UNIVERSITY OF HAWAI'I AT MANOA
Shidler College of Business
FIN 412: Options and Other Derivatives
Spring 2020

Instructor: Wei ("Victor") Huang
PhD, Professor of Finance, Chair, Department of Finance
Office: CBA building, C tower, C305b
Phone: 956-7679 (Fax: 956-9887)
E-mail: weih@hawaii.edu

Class Meetings: TR 10:30-11:45 a.m. G102
Office Hours: TR 1:30 - 2:45 p.m. or by appointment

1. Course Prerequisites

FIN 311 Investments or consent

2. Course Description and Objectives

As an undergraduate elective course, this class provides an introduction to options, futures and other derivative securities. We will learn a core set of principles that help us understand how derivative assets are used in practice. The broad topics include the valuation models and trading strategies (hedging and speculation) involving forwards, futures, and options. We will also discuss a number of important concepts such as the Greek letters and volatility smiles. Advanced mathematics such as calculus is not required. This course will be helpful for students who plan to take NASD series 7 license exam, and CFP/CFA exams.

3. Course Materials

i) Required Textbook: "Fundamentals of Futures and Options Markets", Ninth Edition by John Hull.
ii) PowerPoint slides: Available on Laulima.

4. Course Requirements[1]

Exams

There will be two in-class mid-term exams and one final exam. The final exam is cumulative but will emphasize the materials covered beyond the second mid-term exam.

Homework

[1] Students taking the class for graduate credit are required to complete an extra assignment in addition to course requirements for undergraduate students.

In addition to class examples, some end of chapter questions or other projects may be assigned to help you further understand the concept and prepare for exams. Most of homework assignments (see Section 8 below) are not graded and solutions will be provided. We will discuss some of them in class.

Group Presentation

Students in groups will conduct a short research on a case or trading strategy related to derivatives. Some cases can be found in Chapter 25, derivatives mishap, Chapter 8, securitization and credit crisis of 2007, Chapter 14, employee stock options, and other financial newspapers and magazines. Each group will make one presentation. For example, you may present one of those high profile cases in recent financial crisis involving companies such as Fannie Mae, Freddie Mac, Lehman Brothers, AIG, and Merrill Lynch. Among others, the presentation should cover, if relevant, 1) what trading activities were involved in the case? Why did the strategy succeed or fail? 2) What can we learn from the case? If you work on other issues such as particular trading strategies or new financial instruments involving derivatives, you should explain how they can work and what potential gains and risks they may have. Cases can also be related to accounting aspects of derivatives such as "hedge accounting." Online short videos may be used in presentations. All team members should participate in the presentation.

5. Examination Policy

Both mid-term exams and the final exam will be taken by the students as per the course schedule. In general, work related conflicts or overlapping requirements due in other classes are not valid excuses for rescheduling exams. You can have a double-sided formula sheet in exams (Standard 8.5 x 11paper, you may write anything you want on both sides). You need a calculator and #2 pencils in exams.

6. Grade Determination

Your grade in this course will be determined by your class participation, homework, mid-term exams and the final exam. The final grade will be weighed as follows:

Grading Scheme	
class participation (including attendance) and group presentation, part of homework assignments (not all homework assignments are graded)	15%
Two in-class mid-term exams	25% each
Final Exam	35%

The final letter grade will be determined based on the following cut-off: **100: A+; 90-99: A; 88 – 89: A-; 85 - 87: B+; 80-84: B; 78 -79: B-; 75-77: C+; 70 - 74: C; 60-69: C-; 55-59: D+; 45-54: D; 40-44: D-; <40: F.** I usually curve grades for this class. In this sense, the final grades will be dependent on a student's relative performance in the class.

7. CBA Policies

All relevant CBA policies concerning academic honesty, grievance procedure and confidentiality in grading apply. Students with disabilities are encouraged to contact the KOKUA Program for information and services. Services are confidential and free of charge. In case of need, please contact KOKUA at 956-7511, or kokua@hawaii.edu.

8. Homework Assignments

(Changes may be made during the semester)

Chapter 1, textbook, 1.1, 1.2.
Chapter 2, textbook, 2.1, 2.3, 2.4, 2.8, 2.9, 2.10, 2.11, 2.17, 2.18, 2.19, 2.22, 2.23, 2.25, and 2.28.
Chapter 3, textbook, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 3.10, 3.11, 3.17, 3.18, and 3.20.
Chapter 4, textbook, 4.1, 4.4, 4.5, 4.8, 4.9, 4.10, 4.13, 4.14, 4.17, and 4.18.
Chapter 5, textbook, 5.1, 5.2, 5.3, 5.4, 5.6, 5.7, 5.9, 5.10, 5.12, 5.14, and 5.15.
Chapter 6, textbook, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11, and 6.17.
Chapter 7, textbook, 7.1
Chapter 9, textbook, 9.1, 9.2, 9.4, 9.6, 9.7, 9.9, 9.10, 9.13, 9.14, 9.15, 9.17, and 9.22.
Chapter 10, textbook, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.9, 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 10.16, and 10.17.
Chapter 11, textbook, 11.1, 11.2, 11.3, 11.4, 11.6, 11.7, 11.10, and 11.12
Chapter 12, textbook, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.9 and 12.10.
Chapter 13, textbook, 13.1, 13.2, 13.4, 13.6, 13.13, and 13.14.
Chapter 17, textbook, 17.2, 17.3, 17.4, 17.5, 17.24, and 17.25.

	Tentative Course Calendar *	Readings
	FIN 412: Options and other Derivatives	Hull 9th ed.
Dates	Topic	Chapters
T Jan 14	Introduction; Mechanics of Futures and Forward Markets	Chapters 1, 2
Th Jan 16	Mechanics of Futures and Forward Markets	Chapter 2
T Jan 21	Mechanics of Futures and Forward Markets – cont.	Chapter 2
Th Jan 23	Mechanics of Futures and Forward Markets – cont.	Chapter 2
T Jan 28	Hedging Strategies Using Futures	Chapter 3
Th Jan 30	Hedging Strategies Using Futures – cont.	Chapter 3
T Feb 4	Hedging Strategies Using Futures – cont.	Chapter 3
Th Feb 6	Interest Rate	Chapter 4
T Feb 11	Interest Rate – cont.	Chapter 4
Th Feb 13	Determinations of Forward and Futures Prices	Chapter 5
T Feb 18	**Exam 1**	
Th Feb 20	Determinations of Forward and Futures Prices	Chapter 5
T Feb 25	Determinations of Forward and Futures Prices-cont.	Chapter 5
Th Feb 27	Interest Rate Futures	Chapter 6
T Mar 3	Interest Rate Futures-cont.	Chapters 6
Th Mar 5	Interest Rate Futures-cont. Introduction to Swaps	Chapter 6, 7
T Mar 10	Mechanics of Options Markets	Chapter 9
Th Mar 12	Mechanics of Options Markets	Chapter 9
	March 16-20: Spring recess	
T Mar 24	Properties of Stock Options	Chapter 10
Th Mar 26	Kuhio Day- No class	
T Mar 31	Properties of Stock Options	
Th April 2	**Exam 2**	Chapter 11
T April 7	Option Trading Strategies	Chapter 11
Th April 9	Option Trading Strategies – cont.	Chapter 12
T April 14	Intro to Binomial Trees in Option Pricing	Chapter 12
Th April 16	Valuing Stock Options-The Black-Scholes-Merton Model	Chapter 13
T April 21	Valuing Stock Options-The Black-Scholes-Merton Model-cont.	Chapter 13
Th April 23	The Greek Letters	Chapter 17
T April 28	The Greek Letters	Chapter 17
Th April 30	The Greek Letters – cont.	Chapter 17
T May 5	Group presentations	
Th May 7	Wrap-up and review for final exam	
Final Exam: Tuesday, May 12, 9:45 – 11:45 a.m. G102		
* The schedule indicated above is tentative; changes may be made as the semester progresses.		