



## **ADVANCED CORPORATE FINANCE**

C15.0008

Spring 2009

Section 1 MW 11.00 pm-12:15pm (Tisch 201)

Section 2 MW 2.00 pm -3:15pm (KMEC 4-90)

Prof. Karan Bhanot

Office: KMC 9-71  
Office Hours: Mon 3:30 pm-5:00 pm, Tue 9.30 am -11.00 am Or by appointment. I will have extra office hours on the day prior to each quiz (time will be announced later).  
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### **Course Description**

This course follows C15.0007 Financial Management and covers various advanced topics in corporate finance including financing policy/capital structure, financial distress, agency issues, valuation, dividend policy, mergers and acquisitions, and real options. The underlying theme is that if the goal of the corporation is to maximize value, then all corporate financial decision-making can be viewed from a valuation perspective. Two primary valuation approaches are used—the law of one price (i.e., pricing via no-arbitrage as in standard option pricing) and discounted cash flow valuation. 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. Every effort will be made to integrate current business news into the presentation and discussion of the material.

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

Richard A. Brealey, Stewart C. Myers, and Franklin Allen, **Principles of Corporate Finance**, Ninth Edition, McGraw-Hill Irwin, 2008.

The book comes with a solutions manual for the end-of-chapter problems (shrink-wrapped together in the bookstore). As an alternative, you can buy the text from a source other than the bookstore.

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 also be available on Blackboard (see the URL above). 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 assignments:***

Groups should consist of 3 or 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. 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.

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 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. Please do not discuss your case solutions with your classmates, except, of course, for the other members of your group. Under no circumstances should you "lend" your Excel solutions to another group. Having multiple groups prepare the case solutions together defeats the purpose of the limit on group size.

At various times during the semester, groups may also be required to prepare and present answers to questions or problems that come up, either in lecture or through readings in the business press. For example, I may distribute a Wall Street Journal article and assign questions to various groups. In all cases, groups will get at least one class session notice.

Although group work can be difficult and stressful at times, students should consider it an opportunity to learn from their classmates. Keep in mind that you never really know something until you can teach it to someone else.

***Individual assignments:***

The individual assignments consist of 4 problem sets, 2 in-class quizzes and a final examination. 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.

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). Many 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.

***Other requirements:***

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. These problems are an excellent way to check your mastery of the material. Looking at the solution before attempting to do the problem is not a good way to approach these problems.

I do not take formal attendance, and I understand that many of you have other commitments (e.g., job interviews, sleep) that, on occasion, may interfere with your ability to get to class. However, keep in mind that class participation does account for 5% of the final grade. I try and get to know and remember the name of each student in the class. Also, I think that you will find the lectures and class discussions very useful in learning the material. The presentation of the material in the lectures often differs slightly from that in the textbook. The idea is to give you multiple ways to think about the same issues. Keep in mind that the lecture notes are not completely self-contained. In many cases, reading over the lecture notes without attending class will not deliver a good learning experience.

Finally, you are expected to contribute, in a constructive manner, to classroom discussions. The assigned reading should be done before the corresponding class session, and you are also expected to keep up with current business news by reading a publication such as the Wall Street Journal. I will attempt to alert you to particularly interesting news items via an announcement on Blackboard. Thus you should make an effort to check the course page regularly. I realize that some students, for a variety of reasons, are unwilling to speak up in class. You can also receive class participation credit by alerting me (via email) to interesting articles in the business press and highlighting their relevance to the class materials.

***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 (unless due to documented serious illness or family emergency); it is unfair to the other students in the class.

Students are expected to adhere to the NYU Stern Undergraduate Code of Conduct, a copy of which can be found at <http://www.stern.nyu.edu/uc/codeofconduct>. A student's responsibilities include, but are not limited to, the following:

- A duty to acknowledge the work and efforts of others when submitting work as one's own. Ideas, data, direct quotations, paraphrasing, creative expression, or any other incorporation of the work of others must be clearly referenced.
- A duty to exercise the utmost integrity when preparing for and completing examinations, including an obligation to report any observed violations.

Students whose class performance may be affected due to a disability should notify me immediately so that arrangements can be made to accommodate their needs in consultation with the Henry and Lucy Moses Center for Students with Disabilities (<http://www.nyu.edu/csd/>).

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. While in class, please be courteous to your fellow classmates and me. During lectures and discussions only one person should speak at a time. I encourage you to ask questions of your fellow students and me. 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.

In the past, students have found this to be a difficult class. This difficulty stems from the number of topics covered in the course (e.g., real options, capital structure, mergers and acquisitions) and the need to synthesize material from past courses in order to successfully master these topics. 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. 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.

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%

At Stern, we want to ensure fair and consistent grading across courses. As such, grades for this course will be distributed following the Stern Grading Guidelines for Core Courses at the Undergraduate College:

A's (A/A-)	25-35%
B's (B+/B/B-)	50-70%
C's and below	5-15%

## Course Outline

The cases and problem sets are listed in the session when they are due (see the last page for dates). BMA refers to Brealey, Myers and Allen, **Principles of Corporate Finance**. Readings should be done prior to the class session in which the material is discussed. The problem numbers refer to the “Questions and Problems” section at the end of each chapter.

<u>Session</u>	<u>Date</u>	<u>Topics</u>	<u>Assignments</u>
1	Wed., Jan 21	<b>Introduction</b> Course overview Group formation	Read syllabus! Find a group!
2	Mon. Jan. 26	<b>DCF Valuation</b> Cash flows Cost of capital The WACC approach	
3	Wed., Jan 28	<b>Options I</b> Call and put options The law of one price Put-call parity	BMA: Chapter 21 Problems: 7, 19
4	Mon. Feb. 2	<b>Options II</b> Binomial valuation	BMA: Chapter 22.1-22.2 Problems: 5, 12
5	Wed., Feb. 4	<b>Options III</b> Black-Scholes valuation Real options	BMA: Chapter 22.3, 23.1 Problems: 6, 17
6	Mon. Feb. 9	<b>Options IV</b> Valuing real options	BMA: Chapter 23.2-23.6 Problems: 1, 9, 13 Problem Set 1
7	Wed., Feb. 11	<b>Long-Term Financing I and II</b> Equity, debt and preferred stock, IPOs and SEOs Raising capital	BMA: Chapter 15 and 16 BMA:
8	Mon., Feb. 18	<b>Long-Term Financing III</b> Warrants and convertibles	BMA: Appendix of Chapter 22 Problems: 8, 18, 19  Case: MW Petroleum Corporation (A)
9	Wed., Feb. 23	<b>Options V</b> Case discussion: MW Petroleum	Problem Set 2

<b><u>Session</u></b>	<b><u>Date</u></b>	<b><u>Topics</u></b>	<b><u>Assignments</u></b>
10	Wed., Feb. 25	<b>Review/Problem Session</b>	Study!
11	Mon., Mar. 2	<b>Quiz #1</b>	
12	Wed., Mar. 4	<b>Capital Structure I</b> Basic capital structure theory Debt and equity as options	BMA: Chapter 18.1-18.3 Problems: 1, 3, 9
13	Mon., Mar. 9	<b>Capital Structure II</b> Equity valuation Corporate taxes Recapitalization	BMA: Chapter 18.3, 18.4, 19.1-19.3 Problems: 19, 20
14	Wed., Mar. 11	<b>Capital Structure III</b> Personal taxes Agency and financial distress costs	BMA: Chapter 19.4, 25.1, 25.4 Problems: 2, 12, 19
15	Mon., Mar. 23	<b>Capital Structure IV</b> Optimal capital structure	BMA: Chapter 24 and issues on credit risk
16	Wed., Mar. 25	<b>Capital Structure V</b> Financial distress The bankruptcy process Leveraged restructuring	BMA: Chapter 25.6, 33.4  Case: American Home Products Corp.
17	Mon., Mar. 30	<b>Capital Structure VI</b> Case discussion: AHP	Problem Set 3
18	Wed., Apr. 1	<b>Review/Problem Session</b>	Study!
19	Mon., Apr. 6	<b>Quiz #2</b>	
20	Wed., Apr. 8	<b>Dividend Policy</b> Theory and evidence Dividend decisions in practice Stock dividends and splits	BMA: Chapter 17 Problems: 1, 6, 15
21	Mon., Apr. 13	<b>Valuation I</b> APV, FTE and WACC	BMA: Chapter 20 Problems: 1, 8, 10, 11, 12
22	Wed., Apr. 16	<b>Valuation II</b> Examples Valuation using multiples	
23	Mon., Apr. 20	<b>Mergers and Acquisitions I</b> Introduction to M&A	BMA: Chapter 32.1-32.3

		Stock vs. cash acquisitions	
24	Wed., Apr. 22	<b>Mergers and Acquisitions II</b> The empirical evidence Takeover defenses	BMA: Chapter 32.4-32.6, 33.1-33.3  Case: USG Corporation
25	Mon., Apr. 27	<b>Valuation III</b> Case discussion: USG	Problem Set 4
26	Wed., Apr. 29	<b>Hedging and Risk Management</b>	BMA: Chapter 27 Concept Review Questions 1, 2, 3 Problems: 5, 7, 10
27	Mon., May. 4	<b>Review/Problem Session</b>	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 (unless due to documented serious illness or family emergency). 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	Feb. 9 <sup>th</sup>
Case: MW Petroleum	Feb. 18 <sup>th</sup>
Problem Set 2	Feb. 23 <sup>rd</sup>
Quiz #1	Mar. 4 <sup>th</sup>
Case: AHP	Mar. 25 <sup>th</sup>
Problem Set 3	Mar. 30 <sup>th</sup>
Quiz #2	Apr. 6 <sup>th</sup>
Case: USG	Apr. 22 <sup>nd</sup>
Problem Set 4	Apr. 27 <sup>th</sup>
Final Exam	Mon., May 11, 10-11:50 am (1) Mon., May 11, 2-3.50 pm (2)