

BRANDEIS INTERNATIONAL BUSINESS SCHOOL

Econ 171A: FINANCIAL Economics

SYLLABUS Spring 2009

Professor Tyler Hull
Tyler@brandeis.edu

Class time: Tuesday and Thursday 5:10-6:30

Office hours: TBD

TA: Jiyoung (Kensey) Yoon

jyoon@brandeis.edu

TA OFFICE HOURS:

TBD

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 Arbitrage Pricing Theory), the efficient market hypothesis, fixed income markets, equity valuation, and options and futures markets.

The course is lecture based. Lectures will consist of covering the theory, examples, and class discussion. Homework assignments will focus on applying the material from lectures. Students should have a basic understanding of microeconomics, statistics, and algebra (see also prerequisites below).

PREREQUISITES:

Intermediate Microeconomics 80 and Statistics 83

COURSE MATERIAL ONLINE:

Course material will be posted online on the LATTE/Moodle platform. You will need your UNet username and password to log on to the system at <http://latte.brandeis.edu>. You should check this site for the latest versions of course materials (once updates are posted I will let you know in class).

REQUIREMENTS AND EVALUATION:

You are required to attend all classes, participate in class discussions, familiarize yourself with (and follow!) the policies on academic integrity (see below). You should also keep up with general financial news. This will be part of the basis of class discussion. Your grade will be based on class participation, attendance, problem sets, the midterm exam, and the final exam. If you think you may have to miss the midterm, you need to contact me *before* the exam and have a *very* good reason. There will be no make-up midterm. If you miss it, more weight will be put on the other components of your grade. All exams will cover material covered up to the point at which the exam is held.

1. Class participation (5%):

Class is interactive and I expect everyone to participate. I also expect you to attend class.

2. Problem Sets – PS (20%):

There will be a weekly problem sets which will be posted on LATTE/Moodle. A tentative outline of PS topics and due dates is in the course outline (below). Problem sets should be done on an individual basis. You may discuss the problem sets but only to the extent of general theory. The problem sets will be absolutely *essential* practice for the midterm and final exams. Please be aware that I will not be able to accept *any* late submissions.

3. Class project (15%) This will be announced in class

4. Midterm Exam (25%)

5. Final Exam (35%):

The final will cover material from the entire course with a slight emphasis on the part of the course after the midterm.

READINGS AND PREPARING FOR CLASS:

I will post copies of the lecture slides on LATTE/Moodle before each class. I recommend that you take a look at the slides before you come to class.

The required textbook for the course is:

Bodie, Kane, and Marcus (BKM) “Investments” 8th edition

The 7th edition of this book covers very similar material but there are several parts of the book that have changed substantially from the 7th edition to the 8th edition. I therefore recommend that you use the 8th edition and will assume that you are reading the 8th edition. Please also be aware that any reference to book chapters or problems will be for the 8th edition.

Each class has readings in the book associated with it. For the exact chapter listing you can refer to the detailed course outline (below). I encourage you to read these sections, ideally before class. There will often be parts of the chapter that we do not cover in depth or skip entirely. If you are interested in learning material above and beyond the class, those sections of the book are a good place to start.

TA SESSIONS AND PRACTICE QUESTIONS:

The TA will be holding review sessions roughly once every two weeks, there are a total of 8 sessions. TA sessions are optional. The sessions are meant to give you a chance to apply and review the material from class. I do not expect everyone to attend these sessions. A couple of days before each TA session I will post TA Session Practice Questions on LATTE/Moodle. The TA will work through the solutions during the session. The Practice Questions are designed to apply and review the material from class. They are entirely optional. If you plan to attend the TA session I strongly encourage you to attempt the practice questions beforehand. Solutions will be posted after the session.

Apart from going over the practice questions, these sessions will also give you a chance to ask questions about the material in class that you would like to discuss or review further.

POLICY ON CALCULATORS:

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 *not* be allowed to use financial calculators that are capable of directly calculating bond price, annuity value, yield to maturity, or duration. In order to prepare for this, I strongly advise everyone to make sure that you have a calculator available to you which you can use to solve problems at exam time.

ACCOMMODATION FOR 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. For more information go to: <http://www.brandeis.edu/disability>

ACADEMIC INTEGRITY:

You are expected to be familiar with and to follow the University's policies on academic integrity. 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.

See: "Brandeis University Rights and Responsibilities" chapter 3; (<http://www.brandeis.edu/studentlife/sdc/rr/>).

Here is the first part: "3.0 Every member of the University community is expected to maintain the highest standards of academic integrity. A student shall not submit work that is falsified or is not the result of the student's own effort. Infringement of academic honesty by a student subjects that student to serious penalties that may include failure on the assignment, failure in the course, suspension from the University or other sanctions (see Section 21). A student who is in doubt regarding standards of academic honesty in a course or assignment should consult the faculty member responsible for that course or assignment before submitting the work. A student's lack of understanding is not a valid defense to a charge of academic dishonesty." If you are ever in doubt about any of these rules please contact me immediately.

OVERVIEW OF TOPICS COVERED:

Introduction, risk and return (4 lectures)
Capital allocation (4 lectures)
CAPM and APT (3 lectures)
Market efficiency (2 lectures)
Bonds (3 lectures)
Equity valuation (2 lectures)
Options (3 lectures)
Credit risk, futures, international markets (3 lectures)

DETAILED COURSE OUTLINE:

The course outline (below) lists the topics covered and the readings for each class. I have listed Problem Set (PS) due dates, **Midterm Examination** date, and tentative **Final Examination** date (TBA), as well as the dates for the 8 optional TA sessions. Please note that dates may change. I will update the syllabus accordingly and post the new version on LATTE/Moodle.

Date:		Reading:
8/27(Th)	Lecture 1: Overview of course, Introduction	BKM 1.1-1.5, 10.2 pp. 324-325
9/1(Tu)	Lecture 2: Review of statistical concepts PS1 Due	BKM 5.4-5.6
9/3(Th)	Lecture 3: Financial securities	BKM 2, 3.2, 3.5-3.8
9/3-4(Th or F)	TA session 1: Present and future value, statistics review	
9/8 (Tu)	Lecture 4: Risk and return PS2 Due	BKM 5.1- 5.3, 5.5, 5.7, 5.8, 5.10
9/10 (Th)	Lecture 5: Risk preferences and capital allocation	BKM 6.1, 6.2- 6.4
9/10-11 (Th or F)	TA session 2: Risk and return, risk preferences	
9/15 (Tu)	Lecture 6: Capital allocation (2 assets: CAL, POS) PS3 Due	BKM 6.4-6.6, 7.2
9/17 (Th)	Lecture 7: Portfolio selection (risk free and 2 risky assets)	BKM 7.2, 7.3
9/22 (Tu)	Lecture 8: Markowitz portfolio selection PS4 Due	BKM 7.1, 7.4, 8.1
9/24 (Th)	Lecture 9: Index models	BKM 8.2, 8.3, 8.5
9/24-25 (Th or F)	TA session 3: Capital allocation, portfolio selection	
10/1 (Th)	Lecture 10: Capital Asset Pricing Model PS5 Due	BKM 9.1-9.3
10/6 (Tu)	Lecture 11: Arbitrage Pricing Theory Review for midterm	BKM 10.1-10.3
10/8 (Th)	Lecture 12: Market efficiency PS6 Due	BKM 11.1-11.3
10/8-9 (Th-F)	TA session 4: Index models, CAPM, APT	
10/12 (M) TBD	Office Hours	
10/13 (Tu)	Midterm Examination (in class)	
10/15 (Th)	Lecture 13: Market efficiency, empirical evidence	BKM 11.4, 11.5, 12, 13.3

10/15-15 (Th-F)	TA session 5: Market efficiency	
10/20 (Tu)	Lecture 14: Bond pricing, introduction to fixed income PS7 Due	BKM 14.1-14.4
10/22 (Th)	Lecture 15: Bond pricing , term structure of interest rates	BKM 15.1-15.4
10/26 (Tu)	Lecture 16: Bond pricing, duration, swaps PS8 Due	BKM 16.1, 23.4
10/28 (Th)	Lecture 17: Equity valuation	BKM 18.1-18.3
10/28-29 (Th- F)	TA session 6: Bonds, Equities	
11/3 (Tu)	Lecture 18: Equity valuation, dividend discount model PS9 Due	BKM 18.3, 18.4
11/5 (Th)	Lecture 19: Options	BKM 20.1-20.3
11/10 (Tu)	Lecture 20: Option strategies, option pricing PS10 Due	BKM 20.4, 21.1,21.3
11/12 (Th)	Lecture 21: Option pricing	BKM 21.3, 21.4
11/12-13 (Th-F)	TA session 7: Options	
11/17 (Tu)	Lecture 22: Credit risk Class project due	BKM 14.5, 23.4
11/19 (Th)	Lecture 23: Futures PS11 Due Stock Market game end date	BKM 22.1, 22.4
11/19-20 (Th-F)	TA session 8: Credit Risk, Futures, Review for Final	
11/24 (Tu)	Lecture 24: Investing in international markets	BKM 25.1-25.3
12/1 (Tu)	Review for Final PS12 Due	
12/3 (TBD)	Additional Office Hours	
12/7-11 (TBD)	Final Examination	