

**COLUMBIA UNIVERSITY
GRADUATE BUSINESS SCHOOL**

FINANCE 8307-002
ADVANCED CORP. FINANCE
Spring 2016
Class time: Tu 9:00 – 12:15
Room: Uris 332

Prof. Roger Mesznik: Uris Hall; Room 218F
Off. Phone 212.854.5308
E-mail: rm21@columbia.edu
OH: Tu 1:00 – 2:00; Th 11:30 – 12:15 & 4:00 – 4:45
Other days/times by appointment

ADVANCED CORPORATE FINANCE

COURSE OBJECTIVE: The purpose of this course is to broaden and deepen the students' understanding of the central concepts of corporate finance as acquired in the preceding courses, the related and concurrent courses, and in the prerequisites. The models of project valuation; cost of capital; capital structure; firm valuation; the interplay between financial and investment decisions, strategic analyses, and economic analyses are used. The provision and acquisition of funds are revisited with a greater amount of detail and with interactive references to the complexity of these concepts in the real world of corporate decision making. The concepts are broadened by references to the issues of agency problems; market domination; risk structure and risk resolution, and hedging; market efficiency or lack thereof; asymmetric information; partial data; inconsistent assumptions; real options, and others. The validity of the analytic tools is tested on issues like highly-leveraged transactions, hybrid securities, volatility in IPOs, mergers and acquisitions, corporate divestitures, acquisition and control premiums, corporate restructurings, sustainable and unsustainable market inefficiencies, and others.

COURSE FORMAT: The course is structured as a combination of lectures, case presentations and class discussions. The discussions involve any and all of the following: Readings from the assigned text; the assigned cases; the assumed advance knowledge brought in from other finance courses and other related courses; current and recent events from the financial markets and the business world; news items from the press; and the students' own experience and interests. Advance preparation of the assigned class material is imperative for a thorough understanding of the topics and for a fruitful participation in the class discussions. Every student is expected to be able to contribute to the class discussions as outlined here. It is crucial that students develop a reasonable degree of dexterity in dealing with the underlying concepts. Continuing, thoughtful, and thorough participation in all aspects of the class is imperative for a successful performance.

REVIEW SESSIONS: My assistant and I will hold review sessions as necessary. The dates and contents of the sessions will be set after consultations with the class, and as needed.

NOTE: If there are any problems with the course, the material, your performance, your work in the course, your attendance, or your work on the assignments, please speak to me or to my assistant as soon as possible. Early intervention and help are much more efficacious.

COURSE MECHANICS:

The required text is:

Brealey, Richard, Stewart Myers and Richard Allen: *Principles of Corporate Finance*; 11th Edition; McGraw Hill 2014. **(BMA)** (Available in the CU bookstore for lease or purchase)

[The same authors have a book called *Fundamentals of Corp Fin*. This would be the WRONG book]

A packet of *Cases and Notes* must be acquired by the students (**CNP**). The CNP contains the cases listed in the outline below. You will receive a separate mailing from me telling you how to acquire and pay for the cases.

THE COURSE GRADE: The grade will be determined as follows:

Two submitted case reports: (12% + 8%)	20%
Midterm Exam (Or Paper?)	25%
Final Exam (Or Paper?)	50%
Class participation	<u>5%</u>
Total:	100%

The two case reports are group projects. You arrange the groups in accordance with your needs and preferences. Each group will present one of its two case write-ups in class. Each group must present one case. Details about the cases and the other assignments (content, mechanics, and presentations) will be discussed in class. This will be finalized after the roster stabilizes.

The exam(s) is (are) open-books, open-notes, in-class exam(s). You will need a laptop/notebook for the exam(s).

FOR YOUR CONSIDERATION:

- You have my permission to audio-tape the class if it helps you studying and reviewing the material. However, you need to tell me explicitly if you intend to use this option.
- Taping is particularly recommended if you have to miss a class, if the material is not at all familiar to you, or if you sense some problem with your proficiency in English.
- When and if taping my class, you agree that the recording may only be used by you. It may not be shared, and it may not be posted, disseminated, publicized, duplicated, reproduced, or used commercially. Breach of these “terms of use” will be treated as a serious violation.
- The school does not video-tape classes. Some exceptions may be possible if it is a religious holiday, and the request is submitted well in advance. Please adjust your schedules accordingly.
- It is your responsibility to ascertain that you are compliant with the course prerequisites as determined by your school, and as listed in the university’s *Directory of Classes*.
- I will distribute materials to you via any of the following channels:
 - Electronically to your email address shown on the registrar’s list.
 - By posting it on CourseWorks.
 - By handing out paper copies

My use of any of these channels depends on what material it is. The use of any one of these channels does not connote varying importance. You are responsible for accessing all materials.

DELIVERABLES:

- Some deliverables are group projects and some are individual. This applies to all submissions.
- You may not seek help or provide help for graded work. You agree to abide by this requirement regardless of whether it is done for pay, or as a courtesy, or as an exchange/barter, or as “you do this for us both, and I will do the next for both of us.”

- If it is a group project, you must all contribute fairly, and all group members listed on the cover sheet will receive the same grade.
- In any case, you can always seek my help or the TAs' help. We will help you as much as possible, fair, and justifiable.
- You arrange the groups in accordance with your needs and preferences. The ideal group size is 4 - 6 people. Groups that want to be larger or smaller must seek my prior approval.
- Details about the cases and the other assignments (content, mechanics, and presentations.) will be discussed in class – but see also the ultimate page of this outline.
- Details about the exam(s) will be discussed as we approach the exam dates.

COURSE CONDUCT, COMPORTMENT, and ISSUES:

- I expect to start every class on time and end it on time. Please help me by being punctual. Tardiness is disruptive, and it affects us all adversely.
- If, for unavoidable reasons, you are late, please just come in and sit as fast and unobtrusively as possible in the proximity of the door. Do not compound the problem of missed material by waiting outside for a “good moment” or a “break” to join the class. Also, do not interrupt the flow of the class by asking your neighbor what we did so far, or about the state of the world and its news, or “What’s up.” You will need to find time for it later.
- If you know that you will be absent, or late, or believe that you will have to leave early, please inform me in advance by e-mail. Excessive absence or tardiness may be deemed detrimental to your grade, and this will happen at my sole discretion. I decide what is deemed excessive and I decide how detrimental. I may decide that your absences, or late arrivals, or early departures are excessive even if you tell me of them in advance, but certainly if you do not.
- Please bring your name-plaque with you to each and every class.
- Talking to your neighbor is disruptive. If you have any questions, I rather you address them to me, in class if at all possible, even if they seem simple, or repetitive, or not in synch with the current class discussion or topic. This is more likely to help you, and less likely to be disruptive to you, to your neighbors, to the rest of the class, and to me.
- When in class, checking your email, surfing the web, messaging, using the cell phone, checking who called by responding to a vibrating signal, and any other such activities are all rude, inconsiderate, and unacceptable. Please do not even be tempted to engage in them. I do not use my cellphone when you talk to me, and you should not do it when I talk to you. Keep in mind that this kind of abuse is a potential reason for expulsion from the course.
- Please recall that you are bound by the rules and your pledge about academic conduct and the Honor Code with respect to all work submitted and behavior in class. This includes, but is not limited to, the distinction between individual work and group work, plagiarism, use of unattributed work, copying from others, incorrect or misleading references, unreported use of on-line materials, resubmission of previously used work, and other such issues. It is as much a transgression to enable someone to copy from you as it is for you to copy from others. Academic integrity and ethical conduct are paramount requirements that cannot and shall not be compromised. Violations may lead to academic complaints and disciplinary hearings that may lead to penalties and/or expulsions.
- If you miss a class, or arrive late, it is your responsibility to find out if anything was announced, agreed to, distributed or handed out. It is best if you do it with your colleagues or group members, but do not do it during class.
- Please note that class-notes from a colleague may not suffice to bring you up-to-date about what was done in a class that you missed. Reason: We rely extensively on open-ended

discussions, in class questions, and Socratic arguments.

- If your work or prior classes seem to have endowed you with profound knowledge about the material we are covering in class, and you find the work redundant, talk to me immediately. We can find better ways to use your time, knowledge, and skills. Do not simply skip class, or sit there bored. We can work around the issue by utilizing your advantage to your benefit.

ABOUT THE CASES:

- The cases are group projects.
- Each group needs submit only one joint report per case. All members must be listed on the cover page in alphabetical order of the last name, and the last name must be in bold letters.
- If a student has a foreign first name as well as a name by which said student prefers to be addressed, both names must be shown next to each other.
- The cover page must show the course name and number as well as the current term. It also must show the case name and the relevant date.
- One case must be presented. A case write-up is also required even if the case is to be presented.
- All case write-ups must be submitted in paper form.
- The write-up needs no special paper, or binding. Printing in b/w on regular paper is satisfactory. Stapling in one corner is sufficient.
- The report must be paginated.
- If you are presenting, a copy of the presentation for me is necessary, and handouts for the class will be greatly appreciated.
- All write-ups are due on the date on which the case is presented in class.
- The write-up should have the form of a business report: Executive summary; definition of the issue; Evidence for the problem; Suggested solutions; Weighing of possible alternative solutions; recommendations and justification.
- Make extensive use of appendices and attachments. It makes it easier to work as a group, easier to read, and it allows for easy corrections if called for.
- There is no max or min number of pages. Don't rehash the case, but don't stint on explanations and analyses.
- I expect to talk to all groups about all cases in advance of the report and as preparations progress. It is your responsibility to contact me. You may try to reach me at any time.
- It is unlikely that you will be able to respond to all the case questions without my help. I am here, please avail yourselves of the resource, and schedule yourselves well in advance of the needed deadline.

MY TA FOR THE COURSE:

Nicolas KIGUEL; OH to be announced

"Kiguel, Nicolas" <NKiguel16@gsb.columbia.edu>

I reserve the right to alter the sequence of topics, the assignments, the cases, the course coverage, the deadlines and the grading system if I deem it necessary and/or appropriate. Should such changes be made, they will be announced in class as needed, and in advance, and/or posted on COURSEWORKS. Once announced and posted, they become binding on you and me, and they replace all earlier arrangements.

SCHEDULE, OUTLINE AND ASSIGNMENTS

Dates	Topics	Key Concepts; Key Questions	Assignments
Pre-term	Course prep	BMA: Chs: 1, 2, 3 If you are in doubt about your recall of accounting concepts such as the basics of balance sheets and income statements, some idea of cash v. non-cash items, and also the development of cash statement, please uses the book(s) you know already from before to review these concepts. Contact me if you need help in choosing materials.	
Week 1 Mtg 1 Jan 19	Introduction The investment decision.	Course structure, The firm and its decisions. How to value a project? What is the source of the positive NPV? What cashflows should be included? Where is the risk? How is risk treated? How are cashflows defined? How to treat depreciation? Amortization? What defines the project life?	BMA: Chs. 5, 6
Week 2 Mtg 2 Jan 26	DCF methods of project valuation.	Market effects on project life and on firm value. Origin of value and manifestation of value. Include financing cashflows in the NPV calculation? Why? How to account for financial project subsidies and off market-rate financing?	BMA: Chs. 9, 10. Case: <i>Dupont -- Titanium Dioxide</i>
Week 3 Mtg 3 Feb 2	Pitfalls, inconsistencies, and problems in the use of DCF models	Should the discount rate be varied to reflect changing time-dependent, risk resolution patterns over time? What are certainty equivalents? How and why perform a sensitivity analysis? When and how to use equivalent annual costs (EAC a.k.a. CAE) ?	BMA Chs. 11, 12. Cases: <i>Acid Rain (The Southern Company)</i>
Week 4 Mtg 4 Feb 9	Compare NPV and IRR. Which to use when?	Is the RADR-based NPV calculation always applicable? Are the NPV and IRR methods comparable? Do they yield the same results? Always? If not, why not? When not? How to treat inflation? What happens under capital rationing? How to calculate the corporate WACC? When can the corporate WACC be used?	BMA Chs. 7, 8. Case: <i>Clarkson Lumber</i> (Or alternative if this case is known) <i>Deadline to finalize paper-topics if applicable</i>

Week 5 Mtg 5 Feb 16	Cost of capital, hurdle rates. Performance assessments	Are divisional and project WACC preferable? How to use the DDM and the CAPM as estimation tools? The effects of underperforming investments. What is the cost of debt? The cost of equity? What are the costs of internally generated funds?	BMA Chs. 13, 14. Handouts on M&M and leverage Case: <i>Marriott Corp: The Cost of Capital</i>
Week 6 Mtg 6 Feb 23	Discount rate and expected returns of investors.	How to account for the issuance costs of external funds? Using yield spreads? Should S/T debt be included in the leverage calculation? How to treat deferred taxes? Identifying sources of value in LBOs. Cost of variable rate debt? Costs of hybrid and compound securities? What risk components are relevant for the WACC calculation?	BMA Chs. 15, 17. Handout on the WACC Cases: <i>RJR Nabisco</i> <i>Interco</i>
Week 7 Mtg 7 Mar 1	Leveraged buy-outs. Capital structure. The adjusted present value method	Is there risk additivity or complementarity? What is the impact of financial leverage? What are the implications of the M&M theorems? Is there an optimal debt level? What are the role and the implications of efficient financial markets? What is the impact of operating leverage? Risk and reasons of performance assessments. The uses and failings of accounting numbers.	BMA: Chs 18, 19 Case: <i>Philip Morris and Kraft</i>
Week 8 Mtg 8 Mar 8	Financial options, how to identify them, value them, and when are they useful?	What are the parametric structures of options? How to value a financial option? Using the binomial model? Using the B/S model? Why is the option value of an investment sometimes different from the NPV of the same investment?	BMA Chs. 20, 21, Chs 24, 25 Handouts on options
Mar 15, 17		SPRING BREAK	No classes
Week 9 Mtg 9 Mar 22	Real options: Structure, composition, parameters, and valuation.	The midterm exam will (most likely) be administered on Mar 22. Hybrid securities as embodiment of options Estimating the necessary parameters of real options. Are real options similar to financial options?	BMA: ch 22. V: Parts 14.1 – 14.3 Cases: <i>Arundel Partners</i>

Week 10 Mtg 10 Mar 29	Real options cont'd	Project abandonment; project postponement. The value of flexibility and the value of waiting. How precise is the result of the B/S equation?	BMA: ch 34 CNP: <i>Strategy as a P'lio of Real Options</i> Cases: <i>Marriott Corp (Chariot).</i>
Week 11 Mtg 11 Apr 5	Mergers, acquisitions, and financial restructuring	What are the reasons, explanations, and justifications of mergers and acquisitions? Why spin-offs and restructurings? Is wealth being created? For Whom? Creation or redistribution of wealth? What is the evidence?	Handout on Agency problems Case: <i>Chase Manhattan Corp</i>
Week 12 Mtg 12 Apr 12	Overview of restructuring. Measurement tools and metrics	Can comparables be used for evaluations? The basics of EVA and VAR. What inputs are needed, what are the weaknesses? What is measured, what is omitted?	Last date for handing in papers Case: <i>Dow's Bid for Rohm & Haas</i>
Week 13 Mtg 13 Apr 19	The agency relations and their impact on financial decisions	What are Agency problems? Effects of asymmetric information? Are there conflicts of interest within the corporate structure and among stakeholders?	Possible presentations of some student papers BMA Chs. 22, 33, 34. Case: <i>John Case</i>
Week 14 Mtg 14 Apr 26	The world of the small and large enterprise Conclusions	Hybrid securities as answer to agency conflicts? Mitigating the agency issues. Public policies, wealth and income distribution. Investing in political influence. Summary and wrap up. Pulling it all together. What do we NOT know? What is the impact of the recent financial crisis? Filling in the open topics and issues. How to prep for the finals.	Possible presentations of some student papers Case: <i>Western Chemical Corp.: Divisional Performance Measurements ?</i>
May 6 - 13		FINAL EXAM during that week. It is open books, open-notes. You must have a laptop	Date to be set by the registrar and confirmed