# uc3m Universidad Carlos III de Madrid

# Business and Finance III: Risk Management in non-Banking Entities

Academic Year: (2020 / 2021) Review date: 01-07-2020

Department assigned to the subject: Business Administration Department

Coordinating teacher: ALVES PORTELA SANTOS, ANDRE

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 1

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

- Business and Finance I
- Business and Finance II

#### **OBJECTIVES**

Upon completion of this course the students are expected to:

- -Understand the risk management process;
- -Understand the value generating mechanisms of risk management;
- -Understand diversification effects, natural hedging and hedging with financial derivatives;
- -Understand the differences, benefits and drawbacks of using over the counter and exchange traded financial derivatives;
- -Perform simple hedging strategies such as:
- o Natural hedging strategies for currency risk;
- o Hedging strategies for interest rate risk with forwards and swaps;
- o Hedging strategies for commodities risk with financial futures;
- Hedging strategies for financial assets with financial options;
- -Understand the differences between Market risk and Credit risk
- -Understand the standard measures for assessing Market and Credit risks

# **DESCRIPTION OF CONTENTS: PROGRAMME**

The course is divided into the following seven chapters:

Chapter 1. Risk management and firm value.

Chapter 2. Risk management with Forwards and Swaps.

Chapter 3. Risk management with Futures and Options.

Chapter 4. Hedging options the Greeks.

Chapter 5. Market risk.

Chapter 6. Credit risk measurement.

Chapter 7. Credit derivatives.

### LEARNING ACTIVITIES AND METHODOLOGY

The time in class will be divided between:

- -Presentation of theory (usually the first class of the week);
- -Solving and analyzing hedging examples;
- -Working out examples in class (usually in the second class of the week);
- Exercises with computer programming

By working in class it is possible to address and clarify many of the doubts students may have, however the lectures also provide additional and individual office hours.

### ASSESSMENT SYSTEM

25% Individual homework sets.

25% Midterm

25% Cases in groups.

25% Final exam.

% end-of-term-examination: 25

% of continuous assessment (assigments, laboratory, practicals...): 75

- Grinblatt, M., & S. Titman Financial Market and Corporate Strategy, Irwin/McGraw-Hill, (2003)
- John C. Hull Options Futures and Other derivatives, Prentice Hall, (1997)
- Smithson, C. W. Managing Financial Risk. 3rd edition, McGraw-Hill, (1998)

# ADDITIONAL BIBLIOGRAPHY

- Hull, John Risk management & financial institutions, Wiley Finance, 2012
- Jorion, P. Financial Risk Manager, Wiley, 2003

# BASIC ELECTRONIC RESOURCES

- Andy Serwer (Editor in Chief) . Yahoo Finance Historical Database: https://www.yahoo.com/author/yahoo-finance/
- John Hull . Risk Management and Financial Institutions, 5th Edition (Book material): http://http://www-2.rotman.utoronto.ca/~hull/riskman/index.html