

Corporate Finance B6300

Spring 2020

INSTRUCTOR

Professor Yiming Ma
Office: Uris 820
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Office hours: Tue 4pm – 5pm

Communications from professor and teaching assistants about the course will take place through Canvas. Students should make sure they regularly check for announcements and messaging notifications

COURSE DESCRIPTION

Corporate Finance is an introductory finance course that is required for all MBA students. It is therefore designed to cover those areas of finance that are important to all managers whether they specialize in finance or not. At the end of the course you will be able to value a firm or a project. In order to reach this goal, we will cover the following topics:

1. General framework for valuation and discounting (including, as special cases, valuation of stocks and bonds, and evaluation of investment opportunities)
2. The free cash flow method for firm valuation
3. Basic concepts of risk and return and identification of opportunity cost of capital
4. Choice of capital structure: how will the firm be financed

The course will consist of approximately one-half lecture and one-half in-class case discussions, for which students should prepare carefully. The aim of the course is to provide students with an understanding both of sound theoretical principles of finance and of the practical environment in which financial decisions are made.

TEXTBOOKS AND MATERIALS

The following items are required:

- Teaching notes: They will be handed out in class and posted on Canvas. These are your primary reference materials for the class.
- Case Materials and Assignments: All case readings and assignments are posted on Canvas.

The (optional) textbook is:

- Corporate Finance: The Core, (3rd or 4th edition), by Jonathan Berk and Peter DeMarzo (BDM). Readings from this book for each lecture are listed in “Schedule of Sessions and Assignments”. Readings should be done prior to class and will serve as a supplement to class lecture material. The book is not required.

These additional materials are not required, but may be useful to some students:

- An additional detailed treatment of valuation is Valuation: Measuring and Managing the Value of Companies, (6th edition) by Tim Koller, Marc Goedhart, and David Wessels (McKinsey & Company Inc.)
- The Wall Street Journal and/or The Financial Times are fundamental reading for any business school student. Class discussion will often reference news items.

CLASSROOM NORMS AND EXPECTATIONS

Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, and Participating.

Laptop computers and other devices – I will not allow laptop computers in class. I will make some exceptions late in the semester when we solve Problem Set 4 (Buckeye Computers), Walmart, and the Eskimo case in class. When we discuss cases, you should have a printed copy of your case write-ups to follow in class. Please make sure that your laptops are put away before the start of class. You should not use phones or other devices (tablets, etc.) during class, except for in-class polls.

Seating – The seat that you choose for your second lecture will be your seat for the remainder of the course.

Name cards – Please bring name cards to every class

TEACHING ASSISTANTS AND REVIEW SESSION

Review sessions will be held on Fridays 10:45am - 12:15pm in Uris 326. A schedule of the review sessions and the material that will be covered is provided at the end of the syllabus. This includes three excel review sessions directed to helping students become efficient at doing valuation in excel. Any materials covered in review sessions will be posted on Canvas. Our TA team will be responsible for running the review sessions, common to all clusters. You can schedule office hours (in the library) with your cluster TA by email. He/she should be the first point of contact for queries about grading or assignments.

Cluster X: Marcela Miguel: MMiguel20@gsb.columbia.edu

Cluster Y: Rafael Matos: RMatos20@gsb.columbia.edu

Cluster Z: James Shen: JShen20@gsb.columbia.edu

GRADING

Grades will be calculated using the following weights:

- Case write-ups 20%
- Four Problem Sets 20%
- Final Exam 50%
- Participation 10%

Case Write-ups

The case assignment, excel data, and reading will be available on Canvas at least one week before the case write-ups are due.

For each case you are required to answer all questions in the “Assignment” portion of the handout. You do not need to explicitly answer the discussion questions; they are only intended to give you ideas and prepare you for class discussion.

Cases are solved in your learning teams. Each case should be answered in excel. All analysis should be succinctly and clearly explained within the excel document. It should be clear how your calculations were performed. You should list and justify any assumptions you make.

Each group will turn in one solution. **Case write-ups should be submitted electronically (an excel file) through the Drop Box in Canvas strictly before 9am on the day in which they are due.** Late submission will not be accepted. You should bring a printed hardcopy of your answers to refer to during class discussion (beware that printing Excel is sometimes cumbersome).

Case write-ups will be graded on a ten-point scale. The first case write-up will be graded leniently so that you can receive feedback that will help you do your future case write-ups. Your grade will depend on the logic of your analysis and the clarity of your write-up.

Problem Sets

There will be four problem sets. You can discuss the concepts related to the problem set with other people in your cluster but the answer to the specific questions in your problem set should be your own individual work. **Problem sets should be submitted electronically (an excel file) through the Drop Box in Canvas strictly before 9am on the day that they are due.** Late submission will not be accepted. Assignments solutions should be clearly explained and formatted to ensure they are easy to read.

Final Exam

The final exam will occur during the exam period at the end of semester **at 9 am on May 11, 2020**. Your primary task in the exam will be a full firm valuation that you will solve in excel. In addition, there will also

be short questions testing your knowledge of finance concepts that are introduced throughout the course. The exam is open book and notes. You will need your laptop to solve the case. The length of the exam is five hours.

All your assignment submissions are subject to the [CBS Honor Code](#). Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal. In order to avoid ambiguity that may lead to unintentional violations of the Honor Code, assignment description types have been standardized and specified below.

<u>Type</u>	<u>Designation</u>	<u>Grade</u>	<u>Preparation of submission</u>	<u>Discussion of Submission*</u>	<u>Discussion of Concepts**</u>
A	Group Work	Same grade for all group members	By the group	Permitted to discuss (within group)	Permitted
B ¹	Individual w/ Discussions of Concepts and Submission	Individual grade	Individual preparation	Permitted to discuss; sharing solutions or submission files is not allowed	Permitted
B ²	Individual w/ Discussions of Concepts Only	Individual grade	Individual preparation	Not permitted to share/discuss solutions or submission	Permitted
C	Individual	Individual grade	Individual preparation	Not permitted to share/discuss solutions or submission	Not permitted***

* The designated group can be either an assigned study group or a self-selected one.

* Submission means any work and/or output pertaining to the specific assignment. If an assignment submission contains a calculation or decision related to a specific set of data and setting, discussing the details how to make this calculation or decision with regard the data/setting is to discuss the submission. Providing another student with a draft of the calculation or decision is sharing the submission.

** Concepts mean any ideas, examples, readings, or other related materials from the class/course. Conceptual discussion should not be based on a specific set of data or setting related to a calculation or decision required in the assignment, but could be based on other related examples, preferably those from class/course materials.

*** As no conceptual discussion is permitted, Type C is akin to a take-home exam.

Case write-ups are “Type A” assignments. Problem sets are “Type B²” assignments

ATTENDANCE POLICY

Students are required to attend each class. Students should reach out to the Office of Student Affairs (OSA) by using Core Absence Form on this course’s Canvas page regarding excused absences (for religious observances; personal, medical, and family emergencies; military service; court appearances such as jury duty). Unexcused absences will affect your course grade as follows:

- Students that miss more than 33% of their classes (unexcused absences) will at most receive a P for the course grade
- Students that miss more than 50% of their classes (unexcused absences) will receive a F for the course grade

In addition to the effect on your final course grade, absences may also affect your final exam grades as follows:

- Students that miss the exam for an excused reason but are unable to take the exam within the stated make-up period will receive a zero for the final exam grade
- Students that miss the exam without notifying OSA (unexcused), will receive an F for the course grade

INCLUSION, ACCOMMODATIONS, AND SUPPORT FOR STUDENTS

At Columbia Business School, we believe that diversity strengthens any community or business model and brings it greater success. Columbia Business School is committed to providing all students with the equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Columbia Business School will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration. Students seeking accommodation in the classroom may obtain information on the services offered by Columbia University's Office of Disability Services online at www.health.columbia.edu/docs/services/ods/index.html or by contacting (212) 854-2388.

Columbia Business School is committed to maintaining a safe environment for students, staff and faculty. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to a Title IX Coordinator. They will treat this information as private, but will need to follow up with you and possibly look into the matter. Counseling and Psychological Services, the Office of the University Chaplain, and the Ombuds Office for Gender-Based Misconduct are confidential resources available for students, staff and faculty. "Gender-based misconduct" includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see <http://sexualrespect.columbia.edu/gender-based-misconduct-policy-students>.

SCHEDULE OF SESSIONS AND ASSIGNMENTS

Day	Date	Session	Topic	Textbook Reading	Prepare	Turn In
PART I: TOOLS						
T	1/28	1	Introduction: The Valuation Framework			
TH	1/30	2	Time Value of Money and Discounting	Ch 3, Ch 4		
T	2/4	3	Investment Decision Rules: NPV and IRR	Ch 7		
TH	2/6	4	Valuing Bonds - The Risk Free Rate	Ch 6		
T	2/11	5	Applying Discounting to Valuing Stocks	Ch 9.1 - 9.2		Problem Set 1
TH	2/13	6	Capital Budgeting and Student Talks		Chocolat Cordon Rouge	Case Write-Up
PART II: THE FREE CASH FLOW MODEL						
T	2/18	7	The Free Cash Flows	Ch 2, Ch 8.1 - 8.4		
TH	2/20	8	Pro Forma: Projecting the Future		Clarkson 1 ¹	Problem Set 2
T	2/25	9	Residual Value and Valuation With Multiples	Ch 9.4		
TH	2/27	10	Valuation 1: Going Concern		Clarkson 2	Case Write-Up
PART III: RISK, RETURN, AND THE CAPM						
T	3/3	11	The CAPM	Ch 10		Problem Set 3
TH	3/5	12	Applications to Corporate Finance	Ch 12		
T			No class			
TH			No class			
T			No class: Spring Break			
TH			No class: Spring Break			
T	3/24	13	WACC, Leverage, and Project Risk		Walmart ²	
TH	3/26	14	Valuation 2: Liquidation		American Chemical	Case Write-Up
PART IV: OPTIMAL CAPITAL STRUCTURE						
T	3/31	15	Debt, Equity and Capital Structure: M&M	Ch 14		
TH	4/2	16	Optimal Capital Structure: Taxes and Financial Distress	Ch 15.1 -15.3 , Ch 16.1 - 16.4		
T	4/7	17	Target Capital Structure		American Home Products	Case Write-Up
TH	4/9	18	Valuation 3: Eskimo Pie		Eskimo Pie ¹	
PART V: COMPREHENSIVE VALUATION CASES						
T	4/14	19	Valuation 4: Buckeye Computer			Problem Set 4
TH	4/16	20	Corporate Governance (IBS)		Cablevision ¹	
T	4/21	21	Valuation 5: HCA		HCA	Case Write-Up
TH	4/23	22	Data Sources fo Corporate Finance			
T	4/28	23	Valuation 6: Soul Cycle		Soul Cycle	Case Write-Up
TH	4/30	24	Course Summary			
	5/11		Exam			

1: Prepare before class, not due for submission
2: You will be given time in class to solve

SCHEDULE OF REVIEW SESSIONS

	Date		Session	Review Session Content* (Excel Review Sessions in Bold)
F	1/31			No Review Session Scheduled
F	2/7	Uris 326	1	Excel Review I: Discounting in Excel (PV, NPV, IRR)
F	2/14	Uris 326	2	Review of Problem Set 1 and Chocolat Cordon Rouge Case
F	2/21	Uris 326	3	Excel Review II: Projecting FCFs w/ Ratios
F	2/28	Uris 326	4	Review of Clarkson Case
F	3/6	Uris 326	5	Review of Problem Set 2 and 3
F	3/13			No Review Session Scheduled
F	3/20			No Review Session Scheduled
F	3/27	Uris 326	6	Review of CAPM, WACC, Leverage and Project Risk
F	4/3	Uris 326	7	Review of American Chemical Case
F	4/10	Uris 326	8	Review of Optimal Capital Structure
F	4/17	Uris 326	9	Excel Review III: Valuation in Excel
F	4/24	Uris 326	10	Review of PS 4
F	5/1	Uris 326	11	Review of Hospital Corporation of America and Soul Cycle
W	5/4	Uris 326	12	Exam Review*

Normal Review Session Time and Room: Friday 10:45am - 12:15pm, Uris 326

* Final Exam Study Day Review Session: Monday, May 4th, 12:30pm - 2:00pm Uris 326