

FINA 4320: DERIVATIVE SECURITY MARKETS

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

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

Spring 2007:

Terry College of Business
University of Georgia
Tuesdays and Thursdays, 12:30 – 1:45, Caldwell 305.

Instructor: Ryan McKeon
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Course Web Site: webct.uga.edu
Office Hours: By appointment, any other time you find me in my office.

For e-mails regarding queries on course material or requests for meetings please use my uga.edu e-mail address. I check this more frequently than WEBCT e-mail. However, you should make a habit of checking WEBCT regularly as I will use the e-mail facility there to send general instructions and comments to the class.

Course Objective:

This course is an introduction to derivative security markets including call and put options, futures and forward contracts, and swaps. Topics include, but are not restricted to, the economic role of derivatives, valuation of derivatives, derivative trading strategies and the management of corporate risk with derivatives. The aim of the course is for students to end up comfortable with the use and valuation of a variety of derivative products.

Recommended Texts:

An Introduction to Derivatives & Risk Management, Sixth Edition, by Don M. Chance, 2004, South-Western Publishers.

Options, Futures and other Derivatives, 6th Edition, by John C. Hull, 2006, Pearson Education.

A variety of relevant books can be found on the 5th floor of the main library, for example in section HG6024.

Novels/Recreational Reading:

When Genius Failed: The Rise and Fall of Long-Term Capital Management, Roger Lowenstein, 2001, Random House Trade.

F.I.A.S.C.O.: The Inside Story of a Wall Street Trader, Frank Partnoy, 1999, Penguin Books.

Covered Calls and Naked Puts, Ronald Groenke, 2004, Keller Publishing.

Some websites of relevance:

<http://www.cboe.com/>

<http://www.cbot.com/>

<http://www.isda.org/>

Prerequisites: FINA 4310 (Survey of Investments) and FINA 3000 (Financial Management).

A basic familiarity with spreadsheets such as Excel is assumed.

Other Items:

a) You will need a capable financial or scientific calculator.

b) Note the above course Web site. I will regularly publish announcements, problem solutions, and other course materials on this site. You should check the site frequently.

Reading assignments:

Articles will be posted for reading from current periodicals or journals. These will provide material for the exam/quizzes. These readings may not be specifically addressed in class, although questions or discussion are welcome if desired.

Projects:

One project is assigned for the course. The due date for this project is Monday, 30th April.

The project will involve an investment game where each student will have a mock-portfolio to manage. The trading will be web-based. Details will follow. Note that there is a fee from the trading game firm.

Each student should prepare a written report on their trading activities including examples of the trades he/she traded, the reasons for implementing these trades and the final outcome. Grades will be based on the clarity of the report and not on the results achieved during the trading game (students may find that losing a lot of “money” on the game is very educational! :)

Absences: I do not keep track of attendance during the semester, but frequent absences will hurt your chances of good scores on tests and the exam. Furthermore, while I am happy to discuss course content and questions outside of class time, I will not be inclined to repeat entire classes which students have missed.

Exam/Tests – Tests and the final Exams will be closed book but I will provide certain complex equations for reference on the exam. Exams and tests will only be administered at the assigned times, and a missed exam or test will carry a grade of zero unless explicitly excused by a physician or the Dean of students. Truly exceptional circumstances should be discussed with me prior to the exam.

Periodic tests: Four in-class tests will be given during the semester. These tests are scheduled for 30 January, 22 February, 22 March and 19 April. These exam dates will be firmed up at least a week in advance of the exam.

Final Examination: The final examination will be on Thursday 3rd May from 12:00 to 3:00.

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

Semester Tests	20 % weighting on your <u>three best</u> scores out of the four
Final Exam	30 %
Project	10 %

Your final grade will be determined solely on your scores in the tests, project and final exam. Regrettably, no points can be awarded for effort or amount of time spent studying.

The following will be used as a guideline for final grades:

92.0% - 100%	A
90.0% - 91.9%	A-
88.0% - 89.9%	B+
82.0% - 87.9%	B
80.0% - 81.9%	B-
78.0% - 79.9%	C+
72.0% - 77.9%	C
70.0% - 71.9%	C-
68.0% - 69.9%	D+
62.0% - 67.9%	D
60.0% - 61.9%	D-
0.0% - 59.9%	F

Honor code:

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. While I strongly encourage discussion with classmates, all work for grades should be completed individually.

Course Outline:

(The relevant chapter in the Hull and Chance books are provided in parentheses. The Powerpoint notes which accompany the chapters in the Hull book can be downloaded from John Hull's website at <http://www.rotman.utoronto.ca/~hull/>)

January:

9 th :	Introduction/Overview (Hull 1 , Chance 1)
11 th :	Structure of Options Markets and Futures markets (Hull 2 and 8 , Chance 2 and 8)
16 th :	Structure of Options Markets and Futures markets (Hull 2 and 8 , Chance 2 and 8)
18 th :	Principles of Option Pricing (Hull 9 , Chance 3)
23 rd :	Principles of Option Pricing (Hull 9 , Chance 3)
25 th :	Option Types, Strategies & Applications (Hull 10 , Chance 6 and 7)

30th: **TEST 1**

February:

1st: Option Types, Strategies & Applications (Hull 10 , Chance 6 and 7)
6th: Binomial Option Pricing Model (Hull 11 , Chance 4)
8th: Binomial Option Pricing Model (Hull 11 , Chance 4)
13th: Stock price dynamics and Black-Scholes Model (Hull 12 and 13 , Chance 5)
15th: Black-Scholes Model (Hull 13 , Chance 5)
20th: Option “Greeks” (Hull 15 , Chance 5)
22nd: **TEST 2**
27th: Option “Greeks” (Hull 15 , Chance 5)

March:

1st: Volatility smile, Volatility estimation (Hull 19)
6th: Futures hedging (Hull 3 , Chance 10)
8th: Futures hedging (Hull 3 , Chance 10)
20th: Forward and Futures pricing (Hull 5 , Chance 9)
22nd: **TEST 3**
27th: Forward and Futures pricing (Hull 5 , Chance 9)
29th: Swaps (Hull 7 , Chance 12)

April:

3rd: Swaps (Hull 7 , Chance 12)
5th: Credit risk (Hull 20 , Chance 15)
10th: Credit Derivatives (Hull 21)
12th: Credit Derivatives (Hull 21)
17th: Financial Risk Management (Hull 18 , Chance 16)
19th: **TEST 4**
24th: Introduction to Real Options (Hull 31)
 Miscellaneous: CDO’s, ASCOT’s, Weather derivatives (Chance 14),
 Warrants (Hull 23) , Overview of Derivative Settlements and
 Documentation
26th: Wrap-up/ Review

May:

3rd: ***FINAL EXAM 12:00 – 3:00 pm.***