



COURSE SYLLABUS
First Semester Academic Year 2020
01111481 Economics of Derivatives Market for Entrepreneur

Instructor: **Dr. Thanasin Tanompongphandh** (thanasin.t@ku.ac.th)
Dr. Paitoon Wongsasutthikul
Pongpat Khamchoo, CMT

Course Objectives:

The objective of this course is to introduce students to derivatives market, and to understand how to use derivatives to manage risks and returns of the underlying assets for entrepreneur.

Course Description:

Economics principles of derivatives market for entrepreneur; forwards, futures and swap contract; options contract; options pricing models, Black-Scholes and Merton model; options strategies.

Pre-requisite: 01111382 Investment in Global Financial Market for Entrepreneur

Teaching Methods: Lecture, cases, assignments, quizzes, group projects

Grading:

Cases/Assignments/Participations	5%
Individual Project 1	10%
Mid-Term Examination	35%
Cases/Assignments/Participations	5%
Individual Project 2	10%
Final Examination	35%

Textbook & Readings:

- **Main textbook:** John C. Hull (2014) Options, Futures, and Other Derivatives, Ninth Edition.
- **Optional textbook:** Paul Wilmott Introduces Quantitative Finance

Time: Friday/Sunday, 9:00 am- 11:50 am

Room: 5617

Course Outline:

Week	Date	Day	Time	Topic	Instructor	Reading
Week 1	15-Jan-21	Friday	9:00-12:00	Introduction to Derivatives Market	Thanasin	Hull Ch.1
Week 2	22-Jan-21	Friday	9:00-12:00	Mechanics of Futures Markets	Thanasin	Hull Ch.2

Week	Date	Day	Time	Topic	Instructor	Reading
Week 3	31-Jan-21	Sunday	9:00-12:00	Hedging Strategies Using Futures	Pongpat 1	Hull Ch.3
Week 4	5-Feb-21	Friday	9:00-12:00	Interest Rates	Thanasin	Hull Ch.4
Week 5	12-Feb-21	Friday	9:00-12:00	Determination of Forward and Futures Prices	Thanasin	Hull Ch.5
Week 6	19-Feb-21	Friday	9:00-12:00	Presentation	Thanasin	
Week 7	26-Feb-21	Friday	9:00-12:00	Review	Thanasin	
Week 8			Midterm (DATE TBA)			
Week 9	14-Mar-21	Sunday	9:00-12:00	Option Contracts	Pongpat 2	Hull Ch.10 & 11
Week 10	21-Mar-21	Sunday	9:00-12:00	Binomial Trees	Pongpat 3	Hull Ch.13
Week 11	28-Mar-21	Sunday	9:00-12:00	Options Application	Pongpat 4	Hull Ch.12 & 22 & 35
Week 12	4-Apr-21	Sunday	9:00-12:00	Options Pricing + Exotic Options	Paitoon 1	Hull Ch.15 & 26
Week 13	11-Apr-21	Sunday	9:00-12:00	Trading Strategies Involving Exotic Options	Paitoon 2	Hull Ch.26
Week 14	18-Apr-21	Sunday	9:00-12:00	Hedging with Derivatives	Paitoon 3	Hull Ch.26
Week 15	25-Apr-21	Sunday	9:00-12:00	Structure Products & Review	Paitoon 4	
Week 16	23 or 30-Apr-21	Friday	9:00-12:00	Presentation	Thanasin	
Week 17			Final (DATE TBA)			

Individual Project 1 “Futures trader”

1. Develop your own investment thesis.
2. Create a long / short position on futures using Click2Win platform.
3. Create a spreadsheet and calculate the margin call level.
4. Compute the risk of getting a margin call based on 5-year historical prices.
5. Create an optimally hedged portfolio using futures and an underlying asset.

Individual Project 2 “Hedge Fund Manager”

- TBA