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Financial Economics

Academic Year: (2018 / 2019)   **Review date: 15-03-2018**

Department assigned to the subject: Business Administration Department

Coordinating teacher: MORENO MUÑOZ, JESUS DAVID

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

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.
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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. 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
-5. 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
-6. Portfolio Theory
a.Diversification Effect
b.Assumptions of the Mean-Variance Analysis
c.The Efficient Frontier
d.The tangency portfolio
-7. 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
-8. Derivatives Products
a.Types of derivatives
b.Pricing Principles
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Reference text books:
- Bodie Zvi, Kane Alex, Marcus Alan (2005), Essentials of Investments, McGraw Hill (6th Edition).
- Brealey R., S. C. Myers and F. Allen (2006), Principles of Corporate Finance, McGraw Hill (8th Edition).

LEARNING ACTIVITIES AND METHODOLOGY

Teaching methodology will be as follows:
-Each topic or sub topic is presented by the professor in a theory session. After the theory session the students have to study the materials, do complementary readings and work on the relevant problem sets. These problem sets and questions from the students are solved in the next practice session. The problem sets have to be solved at home prior to the practice session.
-The course material for each topic (slides that will be used in theory sessions and problem sets to be solved in practice sessions) is provided in advance through the intranet in Aula Global 2.
-At the beginning of the course there will be two practice sessions that will introduce the students to the use of excel in finance. These sessions will take place in the computer labs and the teacher will guide the students through several computer exercises.
-Each teacher has scheduled weekly office hours that the students can use to obtain extra help.

ASSESSMENT SYSTEM

Grades will be awarded on the basis of the following criteria:
-2 mid-term exams. Only the highest of these two grades will count (30%).
-10% of the grade will be freely determined by the theory teacher and announced at the beginning of the course. This 10% can be added to the grade of the mid-term exams or assigned for additional tests, for the resolution of exercises, for class participation, etc.
-Final exam (60%).
-Extraordinary exam. If a student does not pass the course after the final exam, he will have the right to choose between two extraordinary exams: one with a weight of 60% (the remaining 40% will be accounted for by the work done during the course) and one with a weight of 100% of the final grade.
To pass the course a minimum grade of 4.0 out of 10 must be achieved in the Final Exam both in ordinary and extraordinary exam.
The dates of the Final and Extraordinary exam are known well in advance of the beginning of the course. There will be no changes to these dates to accommodate any personal circumstances, other than the ones stablished by the University regulation (such as coincidence of two exams on the same date). Please take this into account before enrolling in this course.

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

BASIC BIBLIOGRAPHY

- Bodie Zvi, Kane Alex, Marcus Alan Essentials of Investments, McGraw Hill , (2005), , (Sixth Edition).

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

ADDITIONAL BIBLIOGRAPHY

- Bodie Zvi, Kane Alex, Marcus Alan Investments, McGRAW-HILL, 2005 (6th edition)

- Grinblatt, M. and S. Titman Financial Markets and Corporate Strategy, McGraw Hill, 2003