COURSE DATA

Data Subject	
Code	36238
Name	Fixed-income operations and markets
Cycle	Grade
ECTS Credits	6.0
Academic year	2024 - 2025

Study (s)

Degree	Center	Acad. year	Period
1313 - Degree in Business Management and Administration	Faculty of Economics	3	First term
1921 - Double Degree Program BMA and Law	Faculty of Law	5	First term

Subject-matter

Degree	Subject-matter	Character
1313 - Degree in Business Management and Administration	43 - Compulsory subjects in the pathway: legal-business management	Optional
1921 - Double Degree Program BMA and Law	6 - Year 5 compulsory subjects	Obligatory

Coordination

Name	Department
CLIMENT DIRANZO, FRANCISCO JOSE	113 - Financial and Actuarial Economics

SUMMARY

The course Fixed Income Operations and Markets is taught in the first quarter of the fifth year of the Double Degree in Business Administration and Management (ADE) + Law (Compulsory Subject). It consists of a total of 6 credits.

The objective of the course is to provide the student with an analysis of the financial operations, the fixed income markets and their derivatives markets. The program of the course is divided into three parts. The first consists of an introductory topic on the negotiation of financial operations. The most important concepts of the Mathematical course, studied in the second year of the double degree, are reviewed, and the different ways of operating are explored, either through simple or double transactions. The second

part is divided into three topics dedicated to assets and fixed income markets. Short-term debt is analyzed in detail, both Treasury Bills and Company Promissoy Notes, the medium and long-term debt, including the analysis of the Treasury Bonds and Obligations and the Corporate Debt. Finally, a descriptive analysis of the Spanish markets for negotiable fixed income securities is carried out. The third part of the course is divided into two topics and deals with the management of interest risk, emphasizing both the study of interest risk and financial immunization and the analysis of derivative assets in both OTC markets and exchanges.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

The basic lines of the course are focused on the fundamental concepts of Financial Mathematics and the analysis and management of interest risk in financial operations. In particular, the aim of the course is to provide the student with a simple, but at the same time rigorous and updated, analysis of financial operations and fixed income markets, as they are developed in the Spanish market.

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1313 - Degree in Business Management and Administration

- Demonstrate capacity for analysis and synthesis.
- Be able to solve problems.
- Be able to make decisions.
- Know the fundamentals that govern financial operations and markets.
- Know the fixed-income and equity markets and their derivatives, as well as the different securities traded on them.
- Be able to value financial assets and derivatives, and to manage fixed-income and equity portfolios.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

- Ability to discriminate and select among different financial assets, based on the objectives to be achieved.

- Ability to trade in the different financial markets including derivatives, based on knowledge of the operation, valuation rules and operation thereof.

- Ability to quantify adequately the different risks to which companies are exposed, taking into account their financial investments.

- Ability to manage the interest risk of fixed income portfolios.

DESCRIPTION OF CONTENTS

1. TRADING OF FINANCIAL TRANSACTIONS

In this first chapter, the goal is twofold. Firstly, to remind the student of key concepts related to financial transactions and financial securities valuation that she learned in previous courses and, secondly, to introduce several ways of trading on the Spanish market.

1. Financial transaction.
1.1. Concept and Outstanding balance.
1.2. Loans.
1.3. The internal effective rate and additional terms and conditions.
2. Internal and external liquidity.
3. Market value of the financial transactions.
3.1. Definition.
3.2. Usufruct and bare ownership.
4. Public and private debt investment.
5. Ways of trading.
5.1. Transactions classification.
5.2. Single transactions.
5.2.1. Spot transactions.
5.2.2. Forward transactions.
5.3. Double transactions.
5.3.1. Blocked repos.
5.3.2. Ordinary repos.
5.3.3. Criterion to be followed in the calculus of the price and yield of double transactions in the Sovereign Market.
6. Rating agencies.

2. SHORT-TERM DEBT

This chapter tackles the concept, characteristics and valuation of the most relevant short-term fixed income securities in the Spanish market: Treasury bills and commercial paper issued by firms and Spanish regional governments.

1. Introduction.
2. Treasury bills.
2.1. Characteristics.
2.2. Issued in auction.
2.3. Interest rates.

2.4. Ways of trading.
2.5. Internal effective rates.
3. Commercial paper issued by firms.
3.1. Characteristics.
3.2. Issue and trading.
3.3. Interest rates.
3.4. Internal effective rates.

3. MID-TERM AND LONG-TERM DEBT

This chapter tackles the study of the characteristics and valuation of mid-term and long-term Public and Private Debt securities. It specially focuses on the issues in auctions of Government bonds and their subsequent trading, as well as on the wide range of corporative bonds traded on the SEND market.

1. Bonds.
1.1. Concept and notation.
1.2. Classification and types of issue.
1.3. Financial, fiscal and commercial characteristics.
1.4. Internal effective rates.
1.5. Financial value of the loan and of an obligation.
1.6. Ways of trading.
1.7. Early cancellation clauses.
2. State debt in the medium and long term.
2.1. Government bonds.
2.2. Strip bonds.
2.3. Indexed bonds.
2.4. Green bonds.
3. Corporative debt.
3.1. Bonds with options.
3.2. ESG Bonds (Environmental, Social and Governance)
3.3. Other fixed income private securities.

4. FIXED INCOME TRADABLE SECURITIES MARKETS

This chapter deals with the basic characteristics of primary and secondary fixed income Markets in the present Spanish financial system.

1. Public Debt Market.
1.1. Introduction.
1.2. Institutional framework.
1.3. The Primary Market.
1.4. The Secondary Market.
2. Private Fixed Income Market.
2.1. Introduction.
2.2. The Primary Market. The issue prospectus.

2.3. The Secondary Market.

5. THE INTEREST RATE RISK

This chapter is devoted to the analysis of interest rate risk. In order to face potential non-expected variations in interest rates, the goal is analyzing the consequences derived from the management of fixed income portfolios.

1. Valuing financial transactions and interest rates.
2. Spot and Forward interest rates.
3. Term structure of interest rates.
3.1. Definition.
3.2. Aplications and limits.
4. The price risk.
4.1. Concept.
4.2. Duration.
4.3. Convexity.
5. The reinvestment risk and the financial immunization.
6. Interest rate risk and trading.

6. INTEREST RATE DERIVATIVES

This chapter deals with the main characteristics, uses and settlement of derivatives instruments on interest rates traded on OTC Markets.

1. Forward Rate Agreements (FRAs).
1.1. Introduction.
1.2. Concept and characteristics.
1.3. Settlement.
2. SWAP Agreements.
2.1. Concept and components.
2.2. Applications.
2.3. Settlement.
3. OTC options on interest rates.
3.1. Introduction.
3.2. CAP options.
3.3. FLOOR options.
3.4. COLLAR options.
4. Derivatives in Exchanges.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
TOTAL	60,00	

TEACHING METHODOLOGY

The course has a theoretical-practical character, so the theoretical classes will be complemented with practical classes dedicated to solving exercises that provide the necessary complements for the correct understanding of the content of the theoretical classes. To that end, in addition to the resolution of numerical issues, the aim is to familiarize the student with the terminology, operation and functioning of the Spanish fixed income financial markets, using for this purpose brochures and quotation bulletins supplied by the markets, as well as information published in the press.

The theoretical classes will consist of the exposition by the professor of the topics of the course. The participation of the student in terms of their critical capacity and debate will be positively valued. On the other hand, the practical classes will involve the resolution of case studies by the professor and/or the student. For the development of these classes the student will be given a collection of exercises, some of which will be allocated to personal work. In addition, individual or group practical exercises will be required, which must be given to the professor or presented in class.

EVALUATION

The evaluation procedure of the course will consist of:
1. A written exam, which may consist of theoretical questions as well as problems and real cases. This exam will represent 60% of the final grade.
2. The continuous assessment based on the attendance to class and the rest of face-to-face formative activities and the participation and implication in the teaching-learning process. This section will consist of an evaluation of the practical activities developed by the student, from the preparation of studies, and/or oral presentations. The evaluation of the written questionnaires/written tests is also included. This section will represent 40% of the grade of the course. All the requested works are individual and, due to the time necessary for their elaboration that would make it unfeasible to include them in the final exam, they are considered as non-recoverable.

The final grade is obtained from the weighted average of the grades for each part of the evaluation, provided that a minimum score of 4 has been achieved in the written exam. Otherwise, the final grade will be the weighted sum of the grade of the written exam and continuous assessment, not being able to exceed a 4.5.

Two aspects should be taken into account: i) those students who do not pass the course in first call, will have the option of being evaluated in second call maintaining the qualification obtained in section 2, not being able to deliver for this second call the so-defined non-recoverable works; ii) in the second call the same evaluation and weighting criteria will be used as in the first call.

Also note that any possible change of date and/or time of the final exams will be governed by the procedure and the term established in article 9.2 of the "Reglament d'avaluació i qualificació de laUniversitat de València per a títols de grau i màster, ACGUV 108/2017 de 30 de mayo".

In particular, in the event of a coincidence of date or time between final exams of subjects of the same degree in which the student has enrolled, if this subject is obliged to make the change, a written request must be submitted by the student to the responsible department at least one month in advance from the start of the official examination period. You can send your request electronically to: dep.economia.financera@uv.es only from your email address alumni.uv.es.

Any e-mail sent from a private address will not be accepted.

REFERENCES

Basic

- Asociación Española de Banca (2020): Definiciones para la interpretación de las confirmaciones de operaciones documentadas al amparo del contrato marco de operaciones financieras. CMOF 2020, Anexo II. https://www.aebanca.es/contrato-marco-de-operaciones-financieras/
- AFI (2019): Guía del Sistema Financiero Español, Biblioteca de Economía y Finanzas, Ediciones Empresa Global, Madrid, 8ª Edición.
- Código de la Ordenación de los Mercados Financieros, https://boe.es/legislacion/codigos/codigo.php?id=215&modo=1¬a=0.
- Knop, R. (2005): Manual de Instrumentos Derivados, Biblioteca de Economía y Finanzas, 13, Ediciones Empresa Global, Madrid.
- Meneu, V.; M.P. Jordá y M.T. Barreira (1994): Operaciones Financieras en el mercado español, Editorial Ariel Economía, Barcelona.
- Meneu, V.; E. Navarro y M.T. Barreira (1992): Análisis y Gestión del riesgo de interés, Editorial Ariel Economía, Barcelona.
- Navarro, E. (2019): Matemáticas de las operaciones financieras, Ediciones Pirámide, Madrid.

Additional

- AEB: https://www.aebanca.es/es/index.htm
- AIAF: https://www.bmerf.es/esp/aspx/Portadas/HomeAIAF.aspx

- Banco de España: www.bde.es
- BME:http://www.bmemarketdata.es/esp/Fin-Dia-Historica/Boletin-de-Operaciones-de-Deuda-Publica
- BME Renta Fija: https://www.bmerf.es/esp/aspx/Portadas/Home.aspx
- CNMV: www.cnmv.es
- ESMA: The European sustainable debt market do issuers benefit from an ESG pricing effect?, ESMA50-524821-2938, 6 octubre 2023.
- EUREX: www.eurexchange.com
- Guía Fiscal Básica de Productos Financieros, Revista Bolsa, BME, www.bolsasymercados.es
- SEND: http://www.aiaf.es/esp/aspx/Portadas/HomeSEND.aspx
- Tesoro Público: www.tesoro.es