



Course: FIN 556: Business Valuation and Investment Analysis

Location: Paccar 395

Time: Tue/Thu 0830-1020 Prof: KEVIN K. BOEH, Ph.D.

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Office Hours: Tue/Thu 1600-1700, or by appointment

TA: TBD

INTRODUCTION

This course provides you with the tools and techniques needed to value firms, assets, investments, and projects. Valuation can be viewed from an internal or external (investor) perspective. Internal analyses are used to direct corporate activities that create value. Externally, we use similar analyses to identify opportunities to obtain value. Across all topics, we will focus on applied techniques using real data and emphasize the development of Excel modelling skills. **Background**: Before Ph.D. I was an investment banker doing deals (over 100 deals, ~\$5B in capital raises, ~\$6B in M&A). A lot of what we do in this course is taken from the applied techniques used in practice.

LEARNING OBJECTIVES

- 1. Understand methods and drivers of valuation.
- 2. Build financial projections and assess the sensitivity of inputs and assumptions on outputs in such models.
- 3. Value firms (and other assets) using several approaches.
- 4. Learn and use real data, gain experience with numerous available databases.
- 5. Extend and complement what you are doing in other courses.

LEARNING APPROACH

The course should be highly interactive. One model of learning is: Watch one, do one, teach one. In classes that stop at the first step, students gain a cursory understanding and short-lived knowledge. The second step pushes students to apply and analyze using knowledge. In the third step students anticipate questions and question assumptions/biases. It leads to the ability to evaluate material and, it is hoped, to see opportunities to generalize and integrate. As such:

- 1. Real-world models: These are models used in industry. This allows you to learn what you will apply.
- 2. Teams: In business, everything is done in teams/groups. Get good at it here and now. You will teach and learn from each other.
- 3. Adaptable: We **will** change things to suit. When learning is sufficiently "complete", we can move on. We will adapt and cover adjacent topics that are of interest. THIS IS INTENTIONAL We are not "OFF TOPIC".
- 4. Real-time: Expect to conduct analyses in real-time, using real data, without preparation.
- 5. Participatory: Business (and life) is not a spectator sport. The "teach one" step involves you adding value to the class by participating, arguing, and conveying your ideas. Everyone must do so.
- 6. Preparation is necessary: Prepare or fail. Show up to a meeting unprepared and your boss will fire you.



GRADING/ASSESSMENT

Assignment grades will be weighted (as below). If needed, final grades will be curved up or down to resemble Foster norms. Assessment is intended to map to the learning objectives and to your contribution to the learning approach. The weightings are intended to ensure you are graded individually, in groups, allow for schedule constraints, and to encourage you to take an active role in learning (participation).

Homework models (drop lowest, average the rest)	30%
Quizzes (drop lowest, average the rest)	30%
Team Projects (2)	30%
Professionalism/participation	10%

Homework (Individual):

Typically, we discuss a topic then start doing it (e.g., the Excel). You will then build the model. The next session you will have a chance to ask questions. Then, you fix and submit your models before the next session. Working together is fine, but EACH STUDENT must independently create a model. **If you use someone else's work, you will not learn**. When you submit it, it might not be perfect, and it might not work perfectly. **That is ok**. We will assess these based on being:

- your own work and not that of someone else;
- submitted on time;
- complete;
- (mostly) correct; and
- shows you put in effort.

GRADING

-10=someone else's work/model, discovered using VeriCite/SimCheck/Turnitin

0=never submitted

1=submitted late, or of low effort/completion

2=moderate effort/completion

3=solid effort/completion, but some issues (THE EXPECTED VALUE)

4=excellent model, flawless, correct, accurate, readable, clear – the model I will put in my course pack

Projects (TEAM):

There are two team projects (descriptions on Canvas). They are more work than the homework projects. The second project is a "culminating" project that takes place of a final exam (the quizzes take place of a midterm). Grading is done using an objective rubric. Feedback will be given. Choose your own teams of 4 (ideal) or 5 (allowed).

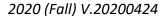
Quizzes:

There are numerous short planned quizzes, **plus 1-2 unplanned quizzes**. No make-ups will be given. Instead, I drop the lowest score (even if you do not take it).

- Format: Short, on Canvas, time compressed. If you know the material, they will be easy.
- The goal: To ensure you keep abreast of the materials/models.
- Content: Mostly all directly from course pack and what we write in it on most days.

Participation/Attendance:

This is usually the easiest part of the grade for graduate students.





How? Attend. Be on time. Participate. Do not multi-task (put the phones, etc. away).

Why? You will learn if you actively engage and allow for other to do the same (i.e., be on time).

GRADING:

Daily, I track a skip, 0, 1, 2, or 3 score. 2 is the norm. 3 means you were a superstar.

You get knocked if you are found unready when asked to share.

You get knocked if you show up late or are disruptive.

You get knocked if you do not contribute or ask a question in "most" classes.

If you must be gone, you must write up that day's materials (one-page max memo) and email it. This is for your benefit to ensure you miss no content. If competently done, you get a "skip" for participation (no grade effect) for the missed class to replace the zero (negative grade effect). You are allowed a max of two of these make-up write-ups, then zeros.

Everyone should get a perfect score on this. Easiest part of the grade.

PROFESSIONALISM/POLICIES

I expect you to treat this class as you would a professional responsibility.

- **COMMUNICATION**. Email is best. I try to answer quickly. If I do not answer within 24 hours, re-email me.
- PARTICIPATION/ATTENDACE is expected. You will learn less if you are not here.
- **TIMING.** Show up on time and I will as well. Let's work together to identify appropriate break times and class end times. Sometimes we get on a roll (finance is ridiculously fun) and lose track. I take no offense to a headsup. If we achieve the learning objectives and have exhausted the materials, we might end early.
- **TECHNOLOGY.** I encourage laptops in class for class-related uses such as note taking and building financial models. Learning how to prepare Excel models is an important objective. However, I support the School's policy against accessing email, surfing, etc. during class. Constrain the use of your laptop during class to class-related purposes.
- **MBA HONOR CODE.** I employ the policies and procedures espoused by the Foster School of Business Honor Code to maintain academic integrity in the course.
- ACCOMMODATIONS. If you have already established accommodations with Disability Resources for Students (DRS),
 please communicate your approved accommodations to me at your earliest convenience. To request academic
 accommodations due to disability, please contact DRS, uwdrs@uw.edu or (206) 543-8924.
- Washington state law requires that UW develop a policy for accommodation of student absences or significant
 hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more
 information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources.
 Accommodations must be requested within the first two weeks of this course using the Religious Accommodations
 Request form available at https://registrar.washington.edu/students/religious-accommodations-request/.

MATERIALS

ARTICLES: Several, posted on Canvas.

Case Pack: Printed, available at EZ Copy. This is a pack in which you will take notes and be given examples. This is

our version of Powerpoint slides – except interactive!

TEXT: (REQUIRED): Valuation: Measuring and Managing the Value of Companies, 7e (or 6e), May 2020,

McKinsey & Co., Koller, Goedhart, and Wessels. Wiley and Sons.

(OPTIONAL): International Financial Statements Analysis, 3rd Ed. (or newer). Robinson, Henry, Pirie,

Broihahn. CFA Institute Investment Series, Wiley, 2015.



SESSION-by-SESSION SCHEDULE:

CP (below) refers to the Course Pack topic number

Day	Date	СР	Topic	Notes
1	10/1		Syllabus	Read: Ch 1-2 McKinsey
			Course introduction	Ensure your Excel is up-to-date
				Read the syllabus.
				Actually read the syllabus.
2	10/6	1	Data and data sources	Read: Ch 8 McKinsey
			Excel add-ins	Log in to UW Foster Library
			Data exercises	Mac and PC users will differpatience
3	10/8	2	Excel modeling norms	Read Ch 13 McKinsey (beta topics)
			Calculations in Excel	
			Stock data in Excel	
			Equity Beta calculation	
4	10/13	3	Firm Valuation	Read: Ch 16 McKinsey
			-Comparable company analysis	Quiz 1: Days 1-3
5	10/15	4	Firm Capitalization	Due: HW1 Beta calculation model
			- Ownership summaries/structure	
6	10/20	5	Financial Projections	Read: Ch 11. McKinsey
			- Sensitivity Models	
			- Assumptions/Inputs	
7	10/22	6	WACC	Read: Ch 13 McKinsey (2 nd half)
			- Cost of equity adjustments	Due: HW2 Cap/Ownership model
			- Cost of debt estimation	
8	10/27	7	Valuation – DCF Model	Read: Ch 12 McKinsey
				Quiz 1: Days 4-7
9	10/29	7	Valuation – From EV to EQ	Read Ch 14 (317-324) McKinsey
			- Adjustments to DCF	Due: HW3 WACC model
			-	
10	11/3	8	Fixed Income Valuation	Read Ch 14 (325-337) McKinsey
			- Debt Valuation	
			- Liabilities (e.g., Pension)	
			- Hybrid valuation	
11	11/5	8	Fixed Income Valuation	Read Ch 14 (325-337) McKinsey
			- Hybrids	Due: HW4 DCF Model
12	11/10		K-structure Optimization	Read Ch 29 McKinsey
			- Building a dynamic model	Quiz 3: Days 8-11
			- Valuation effects	
13	11/12	9	TBD – No session or speaker	
14	11/17	13	M&A – Pro-forma Merger	Read Ch 27 McKinsey (1st half)



15	11/19	14	M&A – Relative Contribution	Due: Project #1 K-Structure Optimization Read Ch 27 McKinsey (2 nd half)
16	11/24	15	Initiation of Research Coverage - Overview of "Strategy" sources of CA - Industry positioning	Read: Porter, Barney articles on Canvas Quiz 4: Days 12-15
	11/26		Holiday	
17	12/01	10	Private Firm Valuation - Private placement valuation - Demand ratio	Read: Ch 32 McKinsey Due: HW5 M&A Relative Contrib
18	12/03	11	Initial Public Offerings - Valuation	Read: Boeh Paper posted on Canvas
19	12/08	12	Follow-on equity - Dilution and valuation	Read: Paper posted on Canvas Quiz 5: Days 16-18
20	12/10		Final Presentations	Due: Project #2 Initiation of Coverage