# UNIVERSITY OF PENNSYLVANIA The Wharton School

#### **FNCE 726: ADVANCED CORPORATE FINANCE**

## Professor Nihat Bülent Gültekin

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## **Course Objective**

The objective of this course is to teach students how to apply modern financial theory to the investment and financing decisions of a modern corporation.

## **Course Content**

This course is designed for finance majors who will pursue careers in major corporations, the financial sector, and consulting firms. The course extends the core theory introduced in Financial Analysis for applications to the strategic financial decision areas of a firm. Some students take this course as a capstone finance course. While the course is useful for those students who wish to gain exposure to the applications of the financial theory to real world cases, this is not a *remedial* finance course.

The theme of this course is value-based management. There has been remarkable progress in financial theory since the seminal work of Modigliani and Miller in the mid fifties. As with all scientific disciplines, however, the theoretical framework explains the real world with abstract and simplified models. Financial theory and techniques, while based on such sound conceptual models, are not sufficiently rich for dealing with all the complexities of the real world. Value based management introduces coherence and consistency in dealing with complex real world problems. Despite their limitations, decisions based on financial models and sound theory are superior to ad hoc decisions. Concepts and techniques introduced in this course help discipline managers by expressing key decisions in terms of their predictable impact on firm value.

This course consists of seven sections. The first four sections focus on a range of financial issues that confront managers in their ordinary course of doing business, mainly financial planning, capital budgeting, and the interaction between investment and financing decisions. Section IV deals with financing decisions and security issuance. The options approach to investment decisions are in Section V and dividend policy is introduced in Section VI. The last section of the course focuses on "organizational transitions" initiated by management or induced by structural or regulatory changes in an industry or an economy. This section illustrates the role of finance in facilitating and, in some cases, precipitating major organizational changes through mergers and acquisitions and corporate restructuring.

Case studies review and supplement the techniques learned in Financial Analysis. More sophisticated valuation techniques, which are the basis for value based management, are introduced as they become necessary to tackle the managerial problems of each case in a progressive fashion. You will begin with simple capital budgeting techniques using weighted average cost of capital (WACC) valuations as in a Financial Analysis course. You will value projects with highly levered capital structures using adjusted present value (APV) and equity cash flows, real options, and a method of multiples applied to mergers and acquisitions along with traditional valuation techniques. During the semester, you will use virtually all the valuation techniques that are used on Wall Street. By encountering these techniques in the context of specific managerial problems, you should emerge from the course knowing not only how to use them, but more importantly when to use them.

#### **Course Format**

This course is taught entirely with cases except for a few review lectures on valuation theory and option pricing. The case method of instruction offers some distinct benefits. In preparing cases, you learn more than just the financial theory required to analyze a case. You learn about the agents, institutions, and transactions that comprise the modern financial system. You also learn to contribute effectively to fast paced discussions about complex financial issues and test your understanding and your solutions to these issues that are rarely black and white.

These benefits come with a substantial cost, however. Discussion-based classes succeed only if all students come prepared to discuss the case material. To foster mutual trust and respect, it is imperative that students attend each class, arrive on time, and minimize subsequent class disruptions. Class participation is vital to your learning as well as the learning of others.

The case method teaches you to use financial theory in order to arrive at coherent and defensible conclusions when faced with real world problems. One should keep in mind that there is not necessarily "the right" answer to a case; different assumptions may lead to different solutions and decisions. There is, however, always a theoretically correct and sound approach to the problems encountered in cases.

## **Study Groups**

You are advised to form groups of four students during the first day of class. Groups offer a good opportunity to leverage your strengths with other team members for a more comprehensive case analysis. Suggested study questions often require full blown calculations and/or valuations. Your team members also enable you to try out your own ideas prior to class discussion. Each student is responsible for these questions. All questions are fair game if you are cold called to open class discussion.

#### **Course Materials**

#### **Textbooks**

The only required reading materials in this course are the cases. For some cases, explanatory teaching notes on your reading list might be useful. If you need to review the prerequisite background materials for the cases, you may refer to the relevant chapters indicated in the following two or any similar texts:

R. Brealy, S. Myers, and F. Allen, *Principles of Corporate Finance*, 8th Edition, Irwin, McGraw-Hill, 2006. (Henceforth, BMA)

T. Koller, M. Goedhart, and D. Wessels, *Valuation: Measuring and Managing the Value of Companies*, McKinsey & Company, Inc., John Willey & Sons, Inc., 4<sup>rd</sup> Edition, 2005. (Henceforth KGW)

Text by Koller et al. is a valuation book written from practitioners' perspective. Copies of both texts will be on reserve in the Lippincott Library.

#### **Course Pack**

The course pack from Wharton Reprographics contains all of the cases and other recommended readings. In addition, students will be charged for class handouts that will be distributed regularly throughout the term

#### webCafé

The course site at Wharton webCafé contains suggested questions for cases, Excel files for exhibits for most cases, lecture notes and handouts distributed in class. You will find the most updated information and announcements for the course, such as office hours and rooms for teaching assistants, review sessions, exams, and guest speakers. webCafé is the information center for the course. Please check the course site regularly.

## **Course Prerequisites**

Students are expected to be thoroughly familiar with the materials covered in the core courses. The minimum prerequisites of the course are:

- a. Financial Analysis
- b. Introductory Financial Accounting
- c. Introductory Statistics or Econometrics
- d. A basic knowledge of EXCEL or a similar spread sheet package.

#### Grades

Final grade for the course will be based on:

1.	Class Participation	(20%)
2.	Group Case Reports	(20%)
3.	Midterm Exam I	(30%)
4.	Midterm Exam II	(30%)

#### 1. Class Participation

This course will provide you with the opportunity to learn how to best contribute to discussions about complex financial issues. Corporate financial decisions are inevitably made in groups. In a group setting, a well articulated expression of confusion is in some instances more valuable than an abruptly delivered "right" answer. Not having a background in finance, therefore, does not put you at a disadvantage with regard to class participation.

I will mark your class participation for each class on a scale from 0 to 4 points to maintain fairness and to minimize subjectivity in grading. In determining your grades, I consider the degree to which your comments advance everyone's learning. The quality of your comments and discussions are much more important than quantity. Your comment's impact on our overall understanding of the managerial decision at hand is more important than the right answer per se. I assess your class participation on this metric, not on "air time" or the number of comments you make.

Cold calling is the only incentive strong enough to ensure adequate preparation. I will start the class by cold calling a student to open the case discussions. Failure to prepare for class reflects an unacceptable disregard for your fellow students. Everyone's learning is dependent on everyone's preparation. Inevitably, circumstances will arise that leave you with insufficient time to prepare. If so, I ask you only to inform me of this prior to class. Students will be excused for absences due to illness or that are necessary to observe religious holidays. Unexcused absences will have a significant impact on your final grade.

## 2. Case write-ups

You should hand in eight case assignments as written group reports throughout the semester; four before the first midterm exam and four after the midterm. Of these 8 write ups, 4 are required as indicated on page 8. Your reports will be graded on a scale from 1 to 5. Groups that provide a competent report will get a full credit, i.e., 3. Exceptionally good reports will get bonus credit of 4 or 5. This will not exceed 10% of the teams for a grade of 4 and 5% for a grade of 5 on any case. Your case report should be in the form of an executive summary with at most 4 pages. You may include your supporting computations and tables in an appendix.

I will grade your reports on the following criteria, not for "the correct" answers:

- a. ability to identify the main issues,
- b. theoretical and analytical soundness of your approach to your decision and/or conclusions,
- c. clarity and succinctness of the report.

#### 3. Exams

There two midterm exams. The Midterm Exam I is on **Monday, October 20**. The Midterm Exam II is on **Monday, November 24**. Both exams are in class and "open book" and "open notes". They will consist of problems similar to those in the cases, but they will shorter and more focused. **No laptops are allowed in the exams**. You will need a financial calculator and be able to use it.

I will not allow anyone to take the exams at another time unless you have the official permission from the MBA office. If your travel plans conflict with the exam dates, you should either change your travel plans now or enrol in a different section of the course.

All graded materials will be returned to your mail folders. Please indicate your section and group number on all your written assignments.

## **Attendance and Class Etiquette**

You should only attend the section of the class that you are registered for. You are expected to arrive on time for class. Once in class, you should remain until the class is completed. Arrivals and departures during class time interfere with the educational process and are not fair to the other students.

## **Seating Chart and Name Cards**

Please display your name cards in class at all times so that I can evaluate your daily class participation. I will provide a seating chart once the enrolment in the course is finalized.

## **Guest Speakers**

We will have one or two guest speakers during the term on current developments in financial markets. In order to accommodate the schedules of the guest speakers, we may have to reschedule one or two classes. I will notify you in advance if we need to reschedule any class.

# **Review Sessions and Office hours by Teaching Assistants**

I will offer periodic review sessions for those needing extra help with the prerequisite finance theory. Teaching assistants will also hold office hours to answer your questions. Rooms and schedules of TA office hours will be posted on webCafé.

#### Correspondence by e-mail

I will not provide lengthy answers to your course related questions or hold tutorial sessions by e-mail. Use office hours or review sessions or TA office hours for that purpose.

## Workload

The subject matter of this course is very technical and quantitative and the pace is very fast. Furthermore, case preparations require a substantial amount of time and dedication. Students in past years have indicated that the work load for this course is *very heavy* and the subject matter is *very difficult*.

Unlike introductory finance course, this course uses with real world cases and problems thus, the information is seldom complete to make a decision to solve a problem. Your results may differ depending on the initial set of assumptions you have to make in the absence of complete information. If you have difficulty with ambiguity of the subject matter and the teaching style, this course is not for you.

## **Academic Integrity and Code of Ethics:**

Most case materials in this course are based on real events and companies. In preparing for class discussions or for your reports, you may use any publicly available past or current information about the companies dealt in cases. You are strongly encouraged to study cases with members of your group. Submitted assignments for grading should be your own or your group's joint work only. Each member of your group is expected to contribute equally to the group reports. Do not allow specialization in your team. This is your opportunity to develop new skills.

Learning in this course will be a direct function of the amount of time you spend on case analyses. Reliance on the work of others is self defeating. The grading system is designed so that all "good faith efforts" on the group reports will result in full credit.

There are a limited number of good cases in finance and only a few new ones are produced each year. Thus, many cases remain on the course syllabus for few years. I distribute all materials used in class in hardcopy and post them on the webCafé. Any use of such previously distributed materials is, however, considered plagiarism, and it will not be tolerated in any way.

You cannot use work completed by other students, old notes or handouts, or solutions to the cases from previous years or other sections of this course at Wharton or similar courses at other business schools or elsewhere for your written reports and class discussions. Violation of this rule will result in an automatic failing grade for the course. Furthermore, the violators will be reported to the Wharton Graduate Division for further disciplinary action.

If you use materials from any publicly available or private source, including those sources on the internet, private company presentations, etc. in your submitted work for any reason, you should properly cite them. Otherwise, it may be considered plagiarism.

If you register for this course, you agree with the principles of academic integrity described above in conjunction with the Wharton Graduate Division Code of Ethics.

#### \* Acknowledgements:

I would like to acknowledge the contributions of many colleagues and friends to the development of this course. They provided course outlines, teaching notes, reading materials, software, and assistance for case writing; and some shared their expertise as guest lecturers. I would like to thank:

Simon Benninga, Marshall E. Blume, Richard Bower, Guido Cipelli, Desmond Conner, Ignacio de Orue, Steve DesJardines, Sonia Dula, Eugene F. Fama, Adam Frieman, William F. Fruhan, Hulya Eraslan, Ozer Ertuna, Benjamin C. Esty, Jr., Robert Gerry-Wade, Stuart C. Gilson, Robert R. Glauber, Mario Gobbo, Michael Goldstein, Mustafa Gultekin, Robert Hamada, Joel Hasbrouck, Gabriel Hawawini, Trent Hickman, Robert W. Holthousen, Mat Ide, Jeff Jaffe, Peter Jones, Donald Keim, Ronald Koenig, Maria C. Kosloski, Roger Leeds, Dennis E. Logue, Herwig Langohr, Inga Marie-Davis, Matthew McBrady, Morris Mendelson, Ian Murray, Ewa Morowska, Enrique Lavina, John Nellis, George Oldfield, John Percival, Thomas R. Piper, Lee Remmer, Richard J. Rogalski, Steven Ross, Mitch Scherzer, Jeremy Seddon, Arnold Shipp, Seymour Schmidt, Robert Stambaugh, Hans Stoll, Toshi Taga, Seha Tinic, Selim Topaloglu, Ed Travisani, Mete Tuncel, Derek Utter, Claude Viallet, Charles Vuylsteke, Richard West, Randolph Westerfield, Gavin Wilson, J. Peter Williamson, Mimi Xue, Oktay Yenal, Bilge Yilmaz, Unal Zenginobuz, and Joseph Zimmel.

I fondly remember the great contributions of Isik Inselbag, Irwin Friend, James Walter, and Merton Miller. I owe a special debt to Isik Inselbag with whom we developed and taught this course for two decades at the Wharton School.

## I. INTRODUCTION

Readings: BMA, Chapter 1

KGW Chapters 1-4

1. Lecture: Introduction and Course Overview

Case: Case of the Unidentifed Industries

## II. FINANCIAL ANALYSIS AND PLANNING

Readings: BMA, Chapters 29-31

Teaching Note: "Assessing the Financial Health of a Firm"

**2.** Case: Clarkson Lumber Company

## III. VALUATION THEORY AND CAPITAL STRUCTURE

#### A. Identifying the Relevant Cash Flows for Capital Budgeting Projects

Readings: BMA, Chapters 2-6 and 10-12

**3.** Case: Empirical Chemicals A&B

#### **B.** DCF Methods for Valuation

Readings: BMA, Chapter 17-19

KGW, Chapters 5-9

Teaching Note: "Alternative Methods for Estimating Terminal Value"
Teaching Note: "An Introduction to Cash Flow Valuation Methods"
Teaching Note: "The Adjusted Present Value Method for Capital Assets"

Teaching Note: "Valuing Equity Cash Flows"

4. Lecture: Capital Structure and Valuation Theory I
5. Lecture: Capital Structure and Valuation Theory II
6. Case: M&M Incorporated (posted at WebCafe)

#### C. Cost of Capital and Capital Structure

Readings: BMA, Chapters 7-9, and 19

KGW, Chapters 10 and 11

"What Practitioners Should Know About Future Value" by M. Kritzman

7. Case: Marriott Corporation

#### D. Interaction between Investment and Financing Decisions

Readings: KGW, Chapters 11 and 12

**8.** Case: Galveston Fishing Company (posted at Webcafe)

**9.** Case: Kennecott Copper Corporation

**10.** Case: Southport Minerals

**11.** Case: American Chemical Company

12. Second Year Focused Interview Period No Classes

# 13. MIDTERM EXAM I Monday, October 20. 6:00-8:00PM. Rooms will be announced.

# IV. CORPORATE FINANCING DECISIONS

Readings: BMA, Chapters 13-15 and 23-26

KGW, Chapter 17

14. Case: MCI

## V. THE OPTIONS APPROACH TO CAPITAL INVESTMENT

Reading: BMA, Chapters 20-22

Teaching Note: "Capital Projects as Real Options: An Introduction"

KGW, Chapter 20

"The Options Approach to Capital Investment" by Dixit and Pindyck

15. Lecture: Review of Black and Scholes' Model for Option Valuation I16. Lecture: Review of Black and Scholes' Model for Option Valuation II

17. Case: Chrysler's Warrants

**18.** Case: MW Petroleum Corporation

## VI. DIVIDEND POLICY

Readings: Brealy and Myers, Chapter 16

**19.** Case: Avon Products

# VII. MERGERS, ACQUISITIONS, AND CORPORATE RESTRUCTURING

Reading: BMA, Chapters 32-34

KGW, Chapter 7 and 17-19

20. Case: Philip Morris
21. Case: Conrail A & B
22. Case: RJR Nabisco

## 23. MIDTERM EXAM II Monday, November 24. 6.00-8:00 PM. Rooms to be announced.

**24.** Case:  $SFM^*$ 

25. Case Turk Telecom\*26. Case: Course Overview

<sup>\*</sup>These classes might be rescheduled for guest speakers.

# FNCE 726: ADVANCED CORPORATE FINANCE COURSE SCHEDULE FOR FALL 2008

Session #	Date	Topic and Assignments	Class Format
1	Sept 3	Introduction and Case of the Unidentified Industries	Lecture/Case discussion
2	Sep 8	Clarkson Lumber Company	Case discussion
3	Sep 10	Empirical Chemicals A&B	Case discussion
4	Sep 15	Capital Structure and Valuation Theory I	Lecture
5	Sep 17	Capital Structure and Valuation Theory II	Lecture
6	Sep 22	M&M Inc.	Case discussion
7	Sep 24	Marriott Corporation	Case discussion
8	Sep 29	Galveston Fishing Company	Case discussion. Required Write up
9	Oct 1	Kennecott Copper Corporation	Case discussion
10	Oct 6	Southport Minerals	Case discussion
11	Oct 8	American Chemical	Case discussion. Required Write up
12	Oct 15	Second Year Focused Interview Period	NO CLASSES
13	Oct 20	Midterm Exam I	6:00-8:00 PM/NO REGULAR CLASSES
14	Oct 22	MCI	Case discussion
15	Oct 27	Option Valuation Review	Lecture
16	Oct 29	Option Valuation Review & Real Options	Lecture
17	Nov 3	Chrysler's Warrants	Case discussion
18	Nov 5	MW Petroleum Corporation	Case discussion
19	Nov 10	Avon	Case discussion
20	Nov 12	Philip Morris	Case discussion. Required Write up
21	Nov 17	Conrail A&B	Case discussion
22	Nov 19	RJR Nabisco	Case discussion. Required Write up
23	Nov 24	Midterm Exam II	6:00-8:00PM/NO REGULAR CLASSES
24	Nov 26	SFM (tentative)	Case discussion
25	Dec 1	Turk Telecom (tentative)	Case discussion
26	Dec 3	Review	Lecture