# FIN 356: Options, Futures and Swaps

Fall 2010

Room W-628, Tuesday: 12:20 pm - 03:05 pm

#### **Instructor:**

Iuliana Ismailescu Office hours: Tuesday: 3:30 pm - 5:30 pm Office: W-410 Thursday: 11:10 am - 2:00 pm

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## **Course Description and Objectives:**

FIN 356 is an introductory course in derivatives securities. It focuses on futures and forward contracts, interest rate derivatives (forward rate agreements and swaps) and options (puts and calls). Its objective is to familiarize you with each derivative instrument's characteristics, as well as with how to price and trade derivative products to achieve a variety of financial goals. The learning goals are critical thinking, decision making, and problem solving.

#### **Textbook**:

Options, Futures, and Other Derivatives, 7<sup>th</sup> edition, by John C. Hull, Prentice Hall, ISBN 0136015867

**Recommended Reading:** Rogue Trader, by Nick Leeson

Fiasco, The Inside Story of a Wall Street Trader, by Frank

Partnoy

The Wall Street Journal

#### **Grading Weight and Distribution:**

Exam 1	30%
Exam 2	30%
Quizzes	30%
Class Participation and attendance	10%

At the end of the semester your overall score will be converted to a final grade as follows:

93 and above	Α	77-79.9	C+
90-92.9	A-	73-76.9	C
87-89.9	B+	70-72.9	C-
83-86.9	В	67-69.9	D+
80-82.9	B-	60-66.9	D
		below 60	F

This course features three exams, of which only the best two will count toward your final grade. The first two exams are in class, the third is take-home. **The third exam is cumulative**. In addition to the three exams, this course features four announced, one-question quizzes, of which only the top three will count toward your final grade. Exams will consist of problems similar to those solved in class. Occasionally, extra-credit questions will be posed in the class room.

## **Class Participation:**

Each student is expected to actively participate in class. For better understanding of the subject matter, students are required to read the chapter(s) before they come to class. At the end of each chapter there are problems related to topics covered by the textbook and discussed in class. Students are encouraged to solve as many problems as possible.

#### **Class Policies:**

- No make-up exams are granted for this course.
- There are no credit projects that can be done to improve a grade.
- Attendance is taken during each class.
- Avoid being late at the beginning of class and after the break. No student will be allowed in the class room 5 minutes after the class starts/resumes.
- Turn off your cell phones and beepers during class.
- Academic integrity is important. Cheating will be dealt with harshly. Pace University Student
  Academic Integrity Code can be found at
  <a href="http://www.pace.edu/emplibrary/Pace%20University%20Student%20Academic%20Integrity%20Code.doc">http://www.pace.edu/emplibrary/Pace%20University%20Student%20Academic%20Integrity%20Code.doc</a>

### **Course website:**

Course information will be posted on the course website (blackboard.pace.edu). Check the announcement section for last minute postings before you come to class.

#### Reasonable Accommodations for Students With Disabilities:

The University's commitment to equal educational opportunities for students with disabilities includes providing reasonable accommodations for the needs of students with disabilities. To request an accommodation for a qualifying disability, a student must self-identify and register with the Coordinator of Disability Services for his or her campus. No one, including faculty, is authorized to evaluate the need and arrange for an accommodation except the Coordinator of Disability Services. Moreover, no one, including faculty, is authorized to contact the Coordinator of Disability Services on behalf of a student. For further information, please see Information for Students with Disabilities on the University's web site.

## Advice on How To Do Well In This Class

Students often ask advice on how to complete this course successfully. My best answer is to follow these steps:

- 1. Read each assigned chapter before you come to class.
- 2. Participate actively in the class room (listen carefully to the lecture and ask questions to clarify points of confusion).
- 3. Follow the problems solved in class and demonstration problems throughout each chapter.
- 4. Solve or try to solve as many end-of-chapter problems as possible. This is the best way to judge your understanding of the material and to prepare for exams.
- **5.** Read each chapter at least one more time after it is covered in class.

# **Course Outline\*:**

1. Introduction Chapter 1: Introduction

(Week 1)

2. Forwards and Futures Contracts Chapter 2: Mechanics of futures markets

(Weeks 2 – 4) Chapter 3: Hedging strategies using futures

Chapter 5: Determination of forward and futures

prices

Week 4 Exam 1

3. Interest Rate Derivatives Chapter 4: Interest rates

(Weeks 5 – 6) Chapter 7: Swaps

4. Options Chapter 8: Mechanics of options markets (Weeks 7 – 13) Chapter 9: Properties of stock options

Chapter 11: Binomial trees

Chapter 13: The Black-Sholes-Merton model

Week 9 Exam 2

Chapter 15: Options on stock indices and currencies

Chapter 10: Trading strategies involving options

Week 14 Exam 3

If time permits Chapter 17: The Greek letters

Chapter 18: Volatility smiles Chapter 24: Exotic options

<sup>\*</sup> The outline is subject to change without prior notification

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# **Student Information Sheet**

Name
Student ID Number
E-mail address
Have you used MS Excel before?
Do you currently work?
Why did you come to Pace?
Why have you registered for this course?
What do you expect to learn in this class?
What is your dream job upon graduation?
I may need special assistance in the class because (check all that apply):
I am transferring this course to another college/university that requires a "C" or better
I am on probation and need a "C" or better to stay at Pace University
I took this class before and failed it
I have never done well in quantitative courses (such as math, statistics, etc.)
I am receiving a scholarship and need at least a "B" to keep it
I can't get reimbursed from my company unless I earn at least a "C"
Other (please specify)