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B8306 – Capital Markets and Investments Fall 2022 Syllabus

Class Times, Review Sessions, Midterm and End-of-Term Exams:

	Section				
	001	002	003		
Class Times [†]	TuTh 8:30-10a	TuTh 10:20-11:50a	TuTh 2-3:30p		
Classroom	Geffen 440 (all sections)				
Optional Review	Friday 8:30–10a (room TBD)				
$Sessions^{\ddagger}$	and Friday 3:30–5p (via Zoom) [†]				
Midterm Exam	time/rooms TBD				
End-of-Term Exam	Tuesday Dec 13, 3:00pm, Rooms TBD				

I. Course Description:

This is a first course in capital markets and investments. The course has three principal goals:

- 1. To introduce the principles of investment and asset management. The majority of the class is concerned with the valuation of financial securities. The concepts covered are heavily used in personal and professional portfolio management, risk management, and corporate finance applications.
- 2. To introduce a set of tools and concepts that are key to understanding modern financial markets:
 - (a) arbitrage; (b) the term structure of interest rates; (c) portfolio theory, risk-control and diversification; (d) equilibrium asset pricing models and the CAPM;
 - (e) efficient and inefficient markets; (f) performance evaluation; (g) pricing and hedging basic derivative securities (futures and options).
- 3. To provide sufficient background knowledge both for students seeking an overview of capital markets, and for those intending to pursue more advanced finance courses.

II. Course Materials:

<u>Textbook:</u> The *optional* textbook for the course is *Investments* by Bodie, Kane and Marcus (McGraw-Hill/Irwin), 10th edition or later (BKM).

Course Notes: Notes will be distributed in each class, and will also be available on Canvas.

<u>ADDITIONAL READINGS:</u> Relevant articles from industry, academia, and the popular press will be provided throughout the course.

[†]I will conduct the morning review session in person at 8:30am, and the course TA will conduct the afternoon review session on Zoom. Professor Johannes is teaching section 4 of this course, with close-to-identical coverage—I will post details on his and his TA's review sessions on Canvas; they will be good substitutes for our review sessions. Note that on certain Fridays, only one review session will be held. Finally, multiple additional review sessions will be held prior to both the midterm and the end-of-term exams; details will be provided on *Canvas*.

III. Course Administration:

The course grade will be based on cases, problem sets, class participation and a midterm and final examination. The weights in your course grade are:

Cases	15%
Problem Sets	25%
Midterm Exam	20%
End of Term Exam	25%
Participation & Quizzes	15%

Cases: There will be three graded case assignments (Case 0 will not be submitted or graded). Cases should be done in **groups of 3 members**. Students are responsible for organizing these groups, and should add all group members to one of the "Assignment Groups" available on Canvas. Each case will be distributed one week in advance and must be submitted by 8am on the due date. Cases and solutions will be available on Canvas. Submitted cases will be graded on a five point scale. The three case grades are weighted equally in your course grades. Because case solutions are discussed in class, late cases cannot be accepted.

<u>Problem Sets</u>: There will be five graded problem sets. (Problem Set 0 is not graded). Your worst problem set grade is thrown out – that is, only the highest 4 grades count. Problem sets should be done with the same 3-member group as the cases. Students are responsible for organizing these groups. Each assignment will be distributed at least one week in advance and is due by 5pm on the due date. Problem Sets and solutions will be available on Canvas. Submitted problem sets will be graded on a 0-5 scale. Although grades will be assigned to five assignments, only your highest four grades will count towards your course grade. **Late problem sets cannot be accepted.**

<u>CLASS PARTICIPATION</u>: You will gain points by regularly attending class, being prepared, answering questions, asking questions, and generally by providing positive externalities to the other members of the class. You lose points by not coming to class, not participating in the class, not being prepared, and particularly by distracting or disruptive behavior. **Please note that laptops, phones,** *etc.* **should be turned off.**

Weekly Canvas Quizzes: – Each week, students must individually take a short quiz on Canvas between Thursday at 6pm and the following Tuesday at 8am. Each quiz consists of no more than three review questions based on the week's lectures and readings. Quizzes must be taken individually. Any books, references, computing or calculating equipment may be used. Quiz scores count towards the participation component of your grade. Solutions will be posted shortly after the quizzes are due.

MIDTERM EXAMINATION: The mid-term exam will be held during the exam week (time/room TBD). Any books, references, computing or calculating equipment may be used.

<u>END-OF-TERM EXAM</u>: The end-of-term exam will be on Thursday, December 13 at 3 pm. The exam, like the mid-term, is open book: any books, references, computing or calculating equipment may be used.

Review Sessions and Office Hours:

There will generally be two review sessions each Friday – one in the morning and one in the afternoon. I will generally conduct the AM session, and the course teaching assistants will run the afternoon session. We run two sessions so as to provide you with some extra flexibility and choice. These sessions are completely optional, and no new material will be covered. In addition to the weekly review sessions, we will conduct multiple review sessions prior to the midterm and final exams – see *Canvas for rooms and times*.

I prepare nothing new for the review sessions. I am happy to work through the problems in the problem sets, other problems, to answer questions, or to explain the material in different ways. Please come prepared with questions.

I have no scheduled office hours; in the past I have found that most students get their questions answered at the weekly review sessions. However, if you still don't understand something after attending the review session you should make an appointment to see either the course teaching assistant, or to see me.

Course Teaching Assistant:

(To Be Announced)

Tips for Studying Finance:

- 1. Work Problems: In my experience, working problems is an integral part of learning finance. While intuition is very important, the language of finance is mathematics, and you will need to learn how to apply this language to make financial decisions. The only way to learn how to do this is by working problems. Try to work through the assigned problem sets on your own before getting together with your homework group. Additionally, there are problems at end of each chapter in the textbook (BKM), and solutions to these problems in the Student Solutions Manual for BKM. Finally, most of the weekly review sessions will probably be devoted to working through problems.
- 2. Ask Questions: Ask questions in class. If you have a question about something, you can be assured that someone else has a similar question. Ask questions at the review sessions. Ask lots of questions in your problem set/case groups.
- 3. <u>Don't Fall Behind</u>: Before each class, be sure to review the material from the previous sessions. Things move quickly in this class, and each class builds on the previous one. Preparing for the weekly quizzes is a good way to review material.

IV. Course Outline (Tentative)

This is a **tentative** schedule of topics that will be covered. Class dates and assignment are **preliminary** and subject to change.

Lecture Notes will be available on Canvas prior to each class.

				${\rm BKM}^{\ddagger}$		Assign
Cls	Date	Sec. [†]	TOPIC	Chptrs	Assign	DueDate*
1	6-Sep	Intro	Overview; Discounting, Arbitrage, & Shorting	1, 2	Case 0	13-Sep
2	8-Sep	Intro	Shorting, Leverage, and No-arbitrage	2, 3	PS 0	20-Sep
3	13-Sep	FI	The Investments Ecosystem	14		
4	15-Sep	FI	Pricing STRIPS and Coupon Bonds	15	PS 1	27-Sep
5	20-Sep	FI	Term Structure of Interest Rates	16		
6	22-Sep	FI	Interest Rate Risk (Duration)	16	Case 1	4-Oct
7	27-Sep	FI	Risk Management (Immunization)	16	PS 2	11-Oct
8	29-Sep	FI	The Fed, Monetary Policy, and Rates	5, 18		
9	4-Oct	EQ	Corporate Debt Valuation	6	PS 3	13-Oct
10	6-Oct	EQ	DDMs and the Gordon Growth Model	7		
11	11-Oct	EQ	Diversification	8, 9		
12	13-Oct	EQ	The Efficient Frontier	8, 9		
	TBD		MIDTERM EXAMINATION			
13	25-Oct	EQ	The CAPM – Theory	9, 11		
14	27-Oct	EQ	The CAPM – Applications	10, 13	PS4	10-Nov
15	1-Nov	PE	Equity Strategies	4, 24		
16	3-Nov	PE	Factor Models	12	Case 3	17-Nov
17	10-Nov	MV	Managed Investment Vehicles	26, 27		
18	15-Nov	MV	Taxes and Tax Strategies	12		
19	17-Nov	MV	Fund Performance Evaluation	20	PS5	29-Nov
20	22-Nov		Speaker Brief			
21	29-Nov		Speaker Brief & Debrief			
22	1-Dec		Speaker Brief & Debrief			
23	6-Dec		Speaker Brief & Debrief			
24	8-Dec		Course Summary			
	13-Dec		End-of-Term Exam – 3 pm.			

[†]The course sections are: Introduction, Fixed Income (FI), Equities (EQ), Performance Evaluation (PE), Behavioral Finance (BeFi), and Derivative Securities.

[‡]BKM refers to the textbook by Bodie, Kane and Marcus. You should at least skim the relevant chapters prior to the lecture.

^{*}Subject to change – check Canvas. Case assignments are generally due by 9am on the due date, and problem set assignments are due by 5 pm on the due date.