UNIVERSITY OF HAWAI'I AT MĀNOA
SHIDLER
COLLEGE OF BUSINESS
• International Excellence •

FIN 654 – Financial Derivatives
Spring 2021
TA: Hamza Essaidi (essaidi@hawaii.edu)

Professor Tray Spilker
Office: BUSAD E-601K
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Section 01: Thu 6pm-8:45pm
Office hours: Thu 5pm-6pm

Zoom: https://hawaii.zoom.us/j/94555429202
Meeting ID: 945 5542 9202, Passcode: 153585

Description This course is an introduction to derivative assets such as futures, forwards, swaps, and options, financial engineering, risk management, and mortgage and credit derivatives. We will cover the pricing of these derivative assets as well as securities that contain embedded options. We will consider risk management strategies such as static and dynamic hedging. Applications will be considered from equity, commodity, bond, and mortgage-backed markets.

Prerequisite FIN 634: Investment Analysis and Management. Exposure to accounting, statistics, calculus, economics, and Microsoft Excel are helpful.

Required Material *Options, Futures, and Other Derivatives, 10th ed.*, John C. Hull, Pearson. 2018
Supplemental material is available on Laulima and includes:

- Lecture slides
- Problem sets and solutions
- Sample midterms and final exams
- Readings
- Spreadsheets

Graded Assignments *Attendance:* Attendance is required for this course. This includes turning on your camera during Zoom classes. Excessive absence will result in loss of points. You are responsible for obtaining any information that you might have missed during san absence. I occasionally will ask someone to present homework solutions in front of class—if your submitted solution is correct, I will feel free to call on you. Attendance will account for 10% of the course grade.

Problem Sets: Problem sets will be distributed throughout the semester. Answers to the problem sets will usually be distributed. I may or may not grade certain problem sets. You have my permission to discuss the problem sets amongst yourselves (unless I specifically state otherwise); however, you must each turn in

individual copies of the homework. Problem sets will account for 10% of the course grade

Exams: There will be graded mid-term and final exams, which will each account for 40% of the course grade. Exams will be closed book and closed notes. However, a calculator and one 8.5"x11" cheat sheet is allowed (front and back). Except for extenuating circumstances, ***no make-up exam*** will be allowed. The final exam will focus on material covered in the second half of the course, but may include material from the first half.

Disabilities Any student with special needs should bring this to my attention as soon as possible, but not later than the second week of class. Students with disabilities are encouraged to contact the KOKUA Program for information and services. Contact KOKUA at 956-7511, kokua@hawaii.edu, or at the Queen Lili'uokalani Center for Student Services room 013.

Integrity Cheating and Plagiarism will not be tolerated. All incidents will be handled in accordance with the UH *Student Code of Conduct.* The UH Student Code of Conduct, is available at: http://www.hawaii.edu/student/conduct.

Tentative Schedule: The schedule is subject to change as the semester progresses.

Jan 14 - Week 1:	Introduction and mechanics of futures markets; Chapters 1, 2
Jan 21 - Week 2:	Determination of forward and futures prices; Chapter 5
Jan 28 - Week 3:	Hedging strategies using futures; Chapter 3
Feb 4 - Week 4:	Hedging strategies using futures continued
Feb 11 - Week 5:	Interest rate futures; Chapter 4, 6
Feb 18 - Week 6:	Swaps; Chapter 7
Feb 25 - Week 7:	Swaps continued; Mid-Term Review
Mar 4 - Week 8:	**Mid-Term Exam**
Mar 11 - Week 9:	Mechanics of option markets and properties of options; Chapters 10,11
Mar 18 – Week 10:	**Spring Break**
Mar 25 - Week 11:	Trading strategies involving options; Chapters 12
Apr 1 - Week 12:	Binomial Trees, Chapter 13
Apr 8 - Week 13:	The Black-Scholes-Merton model; Chapter 15 (excl. 15.6)
Apr 15 - Week 14:	Dynamic Hedging and The Greeks; Chapter 19
Apr 22 - Week 15:	Dynamic Hedging continued; Review of course
Apr 29 - Week 16:	**Final Exam**