New York University Stern School of Business

B40.3335.01 and B40.3335.10 Futures and Options Professor John C. Hull

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Office Hours:	Mon, 3pm to 5pm; Tues 4pm to 6pm or by appointment
Classroom:	2-90 (day section); 3-90 (evening section)
Class Hours:	MW 10:00am to 11:20am (day section);
	W 6:00pm to 8:50pm (evening section)
Teaching Assistant:	Marc Filion; e-mail mrf213@stern.nyu.edu
T.A.'s Office Hours:	Wed 1pm to 6pm; Location: Teaching Assistance Center; Room 6-70

Course Description

The course covers forward contracts, futures contracts, swaps, options, and other derivatives. It deals with how these contracts work, how they are used, and how they are priced.

Course Materials

We will use "Options, Futures, and Other Derivatives," 4th edition by John Hull (ISBN: 0-13-022444-8). You may also wish to purchase the Solutions Manual that accompanies this text (ISBN 0-13-014819-9). Additional material for the classes in the last three weeks will be posted on my NYU Web Site. PowerPoint slides will also be posted on my NYU Web Site.

Software

We will use the Excel version of DerivaGem, which can be downloaded from my U of T Web Site.

Math Skill Requirements

MBA students are often concerned that they do not have the math skills to get through this course. Thumbing through the textbook, they are often put off when they see complex equations and references to things such as Ito's lemma. In fact, the parts of the text we are using have been chosen carefully and will not make unreasonable demands on your math skills.

Career Opportunities

People who are skilled at trading, marketing, and analyzing derivatives are in great demand on Wall Street. It is not unusual for the earnings (including bonus) of successful MBAs to be in excess of \$1 million per year three or four years after graduating. For some advice on how to get a job in derivatives see my NYU Web page.

Class Schedule

Stern has designated Wed. Dec. 13 as a study day with no classes. I have to be out of town on Wed. Dec.6. I have therefore arranged to cancel my classes on Wed Dec 6 and teach classes as usual on Wed. Dec. 13. I apologize for any inconvenience.

Problem Sets

There will be four sets of problems to hand in:

Wed Sept 20 Assignment Questions 1.29, 1.32, 1.33, 2.33, 2.35

Wed Oct 4: Assignment Questions 3.29, 3.30, 3.32, 4.30, 4.31, 5.19, 5.21

Wed Nov 8: Assignment Questions 7.23, 7.25, 8.21, 9.15, 10.12, 11.25, 11.26 (part (a) only and assume that t = 0 so that we are valuing the derivative today), 11.29,

Wed Nov 22: Assignment Questions 12.42, 12.44, 13.24, 13.25, 13.26, 16.26, 17.15

You are advised to attempt the assignment questions as soon as possible after the relevant material is covered in class

Exams

There will be a mid term exam during class on Wed. Oct 18. The final exam will be on Dec 20 (11:15am to 1:15pm for day class and 6pm to 8pm for evening class). The exams are closed book, but you are allowed to bring in one sheet of paper (2 sides) with notes, formulas, etc.

Assessment

Assessment will be as follows:

Problem sets	30%
Mid Term Exam	30%
Final Exam	40%

BUT if you do better on the final exam than the midterm exam, this will become:

Problem sets	30%
Final Exam	70%

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Week 1: Introduction to forward, futures and options contracts. (H. Ch1, Ch2 pp 19-35)

Week 2: Hedging Using Futures; determination of futures and forward prices (H Ch 2 pp 35-45; Ch3)

Week 3: Interest rates and duration (H Ch4)

Week 4: Swaps (H Ch5)

Week 5: Stock Options (H Ch 6,7)

Week 6: Trading Strategies; Binomial Model (H Ch 8,9)

Week 7: Review and mid-term exam (Mid-term will be on Wed. Oct 18)

Week 8: The Black-Scholes Model (H Ch 10, excluding section 10.6 and Appendix 10A, and Ch 11 excluding sections 11.5, 11.9, and Appendices 11A, 11B, 11C)

Week 9: Options on Stock Indices, Currencies, and Futures (H Ch 12, excluding appendices)

Week 10: The Greek Letters (H Ch 13)

Week 11: Binomial Trees; volatility smiles (H Ch 16, pp388-406; H Ch 17, pp435-441))

Week 12: Exotic options and swaps markets (Material to be distributed)

Week 13: New derivative markets (Material to be distributed)

Week 14: Derivatives disasters (Material to be distributed)