

Academic Year: (2021 / 2022)

Review date: 29-06-2021

Department assigned to the subject:

Coordinating teacher: TAPIA TORRES, MIGUEL ANGEL

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Target Audience: This course is adequate for any student in the master (she could be an Economics, Engineering, Mathematicians, Physics or from Business Administration bachelor).

Course Language: This course is totally taught in English.

No previous courses are necessary.

OBJECTIVES**GENERAL COMPETENCES:**

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:

The aim of this course is to understand the main elements that make up a financial system, including the description of its institutions (European Central Bank), its markets (both monetary and capital) and its various types of assets and instruments.

Students will learn and understand:

1. The basic structure, characteristics and functions of a financial system,
2. Financial instruments and transactions, including stocks bonds, deposits, derivatives, and mutual funds.
3. The role of law and regulation of the financial system and how it affects the normal functioning of all institutions, intermediaries and markets.
4. Interpret financial markets in terms of its architecture.
5. The role of active and passive management

In this way the students will understand the current state of financial systems including the role of financial institutions, central banks and the various regulators.

COURSE DESCRIPTION

The content of the program is divided into 8 sessions that cover the main aspects of the financial system. After an introductory track to financial markets the section deals with liquidity aspects. Also we will focus our attention to other financial markets such as Stock Exchanges, Derivatives, Fixed Income and interbank market. When it becomes necessary for each of the markets discussed above products traded and the form and procedure in which these products are created and then traded. Finally, we examine the role of European Central Bank, its monetary policy and regulatory bodies.

FACULTY:

-Mikel Tapia (Professor, UC3M)

-Jorge Yzaguirre (PhD, BME)

DESCRIPTION OF CONTENTS: PROGRAMME**Program**

Session 1: Financial Markets and Instruments: An Introduction.

Introduction and structure: Instruments and Markets

How do financial markets work?

Transaction cost

Types of Markets

Session 2: Financial Markets and Instruments: An Introduction.

Special issues: Anonymity, Fragmentation

Competition of Financial Markets
MiFID
Ultra High Frequency Traders

Session 3: Liquidity

Liquidity: basic concepts

Some results: intra and interday regularities

Two approaches to Liquidity. First Approach, Martinez Rubio and Tapia (REA, 2004). Second Approach: Næs and Skjeltorp (JFM, 2006)

Session 4: Derivatives

Introduction

Options

Futures

The Market.

Session 5: ECB

The Monetary Policy

Quantitative easing (QE)

Session 6: Interbank and Public Bond Market

Interbank Market

Public Debt Market

Session 7 & 8: Capital Structure

Modigliani Miller Propositions

Existence of Corporate Taxes

Financial Distress

Session 9 & 10: Electronic Markets and indexing.

Introduction to indexing

Active and passive portfolio management

Cash and futures index arbitrage

Session 11 & 12: Exchange Traded Funds

Mutual Funds versus Exchange Traded Funds

Role of ETF

Interactions between cash, futures and ETFs

LEARNING ACTIVITIES AND METHODOLOGY

Students will work in teams, learning to collaborate and organize the information. The professor will present the main theoretical concepts before the students do the assignments. All the session have a practical issue to solve by the teams.

1. Assignment 1

Each team should prepare a power point presentation (ppt) of a financial market. In the presentation, the students should provide useful information about the type of market, trading hours, type of orders, last years volume or liquidity, etc.

2. Assignment 2

Using the data included in San_Min.txt that contains information about the first five levels of the limit order book of Santander on 8th august of 2011. Each team should calculate some liquidity variables and compare their results with the ones that the professor explains in class.

3. Assignment 3.

Using the data included in March11 that contains information about volume in shares, number of messages, Quoted spread and dollar depth of 40 stocks listed in Nasdaq. Each team should create some portfolios and compare the results with the ones that the professor explains in class

4. Presentation of Assignment 1

Presentation will evaluate team ability to communicate the main idea of the presentation and to link all concepts and ideas, their ability to answer properly the questions done by the professor and the rest of the class after/during presentation, team members ability to maintain eye contact with audience, seldom returning to notes and finally team ability to identify and accurately explain/use the relevant key concepts.

ASSESSMENT SYSTEM

Assessment (continued) is based on the following criteria:

1. Assignment 1: 10%
2. Assignment 2: 10%
3. Assignment 3: 10%
4. Presentation of Assignment 1: 20%. Presentation will evaluate Team ability to communicate the main idea of the presentation and to link all concepts and ideas, their ability to answer properly the questions done by the the professor and the rest of the class after/during presentation, team members ability to maintain eye contact with audience, seldom returning to notes and finally team ability to identify and accurately explain/use the relevant key concepts.
5. Exam: 50%. Which assessed the knowledge acquired by students. Exam minimum grade to pass the subject is 4 over 10. The exam will be a closed book one with calculator.

Students that do not meet the minimum passing grade should retake the subject. If the resit is taken, the above grade criteria also apply

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

BASIC BIBLIOGRAPHY

- Larry Harris Trading and Exchanges: Market Microstructure for Practitioners, Oxford University Press, 2003
- Stephen Ross, Randolph Westerfield, Jeffrey Jaffe & Bradford Jordan. Corporate Finance. 12th Edition, MacGrawHill.
- Stephen Valdez, Philip Molyneux An Introduction to Global Financial Markets, Palgrave Macmillan. ISBN 9781137007520, 2012