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 enhanced by referring to the issues of agency problems; market domination and market structure; risk structure and risk resolution, and hedging; market efficiency or lack thereof; asymmetric information; partial data; inconsistent data and assumptions; real options, and others. The validity of the analytic tools is tested on issues like highly-leveraged transactions, hybrid securities, volatility in IPOs, M&As, corporate divestitures, acquisition and control premiums, corporate restructurings, sustainable and unsustainable market imperfections; and others.

COURSE FORMAT: The course is structured as a combination of lectures, case presentations, and class discussions based on the cases and the readings. The discussions involve all 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; the students' own experience and interests; additional readings as distributed from time to time; and current news items from the press. 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. Every student is also expected to work diligently and fairly with his group members, as some of the assignments are group work. 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. The format of the course and the qualifications and experience of the class members are especially conducive to a fruitful interplay between the theories we advance, the solutions we seek, and the students’ own work experience.

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, consultations with the office, 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*; 12th Edition; McGraw Hill 2017. *(BMA)* (Available also 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 (CNP)* will be distributed to the students. The CNP contains the cases and notes listed in the outline below.

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two submitted case reports</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm Exam (Or Paper?)</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam (Or Paper?)</td>
<td>50%</td>
</tr>
<tr>
<td>Class participation</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

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. Each case will be presented by one group. 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).

If appropriate, and with my explicit cooperation and prior agreement, students may submit research papers in lieu of one or both exams.

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” is a serious violation, and it will be treated as such.
- The school’s ability to video-tape classes is subject to policy restrictions. Some exceptions may be possible if it is a religious holiday, or some such, 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 or several of the following channels:
- Electronically to your email address shown on the registrar’s list.
- By posting it on CANVAS.
- 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 or primacy. You are responsible for accessing and using all materials as they are made available.

DELIVERABLES:
- Some deliverables are group projects and some are individual. This applies to all submissions.
- You may not seek help or provide outside 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 3 - 4 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.
- 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 some of 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 same applies if the student prefers to use a name which at odds with the official name recorded on the transcript. I must be able to match your name to the transcript. If this requirement may cause you any discomfort, please alert me to the situation ASAP.

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 for the presented case.

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 (upper-left?) 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 viable 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 by you 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:

Ms. Ran LIU; email: rliu21@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 CANVAS. Once announced and posted, they become binding on you and me, and they replace all earlier arrangements.

Please note that we have NO CLASS ON JAN 12, 2019.
We are meeting for the first time ON JAN 26
## SCHEDULE, OUTLINE AND ASSIGNMENTS

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Key Concepts; Key Questions</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 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. |                              |
|        |              | **NO CLASS ON JAN 12, 2019.**  
First meeting on Jan 26.  
ADD CLASS ON APR 27.                                                       |                              |
| Week 1  | Mtg 1        | Introduction  
The investment decision.                                                                                                                                                                                      |                              |
| 26 Jan  |              | 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? CFs in finance v in accounting. Where is the risk? How is risk treated? How are cashflows defined? Accounting v finance cashflows. How to treat depreciation? Amortization? What defines the project life?  | **BMA:** Chs. 5, 6  
**CNP:** Assessing a Firm's Future Financial Health |
| 3:45 PM | to 6:45 PM   | **BMA:** Chs 5, 6.  
**CNP:** Assessing a Firm's Future Financial Health                          |                              |
| Uris 307 |              | **Case:** E. I. DuPont  
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)? The case for strategic investments, defensive investments, me-too investments. |                              |
| Week 2  | Mtg 2        | DCF methods of project valuation.                                                                                                                                                                                        | **BMA:** Chs. 9, 10.  
**Case:** E. I. DuPont |
| 2 Feb  |              | **BMA:** Chs. 9, 10.  
**Case:** E. I. DuPont                                                        |                              |
| 12:30 PM | to 3:30 PM   | **Case:** E. I. DuPont  
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)? The case for strategic investments, defensive investments, me-too investments. |                              |
| Warren 309 |            | **Case:** E. I. DuPont  
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)? The case for strategic investments, defensive investments, me-too investments. |                              |
| Week 3  | Mtg 3        | Pitfalls, inconsistencies, and problems in the use of DCF models                                                                                                                                                      | **BMA** Chs 11, 12.  
**Cases:** Acid Rain : The Southern Company                                    |
| 9 Feb   |              | **BMA** Chs. 11, 12.  
**Cases:** Acid Rain : The Southern Company                                    |                              |
<p>| 8:30 AM | to 11:30 AM  | <strong>Cases:</strong> Acid Rain : The Southern Company                                                                                                                                                    |                              |
| Uris 307 |              | <strong>Cases:</strong> Acid Rain : The Southern Company                                                                                                                                                    |                              |</p>
<table>
<thead>
<tr>
<th>Week 4</th>
<th>Mtg 4</th>
<th>16 Feb 3:45 PM to 6:45 PM</th>
<th>Warren 309</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Week 5</th>
<th>Mtg 5</th>
<th>23 Feb 8:30 AM to 11:30 AM</th>
<th>Uris 307</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Week 6</th>
<th>Mtg 6</th>
<th>2 Mar 8:30 AM to 11:30 AM</th>
<th>Warren 309</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Week 7</th>
<th>Mtg 7</th>
<th>9 Mar 3:45 PM to 6:45 PM</th>
<th>Uris 307</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Leveraged buyouts. Capital structure. The adjusted present value method</td>
<td>Is there risk additivity or complementarity? What is the impact of financial leverage? What are the implications of the M&amp;M theorems? Is there an optimal debt level? What are the roles 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.</td>
<td>BMA: Chs 18, 19 Case: Arundel Partners: The Sequel Project Handouts on options</td>
</tr>
<tr>
<td>Week 8</td>
<td>Mtg 8</td>
<td>Financial options, how to identify them, value them, and when are they useful?</td>
<td><strong>The midterm exam will be administered in class, for a portion of the class time. (Date may be advanced or delayed)</strong> 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?</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>23 Mar</td>
<td>12:30 PM to 3:30 PM</td>
<td>Uris 307</td>
<td></td>
</tr>
</tbody>
</table>
CNP: *Strategy as a P’lio of Real Options*  
Cases: Marriott Corp (A) |
| 30 Mar | 12:30 PM to 3:30 PM | Warren 309 | | |
| Week 10 | Mtg 10 | 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 empirical evidence? | Handout on Agency problems  
BMA: 26, 27  
Case 1: Chase Manhattan Corp: The Making of America’s Largest Bank  
Case 2: John Case Comp |
| 6 Apr  | 3:45 PM to 6:45 PM | Uris 307 | | |
| Week 11 | Mtg 11 | Measurement tools and metrics. Agency relations and impact on financial decisions | 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? What are Agency problems? Effects of asymmetric information? Are there conflicts of interest within the corporate structure and among stakeholders? Revisit impact of insights from *Behavioral Finance*. Challenges to the “rational model” of economic actors | Last day for handing in papers. Possible presentations of student papers  
BMA Chs. 28, 33, 34.  
Case: Canadian Pacific Ltd: Unlocking Shareholder Value in a Conglomerate |
<p>| 13 Apr | 3:45 PM to 6:45 PM | Warren 309 | | |</p>
<table>
<thead>
<tr>
<th>Week 12 Mtg 12</th>
<th>The world of the small and large enterprise</th>
<th>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.</th>
<th>Case: TBD and as needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Apr 12:30 PM to 3:30 PM Warren 309</td>
<td>Conclusions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exam</td>
<td>FINAL EXAM. It is open books, open-notes, with laptop</td>
<td>OPEN BOOKS, OPEN-NOTES. LAPTOP</td>
<td></td>
</tr>
</tbody>
</table>