YEAR 2012 - 2013

MARKETS AND DERIVATIVES (20848)

Degree: Economics
Course: Third/Fourth
Term: First
Number of ECTS credits: 5
Hours of student's dedication: 125 hours
Language of instruction: English
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1. Presentation of the subject:

The subject deals with 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 risk positions through them.

The derivatives market has grown exponentially through the last years, not only for hedging but also for speculative purposes.

Nowadays, the right use and comprehension of these financial instruments is crucial in order to understand the evolution of financial markets around the world.

2. Competences to be attained:

Prerequisites: As a third/fourth year subject, the student is expected to possess a profound economic knowledge.

Expertise in mathematics, statistics, macroeconomics and international and financial economics will be very convenient.

The general competences are:

G1. A correct comprehension and good understanding of written academic texts and textbooks.

G4. An advanced level of English.

G9. A demanding and rigorous discipline focused on work.

G10. A proactive attitude when learning new issues, a quality highly appreciated in a professional life.

G11. Apply the knowledge and understanding, and problem solving abilities in new or unfamiliar environments.

G16. Use the information properly when suggesting proposals or solving problems.

G17. Use an economic reasoning when making decisions in risky environments.

G18. The ability to integrate knowledge and handle complexity.

3. Contents:

S1. Introduction. General overview of the derivatives market.

S2. Mechanics of the futures market.

S3. Determination of forwards 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 options 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:

The course grade will be determined by student's performance in the following areas:

Attendance and proactive participation (lectures and seminars): 10%

To receive full points for attendance and participation the student must attend classes regularly and contribute constructively to class discussions.

Final Exam (comprehensive): 50%

Seminars (working party): 40%

60% will be the result of how the student solves each of the seminars.

40% will come from the student's presentation of a seminar in class.

A zero will be given for no attendance to seminars even if the solution submitted is correct. Attendance to seminars is compulsory.

Both parts (final exam and seminars) must be passed separately with a minimum of four out of ten in order to average and complete this course successfully.

Presumably the retake period will take place in February. The student will be able to retake only the final exam mark.

This resit will be through a new exam (also requiring a minimum of four out of ten to average it). Finally do remember that the C grading is five out of ten.

5. Bibliography:

5.1. Basic bibliography:

Options, futures and other derivatives – John. C. Hull. Pearson Education, New Jersey, 5th edition.

5.2. Additional bibliography:

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

5.3. Teaching resources:

Lecture notes and other supplementary material will be uploaded on the course website at least one day before the scheduled lecture. The student is responsible for printing them.

6. Methodology:

We will occasionally discuss supplemental cases as well as current news related to the material covered in class. All students are expected to come prepared for in-class case/news discussions.

There will be a total of six seminar assignments.

These problems will be either uploaded on the course website or distributed in class at least some days in advance of the due date.

The seminar assignments are meant to help students review the concepts covered during the previous weeks and to help them prepare for the final exam.

Students will work and submit solutions to seminars in groups. Each group will present one seminar in class.

Late homework will not be accepted.

The final exam will be comprehensive in nature through a combination of multiple choice: questions and exercises.

No wireless devices will be allowed in the examination room. Mobile telephones will remain switched off.

Needless to say that no form of academic dishonesty will be tolerated.

If a student is caught trying to cheat during the final exam, the student will automatically fail the course.

7. Activities planning:

The information given below represents the tentative lecture and assignment schedule for this course. Any adjustments will be announced beforehand in class.

WEEK NUMBER:	CHAPTER NUMBER:	SEMINAR:
1	1-2	
2	3-4	
3	5-6	
4	7-8	
5	9-10	SEMINAR 1
6	11-12	SEMINAR 2
7	13-14	SEMINAR 3
8	15-16	SEMINAR 4
9	17-18	SEMINAR 5
10	19-2	SEMINAR 6