

# FIN 633 Derivatives Analysis Summer 2021

## **Richard Swanson**



Email: Richard.swanson@gordon.edu Office Hours: By Appointment



## **Course Information**

Pre-requisites: None

Class Location: Ken Olsen Science Center (127)

Meeting Times: 6:45 PM - 9:45 PM

Meeting Dates: Tuesday nights, each week beginning May 18 to June 29.

### **Course Description**

Building on the principles of Christian ethics, finance, and economics students will understand and apply:

- Futures markets and counterparties
- Hedging strategies
- Interest rates, interest rate futures and swaps
- Determination of forward and futures prices
- Mechanics of options markets
- Stock options and trading strategies using options
- Option valuation methods
- Option applications
- Various types of options including interest rate, credit derivatives, weather, insurance, real, energy, etc.

#### **Course Materials:**

Books for this course can be purchased at the Gordon College Bookstore

#### **Textbook Information:**

Introduction to Derivatives and Risk Management, 10th Edition by Chance and Brooks ISBN-10: 0134083245

Please make sure you buy the version with on-line homework capabilities

#### **Course Objectives:**

- Students will gain a basic understanding of futures, options and derivatives
- Students will learn how to use financial calculators and / or spreadsheets to calculate the value of futures, options and derivatives
- Students will also understand the limitations and potential abuses of derivatives
- Students will apply quantitative tools in the evaluation of derivative-based products
- Students will understand the various applications of derivatives

#### **Grading Criteria:**

Team project	30%
Class Participation	5%
Quizzes	25%
Midterm and Final Exam	40%

Total 1	100%
---------	------

#### **Course Outline:**

Week	Topics	Chapter(s)	Assignment
1	Introduction, markets and	1, 2	Quiz 1
	strategies		
2	Option pricing and the binomial	3, 4	Quiz 2,
	model		Team Assignment #1
3	Black-Scholes and option strategies	5, 6	Quiz 3,
			Team Assignment #2
4	Advanced option strategies	7	Quiz 4
			Midterm Exam
5	Forwards, futures and swaps;	8, 9	Quiz 5,
	Arbitrage		Team Assignment #3
6	Hedging and swaps	10, 11	Quiz 6,
			Team Assignment #4
7	Interest rate forwards & options;	12, 13	Quiz 7,
	Advanced derivatives		Team Assignment #5,
			Exam

### **Important Course and College Information:**

Only grades of B- quality or better will be counted towards completion of the MSFA program requirements. Thus, if you receive a C+ or lower, you must repeat the course. (You will need to pay for this extra class.) If a course is repeated, the higher of the grades will be calculated in the cumulative grade point average.

#### Plagiarism:

Plagiarism occurs when a sequence of ideas is transferred from a source to a paper without the process of digestion, integration, and reorganization in the writer's mind, and without acknowledgment in the paper.

Plagiarism is committed if students submit as their own work:

- Part or all of a written or spoken assignment copied from another person's manuscript or notes
- Part or all of an assignment copied or paraphrased from a source such as a book, magazine, or pamphlet
- The sequence of ideas, arrangement of material or pattern of thought of someone else, even though they are expressed in one's own words.

A student is an accomplice of plagiarism and equally guilty if:

- One's paper, in outline or finished form, is allowed to be copied and submitted as the work of another:
- One prepares a written assignment for another student;
- One keeps or contributes to a file of papers or speeches with the clear intent that
  these papers or speeches be copied and submitted as the work of anyone other
  than the author.

**Accommodations Statement:** "Students with disabilities who need academic accommodation are asked to speak with the instructor within the first two weeks of class. Students are also responsible for making sure that documentation of the disability is on file in the <u>Academic Support Center</u>. Failure to register in time with the leader and the ASC may compromise our ability to provide the accommodation."

**Academic Dishonesty Statement.** "Academic dishonesty is regarded as a major violation of both the academic and spiritual principles of this community and may result in a failing grade or suspension. Academic dishonesty includes plagiarism, (see Plagiarism in <a href="Student Handbook">Student Handbook</a>), cheating (whether in or out of the classroom), and abuse or misuse of library materials when such abuse or misuse can be related to course requirements."

**Library Resources Statement.** "Students are responsible to obtain any library resources assigned for this course. Questions about library resources should be directed to librarians in the Jenks Library. Librarians are available to assist you from the library reference desk, by e-mail at <a href="mailto:library@gordon.edu">library@gordon.edu</a>, or by phone (978) 867-4878."