

**Foundations of Finance
B01.2311.12
Summer Semester II, 2010**

Instructor

Professor Anthony Lynch, KMEC 9-97, phone: (212) 998 0350, email: alynch@stern.nyu.edu.

Meeting Times

Section 70: Monday and Wednesday	6:00 pm-8:50 pm,	KMEC 3-50.
Section 71: Tuesday and Thursday	6:00 pm-8:50 pm,	KMEC 3-50.

Please note that there will be no class for the Tuesday/Thursday section on Tuesday July 6. Instead, there will be a make-up class on Tuesday August 10 from 6pm-8:50pm. A class calendar that reflects this revision to the schedule for the two sections can be found at the back of this syllabus. As I mentioned in an earlier email, this schedule change will keep the two section more closely in synch, which will have a number of benefits for both sections. I will try to keep the sections synchronized as per the class calendar, and you are welcome to attend the other section's classes, subject to the space constraint imposed by the size of room.

Course Content

This course is about financial markets and how financial assets (securities) are valued and traded. Most of this course is taught from the viewpoint of the user of a financial market an investor, investment advisor or someone using the market to hedge risk. Although much of what we cover is relevant to corporate finance (that is, financial decisions within the firm), this area is not the primary focus of the course. Only rarely will we take the viewpoint of a corporate chief financial officer dealing with internal decisions. This perspective is covered in great detail in Corporate Finance, a separate subsequent course.

Grading

Your grade will be based on problem sets, a midterm exam and a final exam. The problem sets will be worth 10%. The midterm exam will be worth 36% and cover the first half of the course. The final will be worth 54% and cover the entire course. However, if your grade on the final is better than your midterm grade, the final will count for the entire 90%.

The curve for this course is the one established by the Finance Department for the introductory course (sorry): A (10%); A- (10%-15%); B+(10%); B and B- (50%-60%); C+,C,C- D and F (10%-15%); IP, IF ($\leq 5\%$).

Problem Sets

There are 5 problem sets but you are only required to hand in the first 4. Each of these 4 problem sets is worth 2½%. These problem sets are due in the 4th, 6th, 8th and 10th classes. For each of these problem sets, you will receive full credit if you have made a good-faith effort to answer all of the questions, you hand in the problem set on time, and you have included and signed Stern's Honor Code statement. Late problem sets will not be accepted. Answers to the problem set must be your

own. You are encouraged to acknowledge any help you received on the front page of your problem set solution. These questions are designed to reinforce concepts learnt in class. Finance involves applying theory to solve problems and the only way to learn how to do this is by solving problems. This is why completion of the problem sets is worth 10%.

Exams

Both exams will be multiple choice with each question graded on a correct/incorrect basis. Both exams will be open book except for laptops and palm pilots, which will not be permitted.

The midterm exam will be in the first 90 minutes of the 7th class, which is on Thursday July 22 for the Tuesday/Thursday section and on Monday July 26 for the Monday/Wednesday section. The final exam will be in the final class, which is on Tuesday August 10 for the Tuesday/Thursday section and on Wednesday August 11 for the Monday/Wednesday section. Please keep these two dates for your section free. A makeup exam will only be given in an exceptional circumstance and at a time that is mutually convenient for you and the instructor.

Class Website

The class website is on Blackboard 8.0 at

<http://w4.stern.nyu.edu/sternlinks>

and all teaching materials are posted on this site. TA office hours and class announcements will be posted here also. Solutions to the problem sets and concept questions will also be posted. The class web site also contains some finance links and articles. Finally, there is a discussion board where the TA and I will participate on a regular basis to answer your questions. You can turn to the discussion board to read your colleagues questions and the TA's and my answers.

Textbooks

Recommended (but not required):

Bodie, Kane and Marcus, *Investments*, 8th Edition, Irwin (B).

Solutions Manual for Investments, 8th Edition(S).

Ross, Westerfield and Jordon, *Essentials of Corporate Finance*, 6th Edition, Chapters 4, 5, and 8, Irwin (R) (a custom edition of just these three chapters bundled together with B and S is available in the NYU Professional Bookstore).

Optional:

Elton, Gruber, Brown and Goetzmann, *Modern Portfolio Theory and Investment Analysis*, Sixth Edition, John Wiley and Sons.

Course Material

Two booklets of lecture notes, problem sets, additional problems with solutions and practice midterm and final questions will be distributed in class. The first booklet will be distributed in the first class and will contain material needed for the midterm. The second booklet will be distributed by the fifth class and will contain material for the rest of the course. The lecture notes are an integral part of the course.

I will also distribute summaries of the material covered. Summaries of the material covered in the

first 5 weeks of class will be distributed in the first class and summaries of the material covered in the rest of the classes will be distributed by the fifth class. I will also distribute a handout for each class that will contain any overheads I use in the class and a set of concept questions for the material covered in the class. You can use the summary, the overheads and the concept questions to review the material covered in each class and I strongly encourage you to do so.

Many students find the lecture notes sufficient for the course; others find the suggested texts useful as supplements to the lecture notes. I suggest waiting until the second or third week before making a decision whether to buy the recommended textbooks. Reading of the *Wall Street Journal* or the financial sections of the *New York Times* is also encouraged.

The material in the booklets, the summaries and the handouts will also be available on the class website.

Course Orientation

By its very nature, finance is mathematical and theory based. However, most of the theory covered in this course has immediate practical applications and implications. These will be emphasized as much as possible especially before introducing the theory so as to motivate why its being taught. Concepts will wherever possible be illustrated using real data that has been obtained from the Wall Street Journal or some other data service. Every effort will be made to highlight how the theory and concepts taught in this course can be used by an investor when making real decisions.

Recent Financial Crisis

Where ever possible, I will also use the theory developed in the course to help explain various aspects of the recent financial crisis. To this end, if there is sufficient demand, I will schedule additional optional class sessions to present some of the slide presentations prepared in conjunction with the recent Stern publication concerning the crisis:

"Restoring Financial Stability: How to Repair a Failed System" edited by Viral Acharya and Matthew Richardson, John Wiley and Sons, March 2009.

More than 30 Stern faculty contributed to the book and I myself contributed to 4 of the book's 18 chapters.

Each chapter in the book has an associated White Paper which represents a 2 page summary of the relevant chapter. I will ask students to read some of these White Papers which can be found at:

<http://whitepapers.stern.nyu.edu/home.html>

The material in the slide presentations and the White Papers will not be examinable.

Help

Justin Birru is the TA for both sections and he will teach weekly review sessions and hold office hours. I will also offer pre-exam review sessions and hold office hours. Our office hours and the review session times will be posted on the class website, which is another source of help.

Miscellanea

Class Attendance:

You are responsible for knowing what occurs in class which may include material not covered in the readings, modifications to the syllabus and announcements concerning exams.

Use of E-mail:

I will often use E-mail to communicate with you, so you should try and check your E-mail regularly.

Calculator:

To solve financial problems, you will need a scientific or financial calculator. In addition to the standard operations (+, -, ×, ÷), it should be able to compute e^x and $\ln(x)$ (the exponential and natural log functions) and should be able to compute present and future values of simple sums and annuities. An ability to compute internal rates of return is sometimes useful but is not required. Standard financial calculators include the HP 12C (costs about \$70), the HP 10B-II (costs about \$30) and the TI BA-II Plus (costs about \$30). You are expected to learn how to use a calculator on your own. However, you can get help by attending the teaching assistants' review sections or his office hours. You will need it for homework and the exam (no laptops or palm pilots are permitted in the exams).

Honor Code:

You are responsible for maintaining Stern's code of conduct which mandates zero tolerance for cheating and plagiarism. Violations of the code of conduct will be prosecuted with a minimum penalty of failure for the course, as required by code of conduct rules. If you become aware of any violations of the code of conduct you must take whatever steps are necessary to stop the violators. On every assignment and exam you must include a signed statement at the top indicating that you adhered to the code of conduct. The statement is: "I pledge my honor that I have not violated the Stern Student Code of Conduct in the completion of this exam/problem set."

Organization of the Course

<i>Class</i>	<i>Topic</i>	<i>Reading</i> (based on 8 th Edition of B)
1	Overview	B Ch 1, skim Ch 2, 4
1-2	Time Value of Money	R Ch 4, 5
2	Equities: Characteristics and Markets	B Ch 2.3-2.4, 3.1-3.5, 3.8
2-3	Stock Positions and Portfolio Return	B Ch 3.6-3.7, 5.4
3-5	Portfolio Management	
	- Characterizing the return distribution	B Ch 5.4, 5.6, 7B, Handouts
	- Asset allocation between one risky and one riskless asset	B Ch 6 (partic. 6.4)
	- Diversification and asset allocation with two risky assets	B Ch 7.1-7.3
	- Diversification and asset allocation with many risky assets	B Ch 7.4, 7A
5	Capital Asset Pricing Model (CAPM)	B Ch 9.1, 8.1-8.3, 9.2
5-6	CAPM: Performance Measures and Evidence	B Ch 24.1, 13.1
6	Multifactor Asset Pricing Models and Evidence	B Ch 10.1,10.6,10.5,13.2,13.3
7	Midterm Exam	
7-8	Fixed Income Instruments: Definitions and Markets	B Ch 2.1-2.2, 14.1-14.3,14.5
8-9	Fixed Income: Valuation	B Ch 15 (not 15.5)
	- Yields on Bonds, Yield Curves and No Arbitrage	
	- Forward Contracts	
	- Theories of the Yield Curve	
9	Fixed Income Portfolio Management	B Ch 16.1, 16.3
9-10	Derivatives: Definitions, Payoffs and Markets	B Ch 20.1-20.3,22.1-22.3
10	Options: Valuation	B Ch 20.4, 21 (not 21.3)
11	Forward Contracts: Valuation	B Ch 22.4, 23 (not 23.3, 23.4)
11	Valuation Models and Intro to Capital Budgeting	B Ch 18; R Ch 8
11	Market Efficiency	B Ch 11.1-11.2; skim 11.3-11.5
12	Final Exam	

Revised Calendar of the Course

Month	Monday Section 70 KMEC 265	Tuesday Section 71 KMEC 265	Wednesday Section 70 KMEC 265	Thursday Section 71 KMEC 265	Friday	Saturday	Sunday
June	28	29 Class 1	30 Class 1				
July				1 Class 2	2	3	4
	5	6 No Class	7 Class 2	8 Class 3	9	10	11
	12 Class 3	13 Class 4 PS 1 Due	14 Class 4 PS 1 Due	15 Class 5	16	17	18
	19 Class 5	20 Class 6 PS 2 Due	21 Class 6 PS 2 Due	22 Class 7 Midterm	23	24	25
	26 Class 7 Midterm	27 Class 8 PS 3 Due	28 Class 8 PS 3 Due	29 Class 9	30	31	
Aug							1
	2 Class 9	3 Class 10 PS 4 Due	4 Class 10 PS 4 Due	5 Class 11	6	7	8
	9 Class 11	10 Class 12 Final	11 Class 12 Final	12	13	14	15