Financial Economics

Academic Year: (2021 / 2022) **Review date: 28-06-2021**

Department assigned to the subject: Business Administration Department

Coordinating teacher: SERRANO JIMENEZ, PEDRO JOSE

Type: Compulsory ECTS Credits : 6.0

Year : 3 Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

- Mathematics for Economics I
- Mathematics for Economics II

OBJECTIVES

At the end of the course students should be able to:

- Compute present and future values of cash-flow streams to compute the net present values of different real and financial investments.
- Have a basic knowledge of the functioning of financial markets and of the way in which investment decisions are made.
- Understand the risk-return tradeoff. Understand how diversification affects risk.
- Have a clear understanding of the difference between systematic and diversifiable risk and know how to measure each.
- Understand how interest rates are set and the principles of valuation of fixed income securities.
- Know the basic types of derivatives and understand why and how they are used in risk management.

DESCRIPTION OF CONTENTS: PROGRAMME

Financial Economics

-1. Introduction to Financial Markets
a.Financing investment in the economy
b.Financial markets and trading financial assets

-2. Financial Mathematics
a.Introduction: The time value of money
b.Simple and compound interest. Equivalent interest rates.
c.Present and Future Values.
d.Annuities

-3. Investment Appraisal
a.Cash flows
b.Determining current and future values
c.Net present value of an investment project
d.Internal rate of return
e.Other valuation techniques

-4. Risk and Return
a.Mathematical representation of a portfolio
b.Expected portfolio returns
c.Variance and standard deviation
d.Finding the minimum variance portfolio
e.Graphical representation of expected return and standard deviation of a portfolio

-5. Portfolio Theory
a.Diversification Effect
b.Assumptions of the Mean-Variance Analysis
c.The Efficient Frontier
d.The tangency portfolio

-6. The Capital Asset Pricing Model (CAPM)
a.Relationship between risk and expected return
b.The CAPM model
c.The CML and The SML
d.Portfolio Beta

-7. Fixed Income Securities
a.Valuation of fixed income
b.The term structure of Interest Rates
c.Forward interest rates
d.Default risk
e.Risk Management

-8. Derivatives Products
a.Types of derivatives
b.Pricing Principles

Reference text books:

- Marín, J.M. and G. Rubio (2011), Economía Financiera, Antoni Bosch.
- Grinblatt, M. and S. Titman (2003), Financial Markets and Corporate Strategy, McGraw Hill.

Other useful books:

- Bodie, Z., Kane, A. and Marcus, A. J. (1999), Investments, McGraw Hill (Fouth Edition).
- Brealey R., S. C. Myers and F. Allen (2006), Principles of Corporate Finance, 8th edition, McGraw Hill.

LEARNING ACTIVITIES AND METHODOLOGY

Learning activities in year 2020/2021 str based on a bimodal system: lectures will be given on an online basis, onsite teaching when it comes to the reduced groups.
1.- Theory (online)- Sessions. The instructor of the course teach the basic concepts of the topic. Classnotes are provided to the students.
2.- Solution to exercises. The student must solve the test to assess his/her degree of knowledge of the different concepts. This part comprises the individual work of the student at home.
3.- Exercises - Sessions (onsite). The instructor of these sessions solves the exercise sets provided to the students.

ASSESSMENT SYSTEM

Grades will be awarded according to the follwing criteria
-Three exams (three exercise exams) in the classes. The average of the two best marks will be taken into account for computing the exercise part.

-The weight of the exercise part in the final mark is 40%.
-The minimun grade for passing the final exam is 4.0 out of 10.0.

Relevant information for exchange students: The date of the final exam is official and fixed by the University. This date will not be modified under any circumstance to accomodate any special situation of the student (return flights, summer internships, etc.).

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

BASIC BIBLIOGRAPHY

- José M. Marín; Gonzalo Rubio Economía Financiera, Antoni Bosch, 2011

- Mark Grinblatt; Sheridan Titman Financial Markets and Corporate Strategy, McGraw-Hill Education - Europe, 2011

ADDITIONAL BIBLIOGRAPHY

- Bodie Zvi, Kane Alex, Marcus Alan Essentials of Investments, 6th Edition, McGraw Hill, 2005

- Brealey R., S. C. Myers and F. Allen Principles of Corporate Finance, 8th Edition, McGraw Hill, 2006