

FINA 4210.002

Spring, 2020

Tuesdays and Thursdays, 3:30 to 4:50 P.M.

Room: BLB 040

Mazhar A. Siddiqi,
BLB312B, 565-3052,
mazhar.siddiqi@unt.edu
M, Tu, W, Th, 11-11:45 A.M.
(No office hours during finals
week)

Course Title: Introduction to Derivatives

Required Text: An Introduction to Derivatives and Risk Management by Don Chance and Robert Brooks, 9th edition.

Course Prerequisites: FINA 4200 with a grade of “C” or better or consent of department.

Course Objectives: First, to understand the basics of options. Second, to understand and use option pricing models. Third, to develop options strategies for various hedging requirements. Fourth, to understand the structure of forward and futures markets. Five, to develop pricing relationships for forward and futures contracts. Six, to develop futures arbitrage strategies for arbitrage. Seven, to develop hedging strategies using futures contracts.

Homework:

Homework consists of problems from the text and elsewhere. I do not grade homework. However your success on the exams, without doubt, depends on your ability to do homework problems. I go over most of the homework problems in class.

Attendance Policy:

I advise you to attend class regularly. I do not alter your grade based upon attendance. However, I may drop students for poor attendance. Also, in all of my classes there has been a high correlation between poor attendance and poor grades.

Exams:

There are three exams. Exam 1 is worth 30%, exam 2 is worth 35% and the final exam is worth 35% of your grade. The final exam is **not** comprehensive. Please make your travel arrangements carefully as all exams are allowed on only the scheduled exam dates. Only in rare cases of real hardship will students be allowed to take makeup exams.

Grades:

Letter grades are assigned as follows:

A is 90% - 100%, B is 80% - 89%, C is 70% - 79%, D is 60% - 69%, and F is 59% or below.

Course grades are posted on the internet and mailed by the university.

Notice for students with disabilities

The University of North Texas is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 – The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide reasonable accommodations to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at <http://www.unt.edu/oda/apply/index.html>. Also, you may visit the Office of Disability Accommodation in the University Union (room 321) or call them at (940) 565-4323. If you need an accommodation, please contact me as soon as possible but at the latest by the second week of class.

Academic dishonesty

Academic dishonesty is defined in the UNT Policy on Student Standards for Academic Integrity. Any suspected case of Academic Dishonesty will be handled in accordance with University policy and procedures. Possible academic penalties include a grade of “F” in the course. You will find the policy and procedures at <http://vpaa.unt.edu/academic-integrity.htm>

Student Perceptions of Teaching (SPOT)

The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. Your comments are an essential input in the process of continuous teaching improvement. So, please participate. The administration of the SPOT will begin a few weeks before the end of the semester and remain open for about two weeks.

Eagle Connect Account:

All students should activate and regularly check their EagleConnect (e-mail) account. You may obtain information about EagleConnect at <https://eagleconnect.unt.edu/>.

Course Outline: A tentative course outline is given below.

| <u>Dates</u> | <u>Topic</u> | <u>Relevant chapter in text</u> |
|---------------|--|---------------------------------|
| Jan. 14 | Option Pricing Principles | Ch. 3 |
| Jan. 16 | Option Pricing Principles | Ch. 3 |
| Jan. 21 | Option Pricing Principles | Ch. 3 |
| Jan. 23 | Binomial Option Pricing Model | Ch. 4 |
| Jan. 28 | Binomial Option Pricing Model | Ch. 4 |
| Jan. 30 | Binomial Option Pricing Model | Ch. 4 |
| Feb. 4 | Overflow or review | |
| Feb. 6 | EXAM 1 | |
| Feb. 11 | Black-Scholes Option Pricing Model | Ch. 5 |
| Feb. 13 | Black-Scholes Option Pricing Model | Ch. 5 |
| Feb. 18 | Basic Option Strategies | Ch.6 |
| Feb. 20 | Basic Option Strategies | Ch.6 |
| Feb. 25 | Advanced Option Strategies | Ch.7 |
| Feb. 27 | Advanced Option Strategies | Ch.7 |
| Mar. 3 | Overflow or review | |
| Mar. 5 | EXAM 2 | |
| Mar. 10 | ***Spring Break, no class*** | |
| Mar. 12 | ***Spring Break, no class*** | |
| Mar. 17 | Structure of Forward and Futures Markets | Ch. 8 |

| | | |
|------------------------------|--|--------|
| Mar. 19 | Structure of Forward and Futures Markets | Ch. 8 |
| Mar. 24 | Pricing Forward and Futures Contracts | Ch. 9 |
| Mar. 26 | Pricing Forward and Futures Contracts | Ch. 9 |
| Mar. 31 | Overflow or review | |
| Apr. 2 | EXAM 3 | |
| Apr. 7 | Futures Arbitrage Strategies | Ch. 10 |
| Apr. 9 | Futures Arbitrage Strategies | Ch. 10 |
| Apr. 14 | Futures Arbitrage Strategies | Ch. 10 |
| Apr. 16 | Forward and Futures Hedging | Ch. 11 |
| Apr. 21 | Forward and Futures Hedging | Ch. 11 |
| Apr. 23 | Forward and Futures Hedging | Ch. 11 |
| Apr. 28 | Overflow or review | |
| Apr. 30 | Overflow or review | |
| May 5, <u>Tuesday</u> | FINAL EXAM from <u>1:30 to 3:30 P.M.</u> in BLB 040 | |