Máster Universitario en Finanzas y Banca/ Master of Science in Finance and Banking

1. SUBJECT

- **Name:** Derivate Markets
- **Type of subject:** compulsory
- **Credits:** 4 ECTS
- **Hours dedication:** 24 hours (in classroom)
  76 hours (out classroom)
- **Coordinator of the subject:** Albert Banal, Oscar Elvira
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2. COURSE DESCRIPTION

Contents

This part will provide an overview of the risks affecting the outcome of financial investments (market risk, interest rate risk, liquidity risk, operational risk and off-balance sheet risk) and describe the derivative products that allow them to be hedged in organised and over-the-counter markets. Next, the speculation and hedging strategies will be studied, and finally, the valuation by arbitration will be examined, up to the Binomial, Black & Scholes and Garman-Kolhagen formulas.

Specific Abilities

SA2. Demonstrate an understanding of financial institutions operations, as well as the impact that banking regulation has on them.

SA3. Proficiency in applying financial tools to estimate the value of financial products, real assets, and companies, through qualitative, econometric and statistical techniques

SA5. Demonstrate an understanding of the interaction between financial products and institutions and real assets and firms.

SA8. To be able to draw conclusions in order to contribute some new aspects to the field of knowledge.

Teaching methodology

TM1 **Traditional methodologies**: this includes lectures based on the lecturer's explanations.
TM2 **Active methodologies:** this includes discussion sessions on previously assigned reading; presentations of topics by students.
TM3 **Independent methodologies:** this includes reading texts and carrying out individual or group assignments.

Evaluation criteria

Evaluation	Minimum	Maximum
Exam	40%	70%
Presentations	10%	30%
Individual our group project	20%	40%
Participation in the activities planned within the classroom	10%	30%
Total	**80%**	**170%**

3. BIBLIOGRAPHY

Hull, John C., Introducción A Los Mercados De Futuros Y Opciones - 8ª Edición, Anaya

Ross, S.M., (1999), An Introduction to Mathematical Finance: Options and Other Topics, Cambridge University Press.
Wilmott, P., S. Howison and J. Dewynne, (2002), The Mathematics of Financial Derivatives: A Student Introduction, Cambridge University Press.