Advanced portfolio management

Academic Year: (2017 / 2018)

Department assigned to the subject:

Coordinating teacher: MARIN VIGUERAS, JOSE MARIA

Type: Electives ECTS Credits : 3.0

Year : 1 Semester : 2

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

Target Audience: This course is adequated for any student in the MSc in Finance.

Course Language: This course is totally taught in English.

The courses of Financial Markets (First Term) and Investment (Second Term) should have been completed previously.

The empirical exercises will be done using Excel.

### Professors:

- Juan Toro (PhD, Managing Director)
- Francisco Silvela (Managing Director, Acquisitions & Strategy at Drago Capital)

### OBJECTIVES

This course is included in the "materia or area": INVESTMENT

### GENERAL COMPETENCES associated to INVESTMENT:

Students will achieve the ability to answer new problems, using a large amount of information. They will learn how work in unstable situations, being part of a team or individually. They will also promote their ability of leadership.

## SPECIFIC COMPETENCES and LEARNING RESULTS:

Student will learn what Hedge Funds are and their main characteristics. They will learn how to manage a portfolio in practice, and how real estate works. They will learn to invest in Real Estate or to price it.

- Course Description

The first part of the course focuses in Hedge Funds and their investment strategies. The second part of the course focuses in several techniques about applying investment process in practice (behavioral finance, risk budgeting, risk monitoring, etc). The third part of this course focus completely in Real Estate (main players, asset classes, investment strategies, valuation, etc).

### DESCRIPTION OF CONTENTS: PROGRAMME

PART 1: HEDGE FUNDS 1- Hedge Funds Introduction -History and description -Fee Structure -Strategies and Style description -LTCM Case

- 2- Risk, Return and Performance in Hedge Funds
- 3- Investment Process in practice
  - Swap Spreads/Cross Currency Swaps/Carry Trades
  - Volatility Trading
  - Equity Market Neutral Strategy
  - Momentum Strategies
- 4- Portable Alphas
- 5- Portfolio construction -Portfolio Management Theory (Behavioral Finance)

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-Quantitative Investing

- 6- Monitoring- Performance Measurement and Risk Budgeting -Performance Attribution
  - -Risk Budgeting
  - -Backtesting and stress testing
  - -Risk monitoring

PART II: REAL STATE 7- Introduction to Real Estate

8- Main players in the Real Estate industry -Corporates/REITs
-Private Equity
-Financing
-Appraisers
-Agents

9- Real Estate. Asset Classes -Residential

- -Office
- -Logistic
- -Retail
- 10- Real Estate Investment Strategies -Core -Value Add
  - -Opportunistic
  - -Development
- 11- Real Estate Financial Reporting
  - -P&L Items
  - -Key BS items
- 12- Real Estate: An approach to valuation -Key drivers -Key investment criteria
- 13- Real Estate Investment in Public Markets -Whats a REIT- Introduction to SOCIMIs -Listed market references (Dividend Yield/NAV Growth)

# LEARNING ACTIVITIES AND METHODOLOGY

Students will work with Excel and Matlab. They will work on 3 (or 4) different empirical cases with real data.

Students will work in teams, learning to collaborate and organize the different roles in the team. In addition, the Professor will present the main theoretical concepts using Power Point presentations just before students do the cases or exercises. Students could be required to read several papers or book chapters during the course.

In some lesson or topic, students will work in a practical exercise (similar to the case but easier) during the lesson in order to learn the main concepts and apply them to a practical problem. Every case is based on real data coming from financial markets.

### ASSESSMENT SYSTEM

The grade will be based on a closed book final exam (50%) and on coursework (50%). You need to do the coursework to pass de course and a minimum grade of 4 out of 10 is needed in the Final Exam to pass the course. Final Exam will be a closed book exam with calculator and there will be questions from both Part I and II.

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

- Bodie, Kane and Marcus Investment, McGraw Hill, 2009

- Donald R. Chambers, Mark J. P. Anson, , Keith H. Black, Hossein Kazemi Alternative Investments: CAIA Level I, Wiley, 2015

- Lo, A,W Hedge Funds: An Analytic Perspective, Princeton University Press, , 2009

<sup>-</sup> CAIA Association, Hossein Kazemi, Keith H. Black, Donald R. Chambers Alternative Investments: CAIA Level II, Wiley, 2016