

Academic Year: ( 2020 / 2021 )

Review date: 03/01/2021 16:45:30

Department assigned to the subject: Business Administration Department

Coordinating teacher: RODRIGUEZ LOPEZ, ROSA

Type: Compulsory ECTS Credits : 6.0

Year : 3 Semester : 2

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

FIXED INCOME AND DERIVATIVES  
ECONOMETRICS I

## OBJECTIVES

The objective of this course is for the student to acquire an overview of the financial risks to which companies are exposed as well as the existing methods for their evaluation and hedging.

To achieve the goal, the student, at the end of the course must have achieved a series of knowledge, skills and attitudes that are detailed below:

Knowledge:

- To understand the fundamental concepts associated with financial risk management.
- To understand the concept of risk and the different types of risks that exist.
- To know the instruments used in companies to measure and evaluate financial risk.
- To understand the application of the instruments and mechanisms for measuring financial risk.
- To understand the application of the instruments and mechanisms for evaluating financial risk.

Of skills:

- Understand the problem of financial risk management in financial and non-financial companies
- To solve risk management problems.
- Apply the hedging techniques used in risk management.
- Calculate the VaR risk measure for market risks using different methodologies

Attitude:

- Enhancing the capacity for analysis and the capacity for synthesis.
- Capacity for the organization and planning of work and autonomous learning in teams
- Ability to solve complex problems associated with risk management in Excel
- Ability to communicate with experts in other areas.
- Enhance oral and written expression skills.
- Ethical commitment.

## DESCRIPTION OF CONTENTS: PROGRAMME

- 1 Introduction to Risk management
- 2 Hedging Risks
- 3 The greeks and Portfolio Insurance
- 4 The management of Interest Rate Risk
5. Value at Risk (VaR).
6. Historical and Montecarlo Simulation of VaR
7. Back-Testing
8. VaR Limitations

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#### LEARNING ACTIVITIES AND METHODOLOGY

- Class
- Group homeworks

#### ASSESSMENT SYSTEM

<b>% end-of-term-examination/test:</b>	50
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	50

The final exam (which will be 50% of the final mark) will aim to check the degree to which the knowledge skills have been acquired by the student. A minimum grade of 4 in this exam is required to compute the average with the continuous assessment.

The remaining 50% of the final grade will correspond to the continuous assessment:

- 20% assessment test on the date shown in the weekly planning.
  - 30% Excel case , will be designed together with the teacher and must be presented in class.
- This work will be done in groups. The teacher will receive the Excel, and the ppt report.

NOTE: If a student cannot take the 1st test for which the date is known from the beginning of the course, he/she will have a zero on that test.

#### BASIC BIBLIOGRAPHY

- Hull, J Options Futures and Other Derivatives, Pearson , 2013
- J. Hull Risk Management and Financial Institutions, Willey, 2012
- Jorion Value at Risk: The New Benchmark for Managing financial Risk, McGrawhill, 2006

#### ADDITIONAL BIBLIOGRAPHY

- Rene M. Stulz Risk Management and Derivatives, Prentice Hall.