#### UNIVERSITY OF PENNSYLVANIA The Wharton School

## Corporate Valuation FNCE207 & FNCE728

Robert W. Holthausen Autumn, 2004

#### DETAILED COURSE OUTLINE

Office:	Steinberg-Dietrich Hall 1307				
Telephone Number:	215 898-7781 (this is my office number; please do not call me at home).				
Office Hours:	Monday: Wednesday:	3:30 pm - 4:50 pm 2:20 pm - 3:50 pm (except 10/27 & 11/24) and by appointment			
	The TAs and their office hours for this course will be announced in the next week.				
EMAIL:	holthausen@wharton.upenn.edu				
	I will answer email that can be answered with a simple reply (for example, "yes" or				

"no"). I will not answer emails that require long explanations. In those cases, I will ask you to call me or see me in my office. I generally answer emails once per day.

#### 1. Course Objectives.

The objective of this course is to teach basic firm and equity valuation methods. The approach combines both accounting and finance into a practical framework for valuing firms, debt and equity. Relatively little new finance theory is introduced in this course; rather the emphasis is on the practical application of finance and accounting to valuation.

Students with weak accounting and finance backgrounds will be at a disadvantage in this course. Working knowledge of EXCEL or other spreadsheet software is also important. **Students who hoped** *to never see a financial statement again should not take this course.* 

The course utilizes homework, two extensive minicases and a midterm and final exam. Prior students indicate that the workload for this course is extremely demanding, as such, it is only recommended for those students who are interested in learning valuation techniques in depth. Students interested in broader topical coverage and a less detailed examination of valuation techniques should consider the corporate finance case course (discussed later).

This course is designed for students with <u>little or no practical work experience</u> in investment banking. I do not believe that the "value added" from this course for students who have previous job related investment banking experience is extremely high, but former students with prior work experience disagree with me on this issue. The course does presume you have a thorough grasp of corporate finance theory and accounting.

- 2. Minimal Prerequisites.
  - A. Introductory Financial Accounting (note, some prior students have indicated that they thought intermediate accounting (ACCTG 201 and or ACCTG 202 OR ACCTG 742) was the real prerequisite).
  - B. Introductory Corporate Finance.
  - C. Introductory Statistics or Econometrics.
  - D. A basic knowledge of EXCEL or some other spreadsheet package.

#### 3. Course Texts.

A. Required Texts.

Richard Brealey and Stewart Myers, <u>Principles of Corporate Finance</u>, Seventh Edition, McGraw Hill, 2003. This is a text virtually all of you should own having taken Corporate Finance. **If you own a prior edition of this text, I would not bother purchasing the seventh edition.** If you own another corporate finance textbook (such as <u>Corporate Finance</u> by Ross, Westerfield and Jaffe), that will suffice as well, though you will have to figure out the relevant chapters for reading. This text is just background reading for concepts you should already know.

#### B. Bulkpacks

The first bulkpack is currently available from Wharton Reprographics. There will be either one or two more bulkpacks available later. In addition, students will have to pay for class handouts. I anticipate approximately 200 pages of additional handouts, though there may be more depending on the material developed during the semester and whether material is handed out in class or through additional bulkpacks. Extra handouts will be on file outside my office door (Steinberg-Dietrich Hall 1307) if you miss class. Once those extra copies are gone, students will be responsible for borrowing the relevant material from another student in order to make a copy. Your bursar bill will reflect the actual cost of the handouts at the end of the semester at Wharton Reprographics standard per page rate.

The bulkpack material comprises the majority of the reading for the class and serves as the basis for all of the lectures. The bulkpack is divided into two pieces. The first part of the bulkpack is material that Mark Zmijewski at the University of Chicago and I are developing for a textbook. This material is being used this year for the first time, but is related to material I have used in the past. The second part of the bulkpack represents our old set of notes on valuation that have not yet been written into textbook form. **Students should read the relevant material before class.** Unless otherwise specified, students will be held responsible for all material in the bulkpacks, whether covered in class or not.

### C. Web Cafe

Material for some of the homework exercises will be available for student access via Web Café. The material for the homework exercises is the underlying data for the problems. In addition, there will be copies of the powerpoint slides I will use during lectures available via Web Café as well. These will not be distributed in hard copy as they follow the notes in the bulkpack, but students wishing to have them prior to class, can print them out. The final version of these will be available by at least 8:30AM on the day of class. There will be two copies of the powerpoint slides (2 slides per page and 6 slides per page). If you are registered for the class, you can gain access to the web Café room for this course via mySPIKE (http://myspike.wharton.upenn.edu) or on the Web Café home page (http://webcafe.wharton.upenn.edu). Both MBA students and undergraduates have access to mySpike.

Mark Zmijewski and I would appreciate having you report typos, errors and comments and to provide feedback via a questionnaire on each of the new chapters. Thus, there will be a place on Web Café where you can report typos, errors and passages that confused you. This area will be organized by chapter number and will be visible to everyone so you can see whether a typo has already been noted and whether we responded to some issue of clarification. NOTE: We will only be collecting this data for the new chapters, not the old chapters as the old chapters will be substantially rewritten. Your feedback will help us rewrite our new material as we get closer to publication. In addition, there will be a questionnaire which we would appreciate you filling out on each new chapter. The responses to the questionnaire will only be available to Mark Z. and me.

D. Other Interesting but not Required Texts.

Lawrence Revsine, Daniel Collins and W. Bruce Johnson, <u>Financial Reporting and Analysis</u> Third Edition, Prentice-Hall, 2004. This is a useful book to aid in understanding how accounting records various transactions, understanding the cash flow statement and how to analyze accounting statements. The course does not rely explicitly on this text so you should only purchase it if the book is a useful addition to your library. It is a good reference book which you might want to own if your intended career will require you to read and comprehend financial statements (e.g., equity analyst, valuation work, etc), or if you need help with the accounting aspects of the course. If you already own another book with the same topical coverage, it is not worth buying this one. It was chosen as it is the book of choice of the ACCT 742 instructors. Other accounting texts that you may already own may help you with the accounting aspects of the course as well.

McKinsey & Co., Tom Copeland, Tim Koller and Jack Murrin, <u>Valuation: Measuring and Managing the</u> <u>Value of Companies</u>, Third Edition, John Wiley & Sons, 2000. This is a valuation book written from a practitioner's perspective.

4. Grading.

Grading in the course will be based on the following criteria:

15%
20%
30%
35%

Combined undergraduate and MBA grade distributions for my sections of Corporate Valuation have been *approximately* 15%-20% DS or A, 35%-40% HP or B, 40-45% P or C and 1-5% NC, D or F. The above distributions are adjusted based on overall class performance (for example, two years ago the distribution was more generous because the class performed extremely well). MBA and undergraduate grades are typically pooled and then grade cutoffs are determined. If that procedure is followed, there is no guarantee that the above distribution of grades will hold for MBAs or undergraduates separately. I reserve the right to pool or not pool the distributions depending on the observed data and what I believe is most fair.

PLEASE NOTE: Because of the substantial reorganization of the class this year, I reserve the right to change the assigned problems and to then make marginal changes in the point allocations.

UNDERGRADUATES PLEASE NOTE: The deadline for dropping from a finance course is September 20<sup>th</sup>. If a student drops after that date, a "W" will appear on their transcript.

A. Class Participation.

Class participation "points" serve as a vehicle for determining the grades of students whose average falls near a boundary of a grade cutoff. Thus, students at a grade boundary may have their grades moved up or down depending on their class participation.

Some classes require you to be prepared for class discussion (discussion of assigned cases or problems), while other classes will be lecture format. During lectures, I encourage you to ask questions. Voluntary class participation is expected, however, I will call on individuals in class from time to time. If the class is not generally prepared, I reserve the right to change the grading criteria in the middle of the semester to weight class participation explicitly.

B. Name Cards

In order to get to know your names, I would like students to display name cards in class at all times. Please write your name in large, dark letters on the name card.

C. Examinations.

The midterm examination will be administered on **Monday**, October 18, 2004 between **6:00** pm - 8:00 pm (rooms to be announced). The midterm exam will be "open book". You may bring class notes, one accounting book, and the Brealey and Myers textbook to the exam. No other material is allowed. There will be no class on Monday October 25 because of Fall Break and no class on Wednesday October 27 because of the midterm which was given on a day we also had class. The midterm exam covers Chapters 1 - 8, 14 and 24.

The final examination will be administered **Monday**, **December 20**, **2004**, from **1:30 - 3:30** during the common exam period set by the University. This exam will be "open book". You may bring class notes, one accounting book and the Brealey and Myers textbook to the exam. **No other material is allowed.** The final examination is cumulative and covers all material covered in the course.

Copies of exams and suggested solutions from prior years have not been distributed because they would just be too confusing given the complete change in the course since last year. For the new material, there are many problems in the back of the chapter. I may be able to distribute some questions from old exams for the old material.

Please note the scheduling of the two exams. You are responsible for ensuring that you are available and on campus to take the exams. I will not FAX exams to remote locations. I will not permit anyone to take the exams at another time unless you are gravely ill or face a significant emergency. If your travel plans conflict with the date of an exam, you should change your travel plans now, or drop the course.

You must ensure that you are available for both examinations, October 18 and December 20. Please advise potential employers that you cannot schedule interviews that conflict with your exam schedule.

D. Valuation Project

My class has historically had a very demanding and time consuming valuation project. That valuation project is not part of this year's course requirements.

#### E. Chapter Exercises/Cases

Students will have to hand in chapter exercises throughout the semester. Late answers will not be accepted. Students must turn in the exercises prior to class so you should bring an extra copy with you since we will be discussing the exercise in class on the day they are due. Electronic versions of some of the raw data for the problems will be available in spreadsheets accessible via web Café.

Note that the homework assignments are marked on the outline as either D or D & S. If marked D, it means you must be prepared to discuss the homework though it will not be submitted. If marked D & S, you must be prepared to discuss it and you must submit it at the beginning of the class.

You may work individually or in teams of up to two individuals on these exercises. If you work as a team, both members of the team will receive the same grade. No team can have three or more members.

The first page of a chapter exercise should indicate the exercises included in the set, the names of the individuals participating in the grade and the section number of each student.

Answers should be clearly marked and final answers should be highlighted in some manner. Work must be legibly and accurately portrayed to receive credit.

Chapter exercises/cases will be graded on a scale of 10 to 0.

Using solutions to exercises handed out in prior years or using the work of prior or current students who are not members of your group is considered a violation of the codes of academic honesty. Moreover, it is likely your exam performance will suffer as these exercises are intended to help you prepare for exams.

### 5. Attendance and Class Etiquette

Students should attend the section of the class for which they are registered. Students are expected to attend class throughout the semester. In the case of a **rare conflict**, students can attend another of my sections. I teach the same class at 9:00, 10:30 and noon in Huntsman Hall G55 on Mondays and Wednesdays. If you should attend a different section of the class, do not take a seat from a student registered for that class.

Students are expected to arrive on time for class. Once in class, students 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 or myself.

### 6. Workload

The subject matter of this course is quite technical and difficult. Students in past years have indicated that the workload for this course is very heavy. The average student spent approximately 15 hours per week on this course outside of class. Because of the substantial reorganization of the class, I cannot accurately predict whether students will consider the workload to be heavy this year.

7. Relation to Corporate Finance Case Course

This course concentrates on valuation issues only and looks at valuation issues in detail. The Corporate Finance Case course examines a variety of issues such as working capital management, optimal capital structure, dividend signaling, capital budgeting and valuation. Thus, while the corporate finance case course deals with valuation issues, it does not look at them in as much detail. However, the corporate finance case course has a much broader topical coverage.

#### 8. Academic Integrity

Students are expected to follow the rules of academic honesty in this class. This means that examinations are to be the work of the individual student using only the material permitted during the examination. Regarding homework/cases, the work should be the work of *only the team members* reported on the front of the homework/case. Students should not in any way rely on solutions to exercises distributed in prior years or on the work of prior students or current students that are not members of their team. This prohibition extends to prior homework, cases or projects that are directly relevant to the assignment being completed. When homework requires you to produce a valuation model, the use of a valuation model not created exclusively by the student team for this course is a violation of the codes of academic integrity. In other words, for all homework assignments, you must start with an excel spreadsheet which is at most populated with some raw data. If you have questions concerning this policy, please see me for a clarification before you use any questionable material.

#### 9. Teams

Homework and Cases can be worked on individually or in teams of up to two students. Teams of three or more are not allowed (no exceptions). MBAs and undergraduates may not be on the same team. MBAs may form teams across sections. I encourage you to work in teams to maximize the learning experience. I will not become involved in any group problems. Teams may change composition during the course of the semester. If two teammates decide they can no longer work together and they cannot find another suitable partner working alone, they will have no choice but to hand in the rest of the homework/cases individually. In choosing a teammate, consider the skills your team will want to possess: accounting, finance and excel modeling expertise. Also make sure that your teammate's expectations for her or his performance in this course are consistent with your expectations for yourself.

# COURSE CALENDAR CORPORATE VALUATION FNCE207 & FNCE728

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# NOTE: ASSIGNMENTS AND DATES ARE SUBJECT TO CHANGE

Class #	Date	Торіс	H & Z Chapter	Brealey & Myers Chapter	Assignment (D=Discussion & S=Submission)
1	September 8, 2004	Introduction to Course and Valuation	1		
2	September 13, 2004	The Discounted Cash Flow Valuation Model	2, App. A	2-6	D 2.6, 2.7, 2.8
3	September 15, 2004	Potential Value Created from Financing and the DCF Model	3	14, 24 17-19	D & S 3.4, 3.5, 3.6. 3.7
4	September 20, 2004	The Effects of Financial Leverage on the Cost of Capital	4,14	14, 24 17-19	D 4.4
5	September 22, 2004	The Effects of Financial Leverage on the Cost of Capital	4, 14	14, 24 17-19	D & S 4.6, 4.8, 14.4, 14.5
6	September 27, 2004	A Closer Look at Measuring Free Cash Flows and the DCF Model	5		D & S 5.2, 5.3, 5.7
7	September 29, 2004	A Closer Look at Measruing Free Cash Flows and the DCF Model	5		D & S 5.8, 5.9
8	October 4, 2004	Excess Earnings Valuation Models	6		D & S 6.5
9	October 6, 2004	Introduction to Market Multiple Valuation Models	7		D 7.8
10	October 11, 2004	Implementing the Market Multiple Valuation Model	8, 24		
11	October 13, 2004	Comprehensive Case - Judson Green	Judson Green		D & S Judson Green Case
12	October 18, 2004	Comprehensive Case - Judson Green	Judson Green		D Judson Green Case continued
13	October 18, 2004	EXAM - CHAPTERS 1-8, 14, 24 6:00-8:00 PM			
14	October 20, 2004	Measuring and Understanding Free Cash Flows	5A		D Chapter 5A Problem 1
	October 25, 2004	NO CLASS - FALL BREAK			
	October 27, 2003	NO CLASS - BECAUSE OF OCTOBER 18 EXAM			
15	November 1, 2004	Measuring and Understanding Free Cash Flows - Advanced	5B		
16	November 3, 2004	Measuring and Understanding Free Cash Flows - Advanced	5B		D & S Chapter 5B Problems 1 & 2
17	November 8, 2004	Measuring and Understanding Free Cash Flows - Advanced	5B		D & S Chapter 5B Problem 3
18	November 10, 2004	Ratios, Strategic Assessment and Forecasting	9,10, 11	27	
19	November 15, 2004	Forecasting	11		D & S Chapter 11, Problem 1
20	November 17, 2004	Cost of Equity Capital	13	7-9	
21	November 22, 2004	Cost of Debt Capital	15	24-25	D Chapter 15, Problem 1
22	November 24, 2004	Estimating the Cost of Capital	16	20-22	
		THANKSGIVING BREAK			
23	November 29, 2004	Estimating the Cost of Capital	16	20-22	
24	December 1, 2004	Estimating the Cost of Capital	16 & Supp A & B	20-22	
25	December 6, 2004	Estimating the Cost of Capital	16		D & S Chapter 16, Problem 1
26	December 8, 2004	Leveraged Buyouts and LBO Models	19		
27	December 20, 2004	COMPREHENSIVE FINAL EXAM (1:30 - 3:30)			