

Course Outline

FN411: DERIVATIVES ANALYSIS

Semester 2/2021 (January 10th – May 7th, 2022)

Number of Credit: 3

Prerequisite: FN312

Course Description:

Fundamental principles of derivatives, including futures, forward contracts, options, warrants, swaps, and real options, derivatives pricing models, strategies for speculating or hedging.

Course Objectives:

The students who can complete this course should:

- Understand the characteristics of futures, forward, option, warrant, and swap.
- Be able to price the above securities.
- Be able to design the proper strategies for speculating and hedging.

Class Time and Logistic

Class day: Thursday

Class time: 2pm – 5pm

Teaching Materials Platform:

All class materials and assignments will be posted and submitted on MS Teams.

Meeting Platform:

<https://zoom.us/j/97579247603>

Meeting ID: 975 7924 7603

Passcode: 411

Instructor:

Name: Anutchanat Jaroenjitrkam

Office Hours: By appointment

Email: anutchanat@tbs.tu.ac.th

Phone:

Main Text:

John C. Hull. Options, Futures, and Other Derivatives. 9th edition or newer version. (M)

Recommended Texts & Materials

- John C. Hull et al. Fundamentals of futures and options markets. 8th edition or newer version.
- R-45 Derivative markets and instruments, R-46 Basic derivative pricing and valuation. 2022 CFA Program Curriculum Level I.

Suggested Readings:

Grading Criteria:

Assignment 1	10%
Assignment 2 and Presentation	30% (25+5)
Midterm Examination	25%
Final Examination	25%
Quiz and homework	5%
Class participation	5%
Total	<u>100%</u>

Total score	0 – 49	50 – 54	55 – 60	60 – 64	65 – 74	75 – 84	85 – 89	90 – 100
Grade	F	D	D+	C	C+	B	B+	A

The above grading criteria is the strictest one. If the overall performance of the class is significantly below these criteria, the instructor can adjust the criteria for the benefit of the students.

Expected Learning Outcomes: Please refer to the curriculum of the program.

Tentative Class Schedule:

Session/Date & Time	Topics	Activities/ Text & Materials*/ Media
13/01/2022	- Introduction to derivatives - Introduction to options - Related careers - Assignment 1: The Warning (2009) https://www.pbs.org/wgbh/frontline/film/warning/ - Due on 27/01/2022	(M) Ch. 1, 10 TFEX (www.tfex.co.th)
20/01/2022	- Basic options valuation	(M) Ch. 11, TFEX
27/01/2022	- Binomial options pricing model	(M) Ch. 13
03/02/2022	- Black-Scholes-Merton options pricing model	(M) Ch. 14, 15
10/02/2022	- Greeks - Volatility smirk	(M) Ch. 19, 20
17/02/2022	- Options strategies for trading and risk management	(M) Ch. 12
24/02/2022	- Introduction to futures market - Data from TFEX	(M) Ch. 2
Mid-term week		
10/03/2022	- Forward and futures prices - Distributing Assignment 2	(M) Ch. 5
17/03/2022	- Hedging with futures	(M) Ch. 3
24/03/2022	- Interest rate futures and swaps 1	(M) Ch. 6, 7, 33
31/03/2022	- Interest rate futures and swaps 2	(M) Ch. 6, 7, 33
07/04/2022	- Options on futures, currency derivatives, and exotic options	(M) Ch 17, 18, 26
21/04/2022	- Introduction to structured products - Monte Carlo simulation - Assignment 2 is due	(M) Ch. 22
28/04/2022	- Presentation and discussion	
05/05/2021	- Presentation and discussion - Q&A and wrap up	

ACADEMIC CALENDAR & HOLIDAY SEMESTER 2/2021

Semester 2/2021 (January 10 – May 7, 2022)	
Classes Begin	January 10, 2022
Add-drop period	January 17 - 20, 2022 <i>(from 9.00 AM of January 17 to 10.30 PM of January 20)</i>
Tuition Fee Payment Period	7 December, 2021 - January 23, 2022 <i>(9 AM - 10.30 PM)</i>
<i>Makha Bucha Day*</i>	<i>February 16, 2022</i>
Mid-term Examination Period	February 28 - March 5, 2022
Withdrawal period with "W" on record	March 14 - April 25, 2022 <i>(from 9.00 AM of March 14 to 10.30 PM of April 25)</i>
<i>Chakri Memorial Day*</i>	<i>April 6, 2022</i>
<i>Songkran Festival Day*</i>	<i>April 11 - 17, 2022</i>
<i>Coronation Day*</i>	<i>May 4, 2022</i>
Last day of class for Semester 2/2021	May 7, 2022
Final exam period	May 9 - 12, 17 - 25, 2022
<i>Royal Ploughing Ceremony Day*</i>	<i>May 13, 2022</i>
<i>Visakha Bucha Day*</i>	<i>May 15, 2022</i>
<i>Substitution for Visakha Bucha Day*</i>	<i>May 16, 2022</i>

Remark * Holiday, No classes during this period