

Finance 865: Theory of Finance
Fall 2018
University of South Carolina, Moore School of Business

General information

Class meetings Tuesday 2:45-5:15pm, DMSB 461F
Instructor Liang Ma, liang.ma@moore.sc.edu, (803) 777-6366
Office Hours by appointment, DMSB 461B

Course Description:

This is a doctoral course for PhD students in finance, economics and other related areas. The course covers the basic issues of asset pricing theory, focusing on discrete-time one-period and multi-period model and continuous-time models. Students are expected to have a solid foundation in microeconomics and mathematics.

Course Materials:

- **Required Text:**
 - George Pennarchi, *Theory of Asset Pricing*, Pearson Education Inc., 2008. **(GP)**
 - Kerry E. Back, *Asset Pricing and Portfolio Choice Theory*, Oxford University Press, 2010. **(KB)**
- **Recommended References:**
 - John H. Cochrane, *Asset Pricing*, Princeton University Press, 2001.
 - Darrell Duffie, *Dynamic Asset Pricing Theory*, Princeton University Press, 1996.
 - John Y. Campbell, Andrew W. Lo and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 1997.
- Lecture notes and other materials available on Blackboard.

Grading

The final grade will be based on a midterm exam, a final exam, and class participation/paper presentation, with the following weights:

Midterm Exam	30%
Class participation and Paper Presentation	25%
Final Exam	45%

Problem Sets

I will also assign problem sets with each lecture, and post solutions to these problem sets. These problem sets will not be graded but they are very helpful for preparing the two exams.

University of South Carolina Honor Code and Academic Integrity

Students are expected to behave in a manner that reflects positively on the reputation of the Moore School of Business. All students are required to follow the University of South Carolina Honor Code, written below:

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.

The Honor Code is intended to prohibit all forms of academic dishonesty and should be interpreted broadly to carry out that purpose. The following examples illustrate conduct that violates this Honor Code, but this list is not intended to be an exhaustive compilation of conduct prohibited by the Honor Code:

1. Giving or receiving unauthorized assistance, or attempting to give or receive such assistance, in connection with the performance of any academic work.
2. Unauthorized use of materials or information of any type or the unauthorized use of any electronic or mechanical device in connection with the completion of any academic work.
3. Access to the contents of any test or examination or the purchase, sale, or theft of any test or examination prior to its administration.
4. Use of another person's work or ideas without proper acknowledgment of source.
5. Intentional misrepresentation by word or action of any situation of fact, or intentional omission of material fact, so as to mislead any person in connection with any academic work (including, without limitation, the scheduling, completion, performance, or submission of any such work).
6. Offering or giving any favor or thing of value for the purpose of influencing improperly a grade or other evaluation of a student in an academic program.
7. Conduct intended to interfere with an instructor's ability to evaluate accurately a student's competency or performance in an academic program.

Whenever a student is uncertain as to whether conduct would violate this Honor Code, it is the responsibility of the student to seek clarification from the appropriate faculty member or instructor of record prior to engaging in such conduct.

For more information about academic integrity issues, go to <http://www.sc.edu/academicintegrity/>.

Tentative Schedule (Subject to Change According to Course Progress)

Week	Date	Topic	Reading
1	8/28	Expected Utility and Risk Aversion	GP Ch.1, KB Ch. 1
2	9/4	Mean Variance Analysis	GP Ch.2, KB Ch. 5
3	9/11	CAPM and APT	GP Ch.3, KB Ch. 6
4	9/18	Consumption-Savings Decision and State Pricing	GP Ch.4, KB Ch. 2
5	9/25	Multiperiod Consumption and Portfolio Choice	GP Ch.5, KB Chs.8-9
6	10/2	Multiperiod Market Equilibrium	GP Ch.6, KB Chs.8-9
7	10/9	Midterm Exam	
8	10/16	Diffusion Processes and Itô's Lemma	GP Ch.8, KB Ch. 12
9	10/23	Dynamic Hedging and PDE Valuation	GP Ch.9, KB Ch. 15
10	10/30	Special Topic	TBA
	11/6	<i>No class (General Election Day)</i>	
11	11/13	Special Topic	TBA
12	11/20	Student Paper Presentation	
13	11/27	Student Paper Presentation	
14	12/4	Final Exam	