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**FINA 4320/6320: DERIVATIVE SECURITY MARKETS**

**Fall 2009 Syllabus for Sections 44-770 and 04-782**

**Dr. Chris Stivers**

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**Course Description:** The markets for futures, options, and other derivative securities. The mechanics of trading, regulation, pricing, hedging, and risk management using derivatives.

**Class time:** Monday, Wednesday, & Friday: 9:05 – 9:55 AM

**Classroom:** Caldwell 302

**Professor:** Dr. Chris Stivers, Ph.D., University of North Carolina at Chapel Hill

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**Office Hours:** Wednesday 3:30 – 4:30 PM, Thursday 10:00- 11:00 AM, and by appointment.

**Course Web Site:** On eLearning Commons (eLC): <http://elc.uga.edu>  
I will regularly publish announcements, course notes, problem solutions, and other materials on this site. Students should check it frequently.

**Course Objectives and Expected Learning Outcomes:** This course will introduce students to derivative security markets; including call and put options, futures and forward contracts, and swaps. Derivative security markets are an exciting, innovative, and growing segment of financial markets. By taking this course, students will gain an understanding of: (1) the economic role of derivatives, (2) the valuation of derivatives including option pricing models, (3) derivative trading strategies, (4) the management of corporate risk with derivatives, including risk from international operations, and (5) so-called “real options”.

**Text:** *An Introduction to Derivatives & Risk Management*, Seventh Edition, by Don Chance and Robert Brooks, 2007, Thomson South-Western Publishers.

**Prerequisites:** -Undergraduate: FINA 4310 (Survey of Investments) and FINA 3000 (Financial Management). Also MATH 2200, MATH 2250, or equivalent.  
-Graduate: Same as undergraduate, or equivalent.

**Course Outline:** A tentative list of specific topics and text assignments appear on the attached course outline at the end of this syllabus. While we may deviate from this schedule, it provides the basic structure for the course.

**Changes to syllabus:** The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

**University Honor Code and Academic Honesty Policy:** *As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <http://www.uga.edu/honesty>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.*

### **Homework:**

Periodic Routine Homework: For every chapter, problems will be assigned that correspond to the lecture material. These problems will not be collected but some of these problems will be worked in class as examples and students should be ready to contribute to these problem-working sessions.

Supplemental Readings: Additional articles will be assigned for reading from current periodicals or journals. We will discuss these articles and they may provide material for the exam/quizzes. These readings will be announced in class and on the course web page.

Pre-exam Homework Assignments: About one week prior to every exam, I will make a prior year's corresponding exam available for self-test. It is **highly** recommended that you work through this exam in detail, as it will be very representative of the type of questions you will see on the exam. I will post solutions for this practice exam, several days before our exam.

### **Quizzes:**

We will have periodic short quizzes to evaluate class progress in between the major exams. I anticipate having 4 to 6 quizzes. These quizzes will count 12% of the course grade for 4320 students and 10% of the course grade for 6320 students. You may drop your lowest quiz score, so no make-up quizzes will be given.

### **Course Projects:**

Two different types of projects will be assigned in the second half of the semester. This will be group work of about 3 students per group.

(1) A case report will be assigned that will apply the concepts from the class. This will be a fictional scenario of a company that requires an analysis of option pricing and option strategies. Details on the form of the report and the scope will be provided later in the term. This case analysis will count for 10% of the course grade for 4320 students and 8% of the course grade for 6320 students.

(2) The second project will be an investment game where each group will have a mock-portfolio to manage. The trading will be web-based. Details will follow. Counts for 10% of the class grade for 4320 students and 8% for 6320 students. Note that there is a small fee from the company that administers the trading game. The fee should be about \$6 to \$9 per person.

**Class Attendance and Participation:** Classroom attendance and participation is expected and will result in a much better course for you and your fellow students. Each student is expected to be prepared for class and to contribute to class discussions. **Students who do not consistently attend class may receive up to a 5% penalty on their final grade.**

It is your responsibility to contact me **in advance** if your absence will affect your ability to meet any of the course requirements **on time**. I realize there may be legitimate reasons for you to leave class early. However, please be considerate and let me know *prior to class starting* that you must leave early.

**Laptop Policy:** Students may want to bring laptops in for some lectures, when we are using Excel applications. Laptops should be used in class only for class activities, such as taking notes or doing an in-class exercise. They should not be used to check email, surf the web, or other non-class activities. If I perceive there is a “laptop problem”, then I reserve the right to implement a “laptops closed” policy, except for when we are using a computer application directly in class.

**Exams** - Exams are closed book but I may provide certain complex equations for reference on the exam. I will let you know in advance which equations will be provided on exams. Cheating will result in a grade of zero.

Periodic Exams: Two in-class exams will be given during the semester. These two exams are tentatively scheduled for September 21 and November 4. These exam dates will be firmed up about two weeks in advance of the exam. The first exam will be graded and returned to you prior to the course withdrawal deadline.

Final Examination: The final examination will be given at the regularly scheduled university examination time, on Monday, December 14, from 8 to 11 PM.

**Exam Regrading:** I will, of course, correct any obvious errors. However, on matters of debate, you should prepare a brief written memo to me explaining why you think you deserve more points on a particular question and then deliver the memo and exam back to me. I will then review this problem and the entire exam to evaluate whether you deserve additional points.

**Policy for make-up of examinations:** There will be NO MAKEUP TESTS. The weight from a missed test will be transferred to the Final Exam, PROVIDED the absence is due to a serious illness, a family emergency or SOME university-sponsored events. If you expect to miss an exam for an approved reason, let me know as soon as possible prior to the exam. You must provide me with a formal written note regarding the situation – preferably before the exam – plus a phone call or note from a physician or other relevant person within one week following the exam.

**Grade Determination:** Final grade assignments will depend upon your overall performance and will be determined as objectively as possible based on the following weights.

	<u>4320</u>	<u>6320</u>
Regular Exams	35%	34%
Final Exam	33%	32%
Quizzes	12%	10%
Project Assignments	20%	24%

The grade breakdown will be based on the following: A: 90-100; B: 80-89; C: 70-79; D: 60-69; and F: <60. Plusses and minuses may be awarded for course averages at the extreme values of these distributions, at approximately +/-1.5 pts.

**FINA 6320 students:** In addition to the above two course projects described above, graduate students will write a research paper on a current issue or recent events relevant to the application, pricing, accounting, or economic benefits of financial derivatives. In connection with this research, graduate students will be expected to read extensively on the topic and to consult with the instructor as they construct their reading list. Graduate students will also be required to make a presentation to the class that relates what they learned in their research paper. This research and presentation project will count 8% of the course grade for the graduate students.

Additionally, graduate students will also be required to complete the other two course projects individually, rather than the group work assigned in this course.

## TENTATIVE TOPICAL OUTLINE

<b>Date</b>	<b>Topic</b>	<b>Text</b>
Aug. 17 - 24	Introduction/Overview Structure of Options Markets	Chapter 1 Chapter 2
Aug. 24 - 31	Principles of Option Pricing	Chapter 3
Aug. 31 – Sep. 11	Binomial Option Pricing Model	Chapter 4
Sep. 7	Labor Day – No class	
Sep. 11 - 30	Black-Scholes Option Pricing Model	Chapter 5
Sep. 21	1st Exam (Chap. 1 – 4)	
Sep. 30 – Oct. 7	Basic Option Strategies & Applications	Chapter 6
Oct. 9 - 19	Adv. Option Strategies & Applications	Chapter 7
Oct. 19 – 26	Structure of Forward and Futures Markets	Chapter 8
Oct. 26 – Nov. 6	Principles of Forward and Futures Pricing	Chapter 9
Oct. 30	Fall Break – No class	
Nov. 4	2nd Exam (Chap. 5 - 8)	
Nov. 6 - 11	Futures Hedging Strategies (partial coverage)	Chapter 11
Nov. 11- 20	Swaps (partial coverage)	Chapter 12
Nov. 23-27	Thanksgiving Break – No class	
Nov. 30 –Dec. 2	Introduction to Real Options	Notes Provided
Dec. 2 - 8	More on Financial Risk Management (partial coverage) & Presentations	Chapters 15 & 16
Dec. 8	Wrap-up/ Review	
Dec. 14	Final Exam	8:00 – 11:00 AM