UNIVERSITY OF ILLINOIS AT CHICAGO

Liautaud Graduate School of Business Department of Finance

Finance 412 Portfolio Management Fall 2012

Professor Hsiu-lang Chen

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Class Website: UICBlackboard

Office Hours: 2:00pm~3:00pm Tuesdays and Thursdays, or by appointments

Course Objectives:

This course develops the concept of investing from the perspective of a portfolio manager rather than an individual investor. Both portfolio theory and investment practice will be the focuses of this course. The course involves detailed quantitative analysis that is essential for a successful career in this area. We will focus on investment strategies for large portfolios, particularly in risk management issues. Students will have abundant opportunities to learn investment methodology by hands-on practice with financial data. Additionally, current developments in financial markets will be reviewed and introduced to help explain the dynamics of the markets. Overall, the course is designed to expose students to what it is really like to run money professionally.

Prerequisites: Fin 310 is required. The course is intensively quantitative. Students are expected to be reasonably comfortable with Excel, particularly in use of linear regressions, variance/covariance algebra in matrix multiplications, and solver.

Reference books:

- **A.** *Investments*, Zvi Bodie, Alex Kane, and Alan J. Marcus, Irwin/McGraw-Hill, 9th edition.
- **B.** *Modern Portfolio Theory and Investment Analysis*, Edwin J. Elton, Martin J. Gruber, Stephen J. Brown, and William N. Goetzmann, John Wiley & Sons, Inc., 8th edition.

Other Materials:

- **A.** The *Wall Street Journal* provides many real applications of modern portfolio theory and the most current financial information. Students can have substantial benefits by reading it on a daily basis.
- **B.** All the course materials including the syllabus, lecture notes, the homework assignments, and papers to be discussed can be found at UICBlackboard.

C. Financial data can be accessed via Wharton WRDS service and Professor French's web site.

https://wrds-web.wharton.upenn.edu/wrds/

http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/index.html

D. Quantitative review for investments and the instruction of Excel Solver are posted at UICBlackboard for your reference.

Evaluation:

Class Participation 5% Homework Assignments 25%

Two Exams 70% (35% each)

Course letter grades will be determined by:

86% + A
76% to 85% B
66% to 75% C
56% to 65% D
55% or below F

Grading might be curved at the end, depending on the overall class performance. However, students absent more than 5 classes are excluded from such a curving. Students surfing over the web during the lecture are considered as absent students.

Homework Assignments:

Homework assignments are done <u>in groups of 6 students</u> before the designated date on which some will be discussed in class and led by a randomly selected group. The group performance will be judged by the completeness of the analysis, the efficiency of Q&A, and the effectiveness of the presentation. Anyone who does not make a contribution to the homework discussion will receive no credit, whereas those who do make a contribution will receive the same grade. Your overall participation in a group discussion will be evaluated by your team members at the end of semester.

Exams:

Two exams will be given this semester. Tests will consist of problems and essay questions. No make-up exams are given except in case of emergency with documentation as a proof. *There is no final exam.*

Academic Integrity and Class Conduct:

Consistent with CBA policy, cheating will be considered a very serious offense. Please familiarize yourself with the complete statement of the Honor Code at http://www.uic.edu/cba/Faculty/academicaffairs/honorcode.html or posted on Blackboard Should you have any questions about what constitutes appropriate behavior, please do not hesitate to talk with me.

Course Outline and Reading Assignments:

The following outline represents the order of topics to be covered. Some topics will receive more attention in lecture than others will, but all will potentially be covered on the tests. To enhance your understanding in class, you should read the relevant chapters or articles before coming to the class.

Part I.

- 1. Consistency of mean-variance analysis and expected utility maximization [Chapter 10-11, EGBG], [Chapter 6 & Appendix A&B, BKM]
- 2. Are assets returns normally distributed? [Chapter 5, BKM]
- 3. Does time diversification work? [Handouts; Chapter 7.5, BKM]
- 4. Portfolio Theory and Portfolio Construction—The Optimal Risky Portfolio, The Correlation Structure of Security Returns, CAPM, and APT, [Chapter 6-8, EGBG], [Chapter 7-10, BKM]; Handouts
- 5. Applications of Factor Models in Risk Management—Risk Neutral and Index Mimicking [Handouts; Chapter 10 & 17, BKM]

Part II.

- 6. Introduction to Mutual Fund Industry
 Reid, Brian K. and John D. Rea, Mutual fund distribution channels and distribution
 costs, *Perspective*, Vol. 9, No. 3, July 2003.
- 7. Mutual Fund Performance Evaluation and Style Classification [Handouts; Chapter 24, BKM]; Fama, Eugene F. and Kenneth R. French, 2010, Luck versus Skill in the Cross-Section of Mutual Fund Returns, *Journal of Finance 65*, 1915~1947.
- 8. <u>Returns-based approach:</u> Sharpe, William F., 1992, Asset allocation: Management style and performance measurement, *Journal of Portfolio Management (Winter)*, 7–19.
- 9. <u>Holdings-based approach:</u> Chan, Louis K. C., Stephen G. Dimmock, and Josef Lakonishok, 2009, Benchmarking Money Manager Performance: Issues and Evidence, *Review of Financial Studies* 22, 4553-4599. Chan, Louis K. C., Hsiu-lang Chen, and Josef Lakonishok, 2002, On mutual fund investment styles, *Review of Financial Studies* 15, 1407-1437.
- 10. Tax Issues in Fund Performance Evaluation
- 11. Current Issues in Mutual Fund/Hedge Fund Industry [Chapter 26 & 27, BKM; Wall Street Journal, Handouts]

Part III.

12. Equity Valuation Models (The Asset Selection Decision) [Chapter 18-19, BKM & EGBG, Wall Street Journal, Handouts] (if time is allowed)