

**GEORGIA INSTITUTE OF TECHNOLOGY**  
**College of Management**  
**Investments (MGT 6080)**  
Fall, 2009

Instructor: Qinghai Wang

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Class: 6:05pm - 8:55pm (Tuesday, Room: 222 Management)

Office Hours: Typically after class, or by appointment

### **1. Course Prerequisites**

MGT 6060 and Graduate level Probability and Statistics course.

### **2. Course Objectives**

The purpose of this course is to introduce students to the fundamentals of finance and the theory and application of asset pricing models, with an emphasis on equities and fixed income securities. The course will cover the fundamental principles of risk and return, diversification, asset allocation, theories of asset pricing and efficient markets. Students will understand market trading structures, valuation of equity and fixed income securities, portfolio strategies and performance evaluation methods. Investment decision-making skills will be developed through classroom lectures, discussions, homework assignments and case studies.

### **3. Course Resources**

(1) Textbook (required): Bodie, Kane and Marcus (BKM), Investments, 8th edition.

(2) Course Material (Lecture Notes, Homework, Sample Exam, etc): Available on T-Square;

(3) Additional Reading: Will be handed out in class (or available on T-Square) throughout the semester. These will include short articles from various academic and practitioner journals such as *Journal of Portfolio Management*, *Financial Analysts Journal*, etc.

(4) Recommended:

a. Wall Street Journal or other financial newspapers;

b. Malkiel, Burton, "A Random Walk Down Wall Street", W. W. Norton &Co, 2004 or earlier editions.

#### 4. Exams and Grading

Your grade in this course will be determined by your class participation, homework assignments, one term project, and two exams, which will be weighed as follows:

Homework/Projects/Trading	30%
Exam 1	35%
Exam 2	35%

Exams will cover material from lectures, assigned readings, and homework. Students are allowed to bring a formula sheet to the exam. Grades are based on absolute scale: A ( $\geq 90$ ), B ( $\geq 80$ ), C ( $\geq 70$ ), D ( $\geq 60$ ), and F.

#### 5. Attendance and Class Participation

Attendance is mandatory for all students. The inability of a student to attend class for any personal or other reasons, needs to be brought to my attention. Students are expected to prepare for each class using the assignments associated with each class in the outline. Students are evaluated on the basis of their contribution to lecture discussions and problem analysis.

#### 6. Lectures

Lecture notes will be posted on T-Square before each class. The notes provide outline of the class discussions and additional details on some selected topics. Note that the lecture note only provides limited coverage on topics covered in the class, so it is not a substitute for attending the class. Class lectures will go beyond the scope of the textbook for certain topics. You are also responsible for all announcements made in class-check with your colleagues if you miss class. Class lectures will sometimes involve working through problems. Thus, you should bring a calculator to class so that you may work on problems and participate in class discussions.

#### 7. Homework and Case Study

Two homework assignments will be given in the semester. The assignments consist of problems and applications to real data. The assignments are designed to apply theories and techniques learned in the course to real data in investment research and management. Also,

the exam questions will be related to the assigned problems. There will be one case write-up for this course. The case addresses questions of theories and practices of investment management. Details of the assignments will be provided after the midterm.

## **8. Practice Questions and Sample Exams**

I will provide a list of problems from each chapter in the textbook that highlights the important concepts covered in the chapter. Although these problems will not be collected, it is strongly recommended that they be done to solidify your understanding of the material (Incentive: some problems in the exams will be taken directly from assigned problems). The answers to the practice questions will be posted on T-Square. I will also provide a sample exam one week before the first exam.

## **9. Trading Simulation**

We will have an investment simulation for the semester. Rules of the simulation are explained in the lecture note.

## **10. Guest Lectures**

We may have guest speakers from the industry in the later part of the semester.

## **11. Honor Code**

It is your responsibility to familiarize yourself with the Georgia Tech Honor Code. Students are expected to follow the Honor Code. Please ask the professor if you need any clarifications on this. Violations of Honor Code will result to an *F* grade in this course. Any violation of the code will be further reported to the university.

**Class Schedule:** Subject to change, Chapters refer to BKM.

- Week 1 - Introduction and Overview of Investments (Chapter 1)
  - Assigned reading: Chapter from “A Random Walk down Wall Street”
- Week 2 - Securities Markets and Trading (Chapter 2-3)
- Week 3 - Risks and Returns: Concepts and Evidence (Chapter 5-6)
  - Homework 1 will be distributed
- Week 4 - Risks and Returns: Asset Allocation and Diversification (Chapter 7-8)
  - Assigned reading: “Harvard Management Company”
- Week 5 - Portfolio Analysis and Asset Pricing Models (I) (Chapter 9)
  - Homework 1 due. Assigned reading: “The Capital Asset Pricing Model”
- Week 6 - Portfolio Analysis and Asset Pricing Models (II) (Chapter 10, 13)
- Week 7 - Market Efficiency and Behavioral Finance (Chapter 11-12)
- Week 8 Exam 1 (Oct 6)
- Week 9 - Money Managing Industry (Chapter 4, 26)
  - Case will be distributed.
- Week 10 - Performance Measurement (Chapter 24)
  - Assigned Reading: “The Loser’s Game”, Homework 2 will be distributed
- Week 11 - Investment Strategies and Portfolio Management (Chapter 27).
- Week 12 - Equity Valuation and Equity Investment Strategies (Chapter 17, 18, 19)
- Week 13 - Fixed Income: Pricing (Chapter 14-16).
- Week 14 - Fixed Income: Investment Analysis (Chapter 14-16).
- Week 15 - Derivative Market (Chapter 22-23).
- Week 16 - Derivative Market (Chapter 20-21).
  - Case due.
- Exam 2, Friday (Dec 11).