

# Syllabus for FINA 7A10 Valuation

Fall 2021, First Half-Semester

Section 01, Fri 2-5pm

Prof. Paul Povel

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## Course Overview

Building on the core finance class (FINA 6A35), we develop and use standard valuation tools based on "discounted cash flow" techniques: valuation using the WACC (weighted average cost of capital), valuation using the APV (adjusted present value), and (to a lesser extent) valuation using the cash-flow-to-equity approach. We will develop the ideas and tools, and we will apply this knowledge when working on in-class problems, individual and team assignments, and case studies. You learnt about some of this material in FINA 6A35. This course will go into much more depth.

*Valuation* is the central theme in this course: In order to make or understand financial decisions, you need to examine what consequences they have (we will focus on risky future cash flows) and how to compare the alternatives. You need to practice the proper approach to valuation: forecast expected future cash flows, and estimate the appropriate discount rate for that cash flow stream. The "value" of an asset is then estimated as the present value of the cash flows it generates, discounted using the appropriate discount rate. The valuation techniques we will use go beyond that, by building in the effects of tax shields and other "side effects" of financing decisions.

A lot of this work is technical (requiring calculations, usually with spreadsheet software), but a lot of it requires that you apply experience and common sense. So "valuation" often seems more like an art than a science. Therefore, I will not insist that "my" answers are the correct ones. However, I will require that (1) you use the techniques correctly, and that (2) you explain and justify assumptions and non-obvious decisions in your work.

This course is essential for anyone planning a career in finance, whether at a corporation or a financial institution. It is recommended for all business students, since any decision made in corporations may add or destroy value, and this course will improve your ability to judge whether value is being added or destroyed. The techniques developed here will be the foundation for the advanced corporate finance courses, including FINA 7A30 (Advanced Corporate Finance) and FINA 7A33 (Mergers and Acquisitions).

Note that this will not be an easy course. You may initially find it hard to become familiar with the concepts, so you should expect to spend time reviewing your notes and working on problems outside of class. The case studies also take time, first to prepare your own answers, second to meet with your team to compare your answers and create a team write-up. Hard work is required, and you will not get a good grade just for showing up.

## Course Outline

The course outline is only **tentative**; depending on the progress that we make, it may change.

<u>Week, day</u>	<u>Topics covered and to be prepared</u> (numbers refer to sections in the lecture notes)
Before class starts	Work through Section 0 of the Lecture Notes, in particular the problems. — Review basics of accounting.
Week 1: Fri, Aug 27, 2021	1: Overview; review of time value of money calculations, the CAPM, and capital budgeting. — 2: Using information from financial statements.
Week 2: Fri, Sep 03, 2021	3: DCF techniques I: The WACC (Weighted Average Cost of Capital). — Delevering and relevering betas or returns.
Week 3: Fri, Sep 10, 2021	Discuss the first part of the <i>Marriott Cost of Capital</i> case (no write-up due). — Examples: WACC valuation.
Week 4: Fri, Sep 17, 2021	<i>CASE: Marriott Cost of Capital.</i> — 4: DCF techniques II: The APV (Adjusted Present Value).
Week 5: Fri, Sep 24, 2021	<i>CASE: Ocean Carriers</i> (team presentations outside of class!) — 4: DCF techniques II: The APV (Adjusted Present Value).
Week 6: Fri, Oct 01, 2021	<i>CASE: Joyce's Juice.</i> — Examples: APV valuation. — 5: Comparison of DCF Techniques.
Week 7: Fri, Oct 08, 2021	Practice problems, questions, etc.
Week 8: Fri, Oct 15, 2021	Final exam

### **Required Knowledge**

Computer skills: This course involves some number-crunching, and spreadsheet software will come in extremely handy. In fact, you will be at a considerable disadvantage if you are not familiar with spreadsheet software. If you do not regularly use spreadsheet software, this is the ideal time to learn how to use it. (In class, I will use *Microsoft Excel*.) Furthermore, you will be required to use the university's "Learning Management Software", [BlackBoard](https://uh.edu/blackboard) ([uh.edu/blackboard](https://uh.edu/blackboard)).

Finance: It is essential that you have taken FINA 6A35 (Managerial Finance). You need to be comfortable with "time value of money" calculations: discounting of future cash flows, given a rate of return, and working with perpetuities. You need to have some familiarity with the CAPM (working with betas). Some of you have a Finance background. If you don't, no worries, you're here to learn how the techniques that we cover in this course work. The important thing is not to let those with pre-existing knowledge do your work for you. In order to learn the material, you must actively engage with it.

Accounting: You need some basic knowledge. If you don't know what assets, liabilities, EBITDA, EBIT, Net Income, Operating Cash Flow, etc. mean, you definitely need to improve your knowledge. You may want to use the two *Merrill Lynch* brochures about financial statements, downloadable from the Course Materials page (they are well written, and free!).

Maths: We will not do anything difficult in this course, but it would be good if you are comfortable dealing with numbers and performing simple calculations.

Time and effort: This course requires significant work outside of class. If you cannot make time available each week for reviewing lecture notes, working on problems and working on cases, you will struggle and get very little out of this course.

## **Equipment**

I will assume that you have access to a computer with spreadsheet software (you have access to Microsoft Office 365 through your @cougarnet.uh.edu account, see [this webpage](#)). I will also assume that you have access to the web, and that you regularly check your email.

You will need a calculator during the final exam. A basic scientific calculator that does powers is fine. Large-display calculators with "parentheses" buttons and "back" buttons are helpful. If you have a financial calculator, you can use it in this class (note: a financial calculator is neither required nor recommended).

## **Readings and Other Materials**

### **Lecture notes:**

Lecture notes are available as PDF files (for free) from this course's *BlackBoard* page (go to the Course Materials tab). The lecture notes have gaps where you should add your own comments, answer questions, take down details of calculations, etc. The lecture notes help me structure the course, and they make your life easier because you do not have to write down everything. They will also make it easier for you to compare your notes with other students', or to ask me clarifying questions. ***You should print out the pages and use them to take notes with a pen.*** Just looking at the lecture notes on a regular screen will not be enough, unless it is a tablet with a digitizer pen that allows you to write onto the screen.

### **Textbooks:**

There is ***NO required textbook*** for this course --- the lecture notes will keep you more than busy. Another reason is that the standard corporate finance textbooks do not cover this material in sufficient depth. If you are interested in a book that covers the material **in great depth**, I recommend this book:

- *Valuation: Measuring and Managing the Value of Companies* by McKinsey & Company Inc.; authors: Tim Koller, Marc Goedhart and David Wessels Wiley Finance, 7th Edition, 2020, ISBN 9781119611868 [[publisher's webpage](#)]

Unlike the standard textbooks, this book is reasonably affordable ([try this for some options](#)). It goes into great depth, so it will be a valuable on-the-job resource. If you can find the 6th edition at a good price ([try this for some options](#)), that will do the job: 6th Edition, 2015, ISBN 9781118873700 [[publisher's webpage](#)]

### **Case studies:**

Please see [below](#).

### **Other material:**

Additional material may be made available during the semester. It will be downloadable from [BlackBoard](#).

## **Internet sources:**

In the past, students also tried to find information on the web. That tends to be a bad idea. If you are unsure about something, gathering more information is less useful than thinking about what exactly is unclear, and why. Often, you will be able to answer your own question very quickly; if not, you can ask me a very precise question. That's "learning". All the information you need is in the course packet and the class notes. You need to "digest" it, and that requires hard work.

## **Accessibility Statement**

The C. T. Bauer College of Business would like to help students who have disabilities achieve their highest potential. To this end, in order to receive academic accommodations, students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), and present approved accommodation documentation to their instructors in a timely manner.

## **Classes**

Class	When	Where
FINA 7A10 Sec 04, Class #28090	Fri, 2:00-5:00pm	<a href="#">Melcher Hall 126</a>

Class participation is mandatory. The course content is not straightforward to understand and master, so this course will require you to interact with the material. The best way to interact with the material is by participating in class and asking questions whenever they arise. Other students will also benefit if you ask helpful questions. In addition, you should plan to spend time outside of class revising notes and working on practice problems, and if new questions arise, to ask them at the next opportunity.

To make the most efficient use of limited class time, students who miss a class or are late are responsible themselves for getting notes, assignments, and announcements from their classmates.

## **Classroom Etiquette**

Please remember to turn off your cell phones, in particular during exams.

If you bring your notebook or tablet into the classroom, please act in a mature fashion: no emailing, surfing of web pages, etc., i.e., activities that distract you and (much more importantly) other students sitting near you. As I explain below, there is a participation component in the overall course grade --- violating this no-internet rule will *seriously* reduce your participation score.

## **News**

If something should come up (e.g. schedule changes, corrections of materials, announcements, etc.), I will post "announcements" on [BlackBoard](#), and you will receive text-message style emails with the announcements.

## **Getting in Touch With Me**

The easiest way will be to use email: [povel@uh.edu](mailto:povel@uh.edu).

My office phone number is (713) 743-4759. My office is Melcher Hall 230G. Since you have lots of classes, I won't have scheduled office hours. You can get in touch with me when you have time, by email or in person. Many questions can be answered right after class. But please do not come to my office right before class, when I am busy preparing for class.

The BlackBoard page for this course includes a "Discussions" tab, where you can post questions and answer or comment on others' questions. If you have a question that you think is of general interest, you may want to post it there, so others benefit from your effort. Trying to answer others' questions will also be a useful exercise. Note, however, that there are no requirements to post or participate in discussions (see also the explanations about grading, below).

## **Teaching Assistant**

Teaching Assistant: No one. I will grade everything myself.

## **Cases**

There will be three case studies that require write-ups from your teams. Specific instructions are provided for each case in the lecture notes.

The write-ups must be prepared in groups of 3-4 people. You must give me a list of your group members in the second week of class; groups may not be changed after that.

When working on the cases, you are free to make use of all class materials, but do not use outside sources without my permission, and do not get help from anyone outside your group. I regard use of outside sources or help without my permission as [academic misconduct](#).

The case write-ups (one submission per team, by email) are due before class on the day we will discuss the case. Please *email* me your documents, including spreadsheets, so I can check how you calculated your numbers.

The [schedule](#) is preliminary and may be changed.

Please set aside enough time to work on cases. The ideal approach is for every team member to prepare a rough sketch of a possible write-up, including in particular spreadsheets; then you can meet, discuss your ideas and put together a team write-up that you will submit. You should resist the temptation to free-ride on your team members' efforts. Working on cases is a learning experience, and that type of learning is crucial in this course.

Two of the three case studies are copyrighted by Harvard Business School. (The *Joyce's Juice* case study is not copyrighted, it is included in the downloadable lecture notes.) You can go to the HBS website (<https://hbsp.harvard.edu>) and purchase them (after registering). I set up a "coursepack webpage" on the HBS website: <https://hbsp.harvard.edu/import/824072>. The regular price of HBS cases is \$7.46; if you order through the coursepack webpage, it is \$4.25. (I do not receive anything, in case you were wondering.)

The materials you need to purchase are:

- Marriott Corp.: The Cost of Capital (Abridged) (HBS Case 289047) [[webpage](#)]
- Ocean Carriers: (HBS Case 202027) [[webpage](#)]

## **Homework Assignments**

There will be several homework assignments, to be completed independently from other students. The assignments will be made available on [BlackBoard](#). Your answers should consist of spreadsheets that show your calculations and are legible (including legible formulas); where necessary, type text into the spreadsheet (for example, to explain something, or to answer a qualitative question). Upload your spreadsheet on [BlackBoard](#), before the due date and time.

## **Exams**

There will be one final exam. It will include topics from the entire course.

The final exam will be closed-book / closed notes. However, you will be allowed to use a "cheat-sheet" with notes, written on one side of one sheet (8.5"x11"). I regard these "cheat-sheets" as helpful tools for studying: You should carefully put together material that you feel will help you in the exam; that will help you structure the material, recall essential formulas and procedures, etc. You should start working on your "cheat-sheet" from the first class, and you should plan to re-write it often.

You will be using a calculator during the exam, please practice using it to solve problems as we progress through the course, so there are no surprise problems during the final exam. If you decide to use a financial calculator, make sure you know how to operate it; see above, under [Equipment](#). In the exam, you must convince me that you know what you are doing: just writing down a result is not convincing; you should write down both the correct formula and the correct result. If your answer seems unconvincing, you won't get full credit, even if the numbers are right.

## **Grading**

Your performance will add up to an overall score, which will then be translated into a course grade. I grade on a curve, so I cannot tell you ex-ante what the cutoffs for an A, an A-, etc. are going to be. On average, a little over half of students received A or A- grades in the past, and a little less than half the students received B+ or lower grades.

Your overall score is computed as follows:

<u>Weight</u>	<u>Graded work</u>
20%	Individual homework assignments
25%	Team work (case studies)
45%	Final exam
10%	Participation

For the "Team work" score, I will incorporate feedback that I will collect from your team mates at the end of the course. I will ask all students for feedback about their team mates' contributions to the team work. There have been problems of free-riding in the past, unfortunately. Such behavior will severely reduce the Team work score. Please make sure everybody contributes at all stages of all case studies (a great opportunity to apply your leadership skills).

For the "Participation" score, I will incorporate feedback that I will collect from your fellow students, about who made particularly helpful class contributions. Please take class participation seriously, not only because it affects your grade, but because it helps you learn. The purpose of grading class participation is to encourage you to take active control of your learning: the more involved you get and the better prepared you are, the more you will benefit from this class. (Note, however, that simply taking up "air time" without really making a contribution will not improve your participation score.)

Questions about grading: Requests for a regrade must be made in writing within two weeks of the time the graded work is returned, and must clearly and specifically explain where and why you think you were graded incorrectly.

## **Counseling and Psychological Services (CAPS)**

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to the demands of a professional program, or feeling sad and hopeless. You can reach CAPS ([uh.edu/caps](http://uh.edu/caps)) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the “Let's Talk” program, which is a drop-in consultation service at convenient locations and hours around campus ([uh.edu/caps/outreach/lets\\_talk.html](http://uh.edu/caps/outreach/lets_talk.html)).

## **Academic Misconduct**

Academic Honesty: The University of Houston's Academic Honesty Policy is strictly enforced by the Bauer College and by this professor. A discussion of the policy is included in the UH Student Handbook, <http://www.uh.edu/dos/studenthandbook/>. It is your responsibility to fully understand and comply with all principles contained within this Handbook. Please make sure you understand this policy and in particular, you understand the meaning of plagiarism.

There have been unfortunate instances in which students created class-specific chat groups on Slack or similar providers, and wrong or misleading information was spread in those chat groups. Please use such privately-created chat groups only for socializing, not to discuss course content and questions about it. In particular, do not discuss assignments, because doing so would constitute academic misconduct. Important: if you discover that someone violated these rules, it is your duty to report this immediately (failing to report a violation also constitutes academic misconduct). If you would like to discuss course-related topics, please use the Discussions tab on the BlackBoard page or get in touch with me (see above).