

Hong Kong University of Science and Technology
FINA 399F: Advanced Topics in Corporate Finance
Spring, 2003

Class Hours: Tu/Th, L1 09:00-10:20, L2 10:30-11:50
Class Venue: 4117
Office Hours: Tu/Th, 14:30-16:30, or By Appointment
TA:

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Overview

This course examines important issues in finance from the perspective of financial managers who are responsible for making significant investment and financing decisions. The concept of net present value, suitably adapted to account for uncertainty, taxes, and strategic concerns, is used to analyze how investment and financing decisions interact to affect the value of the business. The course covers topics that are also of importance to decision making in corporate strategy and general management.

After a quick review of discounted-cash-flow (DCF) valuation models, we analyze some typical capital investment problems derived from real business settings such as purchasing a plant, initial public offering (IPO), and leveraged-buyout (LBO). We then address an array of topics of interest to corporate managers such as managerial incentives, the interactions between strategy and finance, leasing, and the firm's payout policies. The course ends with discussing applications of options theory in corporate finance.

While the course is not designed to dwell on abstraction, the basic theoretical underpinnings of the various topics are a prerequisite to competent analysis and intellectual discussion. We emphasize the development of problem-solving skills based on a good understanding of the business environment as opposed to pure theorizing or mindless numbers exercise. Because of the practical importance of the material and as illustration of the relevant theory, we will discuss examples and cases.

The pace of the course is swift and mastery of the material can be time-consuming (around 5 hours/week of independent study). Therefore, a strong and continuing time commitment is necessary. *Students are expected to have read the assigned materials before the corresponding lecture and be ready to participate in class discussions.* Class participation is important. I will call on individuals to lead a discussion or otherwise participate in the discussion. The level of participation is a factor in assigning the final letter grade.

Prerequisites

You have probably already taken FINA 111, 221, and 321. Therefore, I assume you have some exposure to basic financial statement analysis and how financial institutions work. For

example, you definitely need a review if you find the following terminology perplexing: *growing perpetuity, net working capital, efficient market hypothesis, firm's capital structure.*

This course does not require advanced knowledge of mathematics, statistics, or programming. However, a working familiarity with algebra and Excel is helpful.

Materials

Required:

- Textbook: Richard A. Brealey and Stewart C. Myers (henceforth BM), **Principles of Corporate Finance**, 7th Edition, Irwin/McGraw-Hill
- Cases:
 1. American Chemical Corporation (HBS 280-102)
 2. Netscape's Initial Public Offering (HBS 296-088) (no writeup required)
 3. Congoleum Corporation (HBS 287-029)
 4. Marvin Enterprises (BM pp. 295-301) (no writeup required)
 5. Union Tank Car Company (class handout)
 6. Arundel Partners: The Sequel Project (HBS 292-140)
- Articles:
 1. T. Luehrman, *Using APV: A Better Tool for Valuing Operations* (HBS 97306)
 2. T. Luehrman, *Capital Projects as Real Options: An Introduction* (HBS 295-074)

Supplemental:

- Stephen A. Ross, Randolph W. Westerfield, and Jeffrey A. Jaffee, **Corporate Finance**, 6th Edition, Irwin/McGraw-Hill
- Aswath Damodaran, **Applied Corporate Finance: A User's Manual**, John Wiley and Sons, Inc.
- Asian Wall Street Journal
- Other items distributed in class

Grading

Your course grade is based on your performance on:

1. Four (group) case writeups (40%)
2. Final exam, details to be announced (50%)
3. Class participation (10 %)

Cases

- Case Group: The cases are an integral part of the course design. Preparation for the cases is done in groups of four to six students from the same section. Case scores are the same for members of the same group. However, at the end of the course, each of

- you will be asked to evaluate the effort of all members of your group. This evaluation is a factor in assigning grades.
- Case Writeup: Except for the instructor cases, each group need to prepare word-processed writeups (three to four pages of text, plus any supporting materials such as spreadsheets, figures and tables) which are due at the start of the respective case discussion classes. For each case, I will provide you with a hint sheet designed to help focus your analysis. The questions outlined therein are meant to be suggestive but not exhaustive and, therefore, neither the substance nor the organization of your writeup should be limited because of the hint sheet. The following are some general guidelines for preparing case writeups:
 - Identify the main issues of the case and highlight your main conclusions in an executive summary (which can take up the first half page of your report).
 - The main body of your analysis should be self-explanatory and reasonably self-contained. That is, the hypothetical reader should be able to replicate your results by tracing through the writeup and its spreadsheets.
 - State clearly the inputs to your analysis and the chosen methodology. If you feel that certain assumptions need to be made to justify a solution technique or a parameter choice, please make the assumption explicit. Justify your findings by providing the attendant intuition.
 - Where appropriate, perform sensitivity analysis and discuss the robustness of your results and their relevance to important corporate finance issues.
 - Case Presentation: To encourage student participation, I may request pre-designated groups to make a 15-minute presentation. The oral presentation should be well-prepared and supported by visual aids. Nonpresenting students are expected to comment on the presentations.

Miscellaneous

No makeup exams will be given. I will *not* assign homework problems to be collected or graded. However, you are strongly encouraged to work out the quizzes and questions from relevant chapters of the BM textbook. You may discuss these problems with the teaching assistant after you have made serious attempt at them. Simply reading the solutions manual is a very poor substitute to attempting the problems by yourself. Additional student resources are available at www.mhhe.com/bm7e and www.dushkin.com/powerweb.

You are expected to adhere to a high standard of integrity. Any form of academic dishonesty has no place in our School. If you have any question regarding the course, you should contact me immediately. To continuously improve the effectiveness of teaching and learning, I value your input regarding any aspect of the course.

Class Schedule (subject to change)

MODULE ONE

- Course Introduction
 - BM Chapters 1-5
- Topic: CAPM and WACC
 - BM Chapter 7-9
- Topic: Valuation Basics: Accounting Numbers, FCF
 - BM Chapters 6, 29
- Case Discussion: American Chemical Corporation
- Topic: Initial Public Offering
 - BM Chapter 15
 - Instructor's Case: Netscape's IPO
- Topic: Valuation Techniques: APV, FTE
 - BM Chapter 19
 - Timothy Luehrman, *Using APV: A Better Tool for Valuing Operations*
- Topic: Overview of M&A
 - BM Chapter 33
- Case Discussion: Congoleum Corporation

MODULE TWO

- Topic: Governance of the Public Corporation
 - BM Chapter 34.4
- Topic: Agency Costs
 - BM Chapter 12.1-12.3
- Topic: Incentives and Performance Measurement
 - BM Chapter 12.4-12.6
- Topic: Corporate Strategy
 - BM Chapter 11
- Instructor's Case: Marvin Enterprises

- Topic: Leasing
 - BM Chapter 26
- Case Discussion: Union Tank Car Company
- Topic: Dividends
 - BM Chapter 16
- Topic: Share Repurchases
 - BM Chapter 16

MODULE THREE

- Topic: Options Basics
 - BM Chapters 20
- Topic: Options Valuation
 - BM Chapters 21
- Topic: Real Options
 - BM Chapter 22
 - Timothy Luehrman, *Capital Projects as Real Options: An Introduction*
- Case Discussion: Arundel Partners: The Sequel Project
- Warrants and Convertibles
 - BM Chapter 23
- The Demise of LTCM: *Trillion Dollar Bet*
- Course Wrapup