Northwestern University
Kellogg School of Management

FINC430
Summer 2020

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SYLLABUS

The Coronavirus Epidemic
This syllabus was written under the assumption that this class will be taught online due to the Coronavirus epidemic. Unlike previous years, the current course will be taught using the Zoom platform and other online teaching resources.

Course description
FINC430 covers managers' and investors' most fundamental finance decision: how to value a project or an asset. Managers must determine the value of building a factory, entering a new market, or purchasing an entire firm when deciding in which projects to invest. Similarly, individuals must assess the value of financial securities to decide how to invest their wealth. FINC430 teaches methods for valuing projects or assets. These valuation tools lay the foundation for all work in capital markets and corporate finance.

Prerequisites
The prerequisites for this course are knowledge of probability and statistics through linear regression and accounting. These requirements may be satisfied with:
- Sufficient previous or concurrent DECS course work in statistics and econometrics. By the sixth week in the term, it is important that you know how to run a regression, preferably in Excel.
- Either (i) prior or concurrent registration in Accounting 430 or (ii) sufficient previous course work in basic financial accounting.

Course readings

2. Lecture slides, cases, and readings as assigned. Lecture slides and readings will be posted on the course website. Cases will be distributed via the link on Canvas - Study.Net. I recommend that you read the presentation before class. Please note that the presentations include slides that will not be discussed in class.
Grading Policy
Your total score for the course will be a weighted average of your performance. The midterm exam is optional. If you don’t take it then the points of the midterm exam will be added to the final exam. Also, if you perform better on your final than on your midterm, then the grade of the midterm will not be taken into account. Your grade in the course will be based on the maximum of the following two options:

<table>
<thead>
<tr>
<th></th>
<th>Option A</th>
<th>Option B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group case studies</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Final exam</td>
<td>55%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
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However, your grade may be reduced by up to 12 points if you fail to submit some or all of the HW assignments at the due date.

Your final course grade will be curved and depend on your relative performance in the class. Final grades will be given in accordance with Finance Department policy.

1. **Individual and Group HW Assignments**: There are individual and group HW assignments to be submitted before the beginning of the class for which they are due. Generally submission will be made through Canvas.

2. **Group Case Studies**: The case assignments are group assignments. There should be at most four students per group. Please do not change groups during the quarter. You are responsible for choosing your groups on your own on Canvas and all groups must be chosen before the second class meeting. You must upload your case answers via the link to the case assignment on Canvas. Do not submit more than one set of answers per group. Unless otherwise specified, you should upload your case report as a word document.

   In general, I will not answer any questions about a case before it is turned in. If you are unclear about something, make an assumption, state this assumption clearly in your answer, and move forward with your solution. As long as your assumption is reasonable, then your approach will be acceptable. Discussions of the cases will take place during class, but no “solutions” will be provided. For each case, one member of each group must upload files to Canvas before 12:30 PM on the day they are due. Remember, these are real world cases, and not always there is one correct answer (though there are many wrong answers).

   We will often spend some time discussing these cases in detail in class. All students should come prepared to discuss these cases on the day the assignments are due. I recommend that you bring a printed copy of the case answers with you to class.

3. **Midterm Exam and Final Exam**: The midterm will be held during the sixth class (August 1st, 2020). The midterm will cover the first half of the course. The final exam will be held on Saturday, September 5th, 2020, and will cover the entire course.

Calculation of final course grade
The top 40% of students will receive an “A”, the next 50% will receive a “B”, and the bottom 10% will receive a “C” or lower. The finance department requires this grade distribution across all beginning finance classes.
Additional rules regarding assignment submissions

- *Late submissions will receive no credit.* Deadlines for this class are non-negotiable. If you have a question about a deadline, you should resolve your question sufficiently prior to the deadline so that you can complete the assignment by the due date.
- *All students within a study group will receive identical scores on group case submissions.* Responsibility for submitting the desired answers by the deadline is the joint responsibility of the entire group, regardless of how the group determines the allocation of the work.

Office Hours and availability

**Office Hours:** the TA and I will have office hours Saturday from 12.30PM to 1.15PM. In addition, we will stay online after class to answer questions. We will also be available by appointments. Please email me and or the TA to set up a time to meet online. When requesting a meeting please try to do so at least 24 hours in advance and give us some guidance as to when you are available.

**Email Policy:** I will always try to respond to your e-mails within 48 hours. Please take this into account and plan accordingly. Always cc the TA when writing to me unless it is a personal issue.

Classroom etiquette

As you know, Kellogg has established a series of guidelines to make sure that the classroom environment enhances the learning experience for all students. Please take the time to familiarize yourself with the revised Classroom Etiquette code.

https://www.kellogg.northwestern.edu/policies/etiquette.aspx

Honor code

The first sentence of the Kellogg Honor code reads: “All students enrolled in a course offered by the Kellogg School of Management agree to abide by the Kellogg Honor Code.” If you are unsure of what this means, please read the honor code. You can find it at: https://www.kellogg.northwestern.edu/policies/honor-code.aspx. If you are in doubt about whether something is acceptable under the honor code, please do not hesitate to ask me.

In particular, the following are considered honor code violations:

1. Consulting materials distributed in any other section of this course or any other Kellogg finance course.
2. Discussing cases with any individuals – including former students – other than those students in your current case group.
3. Sharing course materials with anyone at anytime. See below.
4. In future quarters, discussing any course assignment with students then enrolled in this course before those students’ due date.
5. Seeking or receiving any assistance with problem sets, quizzes, the midterm, or the final exam.

Access to course information via the web

Lecture slides, assignments, and course readings will be available on the course Canvas page. Grades will be entered into the electronic gradebook.
Student liaison
The liaison will:

- Be a sounding board for me on student related issues;
- Communicate to me any scheduling conflicts regarding assignments, classes, or exams;

Please contact me if you are interested in serving as the class liaison.
You should always feel free to reach out to me with issues regarding class. Should you wish an anonymous route, you should feel free to reach out to the student liaison.

Other
The class notes, HW assignments, answers, and sample exams are the intellectual property of the instructor. You may not distribute class notes electronically or in any form to anyone outside of the class or outside of Kellogg. You may not duplicate these notes for use by your employers after graduating from Kellogg without my written consent.

Tentative Course Outline
Listed below are the topics and readings for each topic. ”BD” refers to the textbook by Berk and DeMarzo. Please read the corresponding material in the textbook prior to the discussion of the topic.
<table>
<thead>
<tr>
<th>Module</th>
<th>Topics</th>
<th>Chapters readings (BD)</th>
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</table>
| 1.     | **Introduction & Discounted cash flows:**  
- Course introduction  
- Discounted cash flow concepts | 4-5  
Recommended: 1-3 |
| 2.     | **Introduction to capital Budgeting:**  
- Investment decision rules  
- NPV vs. IRR  
Choosing between projects | 7 |
| 3.     | **Valuation (1) - Valuation of projects and companies:**  
- Forecasting the free cash flow  
- Estimating the terminal value  
- Free cash flow valuation | 8, 19.1-19.3, 19.5 (section on discounted cash flows only), 19.6 |
| 4.     | **Valuation (2) – Valuation of Bonds:**  
- Valuation of bonds  
- Yield to maturity  
- Duration  
- Spot rates  
- The yield curve and the term structure of interest rates | 6, 30.4 (pages 1050-1052) |
| 5.     | **Valuation (3) - Valuation of Stocks:**  
- The dividend discount model  
- Valuation based on multiples | 9 |
| 6.     | **Risk and return (1)- Portfolio theory:**  
- Definition of risk  
- Understanding Diversification  
- Portfolio optimization  
- The Capital Market Line (CML) | 10.1-10.6, 11.1-11.6 |
| 7.     | **Risk and return (2)- The Capital Asset Pricing Model (CAPM):**  
- The risk return tradeoff  
- The security market line (SML) | 10.7-10.8, 11.7-11.8, 13.7-13.8 |
| 8.     | **Valuation (4)- Valuation with the CAPM:**  
- Estimating the cost of capital  
- Capital structure and the weighted average cost of capital (WACC)  
- Levering and un-levering beta | 12 |
| 9.     | **Additional Topics, if time allows.** | |