## C15.0002.02 Foundations of Financial Markets SUMMER 2008 June 30, 2008 to August 8, 2008

#### Instructor

Yoel Krasny E-mail: jkrasny@stern.nyu.edu Office Hours: Thursday, 3:30-5:00 pm, in KMEC 4-130

Additional office hours will be held as needed and will be announced in class and in blackboard.

## **Class Time and Location**

Tuesdays and Thursdays 12:00 - 2:55 pm, KMEC 5-140

Additional review sessions will be held as needed and will be announced in class and in blackboard.

## 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 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 derivatives. The course is rigorous and quantitative. Students are expected to understand and apply quantitative methods. Examples illustrate important real-world applications of the theory.

A tentative schedule is attached at the end of this document.

## Blackboard

The course Blackboard will be the site for all course materials. http://sternclasses. nyu.edu/webapps/login/. All information relevant to the course will be put up here: powerpoint presentations, problem sets, solutions, sample exams, handouts. Announcements will be posted throughout the semester. Finally, there is a discussion board where I will participate on a regular basis to answer your questions. You are encouraged to answer each others' questions. You can turn to the discussion board to read your colleagues questions and the answers to their questions. Please ensure that you have access to the Blackboard and check it regularly.

## Textbooks

 (BKM) Bodie, Kane, and Marcus, "Essentials of Investments", 7th edition
 (S) Bodie, Kane, and Marcus, "Solutions Manual to Essentials of Investments", 7th edition 3. (RWJ) Ross, Westerfield, and Jordan, "Essentials of Corporate Finance", Custom Edition (includes Chapter 4, 5 and 8)
4. (H) Handouts - distributed 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 (problem set and investment game), a midterm exam and a final. The breakdown of the final grade:

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

Details follow.

**Problem Sets:** There will be a problem set assigned during the Tuesday session of each week. It will correspond to material covered that week - on Tuesday and Thursday. The problem set will be due one week from the day assigned and all homeworks should be handed in at the beginning of class. Problem sets are graded on a 1 to 3 scale. Please make a good-faith effort to answer all questions. If you are unable to fully answer a question, try to identify the source of your uncertainty (is it a general financial concept you don't fully understand? Is it a mathematical issue? etc.). Answers to the problem set must be your own, and must be handwritten. You are encouraged to acknowledge any help you received on the front page of your problem set solution. Late problem sets will not be accepted.

Investment Game: We will run an investment game throughout the semester:

- At the beginning of the semester, students should form groups of three or four. Each group will receive (virtual) sum of 10,000 USD and should pick a name for the group.
- During the Thursday session of each week, you will receive a set of "securities" from which you should choose a portfolio.
- On the following Tuesday, you should submit your portfolio choices (with the homework) and explain your decision.
- On the following Thursday, securities payoffs will be realized, and you will receive a new set of "securities".

**Exams:** The midterm exam will be on July 22. The final exam is on August 7. The exams will be based on material taught in class and on homework problems. The

final exam is cumulative. You will be allowed one double-sided page of notes for the midterm and two double-sided pages of notes for the final exam. The sheets must be no larger than 8.5 inches by 11 inches. Sample exams will be distributed a few days before the midterm and final.

## Study Group

It is highly recommended that you regularly review the readings and class notes in a study group. Don't wait until exam time to set up such a study group. By then it's too late. You are encouraged to work on the problem sets with your study group, but you must hand in your own answers.

## Calculators

You need a calculator for this class. A financial calculator is not a requirement. All the problems in this class can be answered with a regular calculator.

## Honor Code

You are responsible for maintaining Stern's honor code which mandates zero tolerance for cheating. Violations of the honor code will result in a minimum penalty of failure for the course as required by honor code rules. If you become aware of any violations of the honor code you must take whatever steps are necessary to stop the violators, including notifying me.

# **Classroom Civility**

Your behavior should respect your classmates desire to learn. Try not to come late to class as it is disruptive no matter how quiet you are. If you carry a cell phone or any other type of audible alert device, turn it off before entering class. Please do not engage in side conversations during the lecture.

# 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.

## Schedule

#### (Asterisks indicate key issues)

Note: This schedule is tentative. Readings might be revised as we go through the material, Additional handouts will be distributed in class throughout the semester

Class	Topic	Material
1. Tuesday July 1	Introduction and Overview of Investments,	BKM: 1.1-1.5*, 3.1-3.7*, 2.1-2.5
<ol> <li>Thursday July 3</li> <li>Tuesday July 8</li> </ol>	Time Value of Money and Return Measures Risk and Return	RWJ: 4*, 5.1-5.3* BKM: 5.1*, 5.2*, 5.3*, 5.5* BWI: 5.3*
4. Thursday July 10	Diversification	BKM: $6.1^*$ , $6.2^*$ , $6.3^*$ , $6.4^*$
5. Tuesday July 15	Equilibrium: The Capital Asset Pricing Model	BKM: 6.5*, 7.1*, 7.2.7.3
6. Thursday July 17	Efficient Market Hypothesis Performance Evaluation	BKM: 8*, 17.1*
7. Tuesday July 22	Midterm Arbitrage	BKM: 7.5
<ol> <li>8. Thursday July 24</li> <li>9. Tuesday July 29</li> </ol>	Equity Valuation Fixed Income Securities and Valuation	BKM: 12* BKM: 9.1, 9.2, 9.3- 9.4*,9.6*, 10.1*,
10. Thursday July 31 11. Tuesday August 5	Options Markets and Valuation Options Markets and Valuation	10.2, 10.3 BKM: 14.1*, 14.2* BKM: 15.1*, 15.2, 15.3*, 15.4
12. Thursday August 7	Final	