

**COLUMBIA UNIVERSITY  
GRADUATE BUSINESS SCHOOL  
EXECUTIVE MBA**

**CAPITAL MARKETS AND INVESTMENTS**

B7306-001; EMBA

SPRING 2015

MY OFFICE: URIS 218F

MY OFFICE PHONE: 212.854.5308

PROF. ROGER MESZNIK

HOME PHONE: 212.663.5493

E-MAIL: rm21@columbia.edu

OFFICE HOURS: On class days before and  
after class, and by appointment

**COURSE OBJECTIVE:**

The aim of this introductory course in *Capital Markets and Investments* is to acquaint students with the design and structure of these markets, the role that they play in allocating capital and shifting risk, the securities traded in these markets, the models we use to analyze the prices and performance of such markets – domestic and international, and the related empirical work. The concepts, models and conclusions are of major import to all decision makers, irrespective of whether or not they specialize in finance. They also have implications for managing your personal wealth and endowments, however skimpy or generous.

The main areas of concern that we cover (in no particular order) are: Valuing stocks and valuing bonds; reasons for the use of non-standard instruments and hybrids; valuing such hybrids; the assumptions that underlie these valuation processes; the evidence for and against market efficiency; the participants, design, architecture, and regulation of these markets; banks, non-bank banks, and other financial institutions; the role and performance of mutual funds and investment companies; the impact of taxes and possible tax arbitrage; international investments and markets and their role and impact; market indices and performance indices; the role and effects of monetary and fiscal policy; options, futures, and other derivatives; swaps, hedge funds, and private equity; performance assessment and value at risk; the financial crisis of 2007-2009, why, how and what did we learn or not learn from it.

The course presents a mixture of conceptual structures, analytic models, case analyses and discussions, and institutional frameworks. The learning mode is a combination of lectures, Socratic discussions, cases and case presentations, and reasoned in-class arguments. Emphasis is put upon a working and skillful understanding of the structures and models discussed in class and the cases as assigned. Advance preparation of the assigned class material is imperative for a thorough understanding of the topics. Advance reading of the material also makes the class discussions more interesting and fruitful.

Every student is expected to be able to contribute to the class discussions and case analyses as outlined below. It is crucial that students develop a good dexterity in dealing with the concepts, methodologies, modes of analysis, and calculations. To enable the students to acquire these skills, every student is expected to be able to use a spreadsheet program. Any one of the software packages available in the market can do what we need, but I will be using Excel, and demonstrate the issues on Excel. **Please bring your laptops to class with you at each and every meeting.**

**FOR YOUR CONSIDERATION:**

You have my permission to audio-tape the class if it helps you studying and reviewing the material. However, I expect you to tell me explicitly and individually if you intend to avail yourself of this option.

Taping is particularly recommended if you have to miss a class, if the material is not at all familiar to you, or if you sense some problem with your proficiency in English. When and if you are taping my class, you agree in advance that the recording may only be used by you. It may not be shared, and it may not be posted, disseminated, publicized, duplicated, reproduced, or used outside of class, personally and or commercially. This applies to whole lectures as well as parts thereof. Breach of these “terms of use” will be treated as a violation. The school does not video-tape classes. Some exceptions may be possible if it is a religious holiday, a personal hardship, and if the request is submitted in advance. Please adjust your schedules accordingly. I will distribute materials to you via any of the following channels. My use of any one of these channels depends on what material it is. The use of any of these distribution channels does not connote varying importance. You are responsible for accessing all materials.

- Electronically to your email address shown on the registrar’s list, via SSOL, or CANVAS, or email.
- By posting it to the class website
- By handing out paper copies

#### **CONTACT INFORMATION FOR ME AND MY TA:**

I listed my contact info in the office and at home on the masthead on the first page. If you need to reach me, please use my email address. We can then arrange for phone conversations or meetings as needed. Given your work commitments, I assume that this open-ended arrangement is most suitable for your varying needs. I expect that you will need to speak to me as you work on the cases. I will be happy to spend as much time as needed with you in group or personally to help you see your way through the material. The same applies to my TA.

My TA’s name is: **Pablo SLUTZKY**. His email address is: **pslutzky17@gsb.columbia.edu**

#### **REVIEW SESSIONS:**

I will hold review sessions, and they will be listed in the class schedule. The dates will be set by the office to minimize conflicts. The content of the review sessions which will be held by me or by my TA will be set and adjusted after consultations with the class.

**DELIVERABLES:** The midterm and final exams are individual projects. All other deliverables are group projects unless otherwise stated and announced in advance. We shall use the existing groups, unless some changes seem indicated. Details about the cases and the other assignments (content, mechanics, and presentations.) will be discussed in class. See also the later pages of this outline.

Both exams are open-books, open-notes. You will need a laptop/notebook. Additional details about the assignments (content, mechanics, and presentations) will be discussed in class.

#### **COURSE MATERIALS:**

The required texts are:

1. Bodie, Kane & Marcus: *Investments*; 10<sup>th</sup> edition; McGraw Hill 2014 [BKM]
2. *Case Packet* as prepared and distributed to you. [CP]
3. Additional Electronic Notes as distributed electronically or in paper copies, as needed. [EN]

Items 1 and 2 will be in your hands before the course starts. Item 3 will be distributed as needed. The text book is very thorough and you will find it to be a good reference work later as well. Working with it is very helpful, especially if you have never done such work before. I will assign some problems from the book as we progress. Diligent class and case work is imperative. My handouts and class notes are no substitute for class attendance and participation. They are meant to be used as learning aid, and to help you jog your memories.

### **COURSE GRADE:**

The course grade will be determined as follows:

Two written Case Reports	20% (Presentation + best of remainder)
Problem set(s) (?)	10%
Midterm exam	25%
Final Exam:	40%
<u>Class participation</u>	<u>5%</u>
Total:	100%

Please keep in mind that **I am bound by the school rules about the course grade distribution.**

The case reports and problem set(s) are group projects. The midterm and final exams are individual projects. No help is allowed, expected, or is supposed to be used or proffered. A contravention of these rules is a serious academic violation. The exams consist of all materials covered in class, and the final is cumulative.

### **COURSE CONDUCT & ISSUES:**

- I expect to start every class on time and end it on time. Please help me by being punctual. Tardiness is disruptive, and it affects us all adversely.
- If, for unavoidable reasons, you are late, please just come in and sit as fast and unobtrusively as possible in the proximity of the door. Do not compound the problem of missed material by waiting outside for a “good moment” or a “break” to join the class. Also, do not interrupt the flow of the class by asking your neighbor what we did so far, or about the state of the world and its news, or “What’s up.” You will need to find time for it later.
- If you know that you will be absent, or late, or believe that you will have to leave early, please make sure to inform me in advance by e-mail. Excessive absence may be deemed detrimental to your grade, and this will happen at my sole discretion. I decide what is excessive and what is detrimental.
- Please bring and display your name-plaque with you to each and every class.
- Talking to your neighbor is disruptive. If you have any questions, I rather you address them to me, even if they seem simple, or repetitive, or not in synch with the current class discussion. This is more likely to help you, and less likely to be disruptive.
- Checking your email, surfing the web, messaging, using the cell phone, checking who called by responding to a vibrating signal, and all other such activities are rude, inconsiderate, and unacceptable. Please do not even be tempted to engage in them. I do not check my email while you are talking to me, so please reciprocate in kind.
- Please recall that you are bound by the rules and your pledge about academic conduct and the Honor Code with respect to all work submitted and to behavior in class.
- If you miss a class, or arrive late, it is your responsibility to find out if anything was announced, distributed or handed out. It is best if you do it with your colleagues or group members.
- Please note that class-notes from a colleague may not suffice to bring you up-to-date about what was done in a class that you missed. Reason: we rely extensively on open-ended discussions, in class questions, and Socratic arguments.
- If your work seems to have endowed you with profound knowledge about the material we are covering in class, talk to me. We can find better ways to use your time, knowledge, and skills. Please do not simply skip class, or sit there bored. We can work around that. We can find very useful ways to enhance your skills while using your knowledge productively.

**SUGGESTION:** The readings are potentially confusing to people who are new to this material, and the case write-ups are initially confounding. Not all parts are easy. However, I rather you try to do as much as possible when preparing for class, even if some details remain opaque and seem to escape you at first blush. Learning how to decipher the text, and learning the mode of thinking and methodology can be best acquired by trying, even if not always successfully. I will certainly answer any questions you may have, and I will also pick and discuss urgent and central issues in our classes.

**NOTE:** If there are any problems with the course, the material, your performance, your attendance your assignments, or any other issue, please speak to me as soon as possible. Early intervention, help, and intervention are much more efficacious.

**ABOUT THE PROJECTS, AND OTHER DELIVERABLES:**

- The deliverables (except the exams) are group projects unless otherwise stated and announced.
- Each group should consist of about 4-5 students. Exceptions must be cleared with me.
- Each group needs submit only one report per case or assignment. All members must be listed on the cover page in alphabetical order of the last name, and the last name must be in bold letters.
- If a student has a foreign first name as well as a name by which said student prefers to be addressed, both names must be shown next to each other.
- The cover page must show the date, the course name and number, as well as the current term. It also must show the case or assignment name.
- All write-ups must be submitted in paper form.
- The write-up needs no special paper, or binding. Stapling in one corner is sufficient, and as a matter of fact, preferred.
- The report must be paginated.
- Even if you are asked to present your work in class, a copy of the presentation for me is necessary, and handouts for the class will be greatly appreciated.
- All write-ups are due in writing in class on the date announced.
- Make extensive use of appendices and attachments. It makes it easier to work as a group, easier to read, and it allows for easy corrections if called for.
- There is no max or min number of pages. Don't rehash the questions or case, but don't stint on explanations and analyses.
- After a possible presentation, and allowing for possible rewrites, the cases may be posted by the group or by me on the course's CANVAS site, in the folder provided for.

**Each group must submit the following 6 deliverables:**

**CAVEAT:**

**I reserve the right to alter the sequence of topics, the assignments, the requirements, the cases, the course coverage, the deadlines and the grading system if I deem it necessary and/or appropriate. Should such changes be made, they will be announced in class as needed, as early as possible, and in advance of their becoming binding and effective.**

COURSE OUTLINE		
<p style="text-align: center;"><b>The cases shown below will be chosen from the case packet distributed to you. The assignments shown below will be chosen from the BKM book or will be similar to them</b></p>		
DATE	TOPICS	ASSIGNMENTS; DELIVERABLES
Pre-Term Session 0	Read Ch 1 to Ch 3 incl., pp 1 - 87 of BKM Keep reading even if some items are not clear Prepare questions for class, if you have any These parts are mostly descriptive.	When finished, you may want to use the McGH quizz to test your recollection of the material. You may also try your hand at some end-of-chapter problems, worked on in group, though you need not hand in any
Sat Jan 10 Residence 3:45 - 6:45 Session 1	Introduction, logistics, and mechanics of the course. Bonds: Characteristics, conventions and pricing Yields, prices, and the relation between them Accrued interests and price conventions The effect of taxes on YTM, pre-tax and after-	Read BKM Ch 14 If your Excel skills are wobbly, you may want to do some end-of-chapter problems, but you need not hand in any. Do NOT use the built-in Excel functions, set it up from scratch.
Sat Jan 24 12:30 - 3:30 Session 2	Treasury's, tax-exempt bonds, insured bonds, TIPS, zeros, PIKs, commodity-linked bonds, CAT bonds, MBSs. Junk bonds, default risk, seniority, pecking order, CDS. Duration. Convexity. Bond p'lios	Read BKM Chs 15 and 16 <b>Hand in Assignment 1</b> on bonds at the start of class. The assignment includes some requests for calculations as well as some analysis of historic returns on bond p'lios and the difference between nominal returns and real returns
Sat Jan 31 3:45 - 6:45 Session 3	The term-structure of interest rates. Liquidity premium, expectations hypothesis, and the seeming conflict. Use of logarithmic time scales. Spot rates, forward rates and future rates.	Read BKM Ch 4 and BKM Ch 5 up to p. 129 Be ready to debrief Assignment 1 in class Confirm your ability to graph in Excel Confirm your understanding of standard deviations
Sat Feb 07 12:30 - 3:30 Session 4	Risk and return. The historic record, and the macro determinants. Are returns normally distributed? Does it matter? Are "black swans" an imaginary construct?	Read BKM Balance of Ch 5 and Ch 6. <b>Presentation Case 1</b> , in class
Sat Feb 14 8:30 - 11:30 Session 5	Portfolio construction. Systematic and unsystematic risk. Naïve diversification and managed p'lios. The CAPM, its parameters, their derivation, and its applicability. "Is beta dead?"	Read BKM Ch 7, Ch 9, and Ch 8 up to p. 270. <b>Hand in Assignment 2</b>

Sat Feb 21 3:45 - 6:45 Session 6	Market Efficiency What does it mean? What does it imply? What does it require by way of structure and by way of assumptions? Summary and exercises.	Read rest of Ch 8. Read BKM Ch 11 <b>Presentation Case 2</b> in class.
Sat Feb 28 12:30 - 3:30 Session 7	MIDTERM EXAM The exam may or may not take up the whole class time.	Fully charged laptop battery and sharp pencil
Sat Mar 7 12:30 - 3:30 Session 8	Debrief Midterm Exam. The international markets. Role, structure, ties to US markets, correlations large and small, are they different,	BKM Ch 10 up to p. 337 BKM Ch 17
Sat Mar 14 8:30 - 11:30 Session 9	The DDM. Parameters, applicability and the required steady-state. The use of comparables, correspondence and deviation from the DCF models.	BKM Ch 18 BKM Ch 12 <b>Hand in Assignment 3</b>
Sat Mar 21	No Classes; Spring break	
Sat Mar 28 8:30 -- 11:30 Session 10	Options Basic design, binary options, Black-Scholes equation, its parameters and its use. Identifying options when they are not evidently visible. Hedge funds, origin, name, raison d'être, performance. Are they needed or are they a short-term exploitation of opportune	BKM Ch 20 up to p. 706, skim the rest. BKM Ch 21 Ch 26 up to p. 932 <b>Presentation Case 3</b> , in class
Sat Apr 4	No classes, Easter Weekend	
Sat Apr 11 3:45 - 6:45 Session 11	Futures contracts on commodities and rates, swaps, CDOs, and their role in hedging, seeking returns, complying with regulations, and altering the risk profile.	BKM Ch 22, BKM Ch 23 BKM Ch 13 <b>Presentation Case 4</b> , in class
Sat Apr 18 1:00 - 4:00 Session 12	Performance assessment for p'lios, investments. funds, and corporations Summary and Conclusions Tying up loose ends	BKM Ch 24 selected parts, BKM Ch 27 selected parts, as assigned <b>Hand in Assignment 4</b>
Sat Apr 25 12:30 - 3:30 FINAL EXAM	Final Exam: Open books open notes. Laptop required. Individual project.	GOOD LUCK.