

Syllabus for FINA 7A10 Valuation

Spring 2023, First Half-Semester

Section 01, Wed 6-9pm

Prof. Paul Povel

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) | <u>Assignments</u> |
|---------------------------------|---|--|
| Week 1: Wed, Jan 18, 2023 | 1: Overview; review of time value of money calculations, the CAPM, and capital budgeting. 2: Using information from financial statements. | Work through Section 0 of the Lecture Notes, in particular the problems. Review basics of accounting. |
| Week 2: Wed, Jan 25, 2023 | 2: Using information from financial statements. 3: DCF techniques I: The WACC (Weighted Average Cost of Capital). Delevering and relevering betas or returns. | Homework Assignment 1 Team lists |
| Week 3: Wed, Feb 01, 2023 | 3: DCF techniques I: The WACC (Weighted Average Cost of Capital). Discuss the first part of the <i>Marriott Cost of Capital</i> case (no write-up due). | Read the <i>Marriott</i> case (no write-up due, yet → next week!) Homework Assignment 2 |
| Week 4: Wed, Feb 08, 2023 | <i>CASE: Marriott Cost of Capital.</i> 4: DCF techniques II: The APV (Adjusted Present Value). | <i>Marriott</i> case write-up |
| Week 5: Wed, Feb 15, 2023 | <i>CASE: Ocean Carriers</i> 4: DCF techniques II: The APV (Adjusted Present Value). | <i>Ocean Carriers</i> case write-up |
| Week 6: Wed, Feb 22, 2023 | <i>CASE: Joyce's Juice.</i> 5: WACC and APV. | <i>Joyce's Juice</i> case write-up |
| Week 7: Wed, Mar 01, 2023 | 5: Summary, DCF techniques. Practice problems, questions, etc. | Homework Assignment 3 Look through lecture notes and practice problems. |
| Week 8: Wed, Mar 08, 2023 | 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).

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](#)] or ISBN 9781119610885 [[publisher's webpage](#)]
(To my knowledge, the regular edition and the "University Edition" have exactly the same the content.)

Unlike the standard textbooks, this book is reasonably affordable. 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, 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 01, Class #15067 | We 6:00-9:00pm | CBB 118 |

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.

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 (<http://hbsp.harvard.edu>) and purchase them (after registering). I set up a "coursepack webpage" on the HBS website: <https://hbsp.harvard.edu/import/1010351>. 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)
- Ocean Carriers: (HBS Case 202027)

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) 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).

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, <https://www.uh.edu/student-handbook>. 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).

Additional Syllabus Information, Required by the University

COVID-19 Information

Students are encouraged to visit the University's [COVID-19](#) website for important information including diagnosis and symptom protocols, testing, vaccine information, and post-exposure guidance. Please check the website throughout the semester for updates. Consult the [Graduate Excused Absence Policy](#) for information regarding excused absences due to medical reasons.

Reasonable Academic Adjustments/Auxiliary Aids

The University of Houston complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for disabled students. In accordance with Section 504 and ADA guidelines, UH strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please contact [the Justin Dart Jr. Student Accessibility Center](#) (formerly the Justin Dart, Jr. Center for Students with DisABILITIES).

Excused Absence Policy

Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston [Graduate Excused Absence Policy](#) for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Under these policies, students with excused absences will be provided with an opportunity to make up any quiz, exam or other work that contributes to the course grade or a satisfactory alternative. Please read the full policy for details regarding reasons for excused absences, the approval process, and extended absences. Additional policies address absences related to [military service](#), [religious holy days](#), [pregnancy and related conditions](#), and [disability](#).

Recording of Class

Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the [Justin Dart, Jr. Student Accessibility Center](#). If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with *anyone* without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.

UH Email

Please check and use your Cougarnet email for communications related to this course. To access this email, [login](#) to your Microsoft 365 account with your Cougarnet credentials.

Academic Honesty Policy

High ethical standards are critical to the integrity of any institution, and bear directly on the ultimate value of conferred degrees. All UH community members are expected to contribute to an atmosphere of the highest possible ethical standards. Maintaining such an atmosphere requires that any instances of academic dishonesty be recognized and addressed. The [UH Academic](#)

Honesty Policy is designed to handle those instances with fairness to all parties involved: the students, the instructors, and the University itself. All students and faculty of the University of Houston are responsible for being familiar with this policy.

Title IX/Sexual Misconduct

Per the UHS Sexual Misconduct Policy, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and state law and must report incidents of sexual misconduct (sexual harassment, non-consensual sexual contact, sexual assault, sexual exploitation, sexual intimidation, intimate partner violence, or stalking) about which they become aware to the Title IX office. Please know there are places on campus where you can make a report in confidence. You can find more information about resources on the Title IX website at <https://uh.edu/equal-opportunity/title-ix-sexual-misconduct/resources/>.

Security Escorts and Cougar Ride

UHPD continually works with the University community to make the campus a safe place to learn, work, and live. Our Security escort service is designed for the community members who have safety concerns and would like to have a Security Officer walk with them, for their safety, as they make their way across campus. Based on availability either a UHPD Security Officer or Police Officer will escort students, faculty, and staff to locations beginning and ending on campus. If you feel that you need a Security Officer to walk with you for your safety please call [713-743-3333](tel:713-743-3333). Arrangements may be made for special needs.

Parking and Transportation Services also offers a late-night, on-demand shuttle service called Cougar Ride that provides rides to and from all on-campus shuttle stops, as well as the MD Anderson Library, Cougar Village/Moody Towers and the UH Technology Bridge. Rides can be requested through the UH Go app. Days and hours of operation can be found at <https://uh.edu/af-university-services/parking/cougar-ride/>.

Syllabus Changes

Please note that the instructor may need to make modifications to the course syllabus. Notice of such changes will be announced as quickly as possible through (*specify how students will be notified of changes*).

Helpful Information

Coogs Care: uh.edu/dsa/coogscare

Student Health Center: uh.edu/healthcenter