

# Syllabus Foundations of Finance

## Spring Semester 2008-2009

### B01.2311.30

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## 1 Instructor

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## 2 Class Time

The class meets once per week, during 12 weeks. Each class time is divided into two sessions.  
Session 1: 6:00-7:25 pm  
Session 2: 7:40-9:00 pm.  
The first class is on W 02/11.  
The last class (final exam) is on W 05/06.  
The venue is KMEC, Room 1-70.

**Classroom Civility** Your behavior should respect your classmates' desire to learn. Each lecture begins exactly at 6:00 p.m. and ends exactly at 9:00 pm. I understand your busy work schedules, but try not to come late. Because of the classroom layout, 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. Do not engage in side conversations during the lecture. Repeated occurrence of such disruptions will be reflected in the final grade. If you must miss a class or must come late, please let me know by email beforehand.

### 3 Readings

The textbooks for this class are:

- 1 “Investments” by Zvi Bodie, Alex Kane, Alan J. Marcus, 8th edition.
- 2 “Solutions Manual to accompany Investments” by Zvi Bodie, Alex Kane, Alan J. Marcus, Alan Marcus, 8th edition
- 3 Selected Materials from “Essentials of Corporate Finance” by Stephen A. Ross, Randolph W. Westerfield, Bradford D. Jordan, 5th edition

We will mainly use [1], abbreviated BKM below. If you have an *earlier edition* of BKM (fourth, fifth, sixth, or seventh), you are fine. There are only minor changes between editions. Page and chapter numbers may vary slightly, but this is hardly a reason to buy a new copy.<sup>1</sup> The main role of the textbooks is to serve as a source where you can review the material. BKM is at times very good and tightly linked to the material I cover, but a bit weaker and less related to the material I cover in class on some other topics. That being said, it is currently the best book on the market for our purposes, and you will need it to prepare before class and go over the material after class.

Book [2] will come in handy to solve practise questions. We will only use chapters 4 and 5 from book [3], abbreviated RWJ. These two chapters come as a supplement in the class material packet if you purchased your class material through the bookstore. The supplement [3] will only be used in class 2. If you did not buy [1] through the bookstore, you can purchase [2] and [3] separately, online on the publisher’s web site. Click on “Custom eBooks” and follow the links.<sup>2</sup> [3] costs around \$15.<sup>3</sup>

The main class material are the course notes, which I will post successively on the class website.

**Staying Up-to-Date** The class web site on Blackboard will contain links to recent articles in the financial press that complement the lectures. You are encouraged to follow financial and macroeconomic news in the Financial Times, Wall Street Journal, or The Economist. If you encounter an interesting article that you would like to share with the class, send me an email and I will post it on the class web site. This section of the Blackboard site is regularly update during the semester.

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<sup>1</sup>If you already own the “Essentials of Investment” textbook by the same authors instead, you will have more difficulty finding the corresponding chapters, sections, and exercise numbers because they are all different. You may want to upgrade to the “Investments” book.

<sup>2</sup><https://ebooks.primisonline.com/eBookstore>

<sup>3</sup>Sometimes, these two chapters are freely available for download as “sample chapters.” Check out the web site: at [http://highered.mcgraw-hill.com/sites/0072510765/information\\_center\\_view0/sample\\_chapter.html](http://highered.mcgraw-hill.com/sites/0072510765/information_center_view0/sample_chapter.html).

## 4 Calculator

You will need a calculator for this class. It is a distinct advantage to have a financial calculator, but not an absolute requirement. If you plan to take other finance classes, you will get good use out of a financial calculator anyways. 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 operate the calculator on your own. However, you can get help by attending the teaching assistants' review sections (after class 2) or his office hours. Finally, I have included some useful slides in the course pack on how to work with the calculator.

## 5 Communication

The class web site will be posted on Blackboard at <http://www.sternclasses.nyu.edu/>. This is the central location where all teaching materials are posted. TA office hours and class announcements will be posted here. Problem sets are posted there as well. Solutions to the problem set will be posted no later than one week after the due date; they will not be distributed in paper form in class.

The class web site also contains the concept questions (see below), suggested problems, and some finance links and articles. Finally, there is a discussion board where the TAs and myself will participate on a regular basis to answer your questions. You are encouraged to answer each others' questions. If you have a question, first turn to the discussion board; chances are the question has been asked and answered there already.

## 6 Exams and Assignments

Grades will be based on the final exam (40 percent), the midterm exam (30 percent), and problem sets (30 percent).

The Stern finance department follows a strict grading curve for graduate core courses (see finance department web site). I am required to strictly adhere to this curve. The finance curve for core courses is: A (10%), A- (15%), B+ (15%), B (40%), B- (15%), C (5%).

**Honor Code** You are responsible for maintaining Stern's Honor Code which mandates zero tolerance for cheating and plagiarism. Violations of the honor code 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 honor code you must take whatever steps are necessary to stop the violators. Per request of the dean, you must include a signed statement at the top of each problem set and exam, indicating that you adhere to the honor code. The statement is: *'I pledge my honor that I have not violated the Stern Honor Code in the completion of this exam/problem set.'* It is in your best interest that the market place knows that Stern takes honesty seriously; it adds to the value of your degree.

**Exams** The midterm and final exams test your understanding of the key concepts in the class. They do not test your ability to memorize or to use your calculator. Rather they probe your deeper understanding of the material. As a result, they may be more challenging than the exams you are used to. To prepare for these exams, you should review the slides together with your own class notes, the handouts (at the end of the course pack), the concept questions, the required readings, the problem sets, the sample exams (will be posted on site), and preferably the suggested problem sets and suggested readings. The final exam is *cumulative*.

You will be allowed one double-sided page of notes at the midterm exam and two double-sided pages of notes at the final exam. The sheets must be no larger than 8.5 inch by 11 inch. There are no restrictions on the content of the formula sheets, except that you are not allowed to reprint my powerpoint slides verbatim. You will be asked to turn in these formula sheets after the midterm and exam, but you will be able to recover the midterm sheet in the week after the midterm.

You are not allowed to take the exam questions home, and no written answers will be provided. There will be a post-midterm discussion in class 7. Once graded, you are allowed to come visit your midterm in my office, during office hours, or by appointment. The same rules apply to the final. If you must miss an exam, you will be required to make it up after the semester is over. No laptops nor palm pilots are allowed on the exam.

**Problem Sets** There will be 4 problem sets over the course of the semester. For each problem set, you will be rewarded full credit if you have made a good-faith effort to answer all of the questions and if you hand in the problem set on time. 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. The homework questions will be in the same spirit of the exam questions, but slightly easier. The reason is that they are your first confrontation with the implementation of the material.

**Suggested Problems** After every class, suggested problems are posted on Blackboard. These questions are intended to give you extra practice over and above the homework. You do not have to turn them in, and there is no credit for them. You can look up solutions in your solution manual [2]. Practise makes perfect: You are strongly encouraged to take the suggested problems seriously.

**Study Groups** 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.

## 7 Course Content

**Content** The course is a rigorous, quantitative introduction to financial market structure and financial asset valuation. The main topics of the course are arbitrage, portfolio selection, equilibrium asset pricing (CAPM), fixed income securities and derivative pricing. There is a small section on project valuation.

You are expected to understand valuation formulas and be able to apply them to new problems. The appropriate tools necessary for solving these problems will be developed at each stage and practiced in the homework assignments. The models we will cover have immediate applications and implications for real-world financial decisions. Every effort will be made to relate the course material to current financial news.

**Prerequisites** Students must be comfortable with statistics, linear algebra, calculus, and microeconomics. Students are strongly encouraged to study the review handout on statistics at the beginning of the semester (Handout will be posted on website). Alternatively or additionally, the Quantitative Review in appendix A of BKM will help you through refresh the statistics material.