Fixed income and derivatives

Academic Year: (2022 / 2023) **Review date: 05-05-2022**

Department assigned to the subject: Business Administration Department

Coordinating teacher: BALBAS DE LA CORTE, ALEJANDRO

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 2

OBJECTIVES

The course will provide the students with knowledge about different strategies involving fixed income, equity and derivative markets. Usual speculative and hedging strategies will be analyzed.
At the end of this course the student must be able to:
- Know the advantages and drawbacks associated with every financial instrument, depending on the investor profile and objectives.
- Have a perfect knowledge about fixed income securities and the TSIR in a static framework.
- Have a perfect understanding about the notion of ¡§hedging strategy¡¿, along with its advantages and shortcomings.
- Use derivatives so as to speculate and hedge.
- Use derivatives with other purposes.

- Obtain information about prices, volumes, and other parameters in order to price and compose different portfolios with different objectives.
- Measure risk levels so as to propose hedging strategies.

In the course we will also analyze:

- Complex problems involving fixed income securities and derivatives.
- Relationships with other courses of Finance and Accounting.

Finally:
- Collaboration with other students will be stimulated, so as to deal with complex practical problems.
- Discussions and critic analyses will be provoked.
- The use of static and dynamic approaches will be encouraged.

DESCRIPTION OF CONTENTS: PROGRAMME

FIRST PART: Fixed income markets, TSIR, Duration and convexity, introduction to credit risk.
SECOND PART: Basic concepts and properties of forwards, futures, calls, puts, swaps, etc.
THIRD PART: Black and Scholes, Greeks, other Basic dynamic issues.

LEARNING ACTIVITIES AND METHODOLOGY

Methodology will include:
(1) Lectures, in order to present the main ideas of every topic.
(2) The use of the computer.
(3) Numerical exercises.
(4) More complicated practical situations that will be analyzed by teams of three/four students.

ASSESSMENT SYSTEM

20% Midterm exam
20% Projects
60% Final exam.

The exam grade must be 4 or more than 4 in order to pass the course. Students passing the course could imporve the global grade if before the exam date they delivered the solution of some exercises to be proposed during the class.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals…):	40

BASIC BIBLIOGRAPHY

- Hull Options, futures and other derivatives, Pearson.