

**SLOAN SCHOOL OF MANAGEMENT
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
15.434 (meets with 15.4341), Fall 2016**

15.434 Advanced Corporate Finance

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E62 – 632

Course Description

This is an advanced course that approaches corporate finance from the standpoint of a CFO whose job is to maximize the value of the firm. The course is of interest to students who are pursuing a career in investment banking, but please keep in mind that the emphasis will be on the firm rather than its advisors. This is an applied course that will use case studies and lectures to introduce financial tools needed to make value-enhancing business decisions. We will focus on the following topics:

- Capital Structure
- Advanced Topics in Valuation
- Real Options
- Leasing
- International Valuation
- Valuing Private Firms
- Project Finance
- Introductory Restructuring

Administrative Structure

- **Instructor:** Nittai Bergman, nbergman@mit.edu, E62-632, 617-253-2933
Office Hours: Tuesdays from 1:00pm-2:00pm in E62-632
- **Course assistant:** Jenn Alton, jalton@mit.edu, E62-631, 617-253-3386
- **Teaching assistant:** Alfonso Blohm, blohmf@mit.edu
Office Hours: Wednesdays from 5:00pm-6:00pm in E51-242
- **Teaching assistant:** Baris Sevinc, bsevinc@mit.edu
Office Hours: Wednesdays from 1:00pm-2:00pm in E52-242

Prerequisites: Finance Theory II (15.402)

Readings/Books:

- Required: R. Brealey, S.C. Myers, and F. Allen, *Principles of Corporate Finance*, 12th ed., Irvin, McGraw-Hill (or the version you have from last year's 15.402)
- Course packet: Contains case studies and some supplementary readings for the course. Additional reading material will be distributed in class and posted on Stellar
- Recommended but not required: *Barron's Dictionary of Finance and Investment Terms*
- Additional Reading (Recommended but not required): Jonathan Berk and Peter DeMarzo, *Corporate Finance*, 4th Edition, Pearson Series in Finance (or any other edition you have)

C. Class Procedures

For class meetings, I will assign study questions on either a case study or on academic articles. For classes involving a case study, we will consider the questions and the material in the case.

You are allowed and encouraged, but not required, to meet in groups outside of class to discuss and analyze the cases.

In each class in which a case will be covered, each student will submit a two-page memorandum of analysis and recommendations based on the case questions. Write these as if you were writing a recommendation to a CEO or other major decision maker in a corporation. The two-page limit for the case memoranda is for text only. You may attach as many numerical calculations as you wish. If you are working in a group, I will accept one memorandum from the group and count it for all students in the group. If you choose to do this, the group cannot be larger than four students. Memoranda will not be accepted after the class has met. The memoranda will be given credit if it is handed in and no credit if it is not. The memoranda will be given either a plus, satisfactory, or minus grade. In particular, the memoranda will be used to determine final grades for those students who are on the border of an A, B, C or D. Case memoranda are due for all cases covered in the course.

Because of the nature of this course and the grading criteria, it is extremely important that you attend every class, arrive on time, and be prepared to participate. You should bring your name cards to each class to facilitate the discussion and receive appropriate credit for your remarks.

Computer spreadsheets can be used to analyze many of the case situations but they are not necessary. Spreadsheets are most valuable with repetitive capital budgeting decisions or when numerous "sensitivity" runs are desired for one decision. In class we will discuss finance techniques and highlight the key assumptions, but we will not generate numbers for every possible situation.

D. Requirements/Grading:

- Class participation: 10%, your performance will be judged based both on the quality and the number of your comments. Because so much of the learning in this course occurs in the classroom, it is very important that you attend class.
- Case Write-ups: 20 %
 - Students should form teams of 1 to 4, and hand in a single write-up per team.
 - Write-ups are due at the beginning of class (make copies to refer to during the class).
 - Each team is required to hand in all write-ups.
 - Grading of homework will be on the basis of effort, not correctness. My view is that if students can do the homework perfectly before class there is little reason to attend. The purpose of homework is to ensure preparation before class.
- Midterm: 25%
- Final: 45%

E. Course Policies are Designed to Ensure Fairness:

My goals are to meet the course objectives and to ensure that the course is graded fairly. By remaining enrolled in the course, you agree to abide by the policies detailed below.

Exams cannot be rescheduled or made up. Treat these dates as you would an important meeting in the business world. In the unlikely event that you are faced with unforeseeable and unavoidable circumstances that will cause you to miss the exam, you must talk to me immediately. Travel is not an acceptable reason for exam rescheduling.

Re-grades: The TAs and I will work hard to ensure that the same partial credit is allocated to the same

partially correct answer on each exam. Occasionally, we will make mistakes in our grading, and we are eager to correct mistakes subject to the following limits. If you believe that there was a mistake in the grading of your exam, ***within one week*** following the return of the exam, submit the original exam and a separate *written explanation* of the points of contention to me. If the re-grade request is made after one week or without an accompanying written explanation, no re-grade will be given. There are no exceptions to the preceding rule. All re-grade decisions are final. We reserve the right to correct all mistakes made grading an exam submitted for a re-grade.

Special Arrangements and Exam Conflicts: If you have a documented disability and anticipate the need for accommodations in this course, please make arrangements as soon as possible. Please contact the MIT Coordinator of Disabilities Services to request assistance in arranging appropriate accommodations with me.

Documented evidence that you were seriously ill or had a serious emergency at the scheduled time of an exam are the only valid excuses for missing an exam. In order to be excused from an exam, you must contact me *prior to the exam* and be ready to provide documentation after the exam.

Course Outline: subject to adjustments

Changes to this calendar will be available on Stellar. Additional readings to be assigned in class.

Class #	Day	Date	Topic	Readings
1	Wednesday	7--- Sep	Intro Lecture	BMA: Ch. 17 and 18
2	Monday	12 --- Sep	Lecture: Practical guide to estimating the COC	BMA: Ch .19
3	Wednesday	14 --- Sep	Case: Airbus	
4	Monday	19 --- Sep	Lecture: Advanced Valuation 1	BMA: Ch .19
5	Wednesday	21 --- Sep	Lecture: Advanced Valuation 2	BMA: Ch .19
6	Monday	26 --- Sep	Case: RJR	
7	Wednesday	28 --- Sep	Lecture: Exercises and Further issues in Valuation	
8	Monday	3 --- Oct	Case: BW/IP	
9	Wednesday	5 --- Oct	Case: BW/IP + Financing	
	Monday	10 --- Oct	No Class (Columbus Day)	
	Wednesday	12 --- Oct	No Class (Jewish Holiday)	
10	Monday	17 --- Oct	Case: Swedish Match and Financing	BMA: Ch. 17 and 18
11	Wednesday	19 --- Oct	Lecture: Leasing, Equivalent Annual Cost	BMA: Ch. 25 and Ch. 6.3
	Monday	24 --- Oct	No Class (SIP)	
	Wednesday	26 --- Oct	No Class (SIP)	
12	Monday	31 --- Oct	Lecture: Valuing Private Companies	
13	Wednesday	2 --- Nov	Case: Spyder	
14	Monday	7 --- Nov	Midterm	
15	Wednesday	9 --- Nov	Lecture: International Valuation	BMA: Ch 27.4 and 27.5
16	Monday	14 --- Nov	Case: Yell Group	
17	Wednesday	16 --- Nov	Lecture: Real Options 1	BMA: Chs. 21, 22
18	Monday	21 --- Nov	Case: Petrolera Zuata (Project Finance)	BMA: Ch. 32
	Wednesday	23 --- Nov	No Class (Thanksgiving)	
19	Monday	28 --- Nov	Lecture: Risk Management	BMA: Ch. 26
20	Wednesday	30 --- Nov	Case: Calpine Corporation (Project Finance)	
21	Monday	5 --- Dec	Case: Risk Management (TBD)	
22	Wednesday	7--- Dec	Lecture: Real Option 2	
23	Monday	12--- Dec	Wrap Up and Review	
24	Wednesday	14--- Dec	Final Exam	