



Course Syllabus

1	Course title	Financial Derivatives	
2	Course number	1603443	
3	Credit hours	3	3
	Contact hours (theory, practical)	3	
4	Prerequisites/corequisites	Investment Management	
5	Program title	BA Finance	
6	Program code	03	
7	Awarding institution	University of Jordan	
8	School	Business School	
9	Department	Finance	
10	Course level	BA	
11	Year of study and semester (s)	2021/2022 First	
12	Other department (s) involved in teaching the course		
13	Main teaching language	English	
14	Delivery method	<input checked="" type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input type="checkbox"/> Fully online	
15	Online platforms(s)	<input checked="" type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....	
16	Issuing/Revision Date	17/10/2022	

17 Course Coordinator:

Name: Muhanned Obeidat

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**18 Other instructors:**

Name:

Office number:

Phone number:

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Contact hours:

Name:

Office number:

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19 Course Description:

This course involves the advanced study of security analysis, security selection techniques, and portfolio management. The objective is to use these tools to develop a rational way of thinking commonly used to model investment environment that helps in investment decision making process.



20 Course aims and outcomes:

A- Aims:

The aim of this course is to develop a way of thinking that is necessary in using these securities in managing financial risk while recognizing the risks that these securities themselves can create (i. e., financial engineering). Thus, this course is demanding in the sense that it requires understanding how financial markets with derivative securities modify the risk return profile relative to financial markets where these securities do not exist.

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

1. Understand the structure of derivative instruments (forward contracts, futures, and options) in terms of how they are issued and traded,
2. Explain how derivative instruments can be used to hedge for investment and financing risks.
3. Demonstrate how derivative securities can be used for speculation purposes.
4. Design positions that involve using forward and futures contracts where the overall risk of the position is minimized based on the concept of hedge ratio and understand the structure, use, and pricing of forward rate agreements (FRAs) to hedge for interest rate risk and understand the use of options contracts relative to forward and futures contract.
5. Apply the no-arbitrage principle to learn about the option price boundaries and apply the binomial option pricing model and the Black Scholes model to estimate the fair price of call and put options.
6. Explain option price sensitivity measures derived from pricing models.

SLOs SLOs of the course	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5	SLO 6
1 Understand the structure of derivative instruments (forward contracts, futures, and options) in terms	✓				✓	



of how they are issued and traded						
2. Explain how derivative instruments can be used to hedge for investment and financing risks.			✓			
3. Demonstrate how derivative securities can be used for speculation purposes.			✓		✓	
4. Design positions that involve using forward and futures contracts where the overall risk of the position is minimized based on the concept of hedge ratio	✓					✓
5. Apply the no-arbitrage principle to learn about the option price boundaries and apply the binomial option pricing model and the Black Scholes model to estimate the fair price of call and put options.					✓	
6. Explain option price sensitivity measures derived from pricing models.						✓

21. Topic Outline and Schedule:

Week	Lecture	Topic	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1.1	Introduction	1	Face to Face	Class	Synchronous	Exam	Textbook
	1.2	Introduction	1	Face to face	Class	Synchronous	Exam	Textbook
	1.3	Introduction	1	Face to face	Class	Synchronous	Exam	Textbook
2	2.1	Ch. 2: Futures Markets (up to page 39)	1	Face to face	Class	Synchronous	Exam	Textbook
	2.2	Ch. 2: Futures Markets (up to page 39)	1	Face to Face	Class	Synchronous	Exam	Textbook
	2.3	Ch. 2: Futures Markets (up to page 39)	1	Face to face	Class	Synchronous	Exam	Textbook
Week	Lecture	Topic	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
3	3.1	Ch. 3: Pricing of Forwards & Futures I: The Basic Theory.	2	Face to face	Class	Synchronous	Exam	Textbook
	3.2	Ch. 3: Pricing of Forwards & Futures I: The Basic Theory.	2	Face to Face	Class	Synchronous	Exam	Textbook
	3.3	Ch. 3: Pricing of Forwards & Futures I:	2	Face to Face	Class	Synchronous	Exam	Textbook

		The Basic Theory.						
4	4.1	Ch. 3: Pricing of Forwards & Futures I: The Basic Theory.	2	Face to Face	Class	Synchronous	Exam	Textbook
	4.2	Ch. 3: Pricing of Forwards & Futures I: The Basic Theory.	2	Face to Face	Class	Synchronous	Exam	Textbook
	4.3	Ch. 3: Pricing of Forwards & Futures I: The Basic Theory.	2	Face to face	Class	Synchronous	Exam	Textbook
5	5.1	Ch.4: Pricing of Forwards & Futures II: Building on the Foundations	4	Face to face	Class	Synchronous	Exam	Textbook
	5.2	Ch.4: Pricing of Forwards & Futures II: Building on the Foundations	4	Face to Face	Class	Synchronous	Exam	Textbook
	5.3	Ch.4: Pricing of Forwards & Futures II: Building on the Foundations	4	Face to Face	Class	Synchronous	Exam	Textbook
6	6.1	Ch. 5: Hedging with	3	Face to Face	Class	Synchronous	Exam	Textbook

		Futures & Forwards						
	6.2	Ch. 5: Hedging with Futures & Forwards	3	Face to Face	Class	Synchronous	Exam	Textbook
	6.3	Ch. 5: Hedging with Futures & Forwards	3	Face to Face	Class	Synchronous	Exam	Textbook
7	7.1	Ch. 5: Hedging with Futures & Forwards	3	Face to Face	Class	Synchronous	Exam	Textbook
	7.2	Ch. 5: Hedging with Futures & Forwards	3	Face to Face	Class	Synchronous	Exam	Textbook
	7.3	Ch. 5: Hedging with Futures & Forwards		Face to face	Class	Synchronous	Exam	Textbook
8	8.1	Ch6: Interest Rate Forwards and Futures (up to page 133).	3	Face to face	Class	Synchronous	Exam	Textbook
	8.2	Ch6: Interest Rate Forwards and Futures (up to page 133).	3	Face to Face	Class	Synchronous	Exam	Textbook
	8.3	Ch6: Interest Rate Forwards and	3	Face to Face	Class	Synchronous	Exam	Textbook

		Futures (up to page 133).						
9	9.1	Ch. 7: Options Markets.	2,4	Face to Face	Class	Synchronous	Exam	Textbook
	9.2	Ch. 7: Options Markets.	2,4	Face to Face	Class	Synchronous	Exam	Textbook
	9.3	Ch. 7: Options Markets.	2,4	Face to Face	Class	Synchronous	Exam	Textbook
10	10.1	Ch.8: Options: Payoffs& Trading Strategies	2,4	Face to Face	Class	Synchronous	Exam	Textbook
	10.2	Ch.8: Options: Payoffs& Trading Strategies		Face to Face	Class	Synchronous	Exam	Textbook
	10.3	Ch.8: Options: Payoffs& Trading Strategies	2,4	Face to Face	Class	Synchronous	Exam	Textbook
11	11.1	Ch.9: No - Arbitrage Restriction on Option Price	1,3	Face to Face	Class	Synchronous	Exam	Textbook
	11.2	Ch.9: No - Arbitrage Restriction on Option Price	1,3	Face to Face	Class	Synchronous	Exam	Textbook
	11.3	Ch.9: No - Arbitrage	1,3	Face to Face	Class	Synchronous	Exam	Textbook

		Restriction on Option Price						
12	12.1	Ch. 10: Early Exercise and Put - Call Parity	1,3	Face to Face	Class	Synchronous	Exam	Textbook
	12.2	Ch. 10: Early Exercise and Put - Call Parity	1,3	Face to Face	Class	Synchronous	Exam	Textbook
	12.3	Ch. 10: Early Exercise and Put - Call Parity	1,3	Face to face	Class	Synchronous	Exam	Textbook
13	13.1	Ch. 11: Option Pricing	2	Face to face	Class	Synchronous	Exam	Textbook
	13.2	Ch. 11: Option Pricing	2	Face to Face	Class	Synchronous	Exam	Textbook
	13.3	Ch. 11: Option Pricing	2	Face to Face	Class	Synchronous	Exam	Textbook
14	14.1	Ch. 11: Option Pricing	3	Face to Face	Class	Synchronous	Exam	Textbook
	14.2	Ch. 11: Option Pricing	3	Face to Face	Class	Synchronous	Exam	Textbook
	14.3	Ch. 11: Option Pricing	2	Face to Face	Class	Synchronous	Exam	Textbook
15	15.1	Islamic Derivatives	3	Face to Face	Class	Synchronous	Exam	Textbook



	15.2	Islamic Derivatives	3	Face to Face	Class	Synchronous	Exam	Textbook
	15.3	Review	3	Face to Face	Class	Synchronous	Exam	Textbook

22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Midterm	30	1,2,3,4	1,2,3	Week 7	Face to face
Second	20	All	4,5	Week 15	Face to face
Final	50	All	1,2,3,4,5,6	Week 16	Face to Face

23 Course Requirements

(e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):

24 Course Policies:

- A- Attendance policies: According to The University's Policy
- B- Absences from exams and submitting assignments on time: No make ups will be held
- C- Health and safety procedures: According to The University of Jordan health policy
- D- Honesty policy regarding cheating, plagiarism, misbehavior: Any attempts of plagiarism or cheating, student will be considered failed the course.
- E- Grading policy: According to the University's grading system



F- Available university services that support achievement in the course: As provided by The University.

25 References:

A- Required book(s), assigned reading and audio-visuals:

Derivatives: Principles and Practice, international edition, 2016 by Sundaram and Das.

B- Recommended books, materials, and media:

Will be provided during the semester.

26 Additional information:

Name of Course Coordinator: Muhanned Obeidat	Signature: M.H. Obeidat	Date: 17/10/2022
Head of Curriculum Committee/Department: Dr. Majd Iskandrani	Signature: 17/10/2022	
Head of Department: -----	Signature: -----	
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Head of Curriculum Committee/Faculty: -----	Signature: -----	
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Dean: -----	Signature: -----	