

FINC 6233  
Options and Futures  
University of Houston-Clear Lake  
Fall 2009 Syllabus

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**Office Hours:** MW 10:30-11:30, MW 1:00-2:00, W 6:00-7:00, and by appointment

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**Blackboard/WebCT Site:** <http://courses.uhcl.edu:8900>

**Communication**

Since this is an online course, we will not have the benefit of regular face-to-face class meetings. However, I will still need to communicate important course-related information to you, and you will likely have questions for me. It is important to note that I am not available online 24/7. However, I will check my e-mail and the WebCT discussion boards at least every Monday, Wednesday, and Friday afternoon. Similarly, I expect you to check your e-mail and the WebCT discussion boards at least once every two business days.

When you have a comment or question, you should post it to the discussion board if others in the class might be able to contribute to or benefit from the discussion. Of course, if you have a question regarding your grade or a

personal situation that you would not want to share with the entire class, the discussion board is not the appropriate forum; e-mail me directly instead.

You are welcome to e-mail me at [WhitworthJ@uhcl.edu](mailto:WhitworthJ@uhcl.edu), or by sending me a message through WebCT's mail feature. Each method has its advantages and disadvantages. Mail sent to [WhitworthJ@uhcl.edu](mailto:WhitworthJ@uhcl.edu) usually reaches me with no problems, but sometimes it is delayed due to our (overly?) aggressive spam filter, especially if you e-mail from an off-campus address. The upside of this method is that *sometimes* I am able to retrieve these messages easily on my mobile phone, potentially allowing for a faster response even when I am away from my desk. If you use WebCT's mail feature, the messages will not be forwarded to my mobile phone, but they also will not be caught in the spam filter.

You are also welcome to stop by my office or call during the office hours listed above. If you stop by or call outside those hours, I may still be able to help you, but if for some reason I cannot, we will set up another convenient time. You are always welcome to make an appointment to stop by.

## **Course Overview**

In this course you will learn about financial derivatives, including options, futures, forwards, swaps, and other securities as time permits. Our primary emphasis will be on how these contracts are valued and how they can be used to manage risk by hedging.

## **Prerequisites**

All students should have successfully completed FINC 5031 (Financial Analysis and Markets) or an equivalent course. I will also assume that you are familiar with basic algebra and statistical techniques and that you are able to use Microsoft Excel. Anyone who has *not* completed the required prerequisites should speak with me before continuing in the course.

## **Course Materials**

**Textbook:** *Fundamentals of Derivatives Markets*, by Robert L. McDonald. (ISBN 0-321-35717-5)

**Course Notes:** The notes for each chapter will be posted to the class web page periodically. You will need to visit the class web page regularly and print out copies of the chapter notes before going through the corresponding online lecture.

**Calculator:** You will certainly need a good calculator for this course. At a minimum, you should have a scientific calculator with exponential and

logarithm functions, but additional financial and statistical functions may also be helpful.

**Computer:** I will assume that you have access to a computer with Microsoft Office and a reliable broadband internet connection.

### **Grading**

Your performance in this course will be evaluated as follows:

Orientation quiz	10 points
Chapter quizzes	100 points
Unit review quizzes	90 points
Excel spreadsheet assignments	<u>50 points</u>
Total	<u>250 points</u>

The following scale will be used to determine grades:

<u>% of Total</u>		<u>% of Total</u>	
<u>Points</u>	<u>Grade</u>	<u>Points</u>	<u>Grade</u>
92.0 - 100.0	A	72.0 - 77.9	C
90.0 - 91.9	A $\square$	70.0 - 71.9	C $\square$
88.0 - 89.9	B+	68.0 - 69.9	D+
82.0 - 87.9	B	62.0 - 67.9	D
80.0 - 81.9	B $\square$	60.0 - 61.9	D $\square$
78.0 - 79.9	C+	0.0 - 59.9	F

I reserve the right to adjust any of these requirements slightly at the end of the semester if it is appropriate. However, there is *no guarantee* of any such adjustment.

**Orientation Quiz:** You must earn a perfect score on the orientation quiz before any of the course content or tools (e.g. lectures, assignments, quizzes, discussion board, grades) will be available to you.

**Homework:** A list of homework problems will be posted to the class web site for each chapter we cover. While these problems will not be collected for grading, it is very important that you complete them as soon as possible and seek help if you get stuck on a problem. You will definitely see a lot of quiz questions that are similar to your homework.

**Chapter Quizzes:** There will be an online quiz administered through WebCT for each chapter that we cover. Each quiz may be attempted up to

two (2) times, and I will count only the higher score. While the each quiz will emphasize the chapter just covered, I reserve the right to include questions over topics from previous chapters.

**Unit Review Quizzes:** This course consists of three units: Chapters 1-4 (derivatives basics and strategies), Chapters 5-8 (forwards, futures, and swaps), and Chapters 9-11 (options). At the end of each unit, there will be a unit review quiz, also administered through WebCT. These quizzes will be somewhat longer than the chapter quizzes and will be based primarily on the material from the unit just completed. However, as with the chapter quizzes, you may see a few questions that revisit material from prior units. You may attempt each unit review quiz only once.

**Comprehensive End-of-Semester Quiz (optional):** There will be an online quiz available at the end of the semester with problems drawn from all the topics discussed during the semester. It will be approximately the same length as a unit review quiz. If you choose to take it, you may use the score you earn to replace the lowest of your three unit review quizzes.

### Rules for quizzes:

- You may refer to your books, homework, and notes as you complete each quiz. However, you may *not* receive assistance from fellow classmates or any other person during a quiz, nor may you give assistance to other students on quizzes.
- You are allowed and expected to use a calculator and/or spreadsheet to help you solve quiz problems, just as you would on homework problems.
- Each quiz in WebCT has a deadline which is *not* flexible. Any answers submitted after the deadline (even by one minute) will be rejected by the server, and the quiz will not be reopened. Please be aware that the current time is determined by WebCT, so setting your computer's clock back will not help if you are late. Technical difficulties such as WebCT server problems, computer crashes, internet service provider (ISP) outages, and last-minute personal emergencies are *not* valid excuses for failing to complete a quiz on time. Since these problems do happen sometimes, waiting until the last minute to take a quiz is a bad idea. You will typically have at least one week to complete each quiz, which should be plenty of time.
- I strongly recommend that you use a reliable internet connection and (if possible) have a back-up plan when taking quizzes on WebCT. If you lose your connection for any reason during the middle of a quiz, you may log back on, but the timer will continue to run while you are offline, and no compensation will be given for the lost time. If technical difficulties prevent you from finishing while you are attempting a chapter quiz, then the score from your other attempt will count (assuming it is higher). If technical difficulties prevent you from

finishing a unit review quiz, you will need to take the comprehensive end-of-semester quiz to replace that score. No additional make-up quizzes are available (i) if you are unable to finish either attempt at a chapter quiz, (ii) if you are unable to finish two or more unit review quizzes, or (iii) if you are unable to finish the comprehensive end-of-semester quiz.

**Excel Spreadsheet Assignments:** There will be two (2) assignments this semester that require you to create an Excel spreadsheet to solve problems related to the course material. More specific details will be given later in the semester. You will have at least two weeks to complete each assignment.

### **Academic Honesty**

Academic honesty is the cornerstone of the academic integrity of the University. It is the foundation upon which the student builds personal integrity and establishes a standard of personal behavior. *Because honesty and integrity are such important factors in the professional community, you should be aware that failure to perform within the bounds of these ethical standards is sufficient grounds to receive a grade of “F” in this course and be recommended for suspension from UHCL.* The Honesty Code of UHCL states, “I will be honest in all my academic activities and will not tolerate dishonesty.”

### **Students with Disabilities**

If you will require special academic accommodations under the Americans with Disabilities Act, or other state or federal law, please contact the Disability Services Office (Student Services Building, Room 1301; phone 281-283-2626) as soon as possible.

### **Dropping and Withdrawing**

University policy will be followed. The last day to drop a course or withdraw for the semester is Tuesday, October 27.

### **Changes to the Syllabus**

Circumstances may require changes to any of the dates or other material contained in this syllabus. Any such changes will be announced on the class discussion board. *It is the student's responsibility to monitor these discussion boards regularly and to keep informed of any changes.*

### **Learning Outcomes**

Upon successful completion of this course, students will be able to...

- define each of the basic derivative contracts, including forwards, futures, swaps, and options;
- state how the payoff for each type of derivative is determined;
- give examples of how derivatives can be used for hedging and for speculation; and

- price each type of derivative given the terms of the contract and the characteristics of the underlying asset.

### **Assessment**

The School of Business may use assessment tools in this course and other courses for curriculum evaluation. Educational Assessment is defined as the systematic collection, interpretation, and use of information about student characteristics, educational environments, learning outcomes and client satisfaction to improve program effectiveness, student performance and professional success.

This assessment will be related to the learning objectives for each course and individual student performance will be disaggregated relative to these objectives. This disaggregated analysis will not impact student grades, but will provide faculty with detailed information that will be used to improve courses, curriculum, and students' performance.