

Syllabus
FINA 6325: Financial Derivatives I
Section 794, Spring 2020

Instructor for This Course

Info about the instructor

- Dr. Paul J. Haensly
- Ph.D. in Finance from University of North Texas
- Teaching finance at UTPB since 1997

Contacting the instructor

1. Best way: via Canvas Inbox.
 - Access the Canvas inbox from within Canvas. You can find the Inbox icon in the global navigation panel on the left side of all pages.
 - If you have grade related questions, please ask me using the Canvas Inbox to protect the security of your information.
2. Next best way: via email.
 - UTPB email address: haensly_p@utpb.edu
 - If you don't want your email routed through Uzbekistan: paulhaensly@sbcglobal.net
3. Not a good way: by telephone.
 - Most questions can be answered and problems resolved more quickly via the Canvas Inbox or by email.

Office Hours

- Online office hours: not 24/7 but close.
- On campus office hours: for various reasons, I will not be available on campus this semester. Sorry!

Expectations

You need to know what you are getting into with this course. Here is a quick heads up.

- This course is on an **8-week** schedule. However, this course is a three-credit hour course. Hence, ***you get a full 16 weeks worth of content and activities***. As a result, the course is fast paced. (Most of our online MBA courses are on this accelerated schedule. Thus, an expectation problem generally arises only for students who have been mostly taking our conventional 16-week, face-to-face courses.)
- This course has no face-to-face contact with the instructor. (The great majority of students in our online MBA program live outside the Permian Basin. Thus, an expectation problem generally arises only for students who are in our conventional on-campus program.)

- Due to the nature of this course—specifically, its fast pace and lack of face-to-face contact with the instructor—it is essential that you be strongly self-motivated and self-disciplined.
- You must be able to access this course online. Please see the section, “Access to the Course,” later in this syllabus for more details.

Course Objectives

Catalog description

Introduction to futures and forward contracts and their markets, including how these derivatives are created and traded. The course covers how businesses can use these contracts to hedge risk. Students are introduced to the principles of valuation and pricing for these securities and the mathematical models that apply. Swaps may be covered if time permits.

Prerequisite: FINA 6320.

Course prerequisites

- a) MBA Online course prerequisite: FINA 6320 (Financial Management). In particular, a solid understanding of discounted cash flow models (e.g., present value and future value models) is **essential**.
- b) Computer skills: working knowledge of the basics of Microsoft Excel and Word. I *may* require that selected computational assignments be submitted in Excel and any written assignments be submitted in Word. (At the time of this writing, however, I have no Excel or written assignments in the course.)
- c) Quantitative skills: math skills at the level of an undergraduate business calculus course and statistics skills at the level of an introductory course on statistical estimation and inference (including descriptive statistics, basics of probability distributions and random variables, sampling methods, statistical estimation, hypothesis testing, linear regression, and basic nonparametric statistics).

Prerequisites (b) and (c) are implicit in the program admissions requirements. But sometimes students either did not properly master these skills in the first place or let these skills get rusty.

Heads up: this course is more quantitative than most MBA courses.

General goals for the course

- To learn about the characteristics of futures contracts and forward contracts.
- To learn how futures and forward contracts are created and how they are traded.

- To understand the principles of futures **valuation and pricing**. Primary objectives: understand the mathematical models for valuation of futures and forward contracts, learn how to apply computational procedures in practice, and recognize the limitations of these methods.

Learning objectives for the course

By the end of this course, you should be able to do the following.

- Describe the the fundamental features of the major types of futures contracts and explain how these contracts are created.
- Explain how these features determine the fundamental value of each contract and how this value is linked to prices in the spot markets for the underlying assets.
- Describe how prices for futures are determined by trading in the market, given their fundamental value. In particular, explain how arbitrage aligns the price of financial derivatives with their fundamental values.
- Find information about the features of a futures contract and the price of the underlying asset.
- Apply the appropriate mathematical model to estimate the fundamental value of the contract (and hence the price at which it should be trading).
- Explain how features of modern futures exchanges minimize the risk of default on these contracts.
- Compare the relative strengths and weaknesses of organized futures exchanges with their over-the-counter counterparts.

Major ideas in this course

What do I hope you get from this course, and specifically from the material on valuation?

- **General knowledge of how hedging works.** As a manager (a generalist), you need to understand what the traders and quant jocks (the specialists) who work for you are doing. Or, more importantly, should *not* be doing. Otherwise, you may end up like the managers at Barings Bank. In 1995, an inadequately supervised trader named **Nick Leeson** in their Singapore office accumulated losses that eventually led to the insolvency of Barings.
- **An appreciation for the complexity and risk involved in derivatives trading.**
- **General understanding of how futures and forward contracts work.** Mutual funds and exchange-traded funds in which you might invest may use financial derivatives. Many funds use financial derivatives for cash flow management. In some cases, such as a commodities exchange traded fund (ETF), the investment strategy may be based almost entirely on futures contracts. Your knowledge of financial derivatives will help you to better evaluate the risk and chances of success of these strategies in funds that you own.
- **An understanding of the role of arbitrageurs and speculators in futures and forward markets.** Futures and forward prices are not simply the result of chaotic trading by crazed speculators. Arbitrageurs and speculators are essential for these markets to

function well. In fact, the valuation models that we study in this course are based on the principle that arbitrage trading aligns futures prices with their fair value in terms of spot prices, storage costs, and interest rates.

Heads up: what this course does not cover

- **I won't teach you how to make money playing the futures markets.** This course is not intended to be a training course in speculation. Because this course is offered as part of an MBA program, the intention is to help you as a manager to understand the key ideas rather than to teach you how to trade. The best way to learn how to trade is to go to work as a trader.
- **I won't teach you how to become a successful arbitrageur.** We spend a significant part of the course studying how arbitrage affects futures pricing in principle. This knowledge will give you a better appreciation for and understanding of pricing in these markets and may help you as a manager or individual investor but won't help you become a successful arbitrageur.

Textbooks and Calculators

Required textbook: none. This course does not have any required textbooks. The online lectures form the primary content of this course, along with selected assigned readings from online sources.

Computational tools

- You will find it convenient to have a hand-held calculator. It can be as simple as a Texas Instruments BA II Plus. Your calculator app on your smart phone also will be more than adequate.
- I will discuss application of Microsoft Excel as needed, and you may find it to be a more convenient and accurate tool for many calculations. Microsoft offers free training courses in Excel and Word. I posted the link on the Syllabus page of our course. If you need to improve your proficiency in either Excel or Word, our technical support staff at UTPB recommends these training courses.

Optional textbooks

- John C. Hull. *Fundamentals of Futures and Options Markets*, 8th ed. Upper Saddle River, NJ: Pearson/Prentice-Hall, 2013.
- John C. Hull. *Solutions Manual and Study Guide for Fundamentals of Futures and Options Markets*, 8th ed. Upper Saddle River, NJ: Pearson/Prentice-Hall, 2013.

- For about the last 20 years that I have been teaching financial derivatives at UTPB, I have used John C. Hull's introductory textbook. The course design and content parallels the initial chapters in recent editions of his textbook, and at one time the course was tightly integrated with the textbook. Thus, if you are looking for outside reading beyond what is in the course, then I recommend the 8th edition (details above) or a more recent edition. Throughout the course, I make occasional reference to information in the 8th edition of Hull's textbook. In addition, I make optional exercise assignments from the textbook that may help you understand the concepts and calculations better.
- If you would like to study a more advanced book, then I recommend John C. Hull's *Options, Futures, and Other Derivatives*.

Access to the Course

Accessing this course online

- You must have a computer, webcam, and a decent internet connection.
- This course is designed as an 8-week web-based class. Thus, you should be sufficiently comfortable in an online environment to handle basic web navigation and to upload and download assignments in Canvas. The introductory module in the course includes an introduction, "New to Canvas and Course Navigation." The Help button in the global navigation panel on the far left of pages in Canvas links you to additional resources about navigating and using Canvas.
- This course is not designed for hand-held devices. The best environment for viewing and participating in this course is a desktop or laptop computer. For technical requirements for using Canvas, go to the Canvas Technical Requirements page (link on the Syllabus page in this course; URL: <https://www.utpb.edu/academics/online-learning/reach-center/technical-requirements>).
- You are responsible for your access to the internet and this course in Canvas. ***I do not make exceptions to course policies should you have problems with your internet access or browser*** unless the problem is with the network itself or Canvas. If you have difficulty with your internet access or browser, then you should delay taking this course online or take it in a face-to-face setting instead.

Technical support

- This course is offered through Canvas. For help on using Canvas, locate the Help icon at the bottom of the global navigation menu on the left-hand side of every page in Canvas.
- Also, on the Syllabus page, you will find links to the UTPB Technical Requirements page which includes information about accessing and using Canvas.

Rules for communicating

In this course, we most likely will communicate either through a course forum or by email. Please follow these five rules.

1. Be courteous, respectful, and professional in your course communications.
2. Use language appropriate to the classroom setting. Also, keep in mind that in this day and age, many people are hypersensitive to a variety of slights, whether real or imagined. Try to make only one person mad at a time.
3. Identify yourself. In Canvas, the internal messaging system (Inbox) identifies the writer automatically. In email, please sign your name at the end of your message so we don't have to guess who you are.
4. Enter a suitably descriptive subject in the subject line. This courtesy helps the reader know what you plan to discuss or ask about.
5. Write clearly and concisely, and spell everything out. Text message shorthand usually is inappropriate in this course. Please limit your use of acronyms to ones appropriate for this course, e.g., CAPM for Capital Asset Pricing Model.

Accommodations for students with disabilities

The University of Texas of the Permian Basin in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act provides “reasonable accommodations” to students with disabilities. Any student with a disability who is requesting an accommodation for this course must provide the instructor with official documentation in the form of a letter from the ADA Officer for Students. Only those students who have officially documented a need for an accommodation will have their request honored. (Adapted from UTSA ADA syllabus statement.)

- ADA Officer for Students: Mr. Paul Leverington
- Address: Mesa Building 4243/4901 E. University, Odessa, Texas 79762
- Voice Telephone: 432-552-4696
- Email: ada@utpb.edu

Pacing and Organization of This Course

- This course is self-paced. You may submit work for credit up through the last day of the semester except as noted in this syllabus.
- To provide you guidance on how to pace your activities, I set up “due dates” in Canvas for each activity. You can find these due dates on the Syllabus page in the course and with the instructions for each graded activity. A “due date” is when I recommend that you complete the activity. However, all graded activities remain open until the end of the semester. There is no penalty for completing a quiz or homework assignment after its due date provided that you complete it by the end of the semester.
- A self-paced course has one big disadvantage compared to a course with due dates spread over the semester: you don't have a formal set of staggered deadlines to motivate

you to keep up. **A warning: the content of this course cannot be mastered in one week. If you procrastinate, then you are at great risk of failing this course.** I almost never grant incompletes in the courses I teach, and under NO circumstance will I consider an incomplete for any student who has not kept up completely with the course.

- I organized the course content into five modules. Please see the last section of the syllabus for details. Each module includes two or three lectures. Each lecture is accompanied by various activities such as required readings, optional readings and exercises, discussion forums, quizzes, and homework assignments.

Course Activities

Online lectures and other reading assignments

- Prior to starting the graded activities in a given module, I strongly recommend that you first work through the online lecture and reading assignments. Links to required readings are either given on the “Read first” page of each module or are embedded in the lecture. Required readings are an integral part of the course and will be covered by graded activities.
- Some lectures include companion Excel workbooks. At several points in the online lectures, I direct you to examples in their companion workbooks. Generally, you need to carry out a series of calculations as instructed in the lecture. The links to these workbooks are embedded directly in the online lecture. Download the Excel workbook to your computer. Then open the workbook in a window separate from your browser so that you can switch back and forth between the lecture and its companion workbook.

Exercises for learning and review (optional)

- Should you desire study material beyond the lectures and required readings, I identify optional exercises from the end-of-chapter problems in the optional textbook by John Hull. You can find this information in the “Read first” pages for each module. The purpose of these exercises is to help you understand the lesson better and to prepare for the graded activities in the lesson. The solution keys to end-of-chapter problems in Hull’s textbook are in the *Solutions Manual and Study Guide for Fundamentals of Futures and Options Markets*.

Quizzes

- Many of the lectures are accompanied by a graded Quiz that focuses on basic concepts. Questions generally are conceptual, but some may require simple calculations that can be accomplished with a handheld calculator.

- The format is primarily multiple-choice, *i.e.*, you select the best answer from the list that is given. However, I sometimes include questions that have more than one correct answer. I will let you know if more than one answer may be correct; you must select all of the correct answers and none of the incorrect answers to earn full credit. (Partial credit is possible for this type of question.) Occasionally I also include true/false questions.
- Quizzes are timed. I list the time allowed in the Quiz instructions in Canvas.
- Procedures for each quiz are essentially the same from quiz to quiz. However, I post these instructions with every quiz for your convenience.
- As part of the University policy on student authentication, you must take each quiz using LockDown Browser and Respondus Monitor. Please see the Student Authentication section below for more details.
- Each quiz is graded by Canvas automatically and immediately once you click “Submit.” You may view your answers after you submit the quiz. Canvas will tell you whether you answered each question correctly or not.
- However, because the course is self-paced, I generally do not provide the correct answers in the interest of fairness to students who have already completed the quiz. If you wish to know the correct answer for a question that you missed, you may contact me directly; I will be happy to direct you to the course materials where you can find the correct answer.
- You may take a quiz up to three times. ***Your final score is the one you receive for your last attempt.***
- ***Quizzes are NOT a group activity.*** I expect you to take each quiz on your own. This requirement is part of my policy on Academic Honesty; please see below for more details on this policy.

Homework

- Every lecture is accompanied by a graded Homework assignment. Each focuses on problem solving. Problems usually require computations. Some calculations may be best handled by setting them up in Excel. Usually, you can find one or more related examples in the lecture that illustrate the steps required.
- Many homework problems are quantitative problems for which you type in a numerical answer. Others are multiple choice where you must carry out a calculation and then chose the best answer.
- Homework assignments are NOT timed.

- Procedures for each homework are essentially the same from homework to homework. However, I post these instructions with every homework for your convenience.
- Each homework is graded by Canvas automatically and immediately once you click “Submit.” However, you may navigate away from a homework assignment in progress and return later to continue working on it. (Just make sure that you don’t click “Submit” until you are ready to have your work graded.) Before navigating away from a homework in progress, verify at the bottom of the page that your work has been saved; Canvas displays a message to the right of the “Submit” button indicating time of the last save.
- After you submit a homework, Canvas shows you which questions that you got correct and incorrect **and also displays the correct answer**. However, be aware that when you make a second or third attempt, the specific numerical values for the problems usually change. Thus, I strongly recommend that before you make a second or third attempt, you try to figure out why you did not get the right answer and what the correct procedure is for solving the problem.
- You may submit a homework assignment up to three times. **Your final score is the one that you receive for your most recent attempt.**
- I expect you to complete each Homework assignment yourself. However, my policy concerning discussion of Homework with other students differs from my policy concerning Quizzes. In a nutshell, you may discuss Homework problems with other students **provided that you do so via the discussion forums that I set up for the module in which the homework is assigned**.

Discussion forums

- Each module will have a discussion forum. My general objective is to provide a common place for us to informally exchange ideas and raise questions about the topics in this course, including questions that you have about specific homework problems.
- At each forum, I post general guidelines for the discussion. For convenience, here are these guidelines.
 - I require that discussion be civil and courteous.
 - In order to communicate clearly, please use proper grammar, spelling, and punctuation, and please be as specific as possible.
 - Discussion should be directly related to the lectures, readings, and graded activities in the corresponding module or to topics directly related to these activities.
- Your participation is optional, however...
- I will be awarding extra credit points (up to 5 points per post) for particularly good posts that meet the following criteria.

- Your post must be **original** in order to earn credit. Specifically, your post is eligible for extra credit only if it does not essentially repeat what someone else has already posted.
 - Your post must be **substantive** in order to earn credit. By substantive, I mean that your post has meaningful content; hence addressing it advances our understanding.
 - I welcome and encourage all questions. Nonetheless, if the answer to your question is **clearly addressed** in the lecture or readings, then your post will not be eligible for extra credit; but it still is worthwhile to raise if it helps you understand something!
- I cap extra credit points that can be earned in a given discussion forum at 20 points.
 - Because the course is self-paced, the forums will remain open for participation all semester. However, in order to avoid getting overwhelmed with the extra credit grading at the end of the semester, I set up staggered deadlines for posts that will be eligible for extra credit. These deadlines will appear as “due dates” on the Syllabus page and in the forum instructions. The deadlines correspond to the last “due date” for quizzes and homework assignments in the module.

Student Authentication

Student Authentication Policy and Procedures at UTPB

UTPB requires that each student who registers for an online course is the same student who participates in, completes, and receives credit for the course. UTPB's Distance Education Policy requires faculty members to employ at least two methods of verification to ensure student identities. To access online courses students must login to the UTPB learning management system using their unique personal identifying username and secure password. UTPB's Distance Education Policy requires at least one additional student identification method within the course that has been determined and approved by the faculty or academic program. This course satisfies the second method of student authentication by presentation of approved photo ID through a web cam and video recorded proctoring during assessment (LockDown Browser and Respondus Monitor). Approved photo identifications are: passports, government issued identification, driver's licenses, military ID from DoD; dual credit and early college high school students use school district identifications.

The University has a contract with Respondus that provides online UTPB faculty with an electronic test proctoring service that also serves as a second method of student authentication. Respondus Monitor both locks down the student's browser preventing the student from accessing the web or computer files during an exam and video records the student during the exam period. Students present their ID into the camera (which UTPB requires for all online courses) to authenticate themselves, and the camera records the student and their surrounding environment during the test.

Your only technical requirements are a computer, webcam, and a decent internet connection.

Procedures In This Course

In this course, I require Lockdown Browser and Respondus Monitor when you take a quiz. I do not require these tools for other graded activities. For an introduction to the Respondus LockDown Browser, please view the video at this [URL:](http://www.respondus.com/products/lockdown-browser/student-movie.shtml)
<http://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Please do NOT communicate with other people while you are taking a quiz. **However, I do permit you to use your class notes (hand written or printed in advance) and, should you think it necessary, your calculator.** You also have my permission to log into our course on a second device. (You will need to take the quiz in LockDown Browser on your primary computer, however.) Note: you will need to review results from quiz attempts in the LockDown Browser.

Installing LockDown Browser On Your Computer

Please read and follow the instructions presented on the Student Authentication page in the Welcome module for our course.

Grading

Grading procedures

- All quizzes and homework assignments are graded by Canvas immediately on submission.
- You may have up to three attempts on each quiz and homework assignment. However, keep in mind that **your score for a given graded activity is the score on your most recent attempt.**
- If you think that a question on your quiz or homework was misgraded, or you think that your answer was really close but you did not receive any points, please don't hesitate to contact me. Send me the specific details about the assignment and the question/problem, and I will be happy to review your work.
- I grade special assignments, if any, manually. My objective is to return graded special assignments within three days of the "due date" (or the date when you submit your work, whichever is later).
- I grade discussion forums for extra credit after their "due date" and will post these extra credit points within a week of the "due date."

Your course grade

- For this semester, I designed two primary types of activities in this course to assess your learning: quizzes and homework. (I reserve the option to make other special assignments available for credit as appropriate.)
- Each graded activity (specifically, a quiz, homework, or any special assignment that I add during the semester) is worth a specified number of points. The official point information is in the instructions in Canvas for each activity.
- At the end of the semester, I total up the points that you earned and calculate the percentage that you earned out of the total possible points. This percentage will be your numerical course average. Extra credit points that you earn are included in the numerator of this calculation but not the denominator.

Letter grade in this course: your numerical course average determines your letter grade:

- 89.7%-100%: A
- 79.7%-89.6%: B
- 69.7%-79.6%: C
- 59.7%-69.6%: D
- 0%-59.6%: F

I reserve the option to adjust letter grade cutoff points downward (i.e. to “curve” the grade scale). However, I don’t make this decision until the end of the semester.

Make-up work, late assignments, and incomplete course grades

- Because this course is self-paced, the question of make-up work and late assignments is not relevant except at the end of the semester.
- **All graded work MUST be completed by the end of the semester.** The last day of the semester is a hard deadline.
- I do not give an incomplete except under what I judge to be extreme circumstances. Hence, I strongly encourage you to keep up with the recommended “due dates” that are posted in the course.

Policy on scholastic dishonesty

- The integrity of a university degree depends on the integrity of the work done for that degree by each student. The University expects a student to maintain a high standard of individual honor in all scholastic work (*Rules and Regulations of the Board of Regents*).
- Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts. Detailed information on scholastic dishonesty along with disciplinary

procedures is outlined in the *Handbook of Operating Procedures*, Part 5, Section 1: Scholastic Dishonesty, and the section on “Student Conduct” in the *UTPB Student Guide*. (You can download the latter with the following [URL](https://www.utpb.edu/assets/images/student-code-of-conduct-2019.pdf): <https://www.utpb.edu/assets/images/student-code-of-conduct-2019.pdf>)

- We do not have group projects in this course. **All work must be your own.** Plagiarism of any sort will earn you a zero on the graded activity in question. If you copy from another student in this course, that student may also receive a zero for the activity. If your dishonesty is repeated or blatant, you may be assigned a failing grade in the course, regardless of your point total, and referred to the Dean of Students for disciplinary action.

Course Schedule and Module

Note: course content is organized at two levels. I call the top level a “module,” and our course in Canvas is organized in this way. Each module has two or three parts. Please see the Syllabus page in Canvas for the recommended completion dates for activities. These appear as “due dates” (although keep in mind that all activities are open until the end of the semester).

Module 1: Futures Contracts and Margin Accounts

Part 1.A: Introduction to Futures Contracts

- Lecture 1A: Basics of Futures Contracts
 - (Optional) reading assignment: Sections 1.1-1.4 in the textbook by Hull.
 - Video tutorials from CME (assigned in the Lesson).
 - Graded activities: Quiz 1A and Homework 1A.
- ⊗ Learning objectives: at the end of Part 1.A, a student should be able to do the following.
- Describe the basic features of futures and forward contracts.
 - Explain the basics of how contracts are created.

Part 1.B: Futures Margin Accounts

- Lecture 1B: Futures Margin Accounts
 - (Optional) reading assignment: Sections 2.1-2.5 in the textbook by Hull.
 - Graded activities: Quiz 1B and Homework 1B.
- ⊗ Learning objectives: at the end of Part 1.B, a student should be able to do the following.
- Explain how a futures margin account works.
 - Calculate the change in value of a futures account when futures prices change.
 - Explain how futures markets minimize default risk by means of the clearinghouse and the procedure of marking futures accounts to market.

Module 2: Introduction to Futures Markets and Hedging with Futures

Part 2.A: Futures Trading

- Lecture 2A: Futures Trading
 - (Optional) Lecture 2A Appendix on order types
 - (Optional) Reading assignment: Sections 2.3, 2.6-2.9, and 2.11 in the textbook by Hull.
 - Supplemental reading from the CME (online and PDF).
 - Graded activities: Quiz 2A and Homework 2A.
- ⊗ Learning objectives: at the end of Part 2.A, a student should be able to do the following.
- Explain the basic mechanics of how futures trade in futures markets.
 - Describe the basic types of simple futures trades that can be performed for speculation and arbitrage.
 - Describe the important differences and similarities between forward contracts and futures contracts.

Part 2.B: Introduction to Hedging with Futures

- Lecture 2B: Principles of Basic Hedging
 - (Optional) Reading assignment: Sections 3.1-3.2 in the textbook by Hull.
 - Graded activities: Quiz 2B.
- ⊗ Learning objectives: at the end of Part 2.B, a student should be able to do the following.
- Explain the basic principles of hedging with forward and futures contracts.
 - Describe how to set up and close out a basic hedge.

Part 2.C: Practical Problems in Basic Hedging

- Lecture 2B: Practical Problems in Hedging
 - (Optional) Reading assignment: Section 3.3 in the textbook by Hull.
 - Graded activities: Homework 2C.
- ⊗ Learning objectives: at the end of Part 2.C, a student should be able to do the following.
- Calculate effective price when a hedge is used to reduce future price risk.
 - Calculate basis risk and explain what it means for the hedger.

Module 3: Risk Management: Hedging with Futures

Part 3.A: Hedging with Equity Index Futures

- Lecture 3A: Hedging with Equity Index Futures
 - Supplemental reading from the CME.
 - Graded activities: Quiz 3A and Homework 3A.
- ⊗ Learning objectives: at the end of Part 3.A, a student should be able to do the following.
- Describe the elements of an equity index futures contract.
 - Explain how to hedge equity portfolios with equity index futures.

Part 3.B: Hedging in Practice

- Lecture 3B: More on Hedging in Practice
 - Supplemental reading from the CME.
 - (Optional) Reading assignment: Sections 3.4 and 3.6 in the textbook by Hull.
 - Graded activity: Homework 3B.
- ⊗ Learning objectives: at the end of Part 3.B, a student should be able to do the following.
- Explain how to execute cross hedging.
 - Describe the basics of dynamic hedging.

Module 4: Futures Pricing**Part 4.A: Interest Rate Conventions**

- Lecture 4A: Interest Rates and Calculations
 - (Optional) Reading assignment: Sections 4.1-4.6 and the chapter 4 appendix in the textbook by Hull.
 - Graded activity: Homework 4A.
- ⊗ Learning objectives: at the end of Part 4.A, a student should be able to do the following.
- Explain the procedures for measuring interest rates when working with derivatives.
 - Apply time value of money calculations based on continuous compounding.

Part 4.B: Valuation of Forward and Futures Contracts

- Lecture 4B: Basics of Forward and Futures Prices
 - (Optional) Reading assignment: Sections 5.1-5.5, 5.7, 5.8 in the textbook by Hull.
 - Graded activities: Homework 4B.
- ⊗ Learning objectives: at the end of Part 4.B, a student should be able to do the following.
- Describe the role of arbitrage in forward and futures pricing models.
 - Describe basic forward pricing when underlying assets provide no income, and when underlying assets provide a known (future) income.

Module 5: Applications of Futures Pricing**Part 5.A: Pricing of Commodity Futures, Part A**

- Lecture 5A: Pricing of Commodity Futures: Investment Commodities
 - (Optional) Reading assignment: Sections 5.11 and 5.13 in the textbook by Hull.
 - Graded activities: Quiz 5A and Homework 5A.
- ⊗ Learning objectives: at the end of Part 5.A, a student should be able to do the following.
- Describe the procedures for determining the value of a commodity futures contract.
 - Explain the role that arbitrage plays in the pricing.
 - Apply the pricing formulas to determine appropriate hedging strategies with investment commodity futures.

Part 5.B: Pricing of Commodity Futures, Part B

- Lecture 5B: Pricing of Commodity Futures: Consumption Commodities
 - (Optional) Reading assignment: Section 5.12 in the textbook by Hull.
 - Graded activities: Homework 5B.
- ⊗ Learning objectives: at the end of Part 5.B, a student should be able to do the following.
- Describe the role that arbitrage plays in the pricing.
 - Explain the distinction between investment commodities and consumption commodities and the implications for pricing.
 - Apply the pricing formulas to determine appropriate hedging strategies with investment commodity futures.

Part 5.C: Pricing of Equity Index Futures

- Lecture 5C: Pricing of Equity Index Futures
 - (Optional) Reading assignment: Section 5.9 in the textbook by Hull.
 - Graded activities: Homework 5C.
- ⊗ Learning objectives: at the end of Part 5.C, a student should be able to do the following.
- Describe the procedures for determining the value of an equity index futures contract.
 - Explain the limitations of these procedures.

Part 5.D: Pricing of Currency Futures

- Lecture 5D: Pricing of Currency Futures
 - (Optional) Reading assignment: Section 5.10 in the textbook by Hull.
 - Graded activities: Quiz 5D and Homework 5D.
- ⊗ Learning objectives: at the end of Part 5.D, a student should be able to do the following.
- Describe the procedures for determining the value of a currency futures contract.
 - Explain the similarities and differences between currency futures and currency forward contracts.
 - Apply the valuation models to currency forward contracts.
 - Explain the limitations of these procedures.

Our Communications**Announcements and Calendar**

- Canvas includes a calendar of the “due dates” for graded activities; please see bottom of the Syllabus page in the course. The Home page (also called the “Modules” page) displays all course activities and is organized by Module.
- As the semester progresses, I post announcements on a variety of issues, including current news related to our course, changes or additions to assigned readings, or other things that I think may be beneficial for you to know. Always check the Announcements when you log into the course.

Communicating with the Instructor

- E-mail is our method for one-to-one communication. The best tool to use in the Canvas Inbox. The Inbox link is in the global navigation panel on the far left-hand side of most pages in Canvas. In addition, you may contact me at paulhaensly@sbcglobal.net. For various reasons, I generally am not accessible by telephone.
- Whenever you send me an e-mail outside of Canvas, please help me sort your messages from spam. **List “FINA 6325” in your Subject line.** Also, please also add a brief description in the Subject line of the purpose of your e-mail.
- If the course includes any special assignments, please use the assignment upload tools in Canvas. In this way, you have documented evidence of your submission.

Grade center in Canvas

- You can access your grades by the Grades link in the course navigation panel on the left-hand side of the course pages. Grades are listed in terms of points earned.
- Quiz and Homework scores are posted as soon as you submit your work using the “Submit” button. (Quizzes are automatically submitted if you run over time.)
- I grade discussion forums for extra credit after their “due date” and will post these extra credit points within a week of the “due date.”
- Should I add any special assignments during the semester, I will do my best to return your graded work and post scores for within three days after the due date (or the date when you submit your work, if later).
- Grades in Canvas shows you a running total of your points earned to date. To calculate your current grade average, divide this total by the sum of points possible for completed activities to date. I will not send you special alerts if you are doing poorly, but I am more than happy to reply to your e-mail request for your current grade status.