SYLLABUS

COR1-GB.2311.0A (B01.2311.0A)

FOUNDATIONS OF FINANCE

Summer Semester, 2011

COURSE DESCRIPTION

This is a quantitative course introducing the fundamental principles of asset valuation within the framework of modern portfolio theory. The key analytical concepts are present value, option value, risk/diversification and arbitrage. These tools are used to value stocks, bonds, options, and other derivatives, with applications to the structure of financial markets, portfolio selection, and risk management.

PREREQUISITE KNOWLEDGE

This is a core course that assumes no prior background in finance but requires knowledge of the following basic economic and statistical concepts: supply and demand curves, including how shifts in the curves change the equilibrium price; indifference curves; mean, standard deviation, covariance and correlation as descriptive statistics; probability statements based on the area under the normal curve; and the regression coefficient as a summary statistic.

INSTRUCTOR

Name	Room	Phone	Email
Professor John Handley	TBA	TBA	jhandley@stern.nyu.edu

CLASS TIMES AND VENUES

Section	First Class	Days	Time	Room
0A	2 Jul	Sat	9.00am – 12.00pm & 1.00pm – 4.00pm	KMC 2-65

A detailed class schedule is set out at the end of this syllabus.

Due to the intensive nature of this course, you are strongly encouraged to keep up to date and work consistently throughout the semester.

CONSULTATION AND ASSISTANCE

I will generally be available for consultation and assistance on Saturdays from 4.00 - 5.20 pm in KMC 2-65 and at other times during the week by appointment – just send me an email to request a time. These sessions are optional and provide an additional forum for discussion relating to any of the material covered in class (on that day or in previous classes).

ASSESSMENT

(i) Grades

Grades will be based on assignments (10%), a 60 minute midterm exam (25%) and a 180 minute final exam (65%).

In accordance with Department of Finance policy for core graduate courses, the expected distribution of grades for this course is: A (10%); A– (10 to 15%); B+ (10%); B and B– (50 to 60%); C+, C, C–, D and F (10–15%).

(ii) Assignments

There are two assignments each worth 5% of your final grade. The assignments are due in at the start of classes 5 and 9. For each assignment, you will receive full credit if you have made a good-faith effort to answer all of the questions and you hand it in on time. Late assignments will not be accepted. Answers to the assignment must be your own and you are encouraged to acknowledge any help you have received on the front page of your assignment.

(iii) Exams

You must take both exams. <u>The midterm exam will be held during the first half of class 7</u> and will be based on material up to and including section 3 of class 4. <u>The final exam will be held during class 12</u> and will be based on material from section 4 of class 4 to class 11 inclusive. <u>Please write these exam dates in your diary now</u>.

Both exams will consist of multiple choice questions and short problems and will be on a closed book basis except that: (i) the exam paper will include a formula sheet (a copy of the formula sheet will be distributed to students prior to the exam); and (ii) you make take one $8.5" \times 11"$ (Letter size) sheet of paper (with anything written on both sides) into the midterm exam and you may take two $8.5" \times 11"$ sheets (with anything written on both sides) into the final exam.

The only other allowable materials that you can take into an exam are writing instruments and a calculator (see below for further details). Laptops, cell-phones and other electronic devices are not permitted.

<u>TEXT</u>

The textbooks for this class are:

- (i) Bodie, Kane and Marcus, ESSENTIALS OF INVESTMENTS, McGraw-Hill/Irwin ("BKMe").
- (ii) STUDENT SOLUTIONS MANUAL to accompany Essentials of Investments ("SSM").
- (iii) Ross, Westerfield and Jordan, ESSENTIALS OF CORPORATE FINANCE, with Solutions, McGraw-Hill/Irwin ("RWJe") Custom edition Chapters 4, 5 and 8 only.

The current edition of BKMe is the 8^{th} but you may also use the 7^{th} edition in this class. Similarly, the current edition of RWJe is the 6^{th} but you may also use the 5^{th} edition in this class. I will advise readings for both the current and these immediately preceding editions of both BKMe and RWJe.

A bundled copy of these three texts is available for purchase from the NYU bookstore. Alternatively you can purchase an online version of RWJe separately through the publisher's website (you will find it listed as "B01.2311 - Prof. van Nieuwerburgh – Ross" at https://create.mcgraw-hill.com/shop/#/catalog/details/?isbn=9780390169501).

In addition, copies of the texts are available for (short term) borrowing from the Course Reserves Desk, on Lower Level 2 of the Bobst Library at <u>http://library.nyu.edu/services/reserves.html</u>

The role of the textbooks is to provide additional information on concepts covered in class – use them as you see fit i.e. on some topics you may be able to skim the readings but on other topics you may need a closer reading.

OTHER TEACHING MATERIALS

Each class will be accompanied by a set of lecture slides and an exercise set. These materials are an integral part of the course. <u>You are expected to take notes during class</u>. The exercise sets are for self-study purposes and are designed to reinforce and or extend the concepts covered in class. They will consist of selected questions from the texts plus additional questions from me. Solutions not available in SSM or RWJe will be distributed to students. You are advised to make a reasonable attempt to answer a question before looking at the solution. You may wish to form a study group to jointly work through the exercise sets and review the material in the lecture slides. You may also work on the assignments with your study group but you must hand in your own answer.

Reading of the Wall Street Journal or the financial sections of the New York Times is also encouraged.

CLASS WEBSITE

The class website is on Blackboard at <u>http://sternclasses.nyu.edu/</u>

A copy of the lecture slides and exercise sets will be posted in the Course Documents section of the website on a weekly basis. I will hand out a copy of the lecture slides at the start of each class – i.e. there is no need for you to print out a copy beforehand. Important announcements will also be posted on the class website. You should also regularly check your email account. I will not be using the Discussion Board facility of the website.

CALCULATOR

You will need a calculator for this class. Financial calculators (such as the HP12C) are permitted. At a minimum, the calculator should have the standard operations $(+,-,\times,\div)$ and the inverse, exponential and natural log functions. It is your responsibility to learn how to use your calculator. The purpose of the calculator is to assist with calculations and it should not be used as a means of storing text or programming formulae.

CODE OF CONDUCT

Integrity is critical to the learning process and to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Stern Student Code of Conduct, which includes a commitment to:

- (i) Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
- (ii) Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
- (iii) Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

STUDENTS WITH DISABILITIES

If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, 998-4980) and provide me with a letter from them verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the CSD, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation.

CLASS ATTENDANCE AND BEHAVIOR

You are expected to attend each class and to arrive on time. In the event that you arrive late (or leave early) please do so quietly in order to minimise disruption to your fellow students. If you miss a class, you should in the first instance, talk to a fellow student (or member of your study group) who attended the class. Regarding general behaviour, students should conduct themselves with respect and professionalism toward faculty, students, and others present in class. Please bring your name card with you to every class.

CLASS SCHEDULE

Class	Date Section 0A	Topic	Reading *	Hand-in
1	2 Jul (am)	Financial Markets, Instruments and Players	BKMe: 1, 2.3, 2.4, 3.1, 3.7, 4.1, 4.2, 4.3, 4.6	-
2	2 Jul (pm)	Time Value of Money and Net Present Value	RWJe: 4, 5.1, 5.2, 5.3, 8.1, 8.4 BKMe: 5.4	-
3	9 Jul (am)	Risk Aversion and Rational Decision Making	BKMe: 5.1, 5.2, 5.3, 9.1	-
4	9 Jul (pm)	Diversification and Asset Allocation	BKMe: 5.5, 5.6, 6.1, 6.2, 6.3, 6.4	
5	16 Jul (am)	Equilibrium	BKMe: 7.1, 7.3, 7.4	Assign. 1
6	16 Jul (pm)	Equity Valuation	BKMe: 13	-
7	23 Jul (am)	Midterm Exam	-	-
		Arbitrage and Replication	BKMe: 2.5, 9.1, 15.1, 15.2 (part), 16.3 (part)	
8	23 Jul (pm)	Bonds	BKMe: 2.1, 2.2, 10 (ex. 10.6), 11.1, 11.3	
9	30 Jul (am)	The Yield Curve and Interest Rate Parity	BKMe: 10.6, 19.2	Assign. 2
10	30 Jul (pm)	Options	BKMe: 15.1, 15.2, 15.3, 16.1, 16.3	
11	6 Aug (am)	Forwards and Futures	BKMe: 17.1, 17.2, 17.3, 17.4	-
12	6 Aug (pm)	Final Exam	-	-

* BKMe refers to chapters (or parts thereof) in either the 7^{th} or 8^{th} editions of BKMe. Similarly, RWJe refers to chapters (or parts thereof) in either the 5^{th} or 6^{th} editions of RWJe.