

# FINC 4571-Derivative Markets

Course Outline

Spring 2020

**Instructor:** Dr. James A. Yoder

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**Office Hrs:** By appointment

(You are WELCOME to drop in any time I am in the office)

## Catalog Description:

An in-depth study of options and futures markets. Topics will include the institutional structure of options and futures markets, pricing models, and hedging techniques.

## Required Background or Experience:

- Prerequisites: FINC 3511 or equivalent
- Prerequisite Justification:  
In depth knowledge of present value analysis and methods of valuation of securities is required. These topics are covered in FINC 3511.

## Expected Outcomes: ([Learning Goals \(http://www.westga.edu/acffin/1676.php\)](http://www.westga.edu/acffin/1676.php))

- Improve communication effectiveness (LG 1)
- Apply basic quantitative skills to business problems (LG 2)
- Improve analytical skills and critical thinking necessary to value and evaluate alternative investment decisions (LG 2, 3, 4, 5, 10)
- Improve written communications skills through preparation of investment projects (LG 1)
- Understand the use of futures and options in portfolio management (LG 2, 4, 6, 10)
- Develop understanding of specific areas in the finance curriculum (LG 7, LG 8, LG 9) as follows:

1. students will be able to discuss institutional characteristics of options and futures markets
2. Students will be able to apply options and futures models
3. Students will be able to describe basic investment strategies involving options and futures
4. Students will be able to use options and futures to hedge portfolios

## Text and References

- Text: [An Introduction to Derivatives & Risk Management](#) (9th or 8th edition) Chance & Brooks.

### **Special or Unique Student Materials:**

- Students will need access to internet, Excel or other spreadsheet program.
- A financial calculator with a cash flow button is required. Examples: TI BAII plus, TI-83, TI-83 plus. Devices with a wireless connection (e.g. iPhone, Blackberry, iPad) are not allowed for test taking.
- Subscription or access to the Wall Street Journal

### **Special or Unique University Facilities:**

Access to the Business School Computer Lab, and the Internet are required for investment projects.

### **Expanded Description of the Course and Instructional Methods:**

#### **Expanded description of the course:**

- This course is in two distinct parts. The first half of the course examines options. Call and put option features are explained the mechanics of trading are described. Options will be valued by the Black-Scholes and other pricing models. Option strategies and their use in portfolio management will be examined

The second part of the course examines futures. Common futures contracts and their trading mechanics are described. Principals of futures pricing and hedging strategies are examined. Option on futures will also be covered

#### **Instructional Methods**

- Lecture, discussion, problem solving, and applied projects.

#### **Methods of Evaluating the Outcomes:**

Grading Policy (point basis/approximate):

- |                            |             |
|----------------------------|-------------|
| 1. Midterm examination (2) | 200 points  |
| 2. Final examination       | 100 points  |
| 3. Projects/quizzes        | As assigned |

#### **Administrative Policies**

- Class attendance is strongly recommended.
- No makeup tests/quizzes.
- You are responsible for knowledge of any administrative announcements (test information, schedule changes, etc. that are made during class).

- Tests/quizzes will be announced in advance.
  - There is no extra credit in this course. Work submitted for credit in other courses will not count for credit in this course.
  - If you require any special conditions for attending class or taking tests, please notify the instructor during the first week of classes.
  - Requests for quiz/exam score adjustments must be made within one week of grade assignment.
  - Finance is the most quantitative major in the core and depends heavily in accounting. If you did poorly in your math and accounting courses, finance is probably not the major for you.
  - <https://www.westga.edu/UWGSyllabusPolicies/> contains important information pertaining to your rights and responsibilities in this class.
  - Credit Hour Policy (3 credit hours): Students in this class will spend 150 minutes per week with faculty instruction (either face-to-face or online). Generally, students can expect to spend about 450 minutes of class work outside of the classroom each week. This out-of-class work may include, but is not limited to, readings, assignments, projects, group work, research, and test preparation. The amount of out of class time required for a given outcome will vary by student
  - The policy of the University of West Georgia is that each student is responsible for checking his/her my.westga.edu e-mail account on a regular basis.
- You are required to log in to Course Den at least once a week. I am required to report if students on financial aid are still participating in the course on a regular basis throughout the semester.

### **Tentative Schedule:**

<b>week (Beginning Monday)</b>	<b>Chapter</b>	<b>Topic</b>
01/06	1	Introduction
01/13	2	Option Markets
01/20	6	Basic Option Strategies
01/27	3	Principals of Option Pricing
02/03	3	Principals of Option Pricing
02/10	4	Binomial Option Pricing
02/17	4	Binomial Option Pricing
02/24	5	Black-Scholes Option Pricing
03/02	5	Black-Scholes Option Pricing
03/09	7	Advanced Option Strategies
03/16	Spring Break	
03/23	8	Futures Markets
03/30	11	Hedging with Futures
04/06	11	Hedging with Futures
04/13	9	Futures Pricing
04/20	12	Swaps

Final Exam: TBA

Last day to withdraw with a grade of “W” is February 28.