

BAYLOR UNIVERSITY
HANKAMER SCHOOL OF BUSINESS
DEPARTMENT OF FINANCE, INSURANCE & REAL ESTATE

Finance 4366: Options, Futures, and Other Derivatives
Tuesday and Thursday, 11 a.m. - 12:15 p.m., Foster 302

Spring 2019

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Office Hours: 3:30-4:30 TR
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1 Texts and Materials

- [John C. Hull, Options, Futures and Other Derivatives, 10th Ed, Prentice Hall.](#)
- [Readings \(assigned from sources other than the textbook\)](#) distributed from the course website (required).
- *Wall Street Journal* (required). Your *WSJ* subscription includes access to print, online, tablet and mobile editions. It only costs \$1 for a 15 week subscription if you purchase it using the following link: <http://r.wsj.net/j73NM>.

2 Prerequisites

The only course prerequisite for Finance 4366 is Finance 3310. However, since Finance 4366 is rather quantitative in nature, you should also be “up to speed” in mathematics and statistics. The mathematics and statistics topics used in Finance 4366 are listed at “<http://bit.ly/mathstatprereqs>” where links to Khan Academy tutorials for each of these topics are provided. [Section 1](#) of Professor Martin Osborne’s [math tutorial](#) is also a highly recommended resource for topics in mathematics which are applicable for Finance 4366.

3 Scope and Objectives of Course

During the past few decades, there has been explosive growth in the use of derivative securities such as options and futures for managing risk. Such securities are commonly referred to as “derivatives” because their values depend upon the values of other assets. This course presents a conceptual framework for understanding how to price derivatives and design risk management strategies.

4 Learning Objectives

After completing this course, students should:

- Understand the nature of financial derivatives.
- Have a better knowledge of the specialized terminology of financial markets.
- Know how arbitrage pricing works and how this sets prices in a competitive market.
- Comprehend the idea of replicating portfolios or transactions.
- Understand how forward and futures contracts are priced in a competitive market.
- Know the different types of options and their characteristics and payoffs.
- Understand how the boundary conditions for option prices are determined.
- Know the ways the binomial and the Black-Scholes-Merton option pricing models are used to determine the fair value of a simple option.
- Be able to make extensions to the basic models used to price futures and options to take account of dividends and, in the case of options, early exercise.
- Be able to use their knowledge of arbitrage pricing methods for options and futures to undertake simple financial engineering.

5 Grade Determination

The final course numeric grade is based upon the following equation:

$$\text{Final Course Numeric Grade} = .10(\text{Class Participation}) + .10(\text{Quizzes}) + .20(\text{Problem Sets}) + \text{Max} \{ .20(\text{Midterm Exam 1}) + .20(\text{Midterm Exam 2}) + .20(\text{Final Exam}), .20(\text{Midterm Exam 1}) + .40(\text{Final Exam}), .20(\text{Midterm Exam 2}) + .40(\text{Final Exam}) \}$$

Since the final exam is comprehensive, this grading scheme allows students to redeem themselves on the final should they perform poorly on either of the midterms.

There will be two midterm exams given in class, the dates for which are to be determined. However, the final exam is scheduled according to the official university schedule.

Final Course Letter Grade. The final course letter grade will be tentatively based upon the following schedule of final course numeric grades:

| | | | |
|----|-----------|----|----------|
| A | 93 - 100% | C | 73 - 77% |
| A- | 90 - 93% | C- | 70 - 73% |
| B+ | 87 - 90% | D+ | 67 - 70% |
| B | 83 - 87% | D | 63 - 67% |
| B- | 80 - 83% | D- | 60 - 63% |
| C+ | 77 - 80% | F | <60% |

6 Office and Contact Information

My office is located at Foster 320.39 and my telephone number is (254) 307-1317. I can also be reached by text at this number, and by email at the address James_Garven@baylor.edu.

7 Attendance and Participation

This course will be conducted on an informal seminar basis. Students are expected to attend class regularly and punctually, as well as participate meaningfully. Furthermore, I abide by the [Hankamer School of Business Attendance Policy](#), which calls for assigning a grade of “F” to any student who fails to attend at least 75 percent of all class sessions. It is the student’s responsibility to ensure that he or she is in compliance with this policy.

8 Other Course Policies

8.1 Grade Appeals

Graded assignments and exams will be returned to students no more than one week after the assignment deadline or the date of the exam. If you feel that a graded assignment or exam has not been fairly evaluated, then you may submit an appeal for the assignment or exam to be regraded. In order to be considered, your appeal must be submitted no later than two weeks after the date of the exam or due date for the assignment. Any appeals submitted beyond this deadline will not be considered.

If you decide to submit an appeal, email it to options@garven.com with the following subject header: “Grade Appeal for Finance 4366”. Include a clearly scanned or photographed copy of the question(s) that is (are) to be regraded, a copy of your answer(s), and an explanation as to *why* you think the question(s) merit(s) regrading. I will then take it upon myself to regrade the question(s). Keep in mind that regrading implies three possible outcomes: a higher grade, the same grade, or a lower grade.

The appeal procedure described above constitutes the “Conference with Faculty Member” requirement set forth in [Baylor’s Academic Appeals Policy and Procedure document](#).

8.2 Electronics Policies

The following electronics policies will be strictly enforced:

- Neither laptops nor tablets may be used in class without the express permission of the instructor;
- No audio or visual recording of lectures without the express permission of the instructor; and
- No cell phone use during class, which includes texting, talking, photography, and videography.

8.3 Late Work

[Assigned problem sets](#) are due at the beginning of class. If you expect to absent on a day when a [problem set](#) is due, it must be turned in at or before this time; otherwise you will not receive any credit for the problem set. Furthermore, if you miss class on a day when a required reading is assigned, there will be no make-ups for the quiz that you miss (note: these rules does not apply in cases involving medical or family emergencies).

9 Course Schedule

My plan is to cover [selected chapters from the textbook](#). I will also occasionally assign other readings that will be available from the course website.

Although the course schedule is subject to change, the [lecture notes page](#) on the course website effectively serves as a course calendar, since it lists by date the sequencing of course material for the entire semester.

10 Academic Honesty and Integrity

As members of the Baylor academic community, each of us is responsible for participating in research, learning, and discourse in a manner characterized by intellectual honesty and scholarly integrity. Honesty and integrity is expected not only in the classroom, but also in the broader context of relationships and interactions involving faculty, students, and staff. The reputation of Baylor University and the value of the contributions made by its faculty, students, and staff depend on the assurance that every member of the academic community adheres to the very highest standards of ethical behavior.

In the narrower context of this particular course, students are expected to act ethically and take responsibility for their own actions. You should review the [Baylor University Honor Code](#), since this standard will be applied to all of your work in Finance 4366.

11 Baylor University Title IX

[Baylor University's Office of the Executive Vice President and Provost](#) has recommended that all syllabi include the following information:

Sexual and Gender-Based Harassment and Interpersonal Violence Policy:

Baylor University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities, and it does not tolerate discrimination or harassment on the basis of sex or gender. This policy prohibits sexual and gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, and retaliation (collectively referred to as prohibited conduct). For more information on how to report or to learn more about our policy and process, please visit www.baylor.edu/titleix or call the Title IX Office at (254) 710-8454.