatives
- - (level 1) Recognize arbitrage opportunities
- - (level 1) Outline regulations of derivative markets
- - (level 2) Give example(s) of derivatives use
- - (level 2) Describe market mechanics
- - (level 3) Employ and exploit trading strategies on equity options

- - (level 4) Distinguish trading strategies according to their objective (speculation, hedging...) with derivatives
  - - (level 5) Construct strategies based on the call-put parity
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### Affective domain

Upon completion of this course, students should be able to

**None affective domain have been associated with this course yet**

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## Outline

### 1. Introduction

The nature of derivatives

Terminology

Use of derivatives examples

Weather, energy and insurance derivatives

### 2. Mechanics of options markets

Options positions and payoffs

Commissions, margins

Trading, regulations

Underlying assets

### 3. Properties of stock options

Types

Price determinants

Parity call-put

Early exercise

Impact of dividends

### 4. Trading strategies involving options

Spreads (bull-bear-box-butterfly-calendar)

Straddle-Strangle-Strip-Strap

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**No prerequisite has been provided**

### Knowledge in / Key concepts to master

Basic corporate finance knowledge

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## Teaching material

## Mandatory tools for the course

- Computer
- Calculator

## Documents in all formats

- Photocopies
- Worksheets

## Moodle platform

- Upload of class documents
- Assessments

## Software

No items in this list have been checked.

## Additional electronic platforms

No items in this list have been checked.

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## **Recommended reading**

Main reading material

Options, Futures, and Other Derivatives 10th Edition, Copyright © John C. Hull 2017, or any other version

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Additional literature

No reading material has been provided.

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## **EM Research: Be sure to mobilize at least one resource**

Textbooks, case studies, translated material, etc. can be entered

No reading material has been provided.

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## **Assessment**

### List of assessment methods

**Intermediate assessment / continuous assessment 1** Class no. 4

Written / Individual / English / Weight : 50 %

This evaluation is used to measure LO1.1

**Final evaluation** Exam week

Written / Individual / English / Weight : 50 %

This evaluation is used to measure LO1.3

