

Rutgers Business School
Rutgers, The State University of New Jersey
Futures and Options (33:390:420:01)
Fall 2009

Instructor: Dr. Zhaodong (Ken) Zhong
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Meetings: Tuesday and Friday 12:00 pm - 1:20 pm
Classroom: LSH B117

Office Hours: Tuesday and Friday 1:30 p.m. ~ 2:30 p.m.

COURSE OBJECTIVES:

Derivative instruments are one of the largest markets in the world and are used daily by corporate and portfolio managers. All managers should understand the basics of their use, pricing, and valuation. Financial engineers specialize in the valuation of derivatives and the creation of new derivatives. This course provides an introduction to these skills. The course will be mathematically intensive and good understanding of calculus and linear algebra is essential.

TEXTBOOK AND MATERIALS:

Required: John Hull, *Fundamentals of Futures and Options Markets*, 6th ed., Prentice Hall
Supplementary materials: *Wall Street Journal*
Course website: *Blackboard*

COURSE REQUIREMENTS AND GRADING

The overall grading schedule is as follows:

The Best Two of Three Exams	80% (40% each)
Assignments	20%

EXAMS:

A total of three exams will be given during the semester. The attached class schedule indicates when exams will occur. The first two exams will be non-cumulative, and the last exam will be cumulative. Only the best 2 out of 3 scores will count towards final grading (i.e., you can drop one exam score). Overall, exams will count for 80% of the final grade.

All exams are closed book. Students should bring a financial or scientific calculator, pen, and pencil. You may also bring *one* single-sided, letter-sized, formula sheet to each of the first two exams, and *two* single-sided, letter-sized, formula sheets to the last exam. Each exam contains multiple-choice questions and problem-solving questions. The best way to prepare for exams is to attend class, solve homework problems, and review lecture materials. A significant part of the exam will be questions nearly identical to problems discussed in class or in the homework.

ASSIGNMENTS:

Homework assignments will be a component of the final grade. Periodically, students are required to hand in *written* solutions to homework for grading. The due dates will be announced in class. Student must turn in their homework on time. Late homework will receive *zero* automatically. Overall, homework will count for 20% of the final grade.

CLASS PARTICIPATION AND BONUS POINTS:



A good student

Class participation is important because it enhances the classroom environment and allows student to practice public speaking in a supportive, low-risk environment. Good public speaking is arguably the most valuable skill of a business leader. Like any other skill, it can only be improved through practice.

Chips will be awarded for solving in-class questions, or participating in discussions that enhance the learning of others. Chips will not be awarded for simple clarifications, or for questions that have already been discussed. Each student can earn one chip each day, and it must be “cashed in” at the end of each class.

Each chip is worth 0.5 bonus point towards the final grade. Each student can earn a maximum of 5 chips during each half of the semester, before and after the first exam. In other words, you can earn a maximum of 2.5 bonus points for each half of the semester (a total of 5 bonus points for the entire semester). Once you earn the maximum number of chips, please allow time for other students to participate. I appreciate active students, but I want all students to participate.

ATTENDANCE:

Attendance is mandatory. Each student is entitled to three unexcused absences during the semester. Each unexcused absence beyond the third one will reduce the final grade by one point per unexcused absence. For example, if a student has five unexcused absences, then his/her final grade will be reduced by two points.

What is an excused absence? An excused absence is when there are extenuating circumstances regarding why a student cannot attend class, such as illness requiring medical attention, conflict due to a religious observation, etc. If such an extenuating circumstance exists, you need to provide me written supporting document with signature of qualified professionals (such as doctor’s note). Emails or other forms of notices are not sufficient, thus will *not* be accepted. Sorry, but work obligations and job interviews do *not* count as excused absences, which is the reason why you get two freebies.

MAKE-UP POLICY:

Since you can drop one exam score, there is no make-up exam if you miss one exam. If under some extreme unusual circumstance that you have to miss another exam after you already miss one (assuming both misses are due to justified causes), one make-up exam can be given, provided that the student has adequate documentation for both cases as determined by the instructor in accordance with university policy.

RE-GRADING:

You may request a re-grade on any exam. Each re-grade request must be accompanied by a concise written explanation of the request and submitted to me within one week after I distribute the grade for the exam. The whole exam will be re-graded, so your score can either increase or decrease or stay same as a result.

Tentative Class Schedule (Subject to change*)

Dates	Contents	Reading (Chapter)
9/1, 9/4	Introduction	1
9/11, 9/15	Forward and Futures	2
9/18, 9/22	Determination of Forward and Futures Prices	5
9/25, 9/29	Hedging Using Futures	3
10/2, 10/6	Interest Rate Futures	4, 6
10/9, 10/13	Options	8
10/16, 10/20	Properties of Option Prices	9
10/23, 10/27	Exam I on 10/27	
10/30, 11/3	Trading Strategies	10
11/6, 11/10	Binomial Trees	11, 16
11/13, 11/17	Black-Scholes Model	12, 17
11/20, 11/24	Options on Indices, Currencies, and Futures	13, 14
12/1, 12/4	Option Greeks and additional topics	15, 7
12/8, 12/11	Exam II on 12/11	
12/16	Exam III on 12/16 @ 12pm Check the following webpage for exact date and time: http://scheduling.rutgers.edu/fallfinals.htm	

*If you miss a class, please check with your classmates for any announcement.