## C15.0002.01 Foundations of Financial Markets SUMMER 2009 May 18, 2009 - June 26, 2009

## Instructor:

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## **Class Time and Location:**

TR 12:00-2:55pm TISCH LC21

#### Description of the Course

This is the first course in finance for most students, and it gives an introduction to financial markets. We will learn the basics of the financial securities, how they are valued and traded, and how to make optimal investment decisions with these securities. The main topics are portfolio selection, equilibrium asset pricing, arbitrage, fixed income securities and derivates. The course is rigorous and quantitative. Students are expected to understand and apply quantitative methods. Examples illustrate important real-world applications of the theory.

#### Blackboard

The course Blackboard will be the site for all course materials. All information relevant to the course will be put up on here: powerpoint presentations, problem sets, solutions, sample exams, handouts. Announcements will be posted throughout the semester.

## Textbook

 (BKM) Bodie, Kane, and Marcus, "Essentials of Investments", 6th edition, 2007
(S) Bodie, Kane, and Marcus, "Solutions Manual to Essentials of Investments", 6th edition, 2007.

3. (RWJ) Ross, Westerfield, and Jordan, "Essentials of Corporate Finance", Custom Edition (includes Chapter 4, 5 and 8)

4. (CP) Course packet, handed out in class.

## Prerequisites

Students should be comfortable with statistics, linear algebra and calculus. The course assumes no prior knowledge of finance.

#### Grading

There will be weekly assignments, a midterm exam and a final. The breakup is:

Class Participation	10%
Assignments	20%
Midterm	30%
Final	40%

Details follow.

**Problem Sets:** There will be a problem set assigned in the Tuesday session of each week. It will correspond to material covered that week - Tuesday and Thursday. The problem set will be due one week from the day assigned and all homeworks should be handed in by the beginning of the class. Problem sets are graded on a 1 to 3 scale, and you will be given full credit if you have made a good-faith effort to answer all of the questions, and if you hand in your answers on time. If you are not able to fully answer a question, try to identify the source of your uncertainty (is it a general finance concept you don't fully understand? Is it a mathematical issue? etc.). Late problem sets will not be accepted. Answers to the problem sets must be your own, and must be handwritten. The course website will contain suggested additional problems.

**Exams:** The midterm exam will be on June 9th. The final exam is on June 25th. They will be based on homework problems and the material taught in class. The final exam is cumulative. There will be no makeup exams. The only exception is if you have serious health problems and you are not able not take the midterm. In that case you should notify me a day in advance and the final exam will have 70% weight. Sample exams will be distributed a few days before the midterm and final.

#### Study Groups

You are encouraged to work in groups on the problem sets, but you must hand in your own handwritten answers. It is also highly recommended that you regularly discuss the readings in a study group.

#### Calculators

You need a calculator for this class. It is an advantage to have a financial calculator, but not a requirement. All the problems in this class can be answered with a regular one. Standard financial calculators include, for instance, Hewlett Packard 12C and 10B. You are supposed to learn how to use it on your own or with your group.

#### Warning

The course is intense and quantitative. What students are asked to absorb in a full semester of four months, you will be asked to absorb in a month and a half. You should be prepared to stretch yourself.

A tentative schedule is attached.

# Schedule

#### (Asterisks indicate key issues)

Note: This schedule is tentative. Readings might be revised as we go through the material, but there will be few such revisions.

Class	Topic	Material
1. Tuesday May 19	Introduction and Overview of Investments	BKM: 1.1-1.5, 3.1- 3.5*,3.6-3.8
2. Thursday May 21	Principles of Security Valuation	CP: 1* RWJ: 4*, 5.1*, 5.2*, 5.3*
3. Tuesday May 26	Risk and Return	CP: 2*, 3*, 4*, 5*, 6*, 7* BKM: 5.1*, 5.2*, 5.3*, 5.5*
4. Thursday May 28	Diversification	RWJ: 5.3* BKM: 6.1*, 6.2*, 6.3*, 6.4*
5. Tuesday June 2	Equilibrium: The Capital Asset Pricing Model	CP: 8*, 9, 10*, 11* BKM: 6.5*, 7.1*, 7.2, 7.3
6. Thursday June 4	Efficient Market Hypothesis Performance Evaluation	BKM: 8*, 17.1*
7. Tuesday June 9	Midterm Arbitrage	BKM: 7.5
8. Thursday June 11	Equity Valuation	CP: 13* BKM: 12* CP: 12*
9. Tuesday June 16	Fixed Income Securities and Valuation	BKM: 9.1, 9.2, 9.3- 9.4*,9.6*, 10.1*, 10.2, 10.3 CP: 14*, 15*,16*, 17*
10. Thursday June 18	Options Markets and Valuation	BKM: 14.1*, 14.2* CP: 18*
11. Tuesday June 23	Options Markets and Valuation	CP: 18 <sup>**</sup> BKM: 15.1*, 15.2, 15.3*, 15.4 CP: 19*, 20*
12. Thursday June 25	Final	01.15,20