

Risk Management

Academic Year: (2021 / 2022)

Review date: 18-06-2021

Department assigned to the subject: Business Administration Department

Coordinating teacher: PEÑA SANCHEZ DE RIVERA, JUAN IGNACIO

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Finance I and Finance II, Mathematics and Econometrics

OBJECTIVES

This course is designed to train the participants in evaluating and measuring financial risks. The course starts with an analysis of matrix and risk profiles. Then the main points related with why and how should firms hedge are addressed. The Basel capital accords are discussed. After making sure that the participants know how to compute market value-at-risk (MVaR), the course turns to how to use MVaR and related risk measures in project selection, performance evaluation, and managerial compensation. The course then focuses on credit risks and its measure (CVaR) and how to deal with it using credit derivatives. The key points related with systemic risk and its measurement is also addressed. The course finishes with a review of operational risk measures (OVaR) and some implementation issues. The emphasis of the course is on modelling and measuring financial risk. The course deals with interest rate, exchange rate, commodity price, equity, credit, systemic and operational risks. The course draws heavily on financial theory. In addition, the disciplines of econometrics and statistics are heavily used to formulate and solve the problems faced by risk managers.

DESCRIPTION OF CONTENTS: PROGRAMME

- Risk Measures
 - Portfolio theory
 - Credit Risk
 - Operational Risk
 - Market Risk (Basel, Solvency II)

LEARNING ACTIVITIES AND METHODOLOGY

ormal clases, case discussions and individual presentations

ASSESSMENT SYSTEM

Course requirements: Students will take a final examination. The final examination will count 40 points; the exercises (problems and cases) will count 30 points and class participation will count for 30 points.

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

BASIC BIBLIOGRAPHY

- Christoffersen, P.F. Elements of Financial Risk Management, Academic Press., (2012)
- Crouhy, M. , D. Galai and R. Mark The Essentials of Risk Management, Wiley, (2014)
- Jorion, P. Financial Risk Manager Handbook., Wiley, (2011)
- McNeil, A.J., R. Frey and P. Embrechts Quantitative Risk Management. , Princeton University Press., (2005)

