Financial Economics

Academic Year: (2021 / 2022) **Review date: 21/09/2021 13:56:54**

Department assigned to the subject: Business Administration Department

Coordinating teacher: SERRANO JIMENEZ, PEDRO JOSE

Type: Compulsory ECTS Credits : 6.0

Year : 2 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:
- Bodie, Z., Kane, A. and Marcus, A. J. (2017), Investments, McGraw Hill (10th. Edition).
- Brealey R., S. C. Myers and F. Allen (2016), Principles of Corporate Finance, 12th edition, McGraw Hill.

Other useful books:

- Marín, J.M. and G. Rubio (2011), Economía Financiera, Antoni Bosch.
- Essentials of Corporate Finance, 9/e edition, Stephen Ross, Jeffrey Jaffe, and Randolph Westerfield, 2017

LEARNING ACTIVITIES AND METHODOLOGY

Learning activities comprise:
1.- Theory - 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.
3.- Exercises - Sessions. The instructor of these sessions solves the exercise sets provided to the students.

ASSESSMENT SYSTEM

% end-of-term-examination/test:	50
% of continuous assessment (assigments, laboratory, practicals…):	50

Grades will be awarded according to the following criteria

-Homework, problem sets and/or group cases (20%)

-Midterm exam (30%)

-Final exam (50%)

BASIC BIBLIOGRAPHY

- Brealey, Myers and Allen Principles of Corporate Finance 12/e, McGraw-Hill,, 2017

- Zvi Bodie, Alex Kane, and Alan J. Marcus Essentials of Investments, 10th Edition, McGraw-Hill Irwin, 2017

ADDITIONAL BIBLIOGRAPHY

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

- Ross, Westerfield and Jordan Essentials of Corporate Finance, 8/e, McGraw-Hill-Irwin, 2013