FINA332 Fundamentals of Option and Futures Spring 2003

Instructor

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Course Description

This course provides practical working knowledge of options valuation and its applications. The first part of the course covers the basic models of option pricing, including the binomial-tree model and the Black-Scholes model. The second part of the course teaches how to use these models and principles to value various derivative securities and to manage market risk. Cases are used to provide students with experiences of applying these models and principles to complex problems in the real world.

Prerequisites

Basic knowledge of bonds, stocks, CAPM, market efficiency
A little knowledge of calculus and statistics
Some knowledge of Microsoft Excel

Course Materials

John C. Hull: Fundamentals of Options and Futures, 4th edition, Prentice Hall
(Required, available at University Bookstore)
John C. Hull: *Options, Futures, & Other Derivatives,* Prentice Hall
(For future studies, available at University Bookstore)
Articles, cases, homework, etc.
(Will be made available during classes)

Course Work

Class Participation: Necessary but not graded
Exercises: Questions in the textbook, not graded,
Cooperation encouraged.
Four sets of homework: 20% of the course grade, complete individually
One cases: 20% of the course grade, complete by group (3~5 people).
Final Exam: 60% of the course grade

Topics and Textbook Reading

Topics	Textbook
Options contracts and markets	1.1-3, 7.1—14 (optional)
Restrictions to option prices	3.3, 8.1—7
Trading strategies and hedging	9.1—5
Models of stock prices	11.1-3
Binomial tree models	10.1-8, 17.1
The Black-Scholes model	11.4—11
Dividend and index options	12.1—4
Futures and currency options	3.5—12, 12.1—6
Managing options risk and Portfolio management with options	15.1—10
Value at risk	3.10, 12.4, 15.12—13