

EMBA
Foundations of Finance 2012
Class of A13

Instructor

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Class Meetings

<i>Class</i>	<i>Date</i>	<i>Time</i>
1	Friday, January 27	1:30 - 5pm
2	Saturday, January 28	9-12:30pm
3	Friday, February 10	9-12:30pm
4	Saturday, February 11	9-12:30pm
5	Friday, February 24	9-12:30pm
6	Saturday, February 25	9-12:30pm
7	Friday, March 9	9-12:30pm
8	Saturday, March 10	9-12:30pm
9	Friday, March 23	9-12:30pm
10	Saturday, March 24	9-12:30pm

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 sets of concept questions and problem sets, a midterm exam, and a final exam. The problem sets and concept question sets will be worth 10%. The midterm exam will be worth 36% and cover almost all the material presented in the first 5 classes. The final will be worth 54% and cover all material presented in the first 8 classes. 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 for all Executive MBA courses:

1. No more than 10% will receive Pass with Distinction (PD) grades.
2. Generally, no more than 35% will receive PD and High Pass (PH) grades.
3. Most will receive a Pass (PS) grade.

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. Any section of the lecture notes marked (optional) will not be examinable.

The midterm exam will be from 9-10:30pm on Friday, March 9 in the first 90 minutes of the 7th class. There will be a lecture after the midterm in the second half of the 7th class. The final exam will start at 9am on Friday, March 23 in the 9th class. Please keep these two dates free so you can attend class and take the exams. A makeup exam will only be given in an exceptional circumstance and at a time that is mutually convenient for you and the instructor.

Concept Questions and Problem Sets

There are 5 sets of concept questions, one for each weekend of classes, and 3 problem sets for the course. Sets of concept questions will be assigned after each weekend of classes, and concept questions and solutions will be available on the Blackboard course site. Each set of concept questions is worth 2.5%, and must be submitted by the start of the Saturday class on the next weekend of classes to receive the 2.5%. All but the last set of concept questions can be submitted, which means there are 4 sets of concept questions in total that can be submitted: submitting all 4 would get you the full 10% available credit from the concept questions and problem sets. Each of the 3 problem sets is worth 3 $\frac{1}{3}$ % and each must be submitted on time to get the 3 $\frac{1}{3}$ %; submitting all 3 would get you the full 10% available credit from the concept questions and problem sets. The three problem sets are due at the start of the 6th, 8th, and 10th classes, respectively.

You can reach the 10% available credit from the concept questions and problem sets with any combination of concept question sets and problem sets you like. For both the concept questions and the 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 or concept question set on time, and you have included and signed Stern's Honor Code statement. You can work on the problem sets and concept question sets in groups, but each group member must hand in her/his own solution to receive credit.

The concept questions are designed to reinforce the concepts and methods taught in each class, while the problem sets are designed to develop a deeper understand of these concepts and methods. Finance involves understanding theory and then applying that theory to solve problems. The only way to learn how to do this is by solving problems. I strongly encourage you to do all the concept questions and problem sets.

Class Website

The class website will be on Blackboard 8.0 at

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

and all teaching materials will be posted on this site. TA office hours and class announcements will be posted there also. Solutions to the problem sets and concept questions will also be posted. The class web site will also contain some finance links and articles. Finally, there will be 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

Required:

Bodie, Kane and Marcus, *Investments*, 9th Edition, Irwin (B).

Solutions Manual for Investments, 9th Edition(S).

Ross, Westerfield and Jordon, *Essentials of Corporate Finance*, 6th Edition, Chapters 4, 5, and 8, Irwin (R).

Optional:

Elton, Gruber, Brown and Goetzmann, *Modern Portfolio Theory and Investment Analysis*, 8th Edition, John Wiley and Sons.

Course Material

All the lecture notes, handouts, summaries, problem sets, concept questions, additional problems with solutions, and practice midterm and final questions with solutions will be available on the class website. For each weekend of classes, the lecture notes and any additional slides that will be used in class will be distributed in that weekend's Friday class. These notes and slides will also be available on the class website at least one week before that weekend's Friday class. I will email you once the lecture notes and additional slides for a given weekend's classes have been posted to the class website.

Studying

The lecture notes are an integral part of the course. Many students find the lecture notes sufficient for the course, while others find the texts to be useful supplements to the lecture notes. Reading of the *Wall Street Journal* or the financial sections of the *New York Times* is also encouraged.

Assessment for the course does not include a participation grade, but I strongly encourage you to attend as many lectures as possible. Students who are unable to attend lectures typically have trouble with the material. If you must miss a class, you can watch the streaming video, which will usually be posted on the Blackboard site the next day.

I encourage you to form study groups to complete the concept questions and problem sets, review the material, and prepare for the exams. I strongly recommend that you read through the assigned lecture notes before each weekend of classes, and then after each weekend of classes do the assigned concept questions before the next weekend of classes if at all possible. Once you've completed all the concept questions for a topic, then attempt the problem set questions for that topic. The problem set questions are designed to build on the knowledge and competency you've developed by completing the concept questions. Then use the practice midterm, additional practice midterm questions, and additional midterm problems to prepare for the midterm exam, and the practice final questions and additional final problems to prepare for the final exam. The summaries can be used to review the material after each class, and help you to do the concept questions and problem sets.

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.

Prerequisites

While the course is largely self-contained, students need to be comfortable with basic statistics, linear algebra, calculus, and microeconomics. Students are strongly encouraged to study the review handout on statistics at the beginning of the semester (Handout 1 of the course materials). Alternatively or additionally, the quantitative statistics review in Appendix 7A of BKM will help you refresh the statistics material.

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. And if there is sufficient demand, I will schedule an additional optional class session to present some of the slide presentations prepared in conjunction with the recent Stern publications concerning the crisis:

Acharya, V., Richardson, M., editors, 2009. Restoring Financial Stability: How to Repair a Failed System. New York University Stern School of Business, John Wiley & Sons. 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. Students can find these White Papers at:

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

Acharya, V., Cooley, T., Richardson, M. and Walter, I., editors, 2010. Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance. John Wiley & Sons. I am a co-author of Chapter 12.

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

Help

Michael Smolyansky will be the TA for the course, and he will teach online and in-class review sessions, respond to email questions, and hold office hours. I will also offer pre-exam review sessions, respond promptly to email (usually within 24 hours), 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 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 9 th Edition of B)
1	Overview	B Ch1 (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, 7B, Handout 1 (optional B Ch 5.6, Handout 2)
	- Asset allocation between one risky and one riskless asset	B Ch 6 (particularly 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	CAPM: Performance Measures and Evidence	B Ch 24.1, 13.1
5-6	Valuation Models and Intro to Capital Budgeting	B Ch 18 (not 18.4-18.5); R Ch 8.1 (skim 8.2-8.6)
6	Fixed Income Instruments: Definitions and Markets	B Ch 2.1-2.2, 14.1-14.3, 14.5
6-7	Bond Pricing and Forward Rates	B Ch 15.1-15.2, 15.6
7	Midterm Exam	
7	Fixed Income Portfolio Management	B Ch 16.1, 16.3
8	Derivatives: Definitions, Payoffs and Markets	B Ch 20.1-20.3, 22.1-22.3
8	Options: Valuation	B Ch 20.4, 21 (not 21.3, skim 21.5)
8	Forward Contracts: Valuation	B Ch 22.4, 23.2, 23.5
9	Final Exam	
10	Theories of the Yield Curve	B Ch 15.3-15.4
10	Multifactor Asset Pricing Models and Evidence	B Ch 10.1, 13.3 (optional 10.5, 13.2)
10	Market Efficiency	B Ch 11.1-11.2 (skim 11.3-11.5)