Course Syllabus

Course description
Finance I 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. Finance I 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
   *This book is required.* See textbook acquisition instructions posted on the Canvas website for details on how to acquire access to MyFinanceLab and a loose-leaf version of the text at significantly reduced prices.

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 Study. Net link on Canvas. 
   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 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>
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<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>45%</td>
<td>70%</td>
</tr>
<tr>
<td>Peer review</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Class participation</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
</tr>
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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 HW Assignments**: There are individual 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. You are responsible for choosing your groups on your own on Canvas and all groups must be chosen before the second class meeting. 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. Cases are due at 2:00 PM the day before we discuss them. Remember, these are real world cases, and not always is there one correct answer (though there are many wrong answers).
3. **Midterm Exam**: There will be an in-class midterm. The midterm will be held on Thursday, August 1st. The midterm will cover the first half of the course. 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.
4. **Final Exam**: The final exam will be held during the exam week and will cover the entire course. If your score on the final exceeds your score on your mid-term, the mid-term will not be taken into account.
5. **Peer review**: No later than Monday, August 19th, all students must complete a peer review, where you will be asked to evaluate the contribution made by each of your group members with respect to the completion of the case studies. Students that do not complete the peer review on time will receive no credit for the peer review component of their own grade.
6. **Participation self-evaluation**: No later than Monday, August 19th, all students must complete a participation self-assessment where you will be asked to evaluate your class participation according to the guidelines listed below. Students that do not complete the participation self-assessment on time will receive no credit for the class participation component of their own grade. To qualify for a participation grade you must satisfy or exceed ALL of the listed characteristics for the given grade.
<table>
<thead>
<tr>
<th>Participation Grade</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>A</td>
<td>Regularly volunteered comments or asked questions that other students found valuable. In response to being called upon, always demonstrated preparedness. Always used name-card.</td>
</tr>
<tr>
<td>B</td>
<td>Often volunteered comments or asked questions that other students found valuable. In response to being called upon, generally demonstrated preparedness. Always used name-card.</td>
</tr>
<tr>
<td>B-</td>
<td>Infrequently volunteered comments or asked questions that other students found valuable. In response to being called upon, sometimes demonstrated lack of preparedness.</td>
</tr>
<tr>
<td>C</td>
<td>Never volunteered comments or asked questions that other students found valuable. In response to being called upon, demonstrated lack of preparedness.</td>
</tr>
<tr>
<td>F</td>
<td>In response to being called upon, demonstrated lack of preparedness. Occasionally disruptive to the learning environment of others.</td>
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**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**: I am available to meet with students by appointment. Please email me to set up a time to meet. When requesting a meeting please try to do so at least 24 hours in advance and give me 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.

**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](https://www.kellogg.northwestern.edu/policies/etiquette.aspx)
In particular:

1. **Attendance:** I expect you to attend every class. If you are unable to attend for an unavoidable reason, please notify me in advance. There is material discussed in class that is not found elsewhere. Students missing class are expected to speak with classmates about material that was missed.

2. **Electronic devices:** You may not use electronic devices for non-class purposes (i.e. email, web-surfing) during class.
   - Phones: Please turn off your phones while in the classroom.
   - Laptops: We will use laptops at various times in class. Apart from these moments, I require that laptops and tablets be closed

3. **Name Plates:** Please bring your name plate to class and have it displayed throughout the quarter. This will help me to learn your names.

**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, 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 Student Liaison for my section is:

- TBA

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**

All course materials are the intellectual property of the instructor. You may not distribute class materials electronically or in any form to anyone – inside or outside of Kellogg. In particular, you may not share course materials with other students or with your employers after graduating from Kellogg.
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  
- Time value of money | 4  
Recommended: 1-3 |
| 2. | **Advanced Issues with Time Value of Money**  
- Interest rates quotes and adjustments  
- Loans  
- Inflation | 5 |
| 3. | **Capital Budgeting (1)**  
- Investment decision rules  
- NPV vs. IRR  
- Choosing between projects | 7 |
| 4. | **Capital Budgeting (2) - 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 |
| 5. | **Valuation of Bonds:**  
- Valuation of bonds  
- Yield to maturity  
- Spot rates  
- The yield curve and the term structure of interest rates | 6, 30.4 (pages 1009-1011) |
| 6. | **Valuation of Stocks:**  
- The dividend discount model  
- Valuation based on multiples | 9 |
| 7. | **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, |
| 8. | **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, |
| 9. | **Valuation with the CAPM:**  
- Estimating the cost of capital  
- Capital structure and the weighted average cost of capital (WACC)  
- Capital budgeting with risk | 12 |
| 10. | **Financial Options:** (time permitting) | 20 |