FNCE 707: Valuation, Fall 2021

Professor David Wessels

Department of Finance, the Wharton School

This course will focus on the financial analysis, strategic assessment, and valuation of companies. The course will link corporate strategy with valuation; a critical skill for those entering consulting, investment banking, private equity, and corporate development. When necessary, the course will take a deep dive into the accounting notes, identifying nuggets of information critical for robust valuation.

The course is segmented into four modules:

- During the first module of class, we take a C-Suite perspective of valuation. We discuss the
 drivers of corporate value, specifically return on capital and organic revenue growth. We
 examine how the world's most valuable companies have created value, and how they protect
 their competitive position. We use this framework to underpin the most common methods of
 corporate valuation.
- During the second module, we create our first DCF models, including the enterprise DCF model, the economic profit model, a cash-flow-to-equity model, and adjusted present value. When properly implemented, each model will lead to the same result, but highlight different aspects of value creation. This is quite useful when testing financial strategies and error checking.
- During the third module, we set the stage for financial forecasting by analyzing historical
 performance. Since financial statements are not well suited to valuation, we reorganize them
 into operating, nonoperating, and financing components. Our primary goal will be to build a
 clean view of operating performance across business units and for the entire company.
- During the final module, we walk through the essentials of model building. We discuss the
 fundamentals of forecasting, how to determine the appropriate forecast period, and issues
 related to continuing value. I plan to demonstrate a fool proof method for constructing free cash
 flow in practice, one that hopefully will save you many unnecessary late-night hours! We
 conclude the section with practitioner pitfalls related to estimating the cost of capital.

If time permits, we close the course with a short discussion on multiples. Multiples are an excellent valuation tool to triangulate a company's value. Multiples may appear straightforward, but as you will

see, their simplicity is deceptive, and the skills developed throughout the course will be critical. By the end of this course, you should feel comfortable creating a sophisticated valuation of a complex company, integrating both strategic and financial assessments into your work!

Course Location and Timing

The course will meet in JMMH 345 at 1:45pm (section 1) and 3:30pm (section 2) on Tuesdays and Thursdays. Since the course is full, please attend your section. If you have unavoidable conflict, you may attend the other section. I would rather have you in class and engaged, than miss class altogether.

Please bring three items to EVERY class: <u>your name tent</u>, the <u>lecture's notes</u>, and a <u>basic calculator</u>. As the semester progresses, please remain diligent. I tend to be relentless with those who come to class empty-handed.

Reading Material

The course will rely on a textbook and a few supplemental readings (which can be found on canvas). The textbook can be purchased in the campus bookstore or on Amazon.com:

Valuation: Measuring and Managing the Value of Companies (7th edition) by Koller,
 Goedhart, and Wessels, 2020, John Wiley & Sons, Inc, NY.

You can use older editions of the book, but please be aware that rules regarding deferred taxes, operating leases, pensions, have changed since the last edition was published in 2015. You are responsible to conduct analysis under the current guidelines! Lecture notes will be available on canvas under files/syllabus and slides.

Assignments & Grading

There will be three individual assignments (15% total), three group projects (20% total) and two exams (65% total). For individual assignments, I expect you to work alone and hand in your own work. You can discuss class tools, but not the assignment. For group work, please self-select groups of between 3-5 people, no exceptions. If you have six people, please create two groups of three. For classes with multiple sections, you can form groups across sections.

Class participation will not formally be scored, <u>but students at the grading cutoffs</u> will be evaluated for their ability to generate an active and positive class environment. The assignment/exam due dates and grading breakdown will be as follows:

	Assignment/Exam	Expected Due Date	Grade
1	Group Project: Value Drivers	9/16/2021	5%
2	Individual Assignment: Economic Profit	9/23/2021	5%
3	EXAM I: Modules 1 & 2 (in class)	10/7/2021	25%
4	Individual Assignment: Integrated Model Building	10/12/2021	5%
5	Individual Assignment: Organic Revenue Growth	11/4/2021	5%
6	Group Presentation: Financial Analysis 11/18/2021		5%
7	EXAM II: Modules 3 & 4 (in class)	12/2/2021	40%
8	Group Presentation: Enterprise Valuation	12/9/2021	10%

Assignment due dates will follow the schedule above unless we have not covered the relevant material. Please check the assignment due date on canvas, as the date on canvas will supersede the expected date above when necessary. The exam dates are fixed and will not change. Please <u>make the appropriate</u> travel accommodations as we cannot accommodate alternative testing dates.

Teaching Assistants & Office Hours

We have four teaching assistants for the class. If you have questions concerning assignments or practice exams, please e-mail your <u>primary TA first</u>. If they are out of town, only then reach out to the other TA. If you have a question about class examples OR assignments, please use the TAs as your primary resource. As a general policy, I do not answer questions about the assignments or practice exams! If you have questions about the course notes or content beyond the class, please come see me during office hours.

Primary TAs. Your primary TA depends on your section, and the first letter of your last name.

1:45pm Section, Last names A-M: John Bogle <jcbogle@wharton.upenn.edu>

- 1:45pm Section, Last names N-Z: Kelsey Letang <kletang@wharton.upenn.edu>
- 3:30pm Section, Last names A-M: Gonzalo Ramos <ramosg@wharton.upenn.edu>
- 3:30pm Section, Last names N-Z: Jack Trunzo <jtrunzo@wharton.upenn.edu>

Office Hours. The teaching assistants will hold office hours from 6:30pm-8:00pm on Mondays and Tuesdays at 2400 Walnut. Professor Wessels will hold office hours starting at 4pm on Wednesdays in SHDH 2438. Please send him a note to book a slot if you plan on attending.

Regrade policy. All regrade requests must be emailed to your primary TA within <u>ten</u> calendar days following the return of your graded work.

Academic Integrity

I expect you to follow Penn's code of academic integrity when completing problem sets, group work, and exams. Allegations of impropriety should be brought directly to me, which in turn will be referred to the University Honor Council. For more, see:

https://catalog.upenn.edu/pennbook/code-of-academic-integrity/

The most common violation is turning in another person's work, which results in a semester-long suspension by the University. This course is meant for you, make sure it reflects your contributions!

I look forward to meeting each and every one of you this semester! Best, Prof. Wessels.

Class Schedule 9/1/2021

Section	Date	Note	Торіс	Reading
Section 1:	8/31/2021	1	C-Suite Thinking: Value Drivers	Granularity of Growth
Value Creation	9/2/2021	2	C-Suite Thinking: Tactical Growth Levers	Valuation:
	9/7/2021	3	Key Value Drivers	Chapters 2, 3, 5
	9/9/2021	4	Valuation using ROIC & Economic Profit	
	9/14/2021	5	Total Returns to Shareholders	
	9/16/2021	n/a	Case Review	
Section 2: DCF	9/21/2021	6	Enterprise DCF Valuation in Practice	Valuation:
Valuation Models	9/23/2021	7	DCF Models: FCF and CFE Models	Chapter 10
	9/28/2021	8	Choosing the Right Model	
	9/30/2021	9	DCF Models: APV and CCF Models	
	10/5/2021	10	Summary of Valuation Models	
	10/7/2021	n/a	EXAMI	
Section 3:	10/12/2021	11	Advanced Financial Analysis: Revenue Growth	Valuation:
Advanced Financial	10/14/2021	n/a	No Class: Fall Break until 10/26	Chapter 11-12, 20, 29
Analysis	10/26/2021	12	Advanced Financial Analysis: Profitability & Capital	
	10/28/2021	13	Reorganizing for Valuation: Invested Capital	
	11/2/2021	14	Reorganizing for Valuation: NOPAT	
	11/4/2021	15	Key Performance Indicators	
Section 4:	11/9/2021	16	Proforma Forecasting	Valuation:
Model Building	11/11/2021	17	Estimating Free Cash Flow	Chapter 13-17
	11/16/2021	18	Continuing Value	
	11/18/2021	19	The Cost of Capital: Theory & Traps	
	11/23/2021	n/a	No Class: Thanksgiving Break until 11/30	
	11/30/2021	20	From Enterprise to Equity Value*	
Triangulation	12/2/2021	n/a	EXAMII	Valuation:
using Multiples	12/7/2021	21	Multiples: Building a Robust Multiple	Chapter 18
	12/9/2021	22	Multiples: Choosing the Right Multiple	

^{*} I prefer to let the natural flow of our class discussion dictate our pace. If we fall behind the schedule above, the lecture on enterprise to equity will be shortened or eliminated.