Finance 6470: Derivatives Markets

Spring Semester, 2019

Course Information

- Course Dates: January 7 - April 23
- Course Time: TR 1:30 - 2:45 PM
- Course Room: Huntsman Hall 170
- Slack Channel
- Course Canvas

Instructor Information

- Tyler J. Brough
- Office Hours: TBD & By Appointment
- Office: BUS 605
- Email: tyler dot brough at aggiemail dot usu dot edu (please use this one and NOT my tyler dot brough at usu dot edu account)

Syllabus

Course Description

This course covers modern derivatives markets from the economic, institutional, and quantitative perspectives.

Textbooks

There is only one *required* textbook for this course:

- Derivatives Markets 3rd Edition by Robert McDonald.

I will also use some other books for some lecture material. Some of these other books are the following:

- Options, Futures, and Other Derivatives 9th Edition by John Hull (sometimes called the bible of option pricing)
- Risk Transfer by Christopher Culp (a gem of a book with a fresh perspective)
- The Economic Function of Futures Markets by Jeffrey Williams (entirely mind-bending perspective)

Methods of Teaching and Learning

This course will be taught as a graduate seminar-style course. That means that your participation is crucial. You will get out of the course what you individually and collectively put in.

I will use the Socratic method as much as feasible during class sections.

Assessment

The grade that you will earn will be determined by your ranking in the class based on the weighted total points accumulated. There is not a predetermined percentage of the class that will get an A or that will fail. If you all do excellent work, you will all earn exceptional grades. The weights given to each part of the class are as follows:

- Class Preparation and Participation (10%) - Your preparation is crucial! No student can earn an A without meeting these requirements!
- Homework (10%) - There will be weekly homework assignments that will consist of numerical and computational problems.
- Presentations (5%) - You will each be given the opportunity to present at least once in class. Your presentation should go for 20 minutes (15 minutes for content, and 5 minutes for discussion and questions). You must email the professor a PDF file of your presentation at least two days prior to your presentation.
- Annotated Bibliography (15%) - You will complete an annotated bibliography of the various readings assigned throughout the semester. This will become a valuable asset when completing your midterm and final exams. I will demonstrate how to create this document in class, and resources will be uploaded to Canvas.
- Midterm Exam (30%) - The midterm will be a take-home exam. You will have two weeks to complete it. You will take it at the end of Module II.
- Final Exam (30%) - The final exam will a take-home final exam. You will have two weeks to complete it. It will cover material from Module III.

Slack

All class communication will take place using Slack, a messaging system that replaces email. Students will be invited to the Fin 6470 Slack channel prior to the first week of class.

Clients for most computing and mobile platforms can be downloaded from the Slack website, or students may use the web client via a desktop browser.

Schedule of Topics

The weekly schedule will be updated on the course Google Spreadsheet

Topics (Subject to Change)

We will cover three broad modules:

- ***Module I:*** Economic Foundations: Arbitrage concepts, the Law of One Price (LOOP), equilibrium concepts
- ***Module II:*** Forwards, Futures, and Swaps (hedging, speculation, trading)
- ***Module III:*** Options and dynamic trading

NB: I reserve the right to dynamically alter this list as the course progresses. I will announce any such changes in class and on the course Slack channel.

Import dates:

- **Jan 8** - First day of classes
- **Mar 11 - 15** - Spring break
- **Apr 23** - Last day of classes
- **Apr 25 - May 1** - Final exams