Investment Theory and Practice Fall 2010

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Course Description

This course is designed to improve your understanding of the fundamental concepts of security investments. The emphasis of the course is on developing skills for portfolio management. After completion of this course, you will hopefully acquire the tools needed to make solid investment decisions and understand the concepts of valuation of financial securities.

I assume that this is your first in-depth course in asset pricing. However, the course is fairly quantitative and you should be familiar with the basic concepts of calculus (i.e. matrix algebra), probability and statistics and be comfortable using spreadsheet packages like Excel.

Course Requirements and Grading

Midterm I	25%
Midterm II	25%
Midterm IIII	30%
Trading Game	10%
Class Participation	10%

Exam Policy: The exams are closed book except you are allowed to take one 8.5"x11" sheet of notes. The exams will be a combination of true/false, short answers, and problems. A review session will be given before the scheduled exam dates. You must take the exams at the scheduled times. There will be NO make-ups for the midterms. Midterm III will be comprehensive. I expect that you arrive on time, exit quietly, and conduct yourself properly during the exams.

Each student in this course is expected to abide by the University of Texas Honor Code. [See the UT Honor Code below.] Any work submitted by a student in this course for academic credit will be the student's own work. During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you

compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action. For more details, please see UT's policy regarding academic integrity: http://deanofstudents.utexas.edu/sjs/acint_student.php.

University of Texas Honor Code:

"The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the university is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community."

Students with disabilities

Any student with a documented disability who requires academic accommodations should contact Services for Students with Disabilities (SSD) at (512) 471-6259 (voice) or 1-866-329-3986 (video phone). Faculty are not required to provide accommodations without an official accommodation letter from SSD. Please notify me as quickly as possible if the material being presented in class is not accessible (e.g., instructional videos need captioning, course packets are not readable for proper alternative text conversion, etc.). Contact Services for Students with Disabilities at 471-6259 (voice) or 1-866-329-3986 (video phone) or reference SSDs website for more disability-related information: http://www.utexas.edu/diversity/ddce/ssd/for_cstudents.php

Additional class-work

I will post on Blackboard bi-weekly problem sets that will generally consist of problems taken from the book. Other problems will consist of computer applications to real world data. None of these assignment will be graded and do not need to be turned in. I will post solutions on the class website (Blackboard) though. I strongly recommend that you try to solve all the problems before looking at the solutions.

The stock-picking and excel problems are to give you an understanding of how what we learn in class can be applied to the "real" world. These will be the best preparation for those who go on to work in the finance industry.

Readings

The required textbook for the course is:

Bodie, Zvi; Alex Kane; and Alan Marcus, Essentials of Investments, Irwin, 7th edition, 2008.

Additional readings may be suggested. For your convenience, I will also provide a set of lecture slides on the course website. These slides are *not* a substitute for attending classes since the class discussion will add value to the notes.

Hours

The class is scheduled to meet on Tuesdays and Thursdays from 14:00 to 15:30 in GSB 3.130. I will have office hours on Tuesday from 15:30 to 16:30 and by appointment. An email will be sufficient to schedule a visit.

Attending the Class

The class is mainly structured as a series of lectures. That does not mean that there will not be any class discussion, nonetheless you should expect less than what is typical management class. Please be in class before the lecture starts. If, by some serious reason, you are late enter the classroom from the back door. You are not allowed to use any computer, personal data assistant, and/or smart phone while in class. You should, however, bring a scientific calculator that you will use to solve problems in class. Also as a matter of courtesy to everybody in the classroom no food is allowed.

Note that I will not take class attendance. The only way to gain points towards class participation is to actively participating in class by asking and answering questions and by engaging in class discussion.

Course Outline

This is a tentative outline of the topics that will be covered. It is strongly suggested that you read the material in the text (all chapters refer to the required textbook) before the lecture.

Aug 26: Course outline and introduction

Overview of financial markets/assets

Readings: Chapters 1, 2

Aug 31: Statistics review I

Readings: TBA

Spe 2: Stock trading

Readings: Chapters 2.4, 3.2–3.3, 3.5–3.8

Sep 7: Risk and return

Readings: Chapter 5.1-5.5

Sep 9: Optimal asset allocation (a)

Readings: Chapter 6.1-6.3

Sep 14: Optimal asset allocation (b)

Readings: Chapter 6.4

Sep 16: Optimal asset allocation (c)

Readings: Chapter 6.1-6.4

Sep 21: Optimal asset allocation (d)

Readings: Chapter 6.1-6.4

Sep 23: Review

Readings: Review

Sep 28: Midterm I

Readings: Study

Sep 30: Statistics review II

Readings: TBA

Oct 5: CAPM

Readings: Chapter 7.1-7.3

Oct 7: CAPM and Factor Models (a)

Readings: Chapter 7.4, 7.5

Oct 12: CAPM and Factor Models (b)

Readings: Chapter 7.4, 7.5

Oct 14: Market efficiency

Readings: Chapter 8.1–8.2

Oct 19: Market anomalies (a)

Readings: Chapter 8.3

Oct 21: Market Anomalies (b)

Readings: Chapter 8.3

Oct 26: Market Anomalies (c)

Readings: Chapter 8.3

Oct 28: Review Readings: Review

Nov 2: Midterm II

Readings: Study

Nov 4: Derivatives security valuation (a)

Readings: Chapter 15

Nov 9: Derivatives security valuation (b)

Readings: Chapter 16.1-16.2

Nov 11: Derivatives security valuation (c)

Readings: Chapter 16.3-16.4

Nov 16: Derivatives security valuation (d)

Readings: TBA

Nov 18: Review Readings: Review

Nov 23: Midterm III

Readings: Study

Nov 30: Stock-picking assignment class presentations

Readings: None

Dec 2: Stock-picking assignment class presentations

Readings: None

Stock-Picking

This is a group assignment. You are expected to form groups of 3-4 and there will be absolutely no exception on this matter. The assignment is supposed to teach not only how to use the tools that we study in class but also to learn how to work in a team.

To help you manage your portfolio, each group will have to register an account with STOCK-TRAK (http://www.stocktrak.com/). Once you register, you activate a brokerage account with an imaginary cash balance. Your initial portfolios will have the following characteristics:

- 1. You have \$1,000,000 to invest
- 2. Your initial portfolio must
 - Contain at least 10 stocks, no maximum
 - \$500,000 is the largest cash position you can maintain
 - \$250,000 is the largest position you can maintain in a single security
- 3. 200 trade maximum
- 4. All kinds of assets are permitted (but you are encouraged to start with stocks first)
- 5. Trading begins on Monday, 9/13/2010, and ends on Friday, 11/26/2010.

You will be responsible for tracking the values of your portfolio. Periodically, you will be asked to turn in or report on the current performance of your portfolio. Any member of the group should be prepared to discuss why you picked the stocks as well as any news surrounding your stocks at any point during the semester.

You should turn in a short paper (3-4 pages) before your presentation which will be scheduled for November 30 or December 2. The paper should include the analysis of overall performance of your portfolio and of the portfolio loadings over the semester. Please make sure you print all the names of the group members on the front page of your paper.

Your grade on this assignment will be based on how actively you follow the stocks you chose during the semester, along with the accuracy of evaluating your performance over the semester, and on the final presentation. Only a part of the grade will be based on the performance of your portfolio.