

# **COURSE DATA**

Data Subject	
Code	36119
Name	Finance
Cycle	Grade
ECTS Credits	6.0
Academic year	2022 - 2023

Study (S)	)
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Degree	Center	Acad. Period
		year
1316 - Degree in Economics	Faculty of Economics	2 Second term

Subject-matter	t-matter		
Degree	Subject-matter	Character	
1316 - Degree in Economics	12 - Business finance	Obligatory	

### Coordination

name	Department		
BALLESTER MIQUEL, LAURA	113 - Financial and Actuarial Economics		
CABALLER TARAZONA, VICENT	172 - Business Finance		

## SUMMARY

This introductory course provides a general survey of finance and investments. It focuses on the basic tools and techniques of finance and how they are employed for the valuation of securities, essential knowledge for any student in Economics.

Students learn how to value assets and businesses given forecasts of future cash flows. The course also concentrates on the risk characteristics of different asset classes. The first three units of the course focus on present value analysis and discounting, valuation of bonds, and term structure of interest rates. The last three units deal with valuation of stocks, the tradeoff between risk and return, diversification, and the capital asset pricing model.

This course emphasizes an intuitive and also rigorous understanding of the theory and practice of financial markets. It will combine the theoretical underpinnings of finance with real-world examples, including several case discussions. Mathematical tools will be employed. Any advanced mathematics that is used will be developed in lectures.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

No previous knowledge in any financial subject is required.

## **OUTCOMES**

### 1316 - Degree in Economics

- Show critical thinking skills.
- Be able to collect and analyse information.
- Have oral and written communication skills in the native language.
- Have decision-making skills and be able to apply knowledge to practice.
- Be able to learn autonomously.
- Be able to use ICTs.
- Be able to prepare and defend an economic report.
- Know how to analyse and interpret the economic and financial information of companies.
- Know the basic concepts of financial analysis and the operation of financial markets.

# **LEARNING OUTCOMES**

- The student will learn the notion of interest rate and term structure of interest rates.
- He/she will learn how to apply methods of valuation of bonds and stocks.
- He/she will learn to analyze the risk and return of financial assets.
- He/she will learn the tools and techniques of portfolio selection.
- He/she will learn how to use appropriate software.

# **DESCRIPTION OF CONTENTS**

### 1. FINANCIAL ASSETS AND TIME VALUE OF MONEY

The aim of this unit is to provide a general survey on the basic concepts about the financial exchanges in a deterministic environment (not random). It focuses in the key tools and techniques and how they are employed for the valuation of fixed and variable income assets that we will develop in the next units.

- 1. Financial System
- 2. Financial Transactions.
- 3. Simple and Compound Interest Law.



4. Financial Sum.

#### 2. FIXED INCOME SECURITIES VALUATION

This unit provides a detailed study about the concept, characteristics and valuation of the more important fixed income securities.

- 1. Short term fixed income securities valuation (Treasury Bills, Commercial Papers).
- 2. Medium and long term fixed income securities (Bonds, Government Bonds).

#### 3. INTEREST RATE RISK

This unit is dedicated to the analysis of interest rate risk. Given that unanticipated changes in interest rates can happen, is needed to analyze the consequences that these changes imply in managing fixed income portfolios.

- 1. Valuation of financial operations and interest rates.
- 2. Interest Rate Risk.
- 3. Reinvestment Risk and financial immunization
- 4. Yield Curve

#### 4. THE VALUE OF STOCKS (variable income securities)

In this unit, the student will learn the basic characteristics of stocks. The essentials of stock valuation, and factors determining the price of stocks will be taught. Also several asset valuation models will be studied.

- 1. Basic notions (characteristics, price and risk).
- 2. Factors determining the price of stocks.
- 3. The dividend discount model.
- 4. Other valuation models.

#### 5. RISK AND RETURN

In this unit we study the tradeoff between return and risk of stocks setting in the financial markets. Also, we compute the average return and (risk) variance of returns from a sample of historical asset prices. We study the effect of combining individual stocks in large portfolios, and the difference between systematic (common) and unsystematic (independent) risk.

- 1. Risks and returns of stocks
- 2. Historical risks and returns of stocks
- 3. Diversification in stocks portfolios
- 4. Systematic versus unsystematic risk



#### 6. EQUITY RISK MANAGEMENT AND FINANCIAL DERIVATIVES

In this unit we compute the expected return and risk for asset portfolios, the role of correlation, and the concept of efficient portfolio. In addition, we introduce the concept of market portfolio and the beta coefficient as a measure of systematic risk. subsequently, we study the capital asset pricing model (CAPM) and highlight the equity risk premium. Finally, the basic notions of derivative financial assets are introduced.

- 1. Expected return and risk for stock portfolios.
- 2. Combinations of two financial assets, and the concept of efficient portfolio.
- 3. Measuring systematic risk.
- 4. The capital asset pricing model (CAPM)
- 5. Financial derivates

# **WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
Attendance at events and external activities	4,00	0
Development of group work	4,00	0
Development of individual work	3,00	0
Study and independent work	40,00	0
Readings supplementary material	1,00	0
Preparation of evaluation activities	17,00	0
Preparing lectures	7,00	0
Preparation of practical classes and problem	4,00	0
Resolution of case studies	10,00	0
Resolution of online questionnaires	0,00	0
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## **TEACHING METHODOLOGY**

There will be a two-hour lecture plus a two-hour practice session per week, thus a total of four classroom hours per week.

The lecturer will combine during the lecture his/her explanations with the active participation of
the students (they should raise their doubts, try to help their classmates, and participate in
discussions in group about the most controversial concepts). The objective is to improve the
autonomous capacity of the students (individual work at home previous to the lecture) as well as
their ability to work in groups, to argue and defend ideas (debate groups), and their oral and written



- communication skills. Students will be expected to have completed the assigned readings before class and review them after class.
- Practice sessions will consist of solving exercises, working on case studies, workshops, presentations and discussions, etc. Weekly problem sets will be assigned throughout the course to illustrate and reinforce the concepts presented in class as well as.
- Lecture slides, practice sessions guidelines and relevant materials can be found at www.aulavirtual.uv.es.
- Students will be expected to work in groups in preparation of the projects that will be presented in class.

# **EVALUATION**

The course grade for the students registered in the group who attend classes regularly will be given by the sum of:

- 1) The final exam. The final exam will be administered according to the official schedule. It will include theoretical and practical questions and problems or case studies to be solved. It will cover all the units. (70% of overall mark). The final exam is compulsory; it is required to pass it to pass the course (a minimum grade of 5 out of 10 is required).
- 2) Continuous assessment of the tasks developed by the student during the course. These tasks comprise individual exercises handed in, group presentations, and discussions in classroom. The participation in the classroom and the attitude towards classmates will influence also the marks obtained in the continuous assessment. (30% of the overall mark)
- To pass the course the student should have a minimum grade of 5 out of 10 from the total of 1 + 2 (as long as the final exam is passed).
- If the final exam is failed, the final mark will never exceed 4.5 (out of 10).

## **REFERENCES**

#### **Basic**

- NAVARRO, E. y J.M. NAVE: Fundamentos de Matemáticas Financieras. Ed. Antoni Bosch. Barcelona, 2001
- GRINBLATT, M. y S. TITMAN: Mercados Financieros y Estrategia Empresarial. Ed. Mc Graw-Hill. Madrid 2010



- ROSS, S; WESTERFIELD, R; JAFE, J. (2010): Corporate Finance, 9 edition. McGraw-Hill International Edition
- BERK ET AL. (2010): Fundamentos de Finanzas Corporativas. Ed. Prentice Hall. Madrid 2010

### **Additional**

- BODIE, Z., R.A., A. KANE y A. MARCUS.: Principios de Inversiones. Ed. Mc Graw-Hill. Madrid 2004
- BREALEY, R.A., MYERS, S.C. ALLEN, F.: Principios de finanzas corporativas. Ed. Mc Graw-Hill. México 2010

