

Finance 425 Futures & Options Syllabus - Fall 2008

4:00 - 5:15pm; T R; SUM 426; line #39634

Instructor: Professor Koch
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 Office / Phone: 226C Summerfield Hall / (785)-864-7503
 Office Hours: right after class: 5:15 - 6:00pm T R; or by appointment.
 Homepage: <http://www2.business.ku.edu/pkoch/>
 Prerequisites: FIN 310 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%20425/>

Course Objectives: This course examines the use of forwards, futures, swaps, 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 these derivatives. The emphasis is on understanding 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 quizzes, 2 exams, a research paper, and class participation. Late papers will not be accepted and makeup quizzes and exams will not be given. Conflicts taking quizzes or exams must be resolved prior to the administration of each quiz or exam. Your lowest quiz score will be thrown out. Grading weights are provided 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 quizzes and exams. Solutions are available. Selected problems will be discussed in class 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 ("D" or better).

Finance 425 Futures & Options: Tentative Schedule - 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.

<u>Date</u>	<u>Topic</u>	<u>Readings: Chapter Problems</u>
Aug 21	Introduction; Background Info. Terminology; FAS 133	Hull- Ch. 1: 1,2,7,10-12,17-19,21; Glossary (pp. 1-2); JOD & JACF.
Aug 26	Derivatives Mishaps; Risk Mgt Policies	Hull- Ch. 23.
Aug 28, Sept 2	Mechanics of Futures Markets	Hull- Ch. 2: 1-6,8-16,18,19,21-23.
Sept 4, 9	Hedging Strategies	Hull- Ch. 3: 1-11,13,15-18,20.
Sept 11	Interest Rates	Hull- Ch. 4: 1,3-5,7,12,14,17,19-21
Sept 16, 18	Valuation of Forwards and Futures	Hull- Ch. 5: 1-12,14,15,17.
Sept 23, 25	Interest Rate Futures	Hull- Ch. 6: 1-7,12,14-18,20.
Sept 30, Oct 2	Interest Rate SWAPs	Hull- Ch. 7: 1-13,15-17.
Oct 7	Midterm Exam	Hull- Ch. 1-7,23; Intro; Backgrnd; Glossary; JOD; JACF
Oct 9	NO CLASS: I'm at a Conference presenting research & interviewing.	
Oct 14	Currency SWAPs	Hull- Ch. 7: 1-12,15-17,23.
Oct 16	NO CLASS: Fall Break	
Oct 21, 23	Mechanics of Options	Hull- Ch. 8: 1,2,4-10,13-22.
Oct 28, 30	Trading Strategies with Options	Hull- Ch. 10: 1-3,5,6,9,14,15.
Nov 4, 6	Properties of Stock Options	Hull- Ch. 9: 1-15,20.
Nov 11, 13	Option Valuation- Binomial Model	Hull- Ch. 11: 1,2,4-7,9-13,15.
Nov 18	Option Valuation- Black/Scholes	Hull- Ch. 12: 1,2,4,6,11,13-15.
Nov 20, 25	Option Sensitivities & Delta Hedging	Hull- Ch. 15: 1-8,10,13,14,22,24.
Nov 27	Thanksgiving Break	
Dec 2, 4	Value at Risk	Hull- Ch. 18: 1-4,8,11,13,16,21.
Dec 9	Exotic Derivatives	Hull- Ch. 20 - 22; Glossary.
Dec 11	Real Options	Course Notes.
Dec 17	*** Final Exam (1:30 - 4:00pm) ***	Hull- Ch. 7-12, 15, 18, 20-22; Glossary; Real Options Notes.

<u>Important Dates</u>	<u>Subject</u>	<u>% of Grade</u>
Sept 11	Deadline to choose topic for paper	
	Quizzes	25
Oct 7	Midterm Exam	30
Nov 25	Paper due	10
Dec 17	Final Exam (1:30 - 4:00pm)	<u>35</u>
	Total	100

Explanation of Paper

You will write a short paper (no more than 2 pages single spaced) discussing the *use of forwards, futures, SWAPs, options, or related derivatives in managing some aspect of financial risk in global markets*. You may wish to discuss an aspect of financial engineering using forwards, futures, SWAPs, or options that is not covered in class. Hull's textbook offers a wide array of contemporary topics that might satisfy this type of paper. See especially Hull, Chapters 20 - 22 and the Glossary and their references. Another possible paper topic could 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, see Hull's book, Chapter 23, which discusses specific cases of individuals & firms' misuse of derivatives in managing risk. In addition, the collection of Wall Street Journal and other articles on electronic reserved reading provides many examples of derivatives disasters for specific individuals and firms, regulatory developments, accounting issues, and other related issues that offer good ideas for this paper. You will be graded on the degree of difficulty of the risk-management problem or topic addressed, and the quality and rigor of your exposition. I am willing to consider allowing small groups (2-3 people) to collaborate on this project, but I need to approve any such proposals in advance. You must clear your choice of topic with me by Sept. 11.

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.

The 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 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 the Honor System:

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