



CORPORATE FINANCE TOPICS

C15.0008

Spring 2007

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Course Description

The objective of the course is to provide an understanding of both the theory of corporate finance and how it applies to the "real" world. The main focus of this course is on the corporate financial manager and how he/she reaches decisions as to capital investments, dividends and financing of all sorts. We will cover many issues that are important to a modern financial manager including various advanced topics in corporate finance such as financing policy/capital structure, financial distress, agency issues, valuation, dividend policy, mergers and acquisitions, leveraged buyouts, hostile takeovers, private equity financing and real options.

The prerequisites for this course are C15.0002 Foundations of Financial Markets and C15.0007 Financial Management. You should have a command of the materials from these courses, including discounted cash flow valuation, capital budgeting, cost of capital, the CAPM, basic option pricing and basic capital structure theory. Many of these concepts will be reviewed briefly in class but not in sufficient depth to learn them from scratch. If you are not comfortable with this material, then you should talk to me before committing to the course.

Required and Recommended Materials

The textbook for the course is a customized version of

Stephen A. Ross, Randolph W. Westerfield, and Jeffrey F. Jaffe, **Corporate Finance**, Seventh Edition, McGraw-Hill Irwin, 2005.

The customized text comes with a solutions manual for the end-of-chapter problems (shrink-wrapped together). There are also three required HBS cases:

"MW Petroleum Corporation (A)"
"American Home Products Corp."
"USG Corporation"

The cases should come in a separate soft-bound booklet.

Finally, there will be lecture notes, handouts (e.g., case questions) and supplementary materials (e.g., sample Excel spreadsheets) for many classes. Lecture notes and handouts will be distributed at the beginning of class, and they will also be available on Blackboard (see the URL above), usually before the relevant class session. Extra copies of these materials will *not* be available in my office. If you miss or lose the handouts, you should print them out from Blackboard. The supplementary materials will also be available on Blackboard, as will links to other relevant information.

Course Requirements

Group formation:

Groups should consist of 3-4 students. They should be formed as early as possible in the semester, and I will give you the opportunity to meet your classmates, form groups, and sign up during the first couple of weeks. There will also be a discussion board on the course homepage on Blackboard for the purpose of setting up groups. Students looking for groups and groups looking for additional members can post messages there. While I would prefer groups to stay together for the whole semester, I will permit “no-fault divorce”. In other words, if the group dynamics are not working, members are free to leave groups and groups are free to expel members. The only requirement is full disclosure. I and all the other group members must be informed of changes in membership. Group work should not be considered an excuse to free-ride. All members of a group are responsible for all aspects of group projects, and I reserve the right to call on any group member not just the group spokesperson.

Cases:

Each group will be responsible for preparing the three assigned cases, which will be discussed in class, and writing a short analysis. Case write-ups must be handed in during the class session prior to the class session during which the case will be discussed. The case write-ups should consist of answers to the case questions, which will be handed out approximately 2 weeks prior to the due date (and will be available on the course homepage). Write-ups should be limited to approximately three pages, plus appendices with spreadsheet printouts, etc. Everyone should come to class prepared to contribute and express their opinions about the case. Specific groups will also be assigned case questions for which they are expected to lead the discussion. In contrast to problem sets and exams, cases do not have a single correct answer. Moreover, they are often ambiguous, do not provide complete information, and require you to make assumptions (just like the real world). In grading the case write-ups, I will not be looking for an answer; rather I will be judging the process that went into getting to the answer. I will be looking for logic, consistency, thoughtful application of finance theory, and justification for any assumptions that you need to make. Preparing cases can be a time-consuming and frustrating experience. It is best to start as early as possible. I will be available to answer questions that arise as you prepare the cases, and there will also be a discussion board on the course homepage on Blackboard where I and your classmates can respond to questions.

Problem sets:

There will be 4 problem sets. Problem set questions will be handed out in class (and will be available on Blackboard). Each student should hand in solutions with his/her name and section prominently displayed on the top. You may discuss the problem sets with other students. Problem sets will be checked but not graded. In other words, all students making a credible effort to answer the questions will get full credit. This grading policy should not be construed as an excuse to blow off the problem sets. Quiz and final exam questions will draw heavily from the problem sets.

Quizzes and a final examination:

The 2 in-class quizzes and the final exam will consist of a number of short problems like those on the problem sets, in the textbook, and in the lecture notes. They will all be closed book exams; however, you may bring a single 8½ by 11 sheet of paper with your notes (both sides). In addition, I will provide a formula sheet with all the relevant formulas. Quiz #1 will cover option pricing, real options, warrants and convertible bonds. Quiz #2 will cover capital structure and related issues. The final exam will be cumulative, with the main focus on the last third of the course (valuation and mergers and acquisitions). Most of the quiz and exam questions will come directly or indirectly from the problem sets, lecture notes, cases, and the text. However, there may also be one or more problems that appear unfamiliar. These problems are a deliberate effort on my part to see if you can apply what you have learned to slightly different settings. **There will be no make-up quizzes or exams.** If you know that you will be unable to make it to class on the scheduled date, let me know far enough ahead of time so that you can take the test beforehand.

Reading and other requirements:

This class will require students to read and understand assigned chapters from the textbook before the corresponding class sessions. In addition to the problem sets, students should attempt to do end-of-chapter problems from the textbook. Suggested problems are given on the syllabus and in the lecture notes. Answers to these problems will not be collected, and the solutions are available in the solutions manual that comes with the textbook. Students are also expected to keep up with current business news by reading a publication such as the Wall Street Journal.

Attendance and class participation:

I do not take formal attendance, and I understand that many of you have other commitments (e.g., job interviews) that, on occasion, may interfere with your ability to get to class. However, you are expected to contribute, in a constructive manner, to classroom discussions. Keep in mind that class participation does account for 5% of the final grade.

Policies and procedures:

All written assignments (problem set and cases) should be handed in before the end of the class session in which they are due. Note that this means the class for which you are registered. (Due dates can be found on the final page of the syllabus.) They can be given to me in class, emailed, faxed, left in the digital drop box on Blackboard, or dropped in my mailbox in the Finance Department. Regardless of the method of delivery, the same deadline applies. The deadline refers to the time at which I receive the assignment, not the time at which you send it. Assignments that are late but within 24 hours of the deadline, will receive ½ credit. After 24 hours no assignments will be accepted (no exceptions); it is unfair to the other students in the class.

I will make every effort to start and end class on time. If you arrive late, please enter quietly without disturbing the rest of the class. If you carry a cell phone or any other type of ‘audible alert device’, turn it off before entering class. While in class, please be courteous to your fellow classmates and me. Do not engage in side conversation during lectures, even in a whisper. Repeated occurrence of such disruptions will be reflected in the final grade.

The emphasis in the class is on learning to think, not on memorizing formulas and the procedures for plugging numbers in these formulas. A conceptual understanding of the material is essential in order to successfully complete the various assignments. The key to understanding the material and doing well in the course is to keep up. Ask questions and clear up misunderstandings and misconceptions before they multiply. I consider a good question as valuable as a good answer. In lectures, it is difficult to ask good questions unless you already have some familiarity with the material. Therefore, you should do the required reading before the relevant class session.

I am available during the office hours listed at the beginning of the syllabus. If I have to cancel office hours I will try to make an announcement both in class and on Blackboard. If you cannot make it at these times, you can make an appointment to see me at another time. I am usually in the office every day. You can also take a chance and just drop by my office. However, even if I am in my office, I may have to turn you away if I am busy.

Grading Policy

The final grade will be calculated as follows:

Class participation	5%
Problem sets	5%
Case write-ups	15%
Quiz #1	20%
Quiz #2	20%
Final	35%

Course Outline

The cases and problem sets are listed in the session when they are due (see the last page for dates). RWJ refers to Ross, Westerfield, and Jaffe, **Corporate Finance**. Readings should be done prior to the class session in which the material is discussed.

<u>Session</u>	<u>Date</u>	<u>Topics</u>	<u>Assignments</u>
1	Tues., Jan. 16	Introduction Course overview Group formation	
2	Thurs., Jan. 18	DCF Valuation Cash flows Cost of capital The WACC approach	Read syllabus! Find a group!
3	Tues., Jan. 23	Options I Call and put options The law of one price Put-call parity	RWJ: Chapter 22.1-22.6 Problems: 22.1, 22.2, 22.8
4	Thurs., Jan. 25	Options II Binomial valuation	RWJ: Chapter 22.7-22.8 Problems: 22.15, 22.16
5	Tues., Jan. 30	Options III Black-Scholes valuation Real options	RWJ: Chapter 8.1, 8.4, 22.12 Problems: 22.11, 22.20, 22.23
6	Thurs., Feb. 1	Options IV Valuing real options	RWJ: Chapter 23.2-23.4 Problems: 23.3, 23.4, 23.5 Problem Set 1
7	Tues., Feb. 6	Long-Term Financing I Equity, debt and preferred stock Raising capital	RWJ: Chapter 14, 16.7, 20 Problems: 14.9, 20.16
8	Thurs., Feb. 8	Long-Term Financing II IPOs and SEOs Private Equity	RWJ: Chapter 19 Problems: 19.6, 19.8
9	Tues., Feb. 13	Long-Term Financing III Warrants and convertibles	RWJ: Chapter 24 Problems: 24.3, 24.6, 24.9, 24.13, 24.15 Case: MW Petroleum Corporation (A)
10	Thurs., Feb. 15	Options V Case discussion: MW Petroleum	Problem Set 2

<u>Session</u>	<u>Date</u>	<u>Topics</u>	<u>Assignments</u>
11	Tues., Feb. 20	Review/Problem Session	Study!
12	Thurs., Feb. 22	Quiz #1	
13	Tues., Feb. 27	Capital Structure I Basic capital structure theory Debt and equity as options	RWJ: Chapter 15.1-15.4, 22.9-22.10 Problems: 22.26, 22.27
14	Thurs., Mar. 1	Capital Structure II Equity valuation Corporate taxes Recapitalization	RWJ: Chapter 15.5 Problems: 15.13, 15.17, 15.18, 15.21
15	Tues., Mar. 6	Capital Structure III Personal taxes Agency and financial distress costs	RWJ: Chapter 16.1-16.9, Appendix 16B Problems: 16.2, 16.6, 16.8
16	Thurs., Mar. 8	Capital Structure IV Optimal capital structure	RWJ: Chapter 16.10
		Spring Break!	
17	Tues., Mar. 20	Capital Structure V Financial distress Bankruptcy process Leveraged restructuring	RWJ: Chapter 30 Problems: 30.5, 30.6
18	Thurs., Mar. 22	Dividend Policy Theory and evidence Dividend decisions in practice Stock dividends and splits	RWJ: Chapter 18 Problems: 18.6, 18.9, 18.14, 18.16 Case: American Home Products Corp.
19	Tues., Mar. 27	Capital Structure VI Case discussion: AHP	Problem Set 3
20	Thurs., Mar. 29	Review/Problem Session	
21	Tues., Apr. 3	Quiz #2	
22	Thurs., Apr. 5	Valuation I APV, FTE and WACC	RWJ: Chapter 17 Problems: 17.2, 17.5, 17.9, 17.11, 17.15
23	Tues., Apr. 10	Valuation II Examples Valuation using multiples	

<u>Session</u>	<u>Date</u>	<u>Topics</u>	<u>Assignments</u>
24	Thurs., Apr. 12	Mergers and Acquisitions I Introduction to M&A Stock vs. cash acquisitions	RWJ: Chapter 29.1-29.9 Problems: 29.4, 29.6, 29.9, 29.10, 29.12
25	Tues., Apr. 17	Mergers and Acquisitions II The empirical evidence Takeover defenses	RWJ: Chapter 29.10-29.12 Case: USG Corporation
26	Thurs., Apr. 19	Valuation III Case discussion: USG	Problem Set 4
27	Tues., Apr. 24	Hedging and Risk Management	RWJ: Chapter 25 Problems: 25.7, 25.10, 25.20
28	Thurs., Apr. 26	Review/Problem Session	Study!

Assignment Due Dates

Assignments (problem sets, cases, quizzes/exams) are due on the following dates. Cases and problem sets are due before the end of the corresponding class session. Assignments that are late but within 24 hours of the deadline, will receive ½ credit. After 24 hours no assignments will be accepted (no exceptions). **There will be no make-up quizzes/exams.** Any changes to this schedule will be announced in class and on Blackboard.

<u>Assignment</u>	<u>Due Date</u>
Problem Set 1	Thurs., Feb. 1
Case: MW Petroleum	Tues., Feb. 13
Problem Set 2	Thurs., Feb. 15
Quiz #1	Thurs., Feb. 22
Case: AHP	Thurs., Mar. 22
Problem Set 3	Tues., Mar. 27
Quiz #2	Tues., Apr. 3
Case: USG	Tues., Apr. 17
Problem Set 4	Thurs., Apr. 19
Final Exam	TBA