USCMarsha	11 <u>Trading and F</u>	Exchanges FBE 554	Course 15425R	
School of Business		Syllabus – Spring 2019 – MW 9:30 a.m. – 3 units		
	Professor: Office:	Larry Harris HOH 806		
	Office phone: Cell phone: Home phone:	(323) 244-1154		
	E-mail:	LHarris@USC.edu		
Class lectures				
Mon/Wed	9:30 – 10:50 a.m. Ro	oom: JKP 102		
Friday	February 1 and 8, Apri	1 12, Room: TBA		
Office hours				
Mondays	4:00 – 5:00 p.m.			
Fridays	1:30 – 2:30 p.m.			
Or by appointment				

Introduction and Course Objectives

"Trading and Exchanges" will introduce you to the theory and practice of securities and contract trading at exchanges, in dealer networks, and among brokers. We will examine

- why and how people trade,
- who profits from investing and speculating, and when,
- the principles of proprietary trading and high-frequency trading,
- why market institutions are organized as they are,
- how markets are changing in response to innovations in information technologies,
- the origins of liquidity, volatility, price efficiency, and trading profits, and
- the role of public policy in the markets.

We will address these issues by studying why and how institutions, dealers, and individuals trade. Understanding trader behavior and how market structure affects behavior is the primary course objective.

Target Audience

This course is for anyone who wants to understand how markets work, how people trade, and when active investment management works and fails. The reading assignments and the class lectures are appropriate for students who have no market experience.

Experienced traders also will value this course. The economic perspectives that they learn in this course can greatly improve their performance. But students with substantial market experience have little advantage over other students other than initial familiarity with the jargon and institutions.

This course also will benefit students who want to understand the determinants of investment performance. We will spend much time discussing why some people make money while others lose money. These lessons apply to businesses in all competitive industries.

Learning Objectives

The objectives of this course are to develop your ability to understand, participate in, and manage trading and investment processes within various market structures. This course will help you develop the following knowledge and skills:

- Global Objective
 - Understand trading terms, concepts, principles, and theories.
- Detailed Objectives
 - Understand how
 - markets operate,
 - traders behave,
 - market structure affects trader behavior, and
 - traders and trading companies lobby policy-makers on market design issues.
 - Be able to
 - construct optimal trading strategies to solve various problems,
 - evaluate and motivate brokers,
 - recognize various trading styles and determine when they will be profitable,
 - Predict who will profit from trading and who will lose,
 - Predict when and which markets will
 - be liquid and
 - have informative prices.
 - Identify trading risks and manage them.

A complete and detailed list of the learning outcome statements for this course appears on Blackboard.

Required Materials

- Larry Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (New York, Oxford University Press, 2003, ISBN 0195144708). An errata sheet is posted on Blackboard.
- Larry Harris, *Trading and Electronic Markets: What Investment Professionals Need to Know* (Charlottesville, The CFA Institute Research Foundation, 2015, ISBN 978-1-934667-91-0). A free PDF download is available at http://www.cfapubs.org/toc/rf/2015/2015/4. The book is also available for free on Amazon Kindle.
- CFA Institute, *Standards of Practice Handbook*, Eleventh edition (CFA Institute 2014, ISBN 978-0-938367-85-7), available for free at www.cfapubs.org/doi/pdf/10.2469/ccb.v2014.n4.1 and also available on Amazon Kindle for \$0.99.

This handbook provides an excellent introduction to the ethical issues that arise in trading and investment management.

• Daily access to the *Wall Street Journal*.

Supplemental Materials

- John Downes and Jordan Elliot Goodman, editors, *Dictionary of Finance and Investment Terms*, 10th Edition (New York: Barron's Educational Series, 2018, ISBN 978-1438010441) This inexpensive dictionary is useful for quickly defining financial jargon and concepts.
- CFA Institute Financial NewsBrief. This free resource provides a daily email that briefs important current financial news stories and provides links to the primary sources. Sign up at https://www2.smartbrief.com/getLast.action?mode=last&b=cfa. You should read it every day.
- Richard Bookstaber, *A Demon of Our Own Design: Markets, Hedge Funds, and the Perils of Financial Innovation*, (New York: John Wiley and Sons, Inc., 2007, ISBN 0471227277). An excellent summary of the main risk management issues in the financial markets.

• Edwin Lefèvre, *Reminiscences of a Stock Operator*, (New York: John Wiley and Sons, Inc., Reprinted 1993, ISBN 0-47105970-6, first published in 1923)

Reminiscences is a ghostwritten autobiography of Jesse Livermore. Livermore was a successful stock and commodity speculator who traded in the late 19th and early 20th centuries. The author, Edwin Lefèvre, was a financial reporter who spent two months interviewing Livermore for this project. The text is a first-person narrative by a character called Larry Livingston, who clearly represents Jesse Livermore. The book is full of market wisdom and human wisdom. It is easy to read, engaging, and covers many of the topics of this course.

Prerequisites

Formally, GSBA 521, GSBA 521b, or GSBA 548 or my permission if you are studying Financial Engineering or Math and Finance. None are absolutely necessary. Familiarity with Investments, Microeconomics, Corporate Finance, Information Technologies, and Statistics is helpful. You will not be lost if you have not yet studied these subjects, but sometimes you may have to work harder than students who are already familiar with their principle concepts.

Other Course Materials

Copies of various supplemental course materials will be available through your Blackboard account. I may use a password to protect some documents. If so, the password will be **TradeOn**. The password is case sensitive.

Grading Summary

		<u>% of Grade</u>
Oral presentation	One oral topic presentation	5.0%
Homework	Short learning outcome statement write-ups	25.0%
Tests	Two midterms at 20% each	40.0%
	Final exam	30.0%
	TOTAL	100.0%

Final course grades represent how you perform in the course relative to other students and relative to my expectations for students in the course. Your grade will not be based on a mandated target, but on your performance, consistent with the policies of USC and the Marshall School of Business. Historically, the grade point average for this course is about 3.5. I assign higher or lower average grades based on my perception of the overall performance of the class.

I consider four items when assigning class grades:

- 1. Your weighted-average standardized score for all exams and other exercises. Since exams inevitably vary in difficulty, I standardize the scores by subtracting the class mean and dividing the result by the class standard deviation. I average these standardized scores weighting by the contributions of each exam to the class grade. I base the standardization only on the scores of students who will receive non-failing class grades.
- 2. Your weighted-average exam and other exercise scores. This measure does not standardize the scores for each exam and exercise. I adjust the raw scores so that weights given to each examination reflect those in the table above.
- 3. Your rankings among all students in the class using the above two measures.
- 4. My impression of the overall achievement of the students in this class relative to that of other students in comparable classes that I have taught in the last few years or am presently teaching in other sections.

ASSIGNMENTS AND GRADING DETAIL

Examinations

The examinations will consist of constructed answer (essay, one-sentence, one word) questions or multiple-choice questions. I usually use constructed answer questions on the midterms and multiple-choice questions on the final. I structure the exams so that well-prepared students usually finish well before the end of the session.

The midterm and final examination dates will not change. Please check now to see that you do not have any conflicts.

The midterms and the final examination all will be cumulative examinations. Since I occasionally reuse questions from previous midterms that I gave you, I strongly suggest that you review your graded midterms to ensure that you can correctly answer questions that you missed in the past.

When writing exams, I always refer to the detailed list of the learning outcome statements that I posted on Blackboard. Except for questions involving current events, every question on an exam will involve knowledge identified by one or more of these learning outcome statements.

Old examinations with answers are posted on Blackboard. I do not post exams with multiple choice questions.

Oral Presentation

Every student will make one short oral presentation during the semester that highlights and briefly explains an important topic that appears in the reading for the current or nearby class session. Your presentation should be about five minutes long, and you should be prepared to answer questions and lead a discussion afterward. You may not choose a topic that is marked with a hash mark (see Homework below) in the set of learning outcome statements.

If you wish to use PowerPoint, bring your presentation file on a USB drive. If so, use PowerPoint's default template presentation font sizes (bigger is better), and do not allow PowerPoint to shrink the font size to put more text on a page. If you need more space, create more slides.

We usually will have two student presentations on most class days. You will sign up to make these presentations on SignUpGenius. I will email you a link to SignUpGenius at the end of the first week of class. I recommend that you respond quickly so that you can have your pick of topics or dates.

I will grade your presentation equally on the following five criteria:

- 1. The importance of the topic you chose.
- 2. The complexity of the topic you chose.
- 3. Your understanding of the topic.
- 4. Whether you presented the topic accurately.
- 5. The organization of your presentation.

I will not grade you on your oral presentation skills, except as they relate to the organization of your presentation. You need not dress up for your presentation, but feel free to do so.

I grade the presentations pass/not pass/fail. Students who come well prepared generally pass. Less prepared students may not pass. Students who do not do a presentation, or who did not take the assignment seriously fail. Since the presentations count for 5% of your grade, and since most students come well prepared and thus pass, it is important that you also prepare your presentation well. On a scale of 1 to 5, I count a pass as 5 a not pass as 2, and a fail as 0.

Homework

On most class days, you will be required to submit via Blackboard a short write-up explaining in your own words the knowledge referred to in three learning outcome statements ("LOSs"). The assignments appear below in the course calendar section of this syllabus. The LOS list is on Blackboard. In that list, statements marked with a hash mark (#) are the LOSs associated with the homework assignments. You must turn in the assignments through Blackboard before the start of class on the day that they are due.

Your LOS write-ups should be brief but detailed enough so that a practitioner could learn the knowledge referred to the LOS. Some LOSs may only require a short paragraph. Others may require several paragraphs.

You usually will not get any feedback unless a teaching assistant or I did not think that you took the assignment seriously. If you want feedback on an assignment, after you turn it in on Blackboard, send me an email with your assignment attached in Word format or included in the body of the email message. Then meet with me during my office hours, arrange to meet with me another time, or call me to discuss your work. I am willing to help you with the course subject concepts and your writing skills.

You will receive either full credit or no credit for the homework. You will receive full credit if you took the assignment seriously and your explanation of the LOS knowledge is correct. You will receive no credit if

- 1. The assignment is late,
- 2. You did not take the assignment seriously,
- 3. Your explanation is substantially wrong,
- 4. You did not use spelling and grammar checkers to correct obvious writing mistakes,
- 5. You copied or paraphrased text from the book, or
- 6. You copied someone else's work. (Plagiarizing also would subject you to other penalties described below.)

You can miss or fail to receive credit for three or fewer homework assignments without affecting your grade. Most students complete all the homework assignments satisfactorily and on time. In my experience, students who fail do the homework assignments on time or who fail to take them seriously also tend to do poorly on the exams.

To avoid paraphrasing text from the book, I recommend that you do your first draft of these assignments while the book is closed, at least one-half hour after you read the relevant passages. Then go back to the book to confirm that you are satisfied with your explanation, and amend it if necessary, again using your own words.

Do not forget to use spelling and grammar checkers to correct obvious writing mistakes. This requirement will help ensure that your writing improves.

The LOSs that I identified for these assignments are among the more important LOSs for this class. Note, however, that the homework LOSs do not include all of the more important LOSs since I did not want these assignments to be too burdensome. While I think that each LOS is important (I otherwise would not have included on the list), some are more important than others (but all may be the subject of an exam question). If you would like help identifying the most important LOSs, ask me in class, during office hours, or call me.

USC Marshall Critical Thinking Initiative

The USC Marshall Critical Thinking Initiative is a school-wide effort to improve your critical thinking skills so that you can be more successful problem solvers in class and the workplace. In this course, you will engage in many learning activities that are aimed at developing and applying your critical thinking

skills in a disciplined manner so that you can outperform others to get your desired job and to excel further in your career. Your ability to think critically is an important part of the evaluation/grading process in this course.

Discussion Board

The Blackboard discussion board for this class will be available for online discussions. If you have questions, post them to the board, and your classmates or I will answer them. I sometimes answer questions quickly, and sometimes I let a question sit for a while, especially if you can easily find the answer in the book.

MARSHALL GUIDELINES

Add/Drop Process

Most Marshall classes are open enrollment (R-clearance) through the Add deadline. If an open seat is available, students can add the class using Web Registration. If the class is full, students will need to submit a Wait List application to secure a seat if one becomes available. The wait list request form can be downloaded at <u>http://info.marshall.usc.edu/dept/gradreg/resources/Pages/default.aspx</u>. Students who do not attend the first two class sessions may be dropped from the course if they do not notify the instructor before their absence.

Further, if you are absent six or more times before April 5, 2019 (the last day to withdraw from a course with a grade of "W"), I may ask you to withdraw by that date. These policies maintain professionalism and ensure a system that is fair to all students.

Marshall Grading Guidelines

Assignment/Exam Grading Policy: As the instructor, I determine what qualifies as an accurate grade on an assignment, exam, or another deliverable, and my evaluation of the performance of each student is the final basis for assigning grades for the class. I may delegate some grading to assistants, but I remain responsible for all grades.

Retention of Graded Coursework

I retain final exams and all other graded works that affect the course grade for one year after the end of the course if I have not returned the graded work to the student. If I returned graded work to you, you are responsible for filing it.

Returned Papers

To protect the confidentiality of your work, you must pick up your own graded paperwork. I will not give your papers to anyone else. Students who miss class sessions when I return paperwork must come to office hours or arrange an appointment to retrieve the material.

Marshall Technology Policy

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY e-devices (cell phones, iPads, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Academic and Personal Conduct

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism).

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" <u>https://policy.usc.edu/scampus-part-b/</u>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct at <u>https://policy.usc.edu/scientific-misconduct/</u>.

I will refer students to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. You can read about the Review process at http://www.usc.edu/student-affairs/SJACS/. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

The University does not tolerate discrimination, sexual assault, or harassment. You are encouraged to report any incidents to the *Office of Equity and Diversity* <u>https://equity.usc.edu/</u> or the *Department of Public Safety* <u>https://dps.usc.edu/contact/report/</u>. These reports are important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <u>https://engemannshc.usc.edu/reporting-options/</u> describes reporting options and other resources.

I take my responsibility to promote good academic and personal contact seriously. I report all incidents of reportable offenses. Regrettably, my past reports (and those of my colleagues) have led to serious consequences for irresponsible students.

Support Systems

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <u>https://engemannshc.usc.edu/counseling/</u>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <u>http://www.suicidepreventionlifeline.org</u>

Relationship & Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <u>https://engemannshc.usc.edu/rsvp/</u>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <u>https://titleix.usc.edu/.</u>

Office of Equity and Diversity (OED)/Title IX compliance – (213) 740-5086 Works with faculty, staff, visitors, applicants, and students around issues of protected class. <u>https://equity.usc.edu/</u>

Bias Assessment Response and Support

Incidents of bias, hate crimes, and microaggressions need to be reported allowing for appropriate investigation and response. <u>https://titleix.usc.edu/reporting-options/</u>

The Office of Disability Services and Programs – <u>https://dsp.usc.edu/</u> Provides certification for students with disabilities and helps arrange relevant accommodations.

Student Support & Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <u>https://studentaffairs.usc.edu/ssa/</u>

Diversity at USC – <u>https://diversity.usc.edu/</u>

Tabs for Events, Programs, and Training, Task Force (including representatives for each school), Chronology, Participate, Resources for Students

USC Emergency Information – <u>https://emergency.usc.edu/</u>

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.

Provides overall safety to USC community. https://dps.usc.edu/

Students with Disabilities

USC is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability which may impact your performance, attendance, or grades in this course and require accommodations, you must first register with the Office of Disability Services and Programs (https://dsp.usc.edu/). DSP provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: ability@usc.edu.

Emergency Preparedness/Course Continuity

In case of a declared emergency, if travel to campus is not feasible, the *USC Emergency Information* website (<u>https://emergency.usc.edu/</u>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

Please make sure you can access this course in Blackboard and retrieve the course syllabus and other course materials electronically. You should check Blackboard regularly for announcements and new materials. In the event of an emergency, the ability to access Blackboard will be crucial. USC's Blackboard learning management system is available at <u>blackboard.usc.edu</u>.

Assignment Submission Policy

Assignments must be turned in by the due date/time electronically via Blackboard.

Evaluation of Your Work

I will do my best to make my expectations for the various exams clear and to evaluate your answers as fairly and objectively as I can. If you feel that an error has occurred in the grading of any question, you

may, within one week of the date the exam is returned to you, write me a memo in which you request that I reevaluate the assignment. Attach the original exam to the memo, and explain fully and carefully why you think the question should be regraded. Be aware that the reevaluation process can result in three types of grade adjustments: positive, none, or negative.

Course Calendar

Class Sessions, Readings, and Homework Assignments

Some important prior commitments will prevent me from attending several scheduled classes. Accordingly, we will meet at our regularly scheduled time on three Fridays at locations that I will announce upon confirmation. The Friday class meetings will occur on February 1, February 8, and April 12. I will record these lectures so that you can watch them if you are unable to attend. Your continued registration in this course will constitute acceptance of these arrangements.

The midterm and final examinations will take place as scheduled.

The homework assignments are due on the indicated dates before the start of class. Note that the numbering of the homework assignments corresponds to the chapter numbers of the included LOSs. For example, for the first assignment, #1.3, the included LOSs are in Chapters 1-3. Note that before midterm examinations, the homework assignments lead the class discussions so that you will have time to concentrate on studying for the exams.

I may modify the topic schedule to meet the needs and interests of the class.

The topics below **correspond** to numbered chapters in the textbook, *Trading and Exchanges*. The assigned readings for each date include these chapters and any other readings indicated below. The monography *Trading and Electronic Markets* is available for free from the CFA Institute Research Foundation. (See required materials above.) Complete the readings before coming to class and come prepared to discuss them.

The course meetings will involve discussions, exercises, and lectures. When I lecture, I will primarily reinforce and expand upon the lessons in the readings. I often will not review them as I will assume that you have done the readings. It is imperative that you read and study the assigned readings before coming to class.

Read the financial press every day. Come to class prepared to discuss current events in the markets. At a minimum, you must read the front page of the Money & Investing section of *The Wall Street Journal*. The business sections of the *New York Times, The Financial Times,* and *Investor's Daily* are also very good. Try reading the finance section of *The Economist* and any relevant special reports. Also, browse the CFA Institute Financial NewsBrief every day—it only takes about a minute. Serious professionals follow current events in their industry. Be a securities industry professional, if only for the next 17 weeks. Reading the news will help you get more out of this class.

I strongly recommend that you read *Reminiscences of a Stock Operator* at your leisure. It is entertaining and very interesting. Although written a century ago, most of its themes remain relevant today.

I also strongly recommend that you read Richard Bookstaber's *A Demon of Our Own Design: Markets, Hedge Funds, and the Perils of Financial Innovation.* This book provides an excellent summary of—and expansion upon—many of the concepts that we cover in this course. It is written at a level that you can understand without the benefit of this course, but you will get more out of the book after you have completed the first half of the course.

Course Calendar

Date		Topics and Assignments
Jan 7	М	Introduction
		Introductory Trading Games Read Chapter 1 – Introduction Read Chapter 2 – Trading Stories Read Chapter 3 – The Trading Industry Read the Forward and Chapter 1 of <i>Trading and Electronic Markets</i>
Jan 9	W	Orders and Order Properties
		Read Chapter 4 – Orders and Order Properties Homework assignment #1.3
Jan 14	М	Orders and Order Properties (continued)
		Homework assignment #4
Jan 16	W	Market Structures
		Read Chapter 5 – Market Structures Homework assignment #5
Jan 21	М	No Class (MLK Holiday)
Jan 23	W	Introduction to Order-Driven Markets: Auction Bidding Strategies
		Read "Notes on Auction Bidding Strategies" Read Chapter 6 – Order-Driven Markets Homework assignment #6
		Optional : 6:00 p.m. Dinner at Harris house
Jan 28	М	No Class (Prof. Harris at SEC FIMSAC meeting)
Jan 30	W	Order-Driven Markets
Feb 1	F	Friday Class
		Brokers and Ethics in Trading
		Read Chapter 7 – Brokers Read pages v, and 1-12 of CFA <i>Standards of Practice Handbook</i> Homework assignment #7
Feb 4	М	No Class (Prof. Harris at Harvard/USC Aspen RE Conference)
Feb 6	W	Midterm Exam 1

Date		Topics and Assignments
Feb 8	F	Friday Class
		Why People Trade
		Read Chapter 8 – Why Do People Trade? Read Chapter 2 of <i>Trading and Electronic Markets</i> Homework assignment #8
Feb 11	М	Good Markets and Informed Trading
		Read Chapter 9 – Good Markets Read Chapter 10 – Informed Traders and Market Efficiency Read Chapter 3 of <i>Trading and Electronic Markets</i> Homework assignment #9.10
Feb 13	W	Order Anticipators
		Read Chapter 11 – Order Anticipators Homework assignment #11
Feb 18	М	No Class (Presidents' Day Holiday)
Feb 20	W	Bluffing and Price Manipulation
		Read Chapter 12 – Bluffing and Price Manipulation Homework assignment #12
Feb 25	М	Dealers
		Dealer Trading Game Read Chapter 13 – Dealers Homework assignment #13
Feb 27	W	Bid/Ask Spreads
		Read Chapter 14 – Bid/Ask Spreads Homework assignment #14
Mar 4	М	Block Trading and Value-Motivated Traders
		Winner's Curse Game Read Chapter 15 – Block Trading Read Chapter 16 – Value-motivated Traders Read "Winner's Curse Mathematics" Homework assignment #15.16
Mar 6	W	Midterm Exam 2
Mar 11	М	Spring Recess Holiday
Mar 13	W	Spring Recess Holiday

Date		Topics and Assignments	
Mar 18	Μ	Arbitrageurs	
		Read Chapter 17 – Arbitrageurs Homework assignment #17	
Mar 20	W	Buy-side traders, Liquidity, and Volatility	
		Read Chapter 18 – Buy-side Traders Read Chapter 19 – Liquidity Read Chapter 20 – Volatility Homework assignment #18.20	
Mar 25	Μ	Futures Trading Game	
Mar 27 W		Transaction Cost Measurement	
		Read Chapter 21 – Liquidity and Transaction Cost Measurement Read Chapter 4 of <i>Trading and Electronic Markets</i> Homework assignment #21	
Apr 1	М	Investment Performance	
		Read Chapter 22 – Performance Evaluation and Prediction Homework assignment #22	
Apr 3	W	Index and Portfolio Markets, Specialists	
		Read Chapter 23 – Index and Portfolio Markets Homework assignment #23 Browse Chapter 24 - Specialists	
Apr 8	М	Off-Exchange Trading and Dark Pools	
		Read Chapter 25 – Internalization, Preferencing, and Crossing Homework assignment #25	
Apr 10	W	Competition within and among Markets	
		Read Chapter 26 – Competition within and among Markets Homework assignment #26	
April 12	F	Friday Class	
		Electronic Trading	
		Read Chapter 27 – Floor versus Automated Trading Systems Electronic and High-Frequency Trading Read Chapters 5-7 of <i>Trading and Electronic Markets</i> Homework assignment #27	
Apr 15	М	No Class (Prof. Harris at Q Group Conference)	
Apr 17	W	No Class (Prof. Harris at IB annual shareholders meeting)	

Date		Topics and Assignments
Apr 22	М	Extreme Volatility
		Read Chapter 28 – Bubbles, Crashes, and Circuit Breakers Read Appendix A of <i>Trading and Electronic Markets</i> Homework assignment #28
Apr 24	W	Insider Trading and Review
		Read Chapter 29 – Insider Trading Homework assignment #29
Apr 29	М	Study day, no class
May 3	F	Final Examination, 8:00 a.m. – 10:00 a.m.in JKP 102
May 10	F	University Commencement

CONTACT INFORMATION

Addresses and Telephone Numbers

Professor Larry Harris Fred V. Keenan Chair in Finance USC Marshall School of Business Hoffman Hall 806 Los Angeles, CA 90089-0804 (323) 244-1154 cell (323) 933-0888 home (213) 740-6496 office

You may call me at home, but please not before 7:00 a.m. after 9:30 p.m., on Friday night, or on Saturday.

LHarris@USC.edu LarryHarris.com

How to Reach Me

1. Drop in during office hours—no appointment is necessary. My office is in Hoffman 806. My office hours this semester are:

Mondays	4:00-5:00 p.m.
Fridays	1:30-2:30 p.m.

- 2. Arrange to meet me by appointment.
- 3. Just drop in. I am in my office most days. It is best (but not necessary) to call ahead to make sure I am available and not occupied.
- 4. Call me on the telephone. If you leave a message, please speak slowly and clearly when you give your phone number. You may call me at work, home or on my cell phone. Please do not call me at home before 7:00 a.m., after 9:30 p.m., on Friday night, or on Saturday.
- 5. Arrange to dine with me before or after class. Consider inviting your classmates too. On Wednesdays, I often eat lunch at 11:00 a.m. at the farmer's market on McCarthy Quad. Look for me on the west side of the quad on a bench or at a picnic table.
- 6. Send me an e-mail at <u>LHarris@USC.edu</u>. While I am always happy to take questions about course topics, I prefer to respond orally rather than by e-mail. The opportunity to listen and respond appropriately usually produces more effective learning. Also, if you have course topic questions, consider posting them to the Blackboard discussion board where a classmate may answer the question first, and where everyone can see my responses.