

Finance 740 - Forwards, Futures, & SWAPs Syllabus - First 8 Weeks: Fall 2008

Thursdays, 6:00 - 9:40pm, SUM 424, line #13540

Instructor: Professor Koch
Email: pkoch@ku.edu
Office / Phone: 326C Summerfield Hall, Lawrence Campus / (785)-864-7503
Office Hours: Tuesdays & Thursdays, 5:15 - 6:00pm, or by appointment.
Homepage: <http://www2.business.ku.edu/pkoch>
Prerequisites: FIN 701 or consent of instructor.
Required Text: John Hull, *Fundamentals of Futures and Options Markets*, 6th edition, 2008.
Course Notes: Blackboard: <http://courseware.ku.edu>
Sch. of Bus. O-drive: <ftp://ftp.business.ku.edu/pkoch/FIN%20740-741>

Course Objectives: This course examines the use of forwards, futures, SWAPs, and related financial derivatives for hedging, arbitrage, and speculation in the global environment. The course focuses on understanding how firms manage interest rate risk, exchange rate risk, and commodity price risk using these derivatives. The emphasis is on the motivation, issues, and techniques behind financial engineering with these derivatives, as practiced by firms and individuals to maximize value in global markets.

In English, we want to understand:

1. how these financial instruments and markets work.
2. how they can be used to manage risk.
3. what determines prices (i.e., valuation).

Course Grading: The course grade will be determined by performance on one short research paper, a midterm exam, a final exam, and class participation. Late papers will not be accepted. Exam conflicts must be resolved prior to the administration of each exam. Grading weights appear below. If at the end of the term you are at the margin between two grades, your contribution to class discussion throughout the term will determine whether you receive the higher or lower grade. Note that it is the quality and not simply the frequency of participation that is important.

Homework: Selected cases and problems will be assigned for experience in working with the concepts discussed in class. These will aid in understanding the material and in preparing for exams. Solutions are available. Selected problems will be discussed when time permits.

Withdrawal Policy: You may withdraw with a grade of "W" any time after the first exam only if you are doing passing work ("C" or better).

FIN 740 - Forwards, Futures, & SWAPs
Tentative Schedule - First 8 Weeks: Fall 2008

References: Hull; *Fundamentals of Futures and Options Markets*, 6th edition, 2008;
 JOD; *Journal of Derivatives*, 2000, article by Kawaller & Koch;
 JACF; *Journal of Applied Corporate Finance*, 2003, Charnes, Berkman, & Koch.
 SSW; Course notes from *Financial Engineering*, Smithson, Smith, and Wilford.

<u>Date</u>	<u>Topic</u>	<u>Readings: Chapter Problems</u>
Aug. 21	Introduction & Motivation; Definitions Background Information; FAS 133 Derivatives Mishaps; Risk Mgt Policies	Glossary (p. 1,2,5); SSW; Hull- Ch.1: 1,2,7,10-12,17-19,21. JOD; JACF. Hull- Ch. 23.
Aug. 28	Mechanics of Futures Markets; Social Benefits of Futures Markets	Hull- Ch. 2: 1-6,8-16,18,19,21-23. Course Notes.
Sept. 4	Hedging Strategies Interest Rates	Hull- Ch. 3: 1-11,13,15-18,20. Hull- Ch. 4: 1,3-5,7,12,14,17,19-21.
Sept. 11	Exam I (first 90 minutes) Valuation (last 120 minutes)	Glossary (pp. 1,2,5); Hull- Ch. 1 - 4, 23; Social Benefits Notes; SSW; JOD; JACF Hull- Ch. 5: 1-12,14,15,17.
Sept. 18	Valuation	Hull- Ch. 5: 1-12,14,15,17;
Sept. 25	Interest Rate Futures	Hull- Ch. 6: 1-7,12,14-18,20.
Oct. 2	Interest Rate SWAPs	Hull- Ch. 7: 1-12,15-17.
Oct. 9 *****	Final Exam (first 90 minutes of class) (I will be at a Conference presenting research and interviewing professors.)	Hull- Ch. 5, 6, First half of 7.

<u>Important Dates</u>	<u>Subject</u>	<u>% of Grade</u>
Aug. 28	Deadline to choose topic for paper	
Sept. 11	Exam I	40
Oct. 2	Paper due	15
Oct. 9	Final Exam (6:00 - 7:30pm, or so)	<u>45</u>
	Total:	100

Explanation of Paper

Each student will write a short paper (no more than 2 pages single spaced) discussing the *use of forwards, futures, SWAPs, or related derivatives in managing some aspect of financial risk*. You may wish to discuss an aspect of financial engineering using forwards, futures, or SWAPs that is not covered in class. The book by Hull offers a wide array of contemporary topics that could satisfy this type of paper. Another possible paper topic would be to write a case discussing a specific individual's or firm's use (or misuse) of derivatives in managing (or mismanaging) some aspect of risk. Again, Hull discusses specific individual's and firm's uses of these derivatives in managing risk. In addition, the collection of Wall Street Journal articles on electronic reserved reading provides many examples of derivatives disasters for specific firms, regulatory developments, accounting issues, and other related issues that offer ideas for this paper. You will be graded on the degree of difficulty of the risk-management problem addressed, and the quality and rigor of exposition. I will consider allowing small groups (2-3 people) to collaborate on this project, but I need to approve any such proposals.

Students with disabilities

Any student who has a disability that may prevent her/him from fully demonstrating his/her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate the educational opportunity.

School of Business Honor System

The School of Business Honor System promotes academic integrity by its students and faculty through adherence to the following code:

We, the faculty, instructors, and students of the School of Business pledge to fulfill our mutual responsibilities to each other and the academic community at large with honor and integrity in order to build and maintain a climate of respect and trust that will enhance our research, teaching, and learning. We will support the Honor System of the School and will not tolerate activities that undermine academic integrity.

As a student in a School of Business class, you will be protected by and expected to conduct yourself in accordance with this system. For a complete description of the system, see: <http://www.business.ku.edu/HonorCode>. This is required reading for all students.

In accord with this policy, the following pledge must be signed by students at the end of all exams:

On my honor, I have neither given nor received any unauthorized aid on this exam.
Nor am I aware of anyone giving or receiving any unauthorized aid on this exam.

Signature _____ Date: _____

As two examples of how this class will operate to promote this Honor System:

1. There will be no graphing calculators allowed in any exams.
2. No cell phones are allowed to operate during class. Be sure to turn yours off.

FIN 741 - Options.
Syllabus - Second 8 Weeks: Fall 2008

Thursdays, 6:00 - 9:40pm, SUM 424, line #13542

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Course Objectives: This course examines the use of options and related financial derivatives for hedging, arbitrage, and speculation in the global environment. The course focuses on understanding how firms manage interest rate risk, exchange rate risk, and commodity price risk using options. The emphasis is on the motivation, issues, and techniques behind financial engineering with options, as practiced by firms and individuals to maximize value in global markets.

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1. how these financial instruments and markets work.
2. how they can be used to manage risk.
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Course Grading: The course grade will be determined by performance on one short research paper, a midterm exam, a final exam, and class participation. Late papers will not be accepted. Exam conflicts must be resolved prior to the administration of each exam. Grading weights appear below. If at the end of the term you are at the margin between two grades, your contribution to class discussion throughout the term will determine whether you receive the higher or lower grade. Note that it is the quality and not simply the frequency of participation that is important.

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FIN 741 - Options.
Tentative Schedule - Second 8 Weeks: Fall 2008

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<u>Date</u>	<u>Topic</u>	<u>Readings: Problems</u>
Oct. 16	Fall Break	
Oct. 23	Currency SWAPs Mechanics of Options	Hull- Ch. 7: 1-12,15-17. Hull- Ch. 8: 1,2,4-10,13-22.
Oct. 30	Trading Strategies with Options Basic Properties of Stock Options	Hull- Ch. 10: 1-7,9,10,12-17. Hull- Ch. 9: 1-15,20.
Nov. 6	Option Valuation - Binomial	Hull- Ch. 11: 1,2,4-7,9-13,15.
Nov. 13	Midterm Exam (first 90 minutes) Option Valuation – B/S (last 120 min.)	Hull- Ch. Last half of 7, 8-11. Hull- Ch. 12: 1,2,4,6,11,13-15.
Nov. 20	Option Sensitivities & Delta Hedging	Hull- Ch. 15:1-8,10,13,14,22,24
Nov. 27	Thanksgiving	
Dec. 4	Value at Risk	Hull- Ch. 18: 1-4,8,11,13,16,21.
Dec. 11	Exotic Derivatives Real Options	Hull- Ch. 20 - 22; Glossary; Course Notes.
Dec. 18	Final Exam (6:00 - 9:40pm)	Hull- Ch. 12, 15, 18, 20-22; Glossary; Real Options.

<u>Important Dates</u>	<u>Subject</u>	<u>% of Grade</u>
Oct. 30	Deadline to choose topic for paper	
Nov. 13	Midterm Exam	40
Dec. 4	Paper due	15
Dec. 18	Final Exam (7:30 - 10:00pm)	<u>45</u>
	Total:	100

Explanation of Research Paper

Each student will write a short paper on *the use of options in risk management* (no more than 2 pages single spaced). This paper may take several possible forms. One possibility is a discussion of how options or related derivatives can be used to manage some aspect of financial risk. The book by Hull is a good resource for such topic ideas. Another possibility is a Case that documents or discusses how a specific individual or firm used (or could have used) options in managing some aspect of financial risk. Other ideas are also welcome. Again, Hull discusses specific individual's and firm's uses of these derivatives in managing risk. In addition, the collection of Wall Street Journal articles on electronic reserved reading provides many examples of derivatives disasters for specific firms, regulatory developments, accounting issues, and other related issues that offer ideas for this paper. You will be graded on the degree of difficulty of the risk-management problem addressed, and the quality and rigor of exposition. I will consider allowing small groups (2-4 people) to collaborate, but I need to approve any such proposals.

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