

Academic Year/course: 2024/25

# 27523 - Fixed-Income Securities and Derivates

## **Syllabus Information**

Academic year: 2024/25

Subject: 27523 - Fixed-Income Securities and Derivates Faculty / School: 109 - Facultad de Economía y Empresa

Degree: 449 - Degree in Finance and Accounting

**ECTS**: 6.0 **Year**: 3

Semester: First semester Subject type: Compulsory

Module:

#### 1. General information

The main goal of this subject is for the student to learn about fixed income financial assets and assets derivatives whose underlying are fixed income securities. These instruments are common in the development of different sectorial activities so the student will be able to be adequately involved in commercial operations, optimize the results of the management of companies and portfolios, contribute to financial advice; as well as to a better management offinancial resources from an integral approach.

This course is intended to introduce and familiarize students with the characteristics of fixed-income instruments and derivative assets, being especially relevant the aspects related to their valuation and management, contributing, from their knowledge, to the improvement of the functioning of the institutions in which they are developed.

It is recommended that students have prior training in financial mathematics.

## 2. Learning results

In order to pass this subject, students must demonstrate that they know how to value fixed-income assets and derivatives in different contexts and according to the characteristics they incorporate, with the aim of quantifying variations in their valuation determining factors. Specifically, the student will be able to:

- To financially value the commercial characteristics incorporated in fixed-income issues.
- Know the main fixed income assets in the public, private and international sphere, identify their characteristics and transfer them to the financial valuation process.
- Choose and evaluate fixed income and fixed income derivative asset management strategies appropriate to the investment goals.
- To detail the importance of fixed-income financial assets and fixed-income derivative assets as a mechanism for channeling the financial needs of organizations and to locate them within the financial system of an economy.
- Identify and classify the characteristics of fixed income derivative instruments, analyze their determining variables, and be able to perform basic operations.

### 3. Syllabus

Part I: Introduction

### Part II: Fixed income instruments

Unit 2: Theoretical price, yield and other characteristics of fixed-income instruments

Unit 3: Valuation of fixed income instruments

Unit 4: Characteristic elements of risk management of fixed-income assets.

### Part III: Fixed income asset management

Unit 5: The time structure of interest rates (TTIP)

Unit 6: Financial management of fixed income portfolios: Passive management

#### Part IV: Fixed income derivative instruments

Unit 7: Financial futures on fixed income assets

Unit 8: Options: concept, variables and valuation

Unit 9: Joint use of options with fixed-income assets

## 4. Academic activities

Academic activities include:

- Theoretical classes (30 hours).
- Practical classes (30 hours) in which the cases proposed by the professor will be solved, as well as the group work done.
- Tutoring: Students will have individual tutoring and consultation hours with the teachers of their group.
- Student's personal work
- Use of ICT as a tool for study and learning: The Moodle application will be used to provide students with information about the subject. Active searches for information will be carried out in the main sources of information on topics related to the contents and practice will be done in spreadsheets to applyfinancial formulas.
- Examinations: Students shall be governed by the provisions of point 5. Assessment

In principle, the teaching methodology and its evaluation is planned to be based on face-to-face classes . However, if circumstances so require, they may be carried out online.

### 5. Assessment system

The subject will be evaluated in continuous or global evaluation in the first call and by means of global evaluation during the second call.

#### **Continuous assessment:**

It consists of two written tests and the completion and presentation of assignments. The first written test will take place around the middle of the semester and the second, which includes all the contents of the course, on the days provided by the Center for the realization of Continuous Assessment tests prior to the official calls.

{In addition, it will be necessary to carry out proposed activities and a final group work that will be presented in class in groups during the practical sessions, on the dates and in the terms that will be specified by the teaching staff at the beginning of the semester. The weight distribution of the different tests is as follows:

- 1. First written test: 35%
- 2. Second written test: 40%
- 3. Activities and group work and presentation: 25%

#### **Global Assessment:**

In this modality the student will take a final written test on the date of the official convocation approved by the Center which represents 100% of the evaluation.

### **Assessment Criteria:**

The written test consists of an exam with a theory part (open questions and/or multiple choice questions with justification) and another practical part (numerical exercises requiring the use of a calculator). The student must demonstrate some mastery of the knowledge acquired in class and be able to apply it to new situations.

To pass the subject by continuous assessment it will be necessary that the result of the two written tests is higher than 3 points out of 10, that the group work is presented; and that the result of the weighting of the three activities is higher than 5 points out of 10.

To pass the subject by global evaluation, the final written test must have a score equal to or higher than 5 points out of 10.

{In addition, students who have passed the subject through the continuous assessment system may sit the global assessment, obtaining as their final grade the maximum between the grade obtained in the continuous assessment and global assessment.

### 6. Sustainable Development Goals

- 4 Quality Education
- 8 Decent Work and Economic Growth