



## PRESENTACIÓN

### Breve descripción:

The main objective of this course is to help students gain the intuition and to provide the necessary skills for pricing forward, future and option contracts and alternative investments. Similarly, students will learn how to use derivatives for hedging purposes. To this purpose, a wide range of real-life strategies will be analyzed. Topics covered in this course are included on the CFA exam, Level 1.

- **Titulación:** Degree in Management with Specialization in Finance and Accounting
- **Módulo/Materia:** Optativas, Optativas específicas del perfil Finance and Accounting
- **ECTS:** 3
- **Curso, semestre:** Third year, Second semester
- **Carácter:** Mandatory for Finance and Accounting students
- **Profesorado:** José Azar (jazar@unav.es)
- **Idioma:** English
- **Aula, Horario:** TBD

## COMPETENCIAS

SSOP22: Know about and manage advanced tools and techniques to value financial assets

SSOP23: Gain an in-depth knowledge of the workings of financial markets

## PROGRAMA

### Topic 1: Derivative markets and instruments

- Derivatives: Definitions and Uses
- The Structure of Derivative Markets: Exchange-Traded Derivatives Markets and Over-the-Counter Derivatives Markets
- Types of Derivatives: forward/futures, contingent claims, hybrids
- The Purposes and Benefits of Derivatives: Risk Allocation, Transfer, and Management
- Criticisms and Misuses of Derivatives: Speculation and Gambling

### Topic 2: Valuation of forward, future and swap contracts

- Fundamental Concepts of Derivative Pricing
- Basic Derivative Concepts
- Pricing the Underlying
- The Principle of Arbitrage free
- Valuation of Forward contracts
- Valuation of Futures Contracts



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- Valuation of Swap Contracts
- Future markets and the use of futures for hedging

## Topic 3: Valuation of options

- Properties of stock option prices: upper and lower bounds, put-call parity
- Binomial Option Valuation Model
- Black–Scholes–Merton Option Valuation Model
- Option Greeks and Implied Volatility

## Topic 4: Trading strategies involving options

- Synthetic Long Asset
- Synthetic Short Asset
- Synthetic Put
- Synthetic Call
- Covered Calls and Protective Puts
- Spreads and Combinations

## Topic 5: Alternative investments

- Characteristics
- Real Estate
- Private Equity/Venture Capital
- Commodity Investments
- Hedge Funds
- Distressed securities

## ACTIVIDADES FORMATIVAS

Problem Sets

Group Projects

## EVALUACIÓN

### CONVOCATORIA ORDINARIA

- Problem Sets 40%
- Group Project 40%
- Class Participation 20%

### CONVOCATORIA EXTRAORDINARIA

- Final Exam 100%

## HORARIOS DE ATENCIÓN



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- Horario de tutoría: TBD

## BIBLIOGRAFÍA

Hull, J. C. "Options, Futures, and Other Derivatives". [Find it in the library](#)