

**FIN 286 VALUATION**

SPRING 2021

M/W 8:00 AM – 10:00 AM, (UNIQUE 03880)

M/W 10:00 AM – 12:00 PM, (UNIQUE 03885)

M/W 12:00 PM – 2:00 PM, (UNIQUE 03890)

Professor	Ari Kang
Office	GSB 6.464
Professor Office Hours	Mondays/Wednesdays (2 pm – 3 pm) and by appointment
Office Hours Location	via Zoom
E-Mail	ari.kang@mcombs.utexas.edu
Course Web Page	via Canvas
Final Exam	Thursday, March 4 th , 6 – 9 pm
TA1	Dylan Pond
Email	Dylan.Pond@mba21.mcombs.utexas.edu
TA1 Office Hours	Mondays (5 pm – 5:45 pm), Tuesdays (4 pm – 4:45 pm)
TA1 Office Hours Location	via Zoom
TA2	Archit Mahajan
Email	Archit.Mahajan@mba21.mcombs.utexas.edu

Course Objectives

This course covers business valuation, equity valuation, and option valuation. The goal of the course is to provide students with practical tools and methods to value a broad range of assets. While the course is designed first and foremost to be practical, the tools and methods covered in this course are presented in the framework of generally accepted financial theory.

The course starts with a broad overview and discussion of valuation techniques. There are a number of different ways to try and determine the value of an asset, and it is almost always good practice to use more than one valuation method. Following the overview of valuation techniques, we start with methods for calculating the discount rate used in cash flow valuation methods. Our discount rate discussion involves determining the firm's cost of capital – both debt and equity capital – and the effect of leverage (debt) on the firm's cost of equity and the firm's overall cost of capital. Following our discount rate discussion, we cover valuation effects of a firm's capital structure.

Along with our discount rate and capital structure classes we cover cash flow valuation techniques used to value businesses and equity. We start with the discounted cash flow method (DCF), which is the most widely used cash flow valuation method. DCF valuation models are well-suited for sensitivity analysis, and we will cover methods for modeling the effects of varying material inputs of the DCF model. Cash flow valuation methods include many uncertain inputs, and sensitivity analysis help reveal the effects of varying the major inputs of the valuation. Following the DCF work, we will cover the use of relative valuation multiples (e.g., EV/EBITDA, P/E). We conclude the course with a discussion of other valuation

techniques and a look at valuation in M&A and LBO contexts.

Prerequisites: Core MBA classes on accounting, statistics, and finance are a prerequisite. We use Excel extensively so working knowledge of EXCEL is also important. Students should expect the workload for this course to be demanding. Students who took this course in the past have indicated that the workload is heavy compared to other courses.

Materials

Required HBS Case materials (Coursepack link: <https://hbsp.harvard.edu/import/794505>)

- Nike – HBS Case #UV0010
- Ferrari – HBS Case #UV7259
- DuPont – HBS Case # UV6790

Optional Textbooks

The material taught in class is a collection of concepts and examples drawn from several textbooks, research papers, and newspapers. Thus, I do not require any textbook. For those students who want to have a reference book, the two textbooks below are the closest in spirit to what I teach in class:

- Valuation: The Art & Science of Corporate Investment Decisions, by Sheridan Titman and John Martin, Prentice Hall, 2010 3rd Edition, ISBN-10: 0133479528
- Corporate Finance: Core Principles and Applications, Stephen A. Ross, Randolph W. Westerfield, Jeffrey F. Jaffe and Bradford D. Jordan, 6th Edition, 2020, McGraw-Hill Education, ISBN-10: 1260571122

The *Wall Street Journal*, *Financial Times*, the *New York Times* business section, the *Economist*, or *Business Week* are all recommended. We will cover the conceptual material to help you think through financial decisions. However, we will discuss current financial news in class.

Course Requirements and Grading

Your grade in the course will be determined as follows:

	<u>Assignment</u>	<u>Points</u>
In-Class Contribution		10
Homework Assignments	Individual	25
Case1 (Nike)	Group	10
Case2 (Ferrari)	Group	15
Case3 (DuPont)	Group	15
Final Exam	Individual	<u>25</u>
		<u>100</u>

Make-up and extra-credit assignments are generally not possible. Your grade will be determined solely by the components listed above. The homework assignments are individual. The case is a group assignment. The average turn-around time for returning the graded HWs and cases back to students is two weeks. The students have two weeks after the assignments are returned to ask questions about the

grading and ask for a re-grade.

The final examination will be administered on March 4th remotely using an automated online proctoring service, Proctorio. The final exam is cumulative and covers all material mentioned in the course. You are allowed one letter-sized sheet of paper, where you can write, front and back, any formula or information you might need. A regular non-programmable calculator is also allowed. No other material is allowed. The best way to prepare for the final exam is by going through examples from the lecture notes and the textbook after each lecture and by working through problem sets and the sample final exam. Please note the scheduling of the exam. You are responsible for ensuring that you are available to take the exam. I will not FAX exams to remote locations. I will not permit anyone to take the exams at another time unless you are gravely ill, face a significant emergency or have an exam conflict. If your travel plans conflict with the date of an exam, you should change your travel plans now, or drop the course. Please advise potential employers that you cannot schedule interviews that conflict with your exam schedule.

A forced curve will be used for grading purposes. The target grade distribution follows the Texas MBA program recommended distribution, with approximately:

A	(4.00)	25%
A-	(3.67)	20%
B+	(3.33)	15%
B	(3.00)	35%
B-	(2.67) or below	5%

C's, D's and F's will be awarded where deserved. Natural breaks in the distribution will be used to determine the final grade distribution. No student is allowed to take the course on a pass/fail basis.

Zoom Professionalism and Etiquette.

Following are some best practices for making sure we are working together to create an efficient, effective, respectful, and ultimately enjoyable classroom when accessing remotely:

- Keep your video on at all times.
- Be mindful of your surroundings when on camera to minimize distractions.
- Avoid display of inappropriate materials or expressions, either visual, textual, or otherwise. Such displays may be subject to disciplinary action.
- Turn your camera off when leaving the meeting temporarily and use the away feedback icon.
- Include a professional photo of yourself for your Zoom profile picture. This photo will be visible during class sessions, if you keep your video off.
- Mute yourself unless you are speaking. This will reduce background or feedback noise and limit distractions.
- Pose questions or comments by using the “raise” your hand feature or typing in the chat window. Try to keep questions and comments brief, especially in large classes.
- Turn off your video if the video or audio is choppy. After the class or meeting, try these [Internet Connection Tips](#).
- Use the most reliable WIFI you can access. If you are experiencing problems with your internet connection, here are some [Internet Connection Tips](#).

For more information, please see [Zoom Etiquette](#)

Students with Disabilities

Upon request, the University of Texas at Austin provides appropriate academic accommodations for qualified students with disabilities. Services for Students with Disabilities (SSD) is housed in the Office of the Dean of Students, located on the fourth floor of the Student Services Building. Information on how to register, downloadable forms, including guidelines for documentation, accommodation request letters, and releases of information are available online at <https://diversity.utexas.edu/disability/>. Please do not hesitate to contact SSD at (512) 471-6259, VP: (512) 232-2937 or via e-mail if you have any questions.

Academic Dishonesty

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the Policy Statement on Scholastic Dishonesty for the McCombs School of Business. By teaching this course, I have agreed to observe all of the faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Judicial Services website or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

Honor Code

Academic honor, trust and integrity are fundamental to The University of Texas at Austin McCombs School of Business community. They contribute directly to the quality of your education and reach far beyond the campus to your overall standing within the business community. The University of Texas at Austin McCombs School of Business Honor System promotes academic honor, trust and integrity throughout the Graduate School of Business. The Honor System relies upon The University of Texas Student Standards of Conduct (Chapter 11 of the Institutional Rules on Student Service and Activities) for enforcement, but promotes ideals that are higher than merely enforceable standards. Every student is responsible for understanding and abiding by the provisions of the Honor System and the University of Texas Student Standards of Conduct. The University expects all students to obey the law, show respect for other members of the university community, perform contractual obligations, maintain absolute integrity and the highest standard of individual honor in scholastic work, and observe the highest standards of conduct. Ignorance of the Honor System or The University of Texas Student Standards of Conduct is not an acceptable excuse for violations under any circumstances.

The effectiveness of the Honor System results solely from the wholehearted and uncompromising support of each member of the McCombs School of Business community. Each member must abide by the Honor System and must be intolerant of any violations. The system is only as effective as you make it.

Faculty Involvement in the Honor System

The University of Texas at Austin McCombs School of Business Faculty's commitment to the Honor System is critical to its success. It is imperative that faculty make their expectations clear to all students. They must also respond to accusations of cheating or other misconduct by students in a timely, discrete and fair manner. We urge faculty members to promote awareness of the importance of integrity through in-class discussions and assignments throughout the semester.

Expectations Under the Honor System

Standards

If a student is uncertain about the standards of conduct in a particular setting, he or she should ask the relevant faculty member for clarification to ensure his or her conduct falls within the expected scope of honor, trust and integrity as promoted by the Honor System. This applies to all tests, papers and group and individual work. Questions about appropriate behavior during the job search should be addressed to a professional member of the Career Management Office. Below are some of the specific examples of violations of the Honor System.

Lying

Lying is any deliberate attempt to deceive another by stating an untruth, or by any direct form of communication to include the telling of a partial truth. Lying includes the use or omission of any information with the intent to deceive or mislead. Examples of lying include, but are not limited to, providing a false excuse for why a test was missed or presenting false information to a recruiter.

Stealing

Stealing is wrongfully taking, obtaining, withholding, defacing or destroying any person's money, personal property, article or service, under any circumstances. Examples of stealing include, but are not limited to, removing course material from the library or hiding it from others, removing material from another person's mail folder, securing for one's self unattended items such as calculators, books, book bags or other personal property. Another form of stealing is the duplication of copyrighted material beyond the reasonable bounds of "fair use." Defacing (e.g., "marking up" or highlighting) library books is also considered stealing, because, through a willful act, the value of another's property is decreased.

Cheating

Cheating is wrongfully and unfairly acting out of self-interest for personal gain by seeking or accepting an unauthorized advantage over one's peers. Examples include, but are not limited to, obtaining questions or answers to tests or quizzes, and getting assistance on case write-ups or other projects beyond what is authorized by the assigning instructor. It is also cheating to accept the benefit(s) of another person's theft(s) even if not actively sought. For instance, if one continues to be attentive to an overhead conversation about a test or case write-up even if initial exposure to such information was accidental and beyond the control of the student in question, one is also cheating. If a student overhears a conversation or any information that any faculty member might reasonably wish to withhold from the student, the student should inform the faculty member(s) of the information and circumstance under which it was overheard.

Actions Required for Responding to Suspected and Known Violations

As stated, everyone must abide by the Honor System and be intolerant of violations. If you suspect a violation has occurred, you should first speak to the suspected violator in an attempt to determine if an infraction has taken place. If, after doing so, you still believe that a violation has occurred, you must tell the suspected violator that he or she must report himself or herself to the course professor or Associate Dean of the McCombs School of Business. If the individual fails to report himself or herself within 48 hours, it then becomes your obligation to report the infraction to the course professor or the Associate Dean of the McCombs School of Business. Remember that although you are not required by regulation to take any action, our Honor System is only as effective as you make it. If you remain silent when you suspect or know of a violation, you are approving of such dishonorable conduct as the community standard. You are thereby precipitating a repetition of such violations.

The Honor Pledge

The University of Texas at Austin McCombs School of Business requires each enrolled student to adopt the Honor System. The Honor Pledge best describes the conduct promoted by the Honor System. It is as follows:

"I affirm that I belong to the honorable community of The University of Texas at Austin Graduate School of Business. I will not lie, cheat or steal, nor will I tolerate those who do."

"I pledge my full support to the Honor System. I agree to be bound at all times by the Honor System and understand that any violation may result in my dismissal from the McCombs School of Business."

Academic Dishonesty

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities

Sharing of Course Materials is Prohibited

No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class unless you have my explicit, written permission. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. I am well aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.

Class Recordings

Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings. Guidance on public access to class recordings can be found [here](#).

Valuation Class Schedule Spring 2021

(Changes to the schedule may be made at my discretion and if circumstances require. It is your responsibility to note these changes when announced.)

Date	Class	Topic & Assignments	Optional Reading
Wed Jan 20	1	Introduction to Valuation. Time value of money. Discounted cash flow model.	Titman & Martin, C2 R, W, J & J C4
Fri Jan 22 (MLK make-up Class; asynchronous)	2	Review of main accounting concepts. Definition of Free Cash Flow.	Titman & Martin, C2
Mon Jan 25	3	Risk and CAPM.	Titman & Martin, C4, C5 R, W, J & J C10, C11
Wed Jan 27	4	More of CAPM. Unlevering/re-levering beta.	Titman & Martin, C4, C5 R, W, J & J C11, C12
Mon Feb 1	5	Fama-French model. Cost of debt. <i>(Assign Case 1 – Nike: HBS Case #UV0010, Group Assignment)</i>	Titman & Martin, C4, C5
Wed Feb 3	6	No friction model and WACC.	Titman & Martin, C4, C5 R, W, J & J C12, C15
Mon Feb 8	7	Forecast FFCF Case1: Cost of capital – Nike (student group presentation) (Case 1 due at the beginning of class)	Titman & Martin, C6
Wed Feb 10 (asynchronous class)	8	Sensitivity analysis (scenario analysis, break-even, and simulation) <i>(Assign Case 2 – Ferrari: HBS Case #UV7259, Group Assignment)</i>	Titman & Martin, C3
Mon Feb 15	9	Valuing a company with multiples.	Titman & Martin, C8
Wed Feb 17	10	Other valuation techniques including APV Case 2: Valuation of distressed firm – Media General (Case 2 due at the beginning of class)	Titman & Martin, C9

Mon Feb 22	11	Private equity and LBO <i>(Assign Case 3 – DuPont: HBS Case # UV6790, Group Assignment)</i>	Titman & Martin, C10
Wed Feb 24	12	More of LBO	Titman & Martin, C10
Mon Mar 1	13	M&A Case 3: Valuation in LBO setting – DuPont (Case 3 due at the beginning of class)	
Wed Mar 3	14	Course Review	
Thu Mar 4		Final Exam (6 pm – 9 pm)	