Teaching plans

Year 2011-12

Markets and Derivatives - 20848

Degree/study: AD/E GRAU
Course: 3/4
Term: First
Number of ECTS credits: 5
Hours of student's dedication: 125 hours of dedication; Lectures: 30 hours; Seminars: 9 hours per group.
Language or languages of instruction: English
Professor: Ramon Alfonso and Alejandro Scherk

1. Presentation of "Markets and Derivatives"

The course covers forwards, futures, swaps and options. By the end of the course, students will have a good knowledge of how these products work, how they are used, how they are priced, and how financial institutions hedge their risks when they trade the products.

The derivatives market has grown exponentially the last years, both for hedging and speculation purposes. The right use of this family of financial instruments is crucial in our days.

2. Competences to be attained

The course aims to help the students to gain the knowledge required to understand, valuate and use derivatives efficiently.

Students taking this course will learn to:

- Identify the different derivatives products: futures, options, swaps,…
- Identify the characteristics of each derivative product, valuation, how to use it,...
- Know the different techniques for use of futures and options
- The strengths and the weaknesses of each of the derivative products

3. Contents

The sessions will be covering the following topics:

S1. Introduction. General overview of the derivatives markets
S2. Mechanics of futures markets
S3. Determination of Forward and Futures Prices
S4. Swaps
S5. Hedging strategies using futures with interest rates and currencies
S6. Hedging strategies using futures in the stock market
S7. Mechanics of the option market
S8. Determination of the price of an option - I
S9. Determination of the price of an option - II

S10. Greek letters
S11. Hedging strategies using options in the stock market
S12. Combining option strategies-I
S13. Combining option strategies-II
S14. Hedging strategies using options with other underlying assets
S15. Exotic options I
S16. Exotic options II
S17. Structured products
S18. Securization and the credit crisis of 2007
S19. Portfolio management using derivatives
S20. Business uses of derivatives.

4. Assessment

Grades will be based on the following criteria:

- 40% Case reports (group based)
- 40% Exam (individual based). The exam will be in test format (30 questions, one right answer). Only a pencil and a calculator will be allowed into the exam. The exam will include all the formulas needed.
- 20% Class participation in the seminars (individual based)

5. Bibliography and teaching resources

5.1. Basic bibliography

John C. Hull, Options, Futures and Other Derivatives, Pearson Education, New Jersey, 5th edition

5.2. Additional bibliography

John C. Hull, Introducción a los mercados de futuros y opciones, Ed. Pearson Prentice-Hall, Madrid, 2009

5.3. Teaching resources

On a weekly basis, reading material and cases would be uploaded at the Market and Derivatives Moodle.

6. Methodology

The course is based on lectures and case study discussions. In order to prepare for the course participants will receive assigned reading material and a number of cases that will distributed throughout the course. Participants are expected to thoroughly prepare and analyze the pre-assigned reading material and cases before each class.

7. Activities Planning

LECTURES

T1 - Group 1+2 - Thursday 22/09/11 - 10:30h to 12:00h - RA
T2 - Group 1+2 - Friday - 23/09/11 - 10:30h to 12:00h - RA
T3 - Group 1+2 -Thursday - 29/09/11 - 10:30h to 12:00h - RA
T4 - Group 1+2 -Friday - 30/09/11 - 10:30h to 12:00h - RA
T5 - Group 1+2 -Thursday - 06/10/11 - 10:30h to 12:00h - RA
T6 - Group 1+2 -Friday - 07/10/11 - 10:30h to 12:00h - RA
T7 - Group 1+2 -Thursday - 13/10/11 - 10:30h to 12:00h - RA
T8 - Group 1+2 -Friday - 14/10/11 - 10:30h to 12:00h - RA
T9 - Group 1+2 -Thursday - 20/10/11 - 10:30h to 12:00h - RA
T10 - Group 1+2 -Friday - 21/10/11 - 10:30h to 12:00h - RA
T11 - Group 1+2 -Thursday - 27/10/11 - 10:30h to 12:00h - RA
T12 - Group 1+2 -Friday - 28/10/11 - 10:30h to 12:00h - RA
T13 - Group 1+2 -Thursday - 03/11/11 - 10:30h to12:30h - RA
T14 - Group 1+2 -Friday - 04/11/11 - 10:30h to 12:30h - RA
T15 - Group 1+2 -Thursday - 10/11/11 - 10:30h to 12:30h - RA
T16 - Group 1+2 -Friday 11/11/11 - 10:30h to 12:00h - RA
T17 - Group 1+2 - Thursday 17/11/11 - 10:30h to 12:00h - AS
T18 - Group 1+2 -Friday 18/11/11 - 10:30h to 12:00h - AS
T19 - Group 1+2 -Thursday 24/11/11 - 10:30h to 12:00h - RA
T 20 - Group 1+2 - Friday 25/11/11 - 10:30h to 12:00h - RA

SEMINARS

S1 – Group 103 – Monday, 17 Oct 11 – 12:30h to 14:00h – Room 23.S01 - RA
S1 – Group 101– Monday, 17 Oct 11 –14:00h to 15:30h – Room 20.179 - RA
S1 – Group 203 – Tuesday, 18 Oct 11 – 12:30h to 14:00h – Room 23.S01 - RA
S1 – Group 201– Tuesday, 18 Oct 11 – 14:00h to 15:30h – Room 20.179 - RA
S1 – Group 102 – Wednesday, 19 Oct 11 – 10:30h to 12:00h – Room 13.103 - AS
S1 – Group 202– Wednesday, 19 Oct 11 – 15:30h to 17:00h – Room 13.103 – AS

S2 – Group 103 – Monday, 24 Oct 11 – 12:30h to 14:00h – Room 23.S01 - RA
S2 – Group 101– Monday, 24 Oct 11 –14:00h to 15:30h – Room 20.179 - RA
S2 – Group 203 – Tuesday, 25 Oct 11 – 12:30h to 14:00h – Room 23.S01 - RA
S2 – Group 201– Tuesday, 25 Oct 11 – 14:00h to 15:30h – Room 20.179 - RA
S2 – Group 102 – Wednesday, 26 Oct 11 – 10:30h to 12:00h – Room 13.103 – AS (RA)
S2 – Group 202– Wednesday, 26 Oct 11 – 15:30h to 17:00h – Room 13.103 – AS

S3 – Group 103 – Monday, 31 Oct 11 – 12:30h to 14:00h – Room 23.S01 – BANK HOLIDAY
S3 – Group 101– Monday, 31 Oct 11 –14:00h to 15:30h – Room 20.179 – BANK HOLIDAY
S3 – Group 203 – Tuesday, 1 Nov 11 – 12:30h to 14:00h – Room 23.S01 – BANK HOLIDAY
S3 – Group 201– Tuesday, 1 Nov 11 – 14:00h to 15:30h – Room 20.179 – BANK HOLIDAY
S3 – Group 102 – Wednesday, 2 Nov 11 – 10:30h to 12:00h – Room 13.103 – AS (RA)
S3 – Group 202– Wednesday, 2 Nov 11 – 15:30h to 17:00h – Room 13.103 – AS

S4 – Group 103 – Monday, 7 Nov 11 – 12:30h to 14:00h – Room 23.S01 – RA (AS)
S4 – Group 101– Monday, 7 Nov 11 –14:00h to 15:30h – Room 20.179 – RA (AS)
S4 – Group 203 – Tuesday, 8 Nov 11 – 12:30h to 14:00h – Room 23.S01 – AS
S4 – Group 201– Tuesday, 8 Nov 11 – 14:00h to 15:30h – Room 20.179 – AS
S4 – Group 102 – Wednesday, 9 Nov 11 – 10:30h to 12:00h – Room 13.103 – AS (RA)
S4 – Group 202– Wednesday, 9 Nov 11 – 15:30h to 17:00h – Room 13.103 – AS

S5 – Group 103 – Monday, 14 Nov 11 – 12:30h to 14:00h – Room 23.S01 – RA
S5 – Group 101– Monday, 14 Nov 11 –14:00h to 15:30h – Room 20.179 – RA
S5 – Group 203 – Tuesday, 15 Nov 11 – 12:30h to 14:00h – Room 23.S01 – AS
S5 – Group 201– Tuesday, 15 Nov 11 – 14:00h to 15:30h – Room 20.179 – AS

S5 – Group 102 – Wednesday, 16 Nov 11 – 10:30h to 12:00h – Room 13.103 - AS
S5 – Group 202– Wednesday, 16 Nov 11 – 15:30h to 17:00h – Room 13.103 – AS

S6 – Group 103 – Monday, 21 Nov 11 – 12:30h to 14:00h – Room 23.S01 – AS
S6 – Group 101– Monday, 21 Nov 11 –14:00h to 15:30h – Room 20.179 – AS
S6 – Group 203 – Tuesday, 22 Nov 11 – 12:30h to 14:00h – Room 23.S01 – RA
S6 – Group 201– Tuesday, 22 Nov 11 – 14:00h to 15:30h – Room 20.179 – RA
S6 – Group 102 – Wednesday, 23 Nov 11 – 10:30h to 12:00h – Room 13.103 – AS (RA)
S6 – Group 202– Wednesday, 23 Nov 11 – 15:30h to 17:00h – Room 13.103 – AS

EXAM

Thursday 22/12/11 - 11:30h to 13:30h