

Code: 81003

Subject name: Derivatives

GENERAL CHARACTERISTICS

ECTS: 3

Language/s: English

Type: Obligatory

Teacher: Daniel Sullá Dulanto

DESCRIPTION

BRIEF DESCRIPTION AND JUSTIFICATION

The main objective of this course is to provide students with the basic knowledge to understand the functioning of the derivatives market, including their terminology and differentiating between different products and positions. You will learn to design different hedging alternatives based on risk, as well as to develop strategies for speculation with different products and positions. Several theories are analyzed for the valuation of the derivatives and the different possibilities of arbitrage before inefficiencies in the market, both in organized markets and in OTC.

Competencies

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

CE2. Students are able to apply the most relevant quantitative models and techniques for the treatment of financial information, based on the understanding and modelling of financial transactions. (Modelling of financial transactions).

CE3. That the student is able to understand the operation of the main products and national and international financial markets, its regulatory regulations, as well as the main financial institutions that operate in them. (Understanding markets and financial products).

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. Types of derivatives: forward, futures and options
2. Main derivative contracts
3. Types of derivative markets: organized and OTC
4. The options
 - a. Description of the options
 - b. Valuation of options
5. Types of Futures Trading
 - a. Speculation operations
 - b. Arbitration Operations
 - c. Hedging
6. Structured Products
 - a. Concept and characteristics
 - b. Classification
 - c. Description of the main structures
7. Practical applications in derivative instruments
8. Foreign exchange market
 - a. Historical and Institutional Aspects
 - b. Factors that determine the price of the currency
 - c. Types of operations: spot, forward

- d. Currency exchange in a reverse and direct and indirect way
- and. Cross exchange rate
- F. Investments in foreign exchange
- g. Exchange insurance
- h. Practical cases

METHODOLOGY

TRAINING ACTIVITIES:

Training activities	ECTS	Competencies
Lectures presenting concepts and procedures	1,3	CE2;CE3;CE4
Practical sessions (exercises, case resolution)	0,4	CE2;CE3;CE4
Assignments by Students	0,4	CE2;CE3;CE4
Seminars or tutorials	0,2	CE2;CE3;CE4
Personal study activities	0,6	CE2;CE3;CE4
Assessment sessions	0,1	CE2;CE3;CE4
Internship in Company		
TOTAL	3	

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 seeks to know the theoretical fundamentals of the subject, as well as the main basic concepts in order to successfully manage derivative products.

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 students assimilate 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 or in groups and involves running a presentation, and it's intended to help the student to apply the new knowledge acquired.

METHODS OF EVALUATION

Methods of evaluation

Methods of evaluation	Weight	Competencies
Final exam	40%	CE2;CE3;CE4
Midterm exam	-	
Following up activities	10%	CE2;CE3;CE4
Homework and presentations	40%	CE2;CE3;CE4
Experimental work or fieldwork	-	
Projects	-	
Evaluation of the company or institution	-	
Participation	10%	CE2;CE3;CE4

LEARNING OUTCOMES

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

- Be fluent in the search for information on derivatives markets, including their terminology.
- Design coverage alternatives, conducting a correct analysis of the market risk situation.

- Design strategies of speculation with the different products and positions, taking them individually or in combination.
- Use the main valuation theories to calculate the price of the different products and perceive possibilities of arbitrage before market inefficiencies
- To carry out operations in the derivative markets with the peculiarities of these, whether organized markets or OTC

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 grade obtained in the final exam, 40% comes from the individual preparation and presentation of a work, 10% for the delivery of class exercises and other follow-up activities and 10% for proactive participation in class discussions.

EVALUATION OF COMPETENCIES

The competency of understanding markets and financial products is evaluated through the final examination activity in which the students have to demonstrate that they have understood, know and know how to apply the theoretical concepts explained on derivatives markets. The specific modeling competencies of financial operations and financial operative investment and financing are evaluated especially through the follow-up activities and in the works and presentations, in which the students have to solve real cases related to derivatives markets.

Bibliography

Bibliography

Hull, J. C. (2014) Options, Futures and other Derivatives, Prentice Hall.

Knop, R. (2000). Finanzas de diseño. Manuel de productos estructurados, Escuela de Finanzas Aplicadas.

Larraga, P.; Elvira, O. (2008). Mercado de Productos Derivados, Bresca.

Summa, J. F.; Lubow, J. W. (2002). Options on futures, new trading strategies, John Wiley and Sons Inc,

Vilariño, A. (2008). Derivados: Valor razonable, Riesgos y Contabilidad, Prentice Hall

PREVIOUS CHANGES

LAST REVISION