### **CAPITAL MARKETS**

# FNCE 238/738

### **Professor Krista Schwarz**

Spring 2020

E-mail: kschwarz@wharton.upenn.edu Office: SH-DH 2433

Phone: **215-898-6087** Office Hours: **Tuesdays 3:00 – 4:30 pm** 

Class Hours (unless otherwise noted on Canvas):

Tuesdays & Thursdays (3 sections)

Class Location: JMHH 255

# **Teaching Assistants**

The course TAs are available to help you with your questions about the course material, structure and grading, in office hours and by e-mail (they have all taken the course and excelled in it):

❖ MAX Norleans mnorl@wharton.upenn.edu attends Section 238-01 10:30 am − 11:50 am

❖ MAX Arias <u>maxarias@wharton.upenn.edu</u> attends Section 238-02 12:00 pm − 1:50 pm

❖ AHALYA Rajagopalan ahalya@wharton.upenn.edu attends Section 738-01 1:30 pm − 2:50 pm

❖ BRANDON Li brali@wharton.upenn.edu grading

TA Office Hours will be posted on Canvas

# **Course Objectives**

Traditional economic theory gives little attention to the role of frictions, which can affect the actions of market participants and/or features of market instruments. The objective of this course is to introduce you to the broad framework of capital markets, with historical context and case studies of seminal market events in order to understand today's market structure and conventions. In particular, we will look at different asset classes from the perspective of the issuer and the investor, and we will see how market innovation and policy affects market dynamics.

## **Application to your post-Wharton career**

- Tools to evaluate future market innovations (profit opportunities & associated risks), given your
  understanding of problems that capital market participants are seeking to solve, the design, issuance
  and pricing structure of financial instruments, and potential arbitrage strategies that can keep their
  prices aligned.
- **Understanding** of the potential effect of policy (the drivers of change in market structure) on the functioning and nature of capital markets, the mechanisms that facilitate their trading and issuance, and the motivations of issuers and investors across different asset classes.
- *Perspective* to discuss economic and financial stability issues (interview/cocktail conversation!), drawing from formative market events that illustrate financing innovations and associated risks.

# Course topics include the following

(specific topics, ordering, and pace are determined during the semester)\*
\*SEE CANVAS course site for COURSE SCHEDULE details.

### (1) MONEY & BANKS

- > Financial Intermediation
- > Pro-cylical effects of bank lending, and macroprudential regulation (Example: 1933)
- Panics and early policy tools to dampen cyclical effects (Example: Panic of 1907)
- Eurodollars, broad money expansion, LIBOR and the future of benchmark rates

### (2) DEBT, EQUITY & LEVERAGE

- Debt vs. Equity
- > Auction mechanism, market manipulation (Example: Salomon)
- > Repo and collateral value of debt (Example: Bear & MF Global)
- Regulatory arbitrage (Example: Lehman's Repo 105)

#### (3) RUN RISK & ASSET-LIABILITY MISMATCH

- Run psychology (Example: Bailey Building & Loan)
- **Banks natural maturity mismatch (**Diamond Dybvig model of bank runs)
- Money Market Mutual Funds, NAV, systemic risk, and "Breaking the Buck"

#### (4) YIELD CURVE & OMOs

- OMOs and the Federal Reserve's portfolio
- > QE, interest on reserves, and monetary policy transmission (Example: Yellen & Great Recession)
- > Secondary Treasury securities market
- > Yield curve interpretation, expectations hypothesis and term premia (Example: Growth Forecast)

#### (5) LONG/SHORT & IR SWAPS

- Long/short positions and arbitrage
- > IR swaps and relative value strategy (Example LTCM)

#### (6) SECURITIZATION & CDS

- Risk premia, risk aversion and risk-neutral pricing
- > CDS and default risk (Example: AIG)
- > Securitization; pooling, tranching, correlation and systemic risk (Example: Magnetar)
- **Regulation of OTC Derivatives** (Example: Brooksley)

### **CASES**

1.	The U.S. Banking Panic of 1933 & Federal Deposit Insurance	HBS	9-799-077
2.	Barclays and the LIBOR: Anatomy of a Scandal	Stanford	ETH-03
3.	Blackrock Money Market Management in Sept'08 (A & B)	HBS	9-209-101, 139
4.	Salomon and the Treasury Securities Auction	HBS	9-292-114
5.	The Tip of the Iceberg: JPMC and Bear Stearns (A, B1, B2)	HBS	9-309-001, 070, 091
6.	Lehman Brothers and Repo 105	HBS	9-112-050
7.	MF Global: Where's the Money?	HBS	9-312-106
8.	Janet Yellen and the Bernanke Fed	HBS	9-714-030
9.	QE in the Great Recession	Kellogg	KEL782
10.	The Yield Curve and Growth Forecast	Darden	UV5689
11.	Long-Term Capital Management, L.P. (A, B, C)	HBS	9-200-007, 08, 09
12.	A Tale of Two Hedge Funds: Magnetar and Peloton	Kellogg	KEL402
13.	AIG- Blame for the Bailout	Stanford	A-203
14.	Lessons Learned? Brooksley Born & OTC Derivatives (A and B)	HBS	9-311-044,-070

### **Course Structure and Materials**

The Course Material is all available via Canvas.

It is organized into **6 MODULES** on Canvas, where material (e.g. slides) will be posted as we cover it in class. Each module **concludes with a QUIZ**.

#### **EACH** Module will contain:

#### 1) SLIDES

Posted to Canvas the *night prior* to each class session, *except* for case-related slides (which may be posted *after* the case is discussed in class). Introduces concepts.

## 2) CASE HOMEWORK

Posted to Canvas a *few days prior to the due date*. Short online questions to check that you have read the case. Cases are assigned most weeks, and give real-life context to the course concepts.

### 3) SUPPLEMENTARY READING

Updated throughout the semester as we progress through the material. Not required reading, but provided as background reference to the class discussion and slides.

### 4) QUIZ

Occur roughly *every other week*. Dates are posted on Canvas. Taken in-class via Canvas on your laptop or tablet. Periodic review of the material helps to identify themes and relationships.

### **SOME** Modules will also contain:

#### 5) SIMULATIONS

Posted to Canvas *after discussed in class*. Spreadsheet examples/simulations allow you to explore the dynamics of concepts discussed in class.

### **6) GUEST SPEAKER SESSION** (only in some modules)

Typically scheduled on *Tuesday or Thursday, 4:30 – 5:50 pm* (so that all sections can attend). But, may be scheduled at another time based on speakers' availability. If session occurs on a regular class day (T/Th), then the *regularly-scheduled class will not take place*. Speakers share unique perspective and insight on course topics.

### Attendance will be taken.

NOTE: If you have another class scheduled at the same time as the speaker session, email the course conflict details to your section TA and your attendance will be excused. **Session Recordings** will be posted to Canvas (conditional on the speakers' permission).

# **Grading**

Your grade for the course will be comprised of **3 components** as follows:

(1) Quizzes (best 5 out of 6)	65%
(2) Case Homework Questions (drop lowest score)	25%
(3) Class Participation	10%

### 1. Quizzes

- There will be **no make-up quizzes**: your lowest score will be dropped.
- > There are 6 quizzes. Dates will be posted on Canvas.
- There is no final exam (or quiz) in the regularly scheduled final exam period.

# What will the quiz cover?

- Any material that we cover in class may appear on the quiz, including case discussions.
- Quiz questions will be drawn from the material covered since the previous quiz.

### What is the best way to prepare?

- Attend class, take notes (even though you have the slides), and then review the material
  we covered in class.
- If you feel a bit lost with the material, it may be helpful to review the **background readings** and links posted on Canvas. While quiz questions are not directly drawn from background readings, these may provide helpful context.
- Many students find it helpful to discuss the material with classmates.
- If you have questions on the material, ask the TAs in **office hours** or by e-mail, or schedule an appointment to discuss the material with me.

### Can I use notes during the quiz?

- Quizzes are closed-book and closed-note. Having a quiz almost every other week means that no single quiz covers an overwhelming amount of material. Staying on top of the material with periodic review also makes it easier to build on topics.
- You may use a calculator during a quiz, but no phone.
- Having scratch paper and a pen/pencil on hand may also be helpful.

### What if I miss a quiz?

- There are no make-up quizzes.
- I will drop your lowest quiz score. This provides for unexpected emergencies, recruiting conflicts, or pre-arranged travel.

The *only* nature of grade appeal that will be considered is one submitted to me, in writing, within one week after the grade in question is received, describing the nature of the appeal. A *re-grade may raise or lower your score*.

# What if I cheat?

Please do not. The risk-adjusted payoff is very negative.

#### How could I be caught (cheating)?

- TAs are monitoring the room during the quiz (e.g. watching for notes, phones).
- While you are logged onto Canvas, your computer activity is tracked very precisely.

# 2. Case HW Questions

- There will be **no make-up Case HWs**: your lowest score will be dropped.
- Case HWs are set up as brief on-line Canvas quizzes with 3 5 questions (typically multiple choice or T/F), made available a few days prior to the due date.
  - To accurately respond to HW questions, you should have a grasp of the course of events in the case and pertinent facts. The aim is to ensure that you have read the case; questions do not presume full analytical understanding of the material.
- > All HW assignments are due on Canvas at 9am.

## How long should it take to complete the Case HWs?

- Some case readings are very short and will only take 10-15 minutes to read. Some cases are considerably longer, and may take an hour or more to digest the material. For longer cases, I may assign only a subset of the pages as required reading.
- Read the case *prior* to starting the assignment! Canvas will close the assignment 10 minutes after you begin. Once you have read the case, 10 minutes is enough time to respond to the questions, and reference the case material to check details if needed.
- I will assign some case readings without a set of questions. Even in the absence of HW questions, you will still be responsible for all material discussed in class.

# What if I have technical difficulties; connection disrupted, Canvas malfunction, etc.?

- Contact the Canvas Helpdesk: <u>courseware@wharton.upenn.edu</u>.
- These folks can diagnose the problem with their detailed log of each students' Canvas activity, and can then provide evidence of exceptional events to the Professor.

## What happens if I accidentally miss the due date/time?

- Canvas will not accept late submissions. A late or missing HW will result in a zero grade.
- I will drop your lowest HW score. This provides for any unexpected events.
- There will be no make-up HWs.

### 3. Participation.

Class Participation scores are influenced by the following 3 factors:

#### Attendance

- You have to attend class in order to participate.
- You are expected to attend & engage in speaker sessions (unless there is a course conflict).
- Office visits are welcome, but these do not affect/improve your participation score.

# Preparation/Engagement

- Prepare for class and support productive class discussion (thoughtful comments).
- Do not ask the professor or TAs questions that are answered in the syllabus or Canvas.

#### Demeanor

- No phone, tablet or laptop use in class (except laptops/tablets during quizzes).
- Sit in same seat throughout the semester.
- Always display name tents.
- In-class attentiveness and appropriate decorum.