

DRAFT Syllabus - Corporate Finance B5300

Spring 2024

INSTRUCTOR

Professor Andrew Hertzberg

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Office hours: By appointment

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. 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. 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.

CLASS MATERIALS TEXTBOOK

The primary class materials are:

- <u>Teaching notes:</u> Students should download the lecture "Handouts" prior to class from Canvas before
 class. These contain the lecture notes with any in-class assignment solutions removed. After class I
 will post the complete "Lecture Notes" that also contain the solution to all in-class exercises.
- <u>Case Materials and Assignments</u>: All case readings and assignments are posted on Canvas. We will discuss case solutions at length in class (and some problem set solutions).

The textbook is an optional supplement to class material. The book is:

- <u>Corporate Finance</u>, (4th edition), by Jonathan Berk and Peter DeMarzo (BDM). Suggested readings from this book for each lecture are listed in "Schedule of Sessions and Assignments". Information on how to access the textbook has been added to the "Files>Textbook Access Information" section of canvas.
- These additional materials are not required, but may be useful to some students:
 - An additional detailed treatment of valuation is <u>Valuation</u>: <u>Measuring and Managing the Value of Companies</u>, (7th edition) by Tim Koller, Marc Goedhart, and David Wessels (McKinsey & Company Inc.)
 - <u>The Wall Street Journal</u> and/or <u>The Financial Times</u> are fundamental reading for any business school student. Some class discussion will reference news items (you will <u>not</u> be examined on the news!).

CLASSROOM NORMS AND EXPECTATIONS

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

<u>Laptop computers and other devices</u> – You must bring your laptop to class and be ready to access class exercises on canvas and work in excel.

TEACHING ASSISTANTS AND REVIEW SESSION

Review sessions will be held on Sunday at 8:00pm. The class will have 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. You can schedule office hours (to be held over zoom) with a TA by email. To share TA work evenly I have assigned one TA to each cluster. He/she should be the first point of contact for queries about class material, grading, or assignments. You are also welcome to reach out to the other TA.

<u>Cluster A</u>: TBA ?????@gsb.columbia.edu

<u>Cluster B</u>: TBA ?????@gsb.columbia.edu

GRADING

Grades will be calculated using the following weights:

Case write-ups 25%
Problem Sets 15%
Final Exam 50%
Participation 10%

Case Write-ups

The case assignment, excel data, and reading are all available on canvas.

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 prepare you for class discussion.

Cases are solved in your learning teams. Each case should be answered in excel. Do not submit any other document besides an excel file. 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 no later than 15 minutes before the start of the lecture on the day in which they are due. Late submission will not be accepted. You should have a copy of assignment answers (electronic or hardcopy) to refer to during class discussion.

Case write-ups will be graded on a ten-point scale. Your grade will depend on the logic of your analysis and the clarity of your write-up.

Problem Sets

There will be three 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 **no later than 15 minutes before the start of the lecture on the day in which they are due**.** Late submission will not be accepted. Assignments solutions should be clearly explained and formatted to ensure they are easy to read. Do not submit any other document besides an excel file. **Problem Set 2 is due by 8pm Sunday January 29th – there is no class that day.

Final Exam

The final exam will occur during the exam period at the end of semester. 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 <u>CBS Honor Code</u>. Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal. To avoid ambiguity that may lead to unintentional violations of the Honor Code, assignment description types have been standardized and specified below.

Type	<u>Designation</u>	<u>Grade</u>	Preparation of submission	Discussion of Submission*	Discussion of Concepts**
А	Group Work	Same grade for all group members	By the group	Permitted to discuss (within group)	Permitted
B¹	Individual w/ Discussions of Concepts and Submission	Individual grade	Individual preparation	Permitted to discuss; sharing solutions or submission files is not allowed	Permitted
B²	Individual w/ Discussions of Concepts Only	Individual grade	Individual preparation	Not permitted to share/discuss solutions or submission	Permitted
С	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.

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

^{*} 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.

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.

DRAFT SCHEDULE OF SESSIONS AND ASSIGNMENTS

Date	Lecture Ses	ssion	Topic	Textbook Reading	Prepare	Turn In	Difficulty
1/10	1 1 2	Introduction: The Valuation Framework					
		Time Value of Money and Discounting	Ch 3, Ch 4				
1/11	2 3 4		Investment Decision Rules: NPV and IRR	Ch 7			
			Valuing Bonds - The Risk Free Rate	Ch 6			
1/12	3 5 6		Applying Discounting to Valuing Stocks	Ch 9.1 - 9.2			
		6	Free Cash Flows (FCFs)	Ch 2, Ch 8.1 - 8.4			
1/19	4	7	Projecting FCFs		Clarkson 1 ¹	Problem Set 1	
		8	Residual Value				
1/20	5 9 10	9	The CAPM	Ch 10			
			CAPM Application to Corporate Finance	Ch 12			
1/29	N/A I	N/A	Assignment Due - No Class			Problem Set 2	
2/2	6 11 12	11	Valuation 1: Going Concern		Clarkson 2	Case Write-Up	
		12	WACC and Leverage		Walmart ¹		
2/16	7 13 14	Valuation 2: Liquidation		American Chemical	Case Write-Up	à à	
		14	Valuation using Multiples	Ch 9.4			
2/17	8 15 16	15	Capital Structure: M&M and OCS	Ch 14, 15.1-15.3, 16.1-16.4			
		16	Student Talks				
		17	Target Capital Structure		AHP	Case Write-Up	
3/2	9 18				Eskimo Pie ¹	case write-op	
		18	Valuation 3: Eskimo Pie		ESKIMO PIE		
3/8	10 19 20	19	Valuation 4: Buckeye Computer		Buckeye Computer	Problem Set 3	
		20	Work in class on HCA				
2/0	11 21 22	Valuation 5: HCA		HCA	Case Write-Up		
3/9		Student Talks					
	12 23 24					22	
3/23			Valuation 6: SoulCycle		Soul Cycle	Case Write-Up	
		24	Course Summary				6291 107

Notes: 1: We will solve together in class. No prep needed.

SCHEDULE OF REVIEW SESSIONS

Review sessions will be held over zoom every **XXXXXX** evening at 8pm during semester. The zoom meeting details for the review sessions are posted on canvas. The following sessions will be dedicated to reviewing the excel skills you will need for the class: XXXX, XXXX, and XXXX.