

**UNIVERSITY OF PENNSYLVANIA—The Wharton School**  
**FNCE 728 – Corporate Valuation**  
**Spring 2011**

**Professor Michael Cichello**

**E-mail:** cichello@wharton.upenn.edu

**Telephone:** 215-898-7617

**Office:** 2439 SHDH

**Office Hours:** Tuesday 3:00 – 4:30

TAs and their office hours will be announced in the second week of class.

**1. Course Objectives:**

The objective of this course is to teach students about the analysis and valuation of equity securities. In learning the primary valuation techniques used to estimate market values for equity securities, we will pay special attention to financial statement analysis. Additionally, the course will highlight the importance of identifying and focusing on key value drivers. The analytical framework and valuation techniques, as well as the practical market information students learn in this class will be useful for careers in corporate finance, asset management, research, sales, trading, financial market regulation or financial journalism.

The course will be segmented into four major sections.

1. **Section 1**— During the first weeks of class we discuss the drivers of corporate value, specifically return on investment and organic revenue growth. We next examine how to build an ROIC-based valuation model and how this differs from and complements the traditional discounted cash flow model.
2. **Section 2**— The second section covers financial analysis using data from the annual report. We start with the traditional competitive benchmarking and next move to current metrics such as return on invested capital (ROIC) and economic profit. Our primary goal will be to build a true understanding of operating performance across business units and for the entire company.
3. **Section 3**— In the third section, we build an integrated valuation model using discounted cash flow. The section starts with the fundamentals of forecasting, how to determine the appropriate forecast period, and issues related to continuing value. We derive the weighted average cost of capital, focusing on how to estimate the inputs.
4. **Section 4**— In the final section, we discuss alternatives to DCF valuation, comparables analysis and options. We use multiples analysis to triangulate our DCF valuation and options analysis to handle uncertainty.

I anticipate a very lively and interesting class, as occurred last year. However, in speaking with prior students, I discovered that those who were not satisfied with the class had a divergence in expectations from mine. Thus, I ask that you think about the following:

***Is this course for you?***

Although we address the standard Wall Street equity analyst approach to valuing stock, I take a broader view of corporate valuation in this class. In particular, I focus on digging deeper into sources of value for a firm and examining how to enhance firm value. **Please make note of this when deciding whether or not to take this class.** This course is designed for students with little or no practical work experience in valuing companies. I do not believe that the "value added" from this course for students who have previous job related valuation experience is as high as for those with no relevant prior experience.

Additionally, the workload is very demanding for this class. **If you are looking for a class with little time commitment, then this class is not for you.**

In this class, we will use an integrated case study of Henkel KgaA throughout the term as well as discussion of current valuation issues involving other companies, such as Starbucks, Microsoft, and Nokia. The major objective of these exercises is to use the logic of financial theory to arrive at sensible conclusions when faced with real world issues. However, one should **keep in mind that there is not one absolutely right answer to a valuation; different assumptions can lead to different valuations.** While there are no “right” answers, there are good arguments and bad arguments. The process of this course will help distinguish between sensible and senseless arguments. Considering my analyses (based on certain assumptions) as the correct solution defeats the purpose of this course and contributes to an impractical notion that in the “real world” there is a single correct recipe to be followed. **If you have difficulty with ambiguity of the subject matter, this course may not be for you.**

Finally, it is inevitable that there will be some overlap with Advance Corporate Finance (FNCE 726). In particular, it is necessary to discuss the framework for valuation and cost of capital in this class, two topics which are addressed in FNCE 726. I have attempted to limit the time spent on these areas without sacrificing the necessary preparation for the final outcome of valuing a firm.

## **2. Course Materials:**

Required Text: Valuation: Measuring and Managing the Value of Companies, 5th Edition: University Edition. Koller, Goedhart, Wessels. Wiley Press ISBN 978-0-470-42465-0 (hardcover) or 978-0-470-42470-4 (paperback).

Web Café: The course site contains lecture notes, information on the integrated case, articles for class discussion, and other miscellaneous information. You will also find the most updated information and announcements for the course. Since this site is the information center for the course, please check it regularly and be sure to check it before asking questions of the TAs or of myself.

It is highly recommended that you purchase a binder for the class, as there will be a lot of additional materials (particularly the class notes). Additional handouts (e.g. current articles from the Wall Street Journal, Business Week, and the Economist) will be distributed in class and charged to your student account.

## **3. Grades:**

Student grades will be calculated as follows:

- 30% Group valuation assignments for Henkel KgaA (4 total)
- 10% Final group valuation assignment for Henkel KgaA
- 30% Midterm Exam 1
- 30% Midterm Exam 2

Grades will reflect knowledge of the course material, communication skills and teamwork. Class participation is crucial to the success of this class. Therefore, you should come prepared for all classes. To ensure this, I will cold call on students at various times. Although class participation is not a direct component of grades, if your weighted final score falls on a borderline, it may be adjusted upward if you have participated actively and effectively in class discussions.

### **Regrading exams and graded assignments:**

Any request for regrading must be submitted in writing within one week from the date the exam or assignment has been returned. The exam or assignment should be placed in my mailbox in the Finance Department. The request for regrading must be very specific. When you request a regrade, the entire exam or assignment may be regraded. Unambiguous errors in grading (e.g., mistakes on tallying allocated points) will be promptly corrected.

### **4. Exams:**

The first midterm exam will be on **Tuesday March 1** from **6:00 to 8:00 p.m.** The second midterm exam will be on **Tuesday April 19** from **6:00 to 8:00.** There will be no class on these days. Location of exams will be announced in class and/or on Web Café.

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

You are responsible for letting me know by **January 27** of any *exam conflict* you have with either exam in the course. Please note, I will not be using the common Final Exam date of that appears on the University Calendar.

### **5. Project Teams:**

You will need to form groups of 3 to 5 people (**no exceptions**) to work on five group exercises. If you have six people, please create two groups of three. You may form teams across sections, but please be aware that any class discussion or presentation of group assignments will be the responsibility of those students present in the particular section having the discussion. You also may want to use these groups as you prepare for classes. You are strongly encouraged to study cases with members of your group. Team sign up is via the course eRoom on Wharton's Web Café.

### **6. Team Assignments:**

Each team assignment will require a written report and must be turned in on paper at the start of class on the due date. Late assignments will have a deduction of 10% per business day. Each report should adhere to stated page limits given on assignment (with 12 point font, single-spaced and 1" margins) not including well referenced exhibits. **Not following these guidelines will lose your team points for the assignment.** Submitted assignments for grading should be your group's joint work only. Each member of your group is expected to contribute equally to the group reports and each member will receive the same grade for a given assignment. You should see these assignments as your opportunity to develop new skills. On assignment due dates, you should bring to class an extra copy of your report since we will be discussing those cases in class.

For the team assignments, I will let you know what assumptions to use and what assumptions you need to provide (and defend). In some instances, you may use firm specific or market data that are publicly available for your analysis. However, under no circumstances may you use old notes, handouts, or solutions to the cases from previous years or similar courses elsewhere for your written reports and class discussions.

## **7. Class & E-mail Etiquette:**

To make it easier for me to get to know you, please sit in the same seat at each class session (this will take some time to work out, with drops and adds). Please bring a name plate to class and attend your assigned section. In the rare event that you have a conflict, you may attend another section of the class, but you should let me know by e-mail before 8:00 a.m. on the day of class. Please direct any interpretation questions to the TAs. I will not provide lengthy answers to your course related questions or hold tutorial sessions by e-mail. You should use my office hours or those of the TAs for that purpose. Additionally, I can provide answers on theory, advanced analysis, or topics outside of the course by phone if you provide me with a call back phone number. Also, to avoid grading discrepancies, I will do my best to NOT answer questions concerning the assignments. **Please refer any assignment questions to the teaching assistants.**

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

*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 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 this may be considered plagiarism.*

## **9. Class Outline**

Below is an outline of key topics and assignments. To provide flexibility, some of the topics may shift dates based on the length of discussions and class needs. Also, there will be changes to the schedule to accommodate guest speakers. All changes will be posted on Web Cafe. It is the responsibility of each student to complete all assignments before the beginning of class and to come prepared.

Section	Date	Topic	Ch.	Notes
1	1/13	Introduction & Fundamentals of Measuring and Managing Value	2	1
1	1/18	Analyzing Key Value Drivers - ROIC	4	2
1	1/20	Analyzing Key Value Drivers - Revenue Growth	5	3
1	1/25	Frameworks for Valuation - Enterp DCF, Econ Prof & APV Models	6	4
1	1/27	Multiples Analysis	14	5
1	2/1	<b>Guest speaker - Class meets 4:00 - 6:00 pm - Location TBA</b>		
1	2/3	<b>Case Due: Presentations for Henkel Case I</b>		
2	2/8	Reorganizing Financial Statements	7	6
2	2/10	<b>Guest speaker - Class meets 4:00 - 6:00 pm - Location TBA</b>		
2	2/15	Reorganizing Financial Statements	7	6
2	2/17	Advanced Financial Analysis - Taxes	25	7
2	2/22	<b>Case Due: Reorganizing the Financials - Henkel Case II</b>		
2	2/24	Analyzing Performance & Competitive Position	8	8
2	3/1	<b>Midterm 1</b>		
	3/3	<b>No Class</b>		
	3/8	<b>No Class - SPRING BREAK</b>		
	3/10	<b>No Class - SPRING BREAK</b>		
3	3/15	Analyzing Performance & Competitive Position	8	8
3	3/17	Forecasting Performance - The Explicit Forecast Period	9	9
3	3/22	Forecasting Performance - Continuing Value	10	10
3	3/24	<b>Case Due: Presentation for Competitive Benchmarking - Henkel Case III</b>		
3	3/29	WACC - Cost of Equity	11	11
3	3/31	WACC - Cost of Debt	11	12
3	4/5	<b>Case Due: Cost of Capital - Henkel Case IV</b>		
3	4/7	Putting the Model to Work - From Enterprise to Equity Value	12	13
3	4/12	Putting the Model to Work - Calculating & Interpreting Results	13	14
3	4/14	Advanced Financial Analysis - Pensions, Leases & Other Obligations	27	15
3	4/19	<b>Midterm 2</b>		
4	4/21	Real Options	32	16
3	4/26	<b>Case Due: Presentation for Henkel Final Valuation - Henkel Case V</b>		

## SPECIAL NOTICE

This syllabus describes how I intend to run the course and the material I plan to cover. While I will do my best to not deviate from it, you should be aware that anything herein is subject to change, including evaluation methods, texts, materials, and scheduling. I will communicate all changes to the class in a prompt and clear manner.