BRANDEIS INTERNATIONAL BUSINESS SCHOOL

Investments
Summer 2012

Instructor: Eric Nierenberg

Office: 11

Phone: TBA

E-mail: nieren@brandeis.edu

Class Hours: Wednesday 6.30pm – 9.30pm;

Office Hours: By appointment

Teaching Assistant: Craig Fischer, cjfisch@gmail.com

Course Description

The course covers topics related to financial economics, including investors' attitudes toward risk, capital allocation, portfolio selection, asset pricing models (Capital Asset Pricing Model and the Arbitrage Pricing Model), the efficient market hypothesis, fixed income markets, equity valuation, options and future markets, and mutual funds and hedge funds.

This course may not be repeated for credit by students who have taken FIN 201a.

The course is lecture based. Lectures will consist of theory explication, examples, and class discussion. Homework assignments will focus on applying the material from lectures. The major topics to be covered are:

- The time-value of money
- Introduction to financial instruments
- Risk and return
- Portfolio theory.
- Capital allocation
- Pricing models, such as the Capital Asset Pricing Model and Index Model
- Market efficiency
- Equity valuation
- Bond pricing and the Term Structure of Interest Rates.
- Derivatives - Pricing and Use

Prerequisites

This is a course that assumes no prior background in finance. However, you are expected to have an understanding of basic statistical concepts. Quantitative Techniques (ECON 210f) or Statistics is a prerequisite for this course, and you may complete either of these courses concurrently. The basic statistical concepts that you should be familiar with include means, variances, standard deviations, correlations, the normal cumulative distribution functions and ordinary least squares estimation. Also, please note that this course may not be taken for credit by students who have taken ECON 171a or FIN 205a in previous years.

Texts

Required

(BKM) Bodie, Kane and Marcus, Investments, 9th Edition.

Class Sessions

I strongly suggest that you read (perhaps quickly) the assigned reading before the class discussion of the topic. In the class discussions I will usually cover the concepts and issues that are most challenging, reinforcing and extending what is in the required reading. I suggest that after the class session you review the assigned reading to solidify your understanding.

Course Materials Online

This course will rely heavily on the LATTE platform – the web site will include downloadable files with the class handouts, copies of problem sets and suggested answers. You will need your UNet username and password to log on to the system at http://latte.brandeis.edu. You should check this site and your e-mail regularly for course announcements.

Course Requirements and Evaluation

Grades are based on the following:

The final numerical average for each student will be the larger of two calculations:

Mid-term: 20%	Mid-term: 0%
Class participation: 15%	Class participation: 15%
Final: 40%	Final: 60%
Problem Set: 25%	Problem Set: 25%

Midterm Exam (20%)

The midterm examination will be held on July 18.

You are permitted to bring one sheet of paper (8½ by 11 inches) with notes on one side to refer to during the quiz. Otherwise, the midterm exam is closed-book.

Final Exam (40%)

The final examination will be held on August 22. It will cover material from the entire class with a slight emphasis on the part of the course after the midterm. You are

permitted to bring one sheet of paper (8½ by 11 inches) with notes on both sides, to refer to during the quiz. Otherwise, the final exam is closed-book.

Problem Sets (25%)

There will be 5 problem sets. You may work in small groups of 2-4 people to discuss the problem sets. However, you must write up answers individually. This is particularly important since the problem sets will be absolutely essential practice for the midterm and final exams. If you don't fully understand your answers you will not be prepared. I will not be able to accept *any* late submissions. Solutions will be posted on LATTE after you have handed in the problem set.

Calculator

You can use any calculator you would like when solving problems on the problem sets, including scientific, programmable, graphing, financial, or software (such as Excel). However, on the exams (i.e., midterm and final) you will be allowed to use *only* scientific calculators. You will *not* be allowed to use programmable or financial calculators, or any other calculators capable of directly calculating bond price, annuity value, yield to maturity, or duration. In order to prepare for this, I would strongly advise everyone to purchase a scientific calculator in the near future and make sure you are able to solve problems using it.

Disabilities

If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately.

Academic Integrity

You are expected to be familiar with and to follow the University's policies on academic integrity (see http://www.brandeis.edu/global/current_academic_integrity.php). Instances of alleged dishonesty will be forwarded to the Office of Campus Life for possible referral to the Student Judicial System. Potential sanctions include failure in the course and suspension from the University.

Planned Schedule

The course outline below lists the topics covered and the readings for each class. I have also listed the dates for the Problem Set (**PS**) due dates, **Midterm Examination** date, and **Final Examination** date. Updates will be posted on LATTE.

	Topic	Reading	Assignment
May 23	The Financial Environment Review of basic financial and mathematical concepts	Ch-1 Ch-5	
May 30	Financial Securities Risk and Return	Ch-2 Ch-5	
June 6	Risk Aversion Capital Allocation	Ch-6 Ch 7.1-2	**Submit:** Problem Set #1
June 13	Optimal portfolio selection	Ch-7.3-4	
June 27	The single index model	Ch-8	
July 11	Capital Asset Pricing Model (CAPM)	Ch-9	**Submit:** Problem Set #2
July 18	Arbitrage Pricing Theory, Market Efficiency	Ch-10	**Midterm examination**
July 25	Testing CAPM Fixed Income Securities	Ch-11 Ch-13 Ch-14	**Submit:** Problem Set #3
August 1	Fixed Income Securities and Bond Pricing	Ch-14 Ch-15	
August 2 Thursday	Equity Valuation, Dividend Discount Model	Ch-18	**Submit:** Problem Set #4
August 8	Options and derivatives	Ch-20 Ch-21	
August 15	Options and derivatives (continued)	Ch-20 Ch-21	**Submit:** Problem Set #5
August 22	**Final examination**		