Credit Hours: 4
Lectures: This is a 7-week course with two classes (2hr 30 min each) per week
Lecture Schedule: Tuesday/Thursday – 2.40 – 5.20
Instructor: Professor Samreen Malik
E-mail: samreen.malik@nyu.edu
Office hours: Monday/Wednesday2.00-4.00

Teaching Assistant: Saba Najeeb
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REQUIRED TEXT:
(BKM) "Essentials of Investments" by Zvi Bodie, Alex Kane, Alan J. Marcus, Mc-Graw Hill, Global edition, 9E.

(SM) .Solutions Manual to accompany "Essentials of Investments", 8th edition

RWJ Chapters 4 and 5 of .Essentials of Corporate Finance.by Stephen A. Ross, Randolph W. Wester.eld, Bradford D. Jordan

OTHER READINGS:
You re highly encouraged to also use the following resources; *the Economist*, *the Financial Times and the Wall Street Journal;* for additional articles and readings.

RECOMMENDED READINGS:
Textbook:
FMF Foundations of Financial Markets and Institutions by Frank J. Fabozzi, Franco Modigliani, Michael G. Ferri

NOTE ON COURSE MATERIAL:
The course materials will primarily be based on the Text book (relevant chapters).

PREREQUISITES
The prerequisite for this course at NYUAD is *Introduction to Accounting and Statistics for the Social and Behavioral Sciences and Markets*.

COURSE DESCRIPTION
This course is an introduction to financial market structures and trading. In particular this course gives an overview of ideas, methods and intuitions that are employed in financial risk management managing risks. Students will be introduced to modern portfolio theory which provides a detailed presentation of the effects of diversification on portfolio risk, the efficient diversification of investor portfolios, the optimal choice of portfolios that strikes a balance between risk and return and the trade-off between risk and expected return. This course will also allow students to analyze simple cash flow problems and compute present values to evaluate risk and return of various assets and portfolios and evaluate financial instruments. With the theory and tools learnt in this course, students will start to understand the present practices in financial institutions as well as analyze how the advancement of information technology and globalization of the world shapes future financial institutions.

Note: You should think of this course as a stepping stone in the field of finance that will allow you to understand the basics of the financial markets and apply this knowledge in more advanced courses.

ASSESSMENT

The grading will be based on three parts:

Homework exercises	25%
Midterm Exam 1	25%
Midterm Exam 2	25%
Project	25%

Homework exercises:

There will be 5 homework exercises (Three homework will be regular homework while the remaining two will be sample midterms), each counting for 5% of the final grade. The due date for each assignment is provided in the mini schedule section of this document. If you miss a class, you are responsible for finding out about any important announcements in class and changes in assignments. Failure to attend class is NOT an excuse for turning in assignments late. Late assignments will not be accepted.

Exams:

There are two midterm (written) exams, which are scheduled on 17th November, 2017 and 5th December, 2017. Midterm Exams are closed-book and other aids, including any notes, electronic or paper dictionaries, should not be used. Cell phones cannot be used as calculators and must be turned off and kept out of sight during all exams. The mid-term will cover all the material covered prior to the mid-term exam day.

Grading:

Grades	Marks
A	95-100
A-	90-94
B+	85-89
B	80-84
B-	75-79
C+	70-74
C	65-69
C-	60-64
D	50-59
F	Below 50

Late Homework and Exam Absence

Late homework will not be accepted under any circumstance. The home works will be online way in advance and therefore no excuse will be accepted for late home works. You must check the NYU class for any due dates regularly. However, the due dates are also provided in the mini schedule.

There is no make-up examination for the midterm and the final exam. If you cannot make it to the midterms due to clashes with other class times or exams, you should not take this class. In

case you have booked plane tickets for the Fall/Spring break that clashes with the mid-term exam or any other assignment deadline, please do not take this class. Any requests to reschedule the exam (or) late submission of homeworks will not be entertained.

Exception: *In extreme cases* (personal or medical emergencies, in which case the student must provide a written statement signed by a doctor, parent, or university official) that presses you to miss the mid-term exam, written statement must be provided.

Re-grading

Any homework/exam for which there is a re-grade request, it must be done within seven days after I return the exam to you. The request for re-grade must be in writing and attached to the exam when submitting the exam for a re-grade. The request must include a description of what the problem is and why you think the exam should be graded differently.

PARTICIPATION AND ATTENDANCE POLICIES

Participation

Students are responsible for attending all class meetings, participating responsibly in class discussions and completing all class assignments.

Specifically, students should try their best:
  i)   to come to class on time
  ii)   to refrain from packing up belongings before class ends
  iii)   not to make noises that might create a disruption in class (e.g., keep your cell phone in vibration mode or turn it off)
  iv)   to give attention while either instructor or another student is speaking

Code of Conduct

Cheating will be taken very seriously. You are responsible to follow all the relevant policies by the University or Faculty/Department.

Communication

I reply to emails quite frequently and I will be happy to answer questions on the course material by email/appointments/during office hours. Please indicate the course name in the subject line. In case, I feel that email is not the best mode to explain your problem; I will set a separate appointment so that you may come to discuss the related questions. Occasionally, I will post some of the questions received—with my answer—on the course website. Hopefully, this will be an efficient way to disseminate information. Student identifiers will be removed if I post a question (if you do not want your question posted, just say so in your email.)

Electronic Lecture Notes/Slides:

All lecture notes, slides and any data we will use throughout the semester is already posted in your NYU classes. The lecture notes are my own notes which I will follow and is an excellent guideline for you to follow the material and navigate the chapters we are covering in each class.

The outline provided is tentative and subject to change at the **instructor's discretion**.

COURSE OUTLINE
(Subject to changes as we go along and it will be updated with relevant section numbers for each chapter.)

Week	Date	Lecture	Topic	CHP & Lecture	Assignment Due
Week 1	31-Oct	Lecture 1	Investments: Background and Issues	BKM 1-3 (1a)	
			Valuation of Assets	RWJ 4 (1b)	
	2-Nov	Lecture 2	Compounding and Return Measures	RWJ 5 (2a)	
			Risk and Return	BKM 5 (2b)	
Week 2	7-Nov	Lecture 3	Efficient Diversification	BKM 6 (3a & b)	Assignment 1 (5 %)
	9-Nov	Lecture 4	Efficient Diversification	BKM 6 (4a)	
			Efficient Market Hypothesis	BKM 8 (4b)	
Week 3	14-Nov	Lecture 5	CAPM	BKM 7 (5a)	Assignment 2 (5%)
	16-Nov	Lecture 6	CAPM	BKM 7 (5b)	
Week 4	21-Nov	Lecture 7	Debt Securities	BKM 10 (7a & b)	Assignment 3 (5%)
	23-Nov	Lecture 8	**Midterm 1 (25%)**		
Week 5	25-Nov	Lecture 9	Event Study -- Example		
	28-Nov	Lecture 10	Equity Valuation	BKM 11 (8a)	
Week 6	5-Dec	Lecture 11	Option Valuation	BKM 13 (9a)	Assignment 4 (5%)
	7-Dec	Lecture 12	**Midterm 2 (25%)**		Assignment 5 (5%) - OL 6-Dec
Week 7	12-Dec	Lecture 13-14	Presentations	3 Groups	Participation - 5%
	14-Dec		Presentations	3 Groups	Presentation & Project- 5% & 15%

Mini Schedule:

Lecture	Mini Schedule	Chapters
1	(1) Financial Systems (2) Financial Instruments (3) Classification of Financial Assets	**BKM 1**
	(1) Future Value and Compounding (2) Present Value and Discounting (3) PV vs. FV (4) Annuities and Perpetuities (5) Annuity Due	**RWJ 4**
2	(1) EAR (2) APR (3) Loans (a) Pure discount loans (b) Interest loans	**RWJ 5**

	(c) Amortized loans	
	(1) Rate of Return (a) HPR (b) Arithmetic average (c) Geometric average (d) Dollar weighted return (2) Risk and Return Premium (a) Probability distribution (b) Normal distribution (i) Value at risk (ii) Time series return (c) Risk premium and risk aversion (d) Sharpe ratio	**BKM 5**
3	(1) Asset Allocation across risky and risk free portfolio (a) Risky assets (b) Risk free assets (c) Portfolio expected return and risk (2) Capital Allocation Line (CAL)	**BKM 6**
	(1) Diversification and Portfolio Risk (2) Asset Allocation with 2 Risky Assets (a) Covariance and Correlation (b) 3 rules of 2 risky asset problem (c) Risk-return trade-off (d) Mean Variance criterion	**BKM 6**
4	(1) Optimal Risky portfolio (2) Efficient diversification (a) Optimal Portfolio (b) Separation (3) Index Model (a) Graphical illustration (b) Single index security line	**BKM 6 & 8**
5	(1) CAPM (a) Investors and Market Portfolio (b) Risk premium (c) Expected return (d) Security market line (SML) (2) CAPM and Index Model (a) Estimating the index model (b) Predicting betas	**BKM 7**
6	(3) Multifactor Model (a) Fama and French 3 factor model (2) Factor Model and Arbitrage (a) CAPM and APT Sample Midterm Review	**BKM 7**

7	(1) Bond Markets (a) Treasury bonds (b) Corporate bonds (c) Preferred stocks (d) Other domestic issues (e) International Issues (f) New Innovative bonds (2) Bond Pricing (a) Discounted model (b) Bond pricing between coupon dates	**BKM 10**
	(1) Bond Yield (2) Bond pricing over time (3) Zero bonds (4) After Tax (5) Default Risk (6) Credit Default Swaps (CDS) (7) Duration (8) Convexity	**BKM 10**
8	MidTerm Exam 1 (25%)	
9	Event Study	
10	(1) Equity Valuation (a) Intrinsic vs. Market price (b) Dividend discounted model (DDM) (i) Constant growth DDM	**BKM 13**
	(1)Stock prices and investment opportunities (2) Lifecycle and Multi stage growth model (3) PE and growth	**BKM 13**
11	(1) Option Valuation (mini Schedule will follow at a later date)	**BKM 16**
12	Midterm Exam 2 (25%)	

Project Description:

There will be 6 groups in total. Each group will have 5 students. Finance theory suggests that stock prices reflect all available information about the prospects of firms. Given this basic premise, one can study how a particular event changes a firm's prospects by quantifying its impact on the firm's stock prices. Finance scholars developed the 'event study methodology' to perform such an assessment/analysis.

Conceptually, event study analyses difference between the returns that would have been expected if the analysed event would not have taken place (normal returns) and the returns that were caused by the respective event (abnormal returns). The different analytic techniques for estimating abnormal returns differ with respect to the model used for predicting the normal returns around the event date. Below are the examples of events and the focus of firms but you can also select your own choice of event for this project.

Eg. Events and stock market:
- Boston Bombing and the effect on the US stock Market
- Nice Terrorist attack and the effect on the European Stock Market
- Gun shootings in the US and US stock market returns

- Brexit and Catalan Independence vote and European stock markets

You can follow the methdology using following links:

Reading list: http://web.mit.edu/doncram/www/eventstudy.html
Event Study Explanation: https://www.eventstudytools.com/event-study-blueprint
STATA code: http://dss.princeton.edu/online_help/stats_packages/stata/eventstudy.html

<u>Project Grading and Requirements</u>

The idea of the project is to foster group coordination, analyzing and undertaking research based analysis, and producing a coherent project.

(1) Participation in the last two classes: Participation means both attendance as well as taking active role in asking quality questions to the presenter. This component is 5% of your grade.

(2) Presentation: Presentation is expected to be 20 minutes in total with 10 minutes for additional discussion, brain storming and some ideas that one can pursue as additional research question. 20 minute presentation – should involve all members of the group. The presentation grade which is 5% will be an individual grade. For example, if you have 6 members in your group, break the presentation to contain the following 6 pieces – In the event you have 5 member group, you are not expected to do the [vi] listed below:

■ (i) Creative ways to introduce the event making sure that it is completely understood by the audience, when the event took place, where it took place, and what the event was. Please do not assumed that the audience is aware of all the events taking place in the world.

■ (ii) Creative ways to introduce the company or companies that you are looking at. Give us some background of what these companies look like in terms of the product they are selling, what sector they belong to, how their sector is performing, and especially measure which reflect the financial health. You can also choose to give us more information on the company if you like. Please use financial ratios (often discussed in class) to describe the company's health, and make sure you know how to explain what those ratio means and any limitation one must be aware of while making inferences from these ratios.

■ (iii) Using Economic and Finance intuition to tell us how the company is expected to behave in light of the event. Explain in detail why you have that intuition. You can use historical events of similar nature and even use some videos, excerpts etc to delve into the past or some interviews. However, you want to show your creativity on this and follow a more narrative or descriptive way of analyzing the events and expected effects.

■ (iv) Explain how you will scientifically conduct the event study to either reject or accept your intuition/hypothesis. There should be a full detail on how you measured the normal returns and abnormal returns. Show us data sources, statistics and regression outcomes for each of the intermediate and final step. Clear and clean understanding of methodology is what we are looking for.

■ (v) Show us your results. What results did you get? Show graphically or in a creative way what your results are telling us and also rationalize your results. Here it is a good idea to have a good take away message for the audience.

■ (vi) If you have a sixth person in the group, in addition to (i) to (v) you are also expected to criticize your own work and tell us how reliable your results are and what can potentially affect your results.

(3) Project Report: You must contain all the pieces listed for the presentation in a written report documenting your results. Again if you are 5 member group, you are not expected to add the 6th component listed above in your report either. You are also expected to send your group presentation and other supplementary material (code/excel sheets which you have used) in one email (with all 3 documents attached as a zip file). This is 15% of your grade and will be a group grade. The length of the report without figures, tables, appendices should not exceed 6 pages (single spaced) for 6 member group and 5 pages (single spaced) for 5 member group.