**FINA 860 – Introduction to Finance Theory**  
Fall 2012  
Professor Donghang “DH” Zhang

**Location and Time:** BA 550; Wednesday 9:30 – 12:15pm

**Course Overview**
This is the introductory course in the finance program designed to give you a firm foundation in financial theory. This course will cover the fundamental issues in both asset pricing and corporate finance. Through the discussions of the major topics in modern finance, students should develop a good understanding of finance theory and a good framework and intuition of thinking about issues in finance. The course focuses on fundamentals. But students are required (and guided) to do some investigations in frontier research areas of financial economics. The readings on any of the topics are selected to provide exposures to fundamental issues. They should not be used as a complete list of all aspects of the literature on a particular topic, and generally speaking, they are not tilted towards frontier research.

**Grading**
Grades are based on (1) class participation (10%), (2) a paper (20%, including presentations and discussions that are related to the chosen topic), (3) problem sets and paper summaries (30%), and (5) exams (40%). Below are brief descriptions of each grading component. The instructor will discuss the detailed expectations for each grading component when the class begins. (In case that it matters to you, we will follow the university guidelines in assigning letter grades: 90% and above for A, 85% and above for B+, 80% and above for B, etc.)

**Class Participation:** Great discussions help all of us to understand the materials. You should be prepared for each class and participate actively in the class discussions.

**Paper:** You are required to choose a research topic that is of interest to you and approved by the instructor, read the literature on the topic, and identify some unanswered questions that can be developed into research papers later. The paper you need to turn in towards the end of the semester should summarize the literature, discuss the methodologies/research designs used in answering the questions on the topic (you are not required to master these methodologies now, but the discussions of research designs should give you a road map as to what you need to accomplish in the next two years for your course work), and discuss the potential research questions that you can work on.

Given the nature of this class, you are encouraged to choose a topic that is related to what we discuss in class (If you are interested in something that is unrelated, please discuss it with the instructor). Your presentation should be related to your paper.

**Problem Sets and Paper Summaries:** The instructor will hand out problems sets periodically. Students are also required to submit a summary of each paper on the required reading list (with some exceptions). More details will be provided on the requirements of the summaries.

**Exams:** We will have a mid-term and a final exam. For both exams, some questions that are similar to the end-of-chapter problems in the selected chapters in Berk and DeMarzo will be included. Note that these questions are MBA level ones, and we will not directly cover the materials.
Readings
We will not specifically follow a particular textbook. Some materials are borrowed heavily from the following books:

- *Corporate Finance, Second Edition*, by Berk and DeMarzo (ISBN: 978-0-13-608943-8). We will not cover any chapters of this book in class, but you are required to read most of the chapters in the book.

We will also use many classical papers in various journals.

Below is a list of topics for this course. Suggested readings are provided for each topic. Some additions and deletions for the readings are expected depending on our pace covering the topics. The suggested reading list is typically more than what we can cover in class. So required readings (a subset of the suggested readings) will be assigned as we move through the topics. You are required to read the required readings before the class. You are also required to turn in a summary for each paper on the reading list unless the instructor explicitly waives such a requirement.

1. Utility Theory and Decision Making under Uncertainty
   - Chapters 1 and 3 in CWS (*required reading*)

2. Consumption-Based Model
   - Cochrane Chapters 1 and 2 (*required reading*)

3. Contingent Claims and the Discount Factor
   - Cochrane Chapter 3 (*required reading*)
   - Cochrane Chapter 4
   - CWS Chapter 4 (*required reading*)
4. Mean-Variance Frontier
   - Cochrane Chapter 5 (required reading)
   - Cochrane Chapters 6 and 7
   - CWS Chapter 5 (required reading)

5. Factor Pricing Models
   - Cochrane Chapter 9 (required reading)
   - CWS Chapters 6 (required reading)

6. Efficient Markets
   - Cochrane Chapter 20 (required reading)
   - Chapters 10 and 11 and Part of Chapter 20 (section I) in CWS (required reading)
7. Options
   o Cochrane Chapter 17 and 18 (required reading)
   o CWS Chapters 7 and 9 (required reading)

8. Theory of the Firm
   o Hart: Chapters 1-4 (required reading)
   o Tirole: Chapter 1 and 2 (required reading)

9. Agency Theory and Corporate Governance
   o CWS: Part of Chapter 12 (from p. 439 on), Part of Chapter 13 (sections C), and Part of Chapter 18 (sections, J, M and N) in CWS
   o Tirole: Chapter 10


10. Capital structure

- CWS: Chapter 14 and Part of Chapter 15 (sections A-J) (required reading)
- Tirole: Chapters 3, 4, and 6
- Hart: Chapters 5 and 6
- Myers, Stewart C., ”The Determinants of Corporate Borrowing,” Journal of Financial Economics (June 1977), Vol. 5, No. 2, pp. 146-175 (required reading)
11. Financial Contracting, Endogeneity, and the Cost of Debt
   o Lin, Chen, Yue Ma, Paul Malatesta, and Yuhai Xuan, 2011, Ownership Structure and the Cost of Corporate Borrowing, *Journal of Financial Economics* 100, 1-23 *(required reading)*

12. IPOs

13. Investment Banking
   o Wang, Charles C.Y., and Yi David Wang, Explaining the Glass-Steagall Act’s Long Life, and Rapid Demise, Stanford University working paper *(required reading)*
   o Brunnermerier, Markus K., Gang Dong, and Darius Palia, 2012, Banks’ Non-Interest Income and Systemic Risk, Columbia University working paper *(required reading)*


14. M&As (optional)

- CWS: Chapter 14 and Part of Chapter 15 (sections A-J) (*required reading*)
- Tirole: Chapters 11 and 14 (*required reading*)


15. Payout Policies (optional)


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**University of South Carolina Honor Code**

All forms of academic dishonesty are prohibited. These include cheating, plagiarism, lying in academic matters, fraud, bribery, unauthorized access to tests and examinations. I expect that all of you follow the highest possible interpretations of the honor code. Here is a copy of the Honor Code:

*It is the responsibility of every student at the University of South Carolina Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.*
<table>
<thead>
<tr>
<th>Dates</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Aug-29-12/Wed</td>
<td>1. Utility Theory and Decision Making under Uncertainty</td>
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<tr>
<td>Sep-05-12/Wed</td>
<td>2. Asset Pricing: Consumption-Based Model</td>
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<td>Sep-12-12/Wed</td>
<td>3. Contingent Claims and the Discount Factor</td>
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<td>Sep-19-12/Wed</td>
<td>4. Mean-Variance Frontier</td>
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<td>Sep-26-12/Wed</td>
<td>5. Factor Pricing Models</td>
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<td>Oct-03-12/Wed</td>
<td>6. Efficient Markets</td>
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<td>Oct-10-12/Wed</td>
<td>7. Options</td>
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<td>Oct-17-12/Wed</td>
<td>Mid-term: 8. Theory of the Firm (if possible; and we will try to use a non-class time for the exam)</td>
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<td>Oct-31-12/Wed</td>
<td>10. Capital structure</td>
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<td>Nov-07-12/Wed</td>
<td>11. Financial Contracting, Endogeneity, and the Cost of Debt</td>
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<td>Nov-14-12/Wed</td>
<td>12. IPOs</td>
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<td>Nov-19-12/Mon</td>
<td>13. Investment Banking</td>
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<td>Nov-28-12/Wed</td>
<td>14. Student Presentations (could be spreaded earlier, if possible)</td>
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<td>Dec-05-12/Wed</td>
<td>15. M&amp;A (optional)</td>
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<td>15. Payout Policies (optional)</td>
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Final exam will be scheduled during the final exam week.

Please note that the schedule is tentative. We may need to adjust our pace and/or coverage of materials as we proceed. All the dates are subject to change.