

**Code:** 81029

**Subject name:** Portfolio management and financial planning

### **GENERAL CHARACTERISTICS**

**ECTS:** 4

**Language/s:** English

**Type:** Elective

**Teacher:** Salvador Torra Porrás

### **DESCRIPTION**

#### **BRIEF DESCRIPTION AND JUSTIFICATION**

The main objective of this subject is to equip the student with the advanced knowledge on portfolio management, expanding training on performance and risk indicators and using methodologies based on the efficient frontier. Likewise, through simulation methods and risk maps, you will learn how to design a portfolio taking into account the risk and profitability profile of each client.

#### **Competencies**

As a consequence of the acquisition of the contents of the subject, the student will be able to:

CT1. That students are able to predict and control the evolution of complex situations by developing new and innovative work methodologies adapted to the professional field of finance in which they develop their activity (Adaptation to change).

CE4. Students should be able to optimize portfolio and wealth management, risk hedging, as well as business financing decisions, by understanding and correctly applying the principles of valuation of financial investment and financing products. (Financial investment and financing operations).

#### **Prerequisites**

Requirements legally established to access postgraduate programs:

Degrees in the field of social, scientific or technological sciences.

## Contents

### 1.- Portfolio Management

#### 1.1. Analysis of Investment Funds / Assets.

1.1.1. Professional Information Sources

1.1.2. Prices or returns?

1.1.3. Drivers of Profitability. Alternatives.

1.1.4. Correlations. Alternatives?

1.1.5. Static or dynamic volatilities?

1.1.6 Dynamic models of volatility and VaR.

#### 1.2. Indicators of Performance / Risk.

1.2.1. Problems in the classic indicators.

1.2.2. Sharpe Variations

1.2.3. Alternative measures GH1 and GH2.

1.2.4. Potential of other measures.

#### 1.3. Efficient Border.

1.3.1. Geometric view of the Classic Model

1.3.2. Alternatives to Markowitz

1.3.3. Non-standard efficient boundaries

1.3.4. Index Tracking

### 2. - Financial Planning

#### 2.1. Simulation Methods

2.1.1. Conceptual design of a model

2.1.2. Uncertainty and Probability

2.1.3. Possibilities of the Spreadsheet. Alternatives.

#### 2.2. Risk / Personal Financial Planning Maps

2.2.1. Design of a Risk Map

2.2.2. New Measures of Corporate Risk

2.2.3. Monte Carlo simulation in risk maps

2.2.4. Maps and Risk Tolerance in Financial Planning

## METHODOLOGY

**TRAINING ACTIVITIES:**

Training activities	ECTS	Competencies
Lectures presenting concepts and procedures	1,8	CT1;CE4
Practical sessions (exercises, case resolution)	0,5	CT1;CE4
Assignments by Students	0,5	CT1;CE4
Seminars or tutorials	0,3	CT1;CE4
Personal study activities	0,8	CT1;CE4
Assessment sessions	0,1	CT1;CE4
Internship in Company		
TOTAL	4	

**EXPLANATION OF TEACHING METHODOLOGY**

There are two types of training activities:

1.- Exposition and reading of theory on matter

It corresponds to the exposition of the subject by the teacher and to the study of the subject by the student. This activity aims to learn the theoretical fundamentals of the subject, as well as advanced concepts for portfolio design and financial planning.

2.- Practical exercises and case discussion

It corresponds to the preparation by the students of the practices corresponding to each theoretical theme. In this activity the transversal competences are developed mainly, while assimilating the knowledge that leads to the specific competences. This section takes into account the practical sessions, the seminars and tutorials that are developed during the course, and the sessions of continuous evaluation. A work is to be done individually and involves running a presentation, and it's intended to help the student to apply the new knowledge acquired. Real cases will be discussed in order to apply the advanced

knowledge acquired to manage portfolios and to adequately plan the financial structure of the investment

## METHODS OF EVALUATION

### Methods of evaluation

Methods of evaluation	Weight	Competencies
Final exam	40%	CT1;CE4
Midterm exam	-	
Following up activities	10%	CT1;CE4
Homework and presentations	40%	CT1;CE4
Experimental work or fieldwork	-	
Projects	-	
Evaluation of the company or institution	-	
Participation	10%	CT1;CE4

## LEARNING OUTCOMES

At the end of the course the student should be able to:

- Be able to use advanced knowledge on portfolio management
- Know how to calculate performance and risk indicators for portfolios
- Use efficient border-based methodologies for portfolio management and financial planning.
- Understand and apply simulation methods and risk maps to design a portfolio taking into account the risk profile and profitability of each client, financially planning a horizon appropriate to their profile.

## EVALUATION

The final grade of the course responds to criteria of continuous evaluation and will be the result of applying the following percentages: 40% for the final exam, 40% for the qualification in the preparation and presentation of an individual work, 10% For the delivery of class exercises and other follow-up activities and 10% for the student's proactive participation in class discussions.

### **EVALUATION OF COMPETENCIES**

In all the evaluation activities of the subject, the transversal competence of adaptation to change is evaluated, especially in the follow-up activities and in the works and presentations, in which the students have to solve real cases related to the financial planning. The specific competence of financial investment and financing operations is fundamentally evaluated through the final exam, in which students have to demonstrate that they have understood and know how to apply the theoretical concepts explained about portfolio management.

### **Bibliography**

### **Bibliography**

Reilly, Frank K. y Brown, Keith C. (2003): Investment Analysis and Portfolio Management. 7ª edición. Thomson South-Western.

Swensen, David F. (2005): Unconventional Success: A Fundamental Approach to Personal Investment. Free Press, New York.

Swensen, David F. (2000): Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment. Free Press, New York.

### **PREVIOUS CHANGES**

### **LAST REVISION**