

FINA 551: Options and Futures Markets
Spring 2004, HKUST
Venue: Room #1403; Time: 9:00-12:20 Saturdays

Instructor: Prof. K.C. John Wei, Ph.D.
Office: Room 2417
Phone: 2358-7676; Fax: 2358-1749; email: johnwei@ust.hk
Office Hours: 13:00-14:00 Saturdays and by appointment.
Home page: <http://www.bm.ust.hk/~fina/staff/johnwei.html>
Teaching Assistant: Mr. Jie Zhang (email: zjking@ust.hk)

Required Textbook

John C. Hull, *Options, Futures, & Other Derivatives*, Fifth edition, Prentice-Hall, 2003.

Students are urged to read the chapters before each class. Further readings will be assigned from time to time. Students are also urged to learn a spreadsheet program such as Microsoft Excel.

Course Objectives

This course will cover financial futures and options, although it will also cover some futures and options on commodities. Roughly one half of the course will be devoted to futures and another half to options. The primary objective of the course is to understand the pricing theories, the trading strategies, and the use of futures and options in risk management. Though this course does not require sophisticated skills, the materials do tend to be somewhat rigorous.

Evaluation

Category	Weight
1. Assignments	20%
2. Case	10%
3. Midterm Exam	30%
4. Final Exam	40%
Total	100%

The time and venue for the midterm and final exams will be announced later. Any conflicts with other midterm exams must be reported immediately.

Assignments and Case

There will be a number of assignments and one case. Groups of no more than four members are allowed for assignments and the case. Each member of the group will receive the same grade. I do not care the free-riders problem. Due to the threat of viruses, email submissions of assignments are not allowed. You can use fax to submit the assignments and the case.

Practice Exercises

I will post practice exercises on my. Most of the questions are from CFA levels I-III. They are useful for the midterm and final exams and those want to take the CFA exams.

Topics to be covered in the course

<u>Lecture #</u>	<u>Topics and relevant chapters</u>
1.	Introduction (Chapter 1)
2.	Futures Markets and the Use of Futures for Hedging (Chapter 2)
3.	Forward and Futures Prices and Hedging (Chapters 3-4)
4.	Interest Rates and Duration (Chapter 5)
5.	Swaps (Chapter 6)
6.	The Basics of Options (Chapters 7 and 8)
7.	Option Trading Strategies (Chapter 9)
8.	Binomial Option Pricing Model (Chapters 10 and 18)
9.	Dynamic Hedging Strategies
10.	The Black-Scholes Option Pricing Model (Chapters 11-13)
11.	Practical Examples: Marketing, Capital Guaranteed Funds, ELNs
12.	Risk Parameters for Options (Chapter 14)