

## **FNCE 7070: Valuation, Fall 2023**

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 SHDH 215 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 two items to EVERY class: your name tent and the lecture's notes. 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 (7<sup>th</sup> 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!

For those looking for extra practice, I recommend the valuation workbook. While I did not write the workbook, my colleague from Georgetown knows the material well. The workbook is not required.

- Valuation Workbook: Step-by-Step Exercises and Tests to Help You Master Valuation (7<sup>th</sup> edition) by Michael Cichello.

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 (30% total) and two exams (55% 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, but students at the grading cutoffs 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	Weight
1	Group Project: Value Drivers	9/19/2023	10%
2	Individual Assignment: Economic Profit	9/26/2023	5%
3	EXAM I	10/3/2023	25%
4	Individual Assignment: Integrated Models	10/26/2023	5%
5	Individual Assignment: Organic Growth	11/7/2023	5%
6	Group Project: Financial	11/14/2023	10%
7	EXAM II	12/5/2023	30%
8	Final Project: Enterprise Valuation	12/11/2023	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 make the appropriate travel accommodations as we cannot accommodate alternative testing dates.

## Teaching Assistants & Office Hours

The lead teaching assistant for the course is Ari Nagelberg <arinag24@wharton.upenn.edu>. If you have questions about grading, including regrades, please reach out to Ari. We have four teaching assistants for the class. If you have questions concerning assignments or practice exams, please e-mail your

primary TA first. If they are out of town, only then reach out to other TAs. We are trying to spread the workload evenly across TAs.

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

1:45pm Section, Last names A-M: Wyatt Currie <wcurrie@wharton.upenn.edu>

1:45pm Section, Last names N-Z: Pranav Damani, <damanip@wharton.upenn.edu>

3:30pm Section, Last names A-M: Asmit Jain <asmitj@wharton.upenn.edu>

3:30pm Section, Last names N-Z: Yining Zhang <ynzhang@wharton.upenn.edu>

**Office hours:** Monday from 10:15am - 11:30am in JMMH F38 and Wednesday from 12:00pm - 1:30pm in JMMH G94. Unfortunately, my teaching schedule changes weekly, so please reach out if you would like to meet. Thursday mornings before my first 10am class are almost always open.

## **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.

Module	Date	Note	Topic	Reading
Module 1: Value Creation	8/29/2023	1	C-Suite Thinking: Value Drivers	Granularity of Growth
	8/31/2023	2	C-Suite Thinking: Tactical Growth Levers	Valuation:
	9/5/2023	3	Key Value Drivers	Chapters 2 & 3
	9/7/2023	4	Valuation using ROIC & Economic Profit	
	9/12/2023	5	Enterprise DCF in Practice	
Module 2: DCF Valuation Models	9/14/2023	6	DCF Models: FCF and CFE Models	Valuation:
	9/19/2023	7	Choosing the Right Model	Chapter 10
	9/21/2023	8	DCF Models: APV and CCF Models	
	9/26/2023	9	Summary of Valuation Models	
	9/28/2023	n/a	Case Presentations	
	10/3/2023	n/a	<b>EXAM I</b>	
Module 3: Advanced Financial Analysis	10/5/2023	10	Advanced Financial Analysis: Revenue growth	Valuation:
	See Canvas	11	Reorganizing for Valuation: Invested Capital	Chapter 11-12, 20, 29
	10/26/2023	12	Reorganizing for Valuation: NOPAT	
	10/31/2023	13	Benchmarking: Margin and Capital	
	11/2/2023	14	Benchmarking: Key Performance Indicators <sup>1</sup>	
Module 4: Excel- Based Model Building	11/7/2023	15	Proforma Forecasting	Valuation:
	11/9/2023	16	Advanced Reorganization: Prepping for FCF	Chapter 13-17
	11/14/2023	17	Estimating Free Cash Flow	
	11/16/2023	18	Continuing Value	
	See Canvas	19	The Cost of Capital	
	11/28/2023	20	From Enterprise Value to Equity Value	
Putting it All Together	11/30/2023	21	Multiples: Building a Robust Multiple	Valuation:
	12/5/2023	n/a	<b>EXAM II</b>	Chapter 18

<sup>1</sup> I prefer to let the natural flow of our class discussion dictate our pace. If we fall behind the schedule above, the lecture on KPIs will be shortened or eliminated.