

Academic Year: ( 2019 / 2020 )

Review date: 12-04-2019

Department assigned to the subject: Business Administration Department

Coordinating teacher: MARIN VIGUERAS, JOSE MARIA

Type: Compulsory ECTS Credits : 5.0

Year : 1 Semester : 1

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

Students are assumed to have an intermediate background in:

- Statistics, Probability and Econometrics
- Calculus
- Economics

**OBJECTIVES**

This is the first finance course in the Ms in Business and Finance. Students will acquire broad knowledge of:

- Asset pricing (CAPM, CCAPM, Derivatives pricing, etc.)
- Portfolio Management
- Corporate finance

Furthermore, students will the basic fundamentals of research in finance and the two main approaches in finance:

- The equilibrium approach
- The absence of arbitrage approach

**DESCRIPTION OF CONTENTS: PROGRAMME**

Ch. 1. Historical and Institutional background (No part of the exam)

\*Allen and Gale (94), chs. 1,2

De la Vega (1688)

Ch. 2. A Basic Framework

- Individuals consumption and investment decisions
- Rules for managers of corporations
- Perfect, complete and efficient markets
- Extension 1: many dates
- Extension 2: uncertainty
- Application: the dangers of shorttermism and longtermism in corporate policy.

Ref.:

Brealey, Myers and Allen, chs. 1-6

Copeland and Weston, 1,2

\*Fried, Jesse, "The Uneasy Case for Favouring Long-Term Shareholders", 2013.

Ch. 3. Rationality and Walrasian Equilibrium (No part of the exam)

- The axioms of rationality
- Utility functions
- Agents' decision problem
- Static pure exchange economy
- Why studying the Walrasian equilibrium

Ref.:

Marín and Rubio, 16.

Mas-Colell, Whinston and Green, 1995.

Ch. 4. Financial Equilibrium: Existence, Efficiency and Valuation

- A simple model of equilibrium in capital markets: certainty
- Extension to many periods

- The financial equilibrium in economies with uncertainty
- Economies with a full set of Arrow securities
- General economy with complex securities

Ref.:

Huang and Litzenberger,  
LeRoy and Werner, 1.  
Marín and Rubio, 17.

#### Ch. 5. Behavior under Uncertainty

- Expected utility
- Risk aversion
- The portfolio choice problem
- Comparative statics results
- Useful utility functions
- Mean-variance analysis
- Asset pricing with expected utility: CCAPM and CAPM

Ref.:

Brealey and Myers, 7,8  
Copeland and Weston, 6,7  
Huang and Litzenberger, 3,4  
LeRoy and Werner, 8-10.  
Marín and Rubio, 18

#### Ch. 6. Asset Pricing in Equilibrium: CAPM

- Diversification and the measurement of risk
- The CAPM
- The role of the assumptions of the CAPM
- Asset Management: Conflict of Interests
- Hedge Funds

Ref.:

LeRoy and Werner, 8-10.  
Marín and Rubio, 19.  
Huang and Litzenberger, 3,4  
\*Cukurova and Marín, "Darwinian Selection in the Hedge Fund Industry", 2015.  
\*Golez and Marín, "Price Support by Bank-Affiliated Mutual Funds", 2015.

#### Ch. 7. Market Efficiency

- The Market Efficiency Hypothesis (MEH)
- The Grossman-Stiglitz paradox
- The joint test of market efficiency
- New developments on the MEH

Ref.:

Brealey, Myers and Allen, 13  
Huang and Litzenberger,  
Copeland and Weston, 10, 11  
\*Grossman, S.J., Stiglitz, J. "On the Impossibility of Informationally Efficient Markets"  
\*Karapandza and Marín, "The Rate of Market Efficiency", 2015.

#### Ch. 8. Options

- Concepts and institutional background
- Pricing: binomial distribution
- Pricing: the Black and Scholes option pricing formula
- General Theory of Pricing in the Absence of Arbitrage.

Ref.:

Kolb.  
Hull.

#### Ch. 9. Corporate finance (if time allows)

- Capital structure
- Dividends
- Mergers and acquisitions
- IPO's

### LEARNING ACTIVITIES AND METHODOLOGY

The course combines theory and practice classes. There is a weekly problem set which is solved in the practice sessions.

Students are also required to go over the academic papers in the literature which are used as leading examples of keys issues covered in class.

#### ASSESSMENT SYSTEM

Regular evaluation: Problem set grading and final exam.

Extraordinary evaluation: Exam.

<b>% end-of-term-examination:</b>	80
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	20