



**Advanced Corporate Finance
Fall 2014
Professor Raghavendra Rau**

This course is a logical continuation of your Core Finance class. The objective of the course is to provide you with the conceptual framework necessary to appreciate and understand the problems facing the financial manager of an operating business. Readings, case analysis, and problem sets focus on the basic tools used by financial analysts and financial decision makers.

The course is devoted to the two basic financial problems that all companies face: (1) On what should funds be spent (i.e., investment decisions)? and (2) From where should funds be obtained (i.e., financing decisions)?

We explore what securities the firm can issue to raise funds, how firms decide on the mix of securities with which they will finance their operations, and how to calculate the firm's resulting cost of capital. The course is almost entirely case based and we will use a series of cases to discuss corporate valuation in mergers and acquisitions, and leveraged buy-outs and initial public offerings (IPOs).

Textbook: Jonathan Berk and Peter de Marzo, *Corporate Finance*, Pearson 2e

Alternatively, you may use either Richard A. Brealey, Stewart C. Myers and Franklin Allen, *Principles of Corporate Finance*, 11th edition, McGraw-Hill/Irwin, 2014 *or* Stephen A. Ross, Randolph W. Westerfield, and Jeffrey Jaffe, *Corporate Finance*, 10th Edition, McGraw-Hill/Irwin, 2013, if you prefer.

Course grades will be based on class participation, and a final exam. The weights for each of these are:

Class participation: 40%
Final exam: 60%

The final exam is not "open-book," but you will be allowed one "crib sheet" for each exam. It can be no larger than normal 8.5" × 11" paper; you may write or type on both sides of the paper; no post-it notes; no multiple layers on one page.

You will be allowed to use a financial calculator during the exams. The use of laptop computers, cell-phones, and personal data assistants (PDA) will *not* be allowed during the exams.

You are encouraged to work in teams to complete daily readings and case study assignments (but not the quizzes), but you should come to class prepared to discuss your solution independently to cases, quizzes and problems.

Class Participation

The approach to attaching a grade to class participation is as follows:

At the end of each class period, I assign each student a score of 1, 2, 3 or 4. We assess the scores after each class with the intent of taking into account both the quality and quantity of each student's participation for the day. I recognize that not every student will be able to participate every day, so I expect to have lots of 1s.

If a student is absent, the student will be assigned a zero for the day. If a student is excused from class with reason for any day, for that day, the student will be assigned the average grade of his or her grades for other days minus 0.5. This will be assessed at the end of the module. (Prior to the end of semester, a grade of zero will be assigned for excused absences, so your score may not reflect your actual final score).

At the end of the module, a total numerical score will be calculated by summing the daily scores.

Hints on Class Participation

What factors contribute to the overall quality of class participation?

1. Being present (unless excused for a reason).
2. Getting to class on time (ready to go when the class begins).
3. Being prepared to respond to questions asked by the instructor or your colleagues.
4. Being able to support responses to the questions you give (i.e., if you prepared the solution to a problem in a group, you personally should be able to explain how the group arrived at the solution).
5. Being willing and able to constructively and critically evaluate and respond to your classmates' contributions.

The list is not prioritized, i.e., simply showing up for class will *not* be sufficient to merit high marks for class participation. In the parlance of economics, it is a necessary, but not sufficient, condition to doing well in class participation. Similarly, a response that simply reiterates a point made earlier by another student will not receive points for participation.

Course Outline

The following outline gives the topics to be covered, reading assignments, problem sets, and case assignments for each day. The notation (CP) stands for the course packet materials, (BDM) stands for the textbook by Berk and DeMarzo, (RWJ) stands for the book by Ross, Westerfield and Jaffe and (BMA) for the book by Brealey, Myers, and Allen.

Daily Class Schedule

Sessions 1 (22 December)

Topic: Introduction and review

The fundamental paradigms of finance

Corporate objectives: Maximizing NPV and why

Reading: Your notes from Core Finance

Chapter 1, 3-5 (BDM) or Chapter 1 (RWJ) or Chapter 1-3 (sections 3.1-3.3) (BMA)

Goal: To review the basic themes in finance.

Session 2 (23 December)

Topic: Review of company valuation techniques

Reading: Your notes from Core Finance

Chapter 7, 10-12 (BDM) or Chapter 4 (Section 4.5) and Chapter 5 (BMA), or Chapter 4-5 (RWJ)

Case: MRC Corporation (A) (CP) (HBS 9-274-118)

Assignment: For MRC Corporation:

What is the problem that Archibald Brinton, president of MRC, faces?

Should MRC acquire American Rayon? How much should they pay?

Make the following assumptions for terminal value:

1. The firm sells its fixed assets for book value
2. The firm sells its fixed assets for zero scrap value
3. The company liquidates today for zero net scrap value
4. The firm keeps sales at 55,000 without any additional expenditures

Goal: To review how to value an all-equity financed company:

1. MRC: By computing its cash flows

Session 3 (23 December)

Topic: Review of cost of capital calculations

Reading: Your notes from Core Finance

Chapter 7, 10-12 (BDM) or Chapter 4 (Section 4.5) and Chapter 7, Chapter 8 (sections 8.1-8.3) (BMA) or Chapter 10-11 (RWJ)

Case: Bayou Petroleum (CP)

Assignment: For Bayou Petroleum: Please see the case for the assignment

Goal: To review how to value an all-equity financed company:

2. Bayou: By computing its cost of capital

Session 4 (24 December)

Topic: Project Analysis in a Complex Setting

Case: Diamond Chemicals (A) (CP)

(Darden UVA-F-1351)

Chapter 6 (BDM) or Chapter 5 and 6 (Sections 6.1-6.2) (BMA) or Chapter 4-6 (RWJ)

Goal: To value a basic project

Session 5 (24 December)

Topic: Real options

Reading: Chapters 20-21 (BDM) or chapters 21-22 (BMA) or Chapter 7 and Chapter 21 (RWJ)

Case: Diamond Chemicals (B)

- Assignment:**
1. Why are the Merseyside and Rotterdam projects mutually exclusive?
 2. How do the projects compare on the basis of DC's investment criteria? Why the difference?
 3. Is it possible to quantify the value of managerial flexibility associated with the Merseyside project?
 4. What are the differences in the ways Elizabeth Eustace and Lucy Morris have advocated their respective projects? How might these differences in style affect the outcome of the decision?
 5. Which project should James Fawn propose to the CEO?

Goal: To understand complex issues in capital project analysis, including an assessment of real option value latent in managerial flexibility to change operating technologies

Session 6 (25 December)

Topic: The Weighted Average Cost of Capital

Reading: Chapter 14 (BDM) or Chapter 9, 14 (Sections 14.1-14.3) (BMA) or Chapters 15-16 (RWJ)

How to Unlever Betas – and Why (CP)

Case: Marriott Corporation (CP) (HBS 9-289-047)

- Assignment:**
1. How does Marriott use the estimate of its cost of capital? Is this appropriate?
 2. What is the weighted average cost of capital (WACC) for Marriott?
 3. What type of investments should be evaluated using Marriott's WAAC?
 4. What is the cost of capital for the lodging and restaurant divisions of Marriott?
 5. What is the cost of capital for Marriott's contract services division?
 6. If Marriott uses a single hurdle rate for evaluating investment opportunities in each of its lines of business, what is likely to happen to the company over time?

Goal: To understand the estimation and use of the weighted average cost of capital and the use of multiple discount rates within the same company.

Session 7 (25 December)

Topic: Corporate Financing Decisions

Reading: Chapter 15 (BDM) or Chapters 17-18 (RWJ) or Chapters 17 (RWJ)

Lecture: Corporate Debt Policy and Corporate Value
The Limits of Corporate Borrowing

Assignment: Notes on Capital Structure Policy: The Debt Policy Puzzle (CP).
Please bring "Notes on Capital Structure: The Debt Policy Puzzle" to class.

Goal: To understand some fundamental concepts in corporate financing strategy.

Session 8 (26 December)

Topic: Managing Corporate Capital Structure in Practice

Reading: Chapter 15-16 (BDM) (review) or Chapters 17-19 (BMA) or Chapters 16-18

(RWJ) (review)

Case: American Home Products (CP) (HBS 9-283-065)

- Assignment:**
1. Is Mr. Wilson working for shareholders' best interests in having such a rigid attitude toward debt financing?
 2. Would you be in favor of a share repurchase?
 3. What would be the valuation effects of a major share repurchase?
 4. Should the leverage ratio be determined by book values or market values?
 5. Would you recommend a debt issue? If so, how much?
 6. What would be the effect on stock price, and total equity value if AHP were to buy back stock and issue debt?
 7. What would the weighted average cost of capital be under the new capital structure? Assume AHP's $\beta_L = 1.1$ to begin and the intermediate term government bond yield is 5.0%.

Goal: To develop facility with managing corporate financing decisions.

Session 9 (26 December)

Topic: Mergers and acquisitions: Valuation of an Acquisition Target

Reading: Chapter 28 (sections 28.1-28.5) (BDM) or Chapter 31 (BMA) or Chapter 29 (RWJ)

Case: Hope Enterprises, Inc. (CP) (Darden UVA-F-1219)

- Assignment:**
1. What is the value of Hope Enterprises? Consider both the value of the assets and the value of the equity.
 2. How sensitive is your valuation to changes in key assumptions?
 3. What price per share would you offer for the acquisition of Hope Enterprises's common stock?

Goal: To understand the use of valuation techniques in mergers and acquisitions.

Session 10 (27 December)

Topic: Valuation in a Leveraged Buyout (LBO)

Reading: Chapter 28 section 28.6 (BDM) or Chapters 19,32 (BMA) or Chapter 18 (RWJ)

Hints for Analyzing Duck-In Stores, Inc. (CP)

Case: The Management Buyout of Duck-In Stores, Inc. (CP)

Assignment: Please see the case for the assignment.

Goal: To understand the use of valuation techniques in LBOs.

Session 11 (27 December)

Topic: Going Public: Issuing an IPO

Reading: Chapter 23 (BDM) or Chapter 15 including Appendices (BMA) or Chapter 20 (RWJ)

Notes on Corporate Valuation: Using Multiples and Comparable Companies (CP)

Case: Wildfire Industries Corp. (CP)

Assignment: Please see the case for the assignment.

Goal: To become acquainted with managing the decision to "go public" with a stock issue.

Session 12 (29 December):

Topic: Corporate governance

This session discusses corporate governance ideas and practices around the world.

A theoretical basis for corporate governance - I

Explicit vs. implicit contracts

Problems with managerial discretion

Symmetric vs. asymmetric information

Goal: To outline the different types of corporate governance practices.