



University of Management and Technology

Dr Hasan Murad School of Management (HSM)

Course Title: Financial Derivatives
Course Code: FN-675
Resource Person:
Department: Banking and Finance

HSM Vision

HSM envisions its success in the sustainable contribution that it will make to the industry, academia and research in public and private sector. HSM will lead by providing professionally competent and ethically conscious human resources engaged in the global and local context to foster socio-economic growth and sustainability for the society. HSM envisages having faculty with high research potential and a deep desire for cutting edge research including collaboration with national and international partners.

HSM Mission

Being a research-oriented and student-centric business school, we emphasize research publications in impact journals as well as state-of -the-art learning methodologies. We will prepare our students to become the future ethical business leaders and the guiding post for the society, while equipping them with the knowledge and skills required by world-class professionals. We will be the leading choice for organizations seeking highly talented human resource. HSM will foster internationalization with key stakeholders and actively work to exchange best practices with business schools across Pakistan through collaborations, workshops, conferences and other means.

Course Objectives

Since the Chicago Mercantile Exchange (CME) first introduced financial futures in the 1970s, this instrument and other modern financial derivatives have gained ground and become popularized over the past decades. Financial futures are defined as futures contracts based on financial instruments, such as Treasury Bonds, stocks, currencies or indexes. As international capital travels around the world's markets more freely than ever before, with more and more economies have been involved in this global capital flow, the upsides of these relatively new financial instruments have been recognized by an increasing number of financial authorities of emerging countries who seek to reform their financial sectors for greater efficiency.

The goal of this course is to provide you with a good fundamental understanding of derivative securities. These securities include forward contracts, future contracts, options, swaps, and structured products. Emphases will be placed

on three aspects of derivatives – the nature of their payoffs, how they are priced and how they can be used for hedging and speculative purposes.

Learning Objectives

Upon completion of this course, student should:

- have a good understanding of derivative securities;
- be able to identify the risk-return patterns of these securities;
- be able to decide which securities to use for hedging and/or speculative purposes;
- be able to de-construct and re-construct complex securities using basic standard and derivative securities; and most importantly, be able to think logically and systematically

Learning Outcomes

- Ability to understand
- ⇒ the purpose of Financial Derivatives
 - ⇒ the concept of Financial Derivatives
 - ⇒ Difference between various forms of financial derivatives
 - ⇒ **Role of Derivatives for a Sustainable Economy**
 - ⇒ **Ethical practices in Derivative Trading**
 - ⇒ **Derivative: An International instrument**
 - ⇒ Hedging procedures using derivative instruments

Teaching Methodology

Class discussions from prescribed readings,
Problem Solving
Applications of concepts using case study analysis wherever required

STUDENTS ARE REQUIRED TO READ AND UNDERSTAND ALL ITEMS OUTLINED IN THE PARTICIPANT HANDBOOK

Class Policy:-

- ⇒ **Be On Time**
You need to be at class at the assigned time. After 10 minutes past the assigned time, you will be marked absent.
- ⇒ **Mobile Policy**
TURN OFF YOUR MOBILE PHONE! It is unprofessional to be texting or otherwise.
- ⇒ **Email Policy**
READ YOUR EMAILS! You are responsible if you miss a deadline because you did not read your email. Participants should regularly check their university emails accounts regularly and respond accordingly.
- ⇒ **Class Attendance Policy**

A minimum of 80% attendance is required for a participant to be eligible to sit in the final examination. Being sick and going to weddings are absences and will not be counted as present. You have the opportunity to use 6 absences out of 30 classes. Participants with less than 80% of attendance in a course will be given grade 'F' (Fail) and will not be allowed to take end term exams. International students who will be leaving for visa during semester should not use any days off except for visa trip. Otherwise they could reach short attendance.



Withdraw Policy

Students may withdraw from a course till the end of the 12th week of the semester. Consequently, grade W will be awarded to the student which shall have no impact on the calculation of the GPA of the student. A Student withdrawing after the 12th week shall be automatically awarded "F" grade which shall count in the GPA.



Moodle

UMT –LMS (Moodle) is an Open Source Course Management System (CMS), also known as a learning Management System (LMS). Participants should regularly visit the course website on MOODLE Course Management system, and fully benefit from its capabilities. If you are facing any problem using moodle, visit <http://oit.umt.edu.pk/moodle>. For further query send your queries to moodle@umt.edu.pk



Harassment Policy

Sexual or any other harassment is prohibited and is constituted as punishable offence. Sexual or any other harassment of any participant will not be tolerated. All actions categorized as sexual or any other harassment when done physically or verbally would also be considered as sexual harassment when done using electronic media such as computers, mobiles, internet, emails etc.



Use of Unfair Means/Honesty Policy

Any participant found using unfair means or assisting another participant during a class test/quiz, assignments or examination would be liable to disciplinary action.



Plagiarism Policy

All students are required to attach a "Turnitin" report on every assignment, big or small. Any student who attempts to bypass "Turnitin" will receive "F" grade which will count towards the CGPA. The participants submit the plagiarism report to the resource person with every assignment, report, project, thesis etc. If student attempts to cheat "Turnitin", he/she will receive a second "F" that will count towards the CGPA. There are special rules on plagiarism for final reports etc. all outlined in your handbook.



Communication of Results

The results of quizzes, midterms and assignments are communicated to the participants during the semester and answer books are returned to them. It is the responsibility of the course instructor to keep the participants informed about his/her progress during the semester. The course instructor will inform a participant at least one week before the final examination related to his or her performance in the course.

Course Outline

Course code: FN-675

Course title: Financial Derivatives

Program	MBA
Credit Hours	3
Duration	4 months
Prerequisites (If any)	None
Resource Person Name and Email	
Counseling Timing (Room# 7)	
Contact no.	042-5212801-10
Web Links:- (Face book, Linked In, Google Groups, Other platforms)	NA

Chairman/Director Programme signature.....Date.....

Dean's signature.....Date.....

Grade Evaluation Criteria

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

Marks Evaluation

Marks in percentage

Quizzes	20%
Assignments	05%
Mid Term	30%
Attendance & Class Participation	05%
Final exam	40%
Total	100%

Recommended Text Books:

- ⇒ Options, Futures and Other Derivatives, by John .C Hull
Latest Edition, Mc-Graw Hill, Inc., USA

Supplementary Readings

- ⇒ Investment; Spot & Derivative Markets By Keith Cuthbertson & Dirk Nitzsche
Latest Edition, John Wiley & Sons

No	Topics to be covered in the course	Learning Objective of this topic	Expected Outcomes from Students	Teaching Method	Assessment Criteria	Deadlines and Homework
1	Basic Concepts of Finance & Investments	To understand that why investment decisions are important?	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Role of Controller & Treasurer • Financial Markets • Money Market Securities 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
2	Basic Concepts of Finance & Investments	To understand the investment decision process	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Fixed Income Securities • Equity Securities • Derivative Securities 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
3	Understanding the Derivatives - Basics	To understand the core concepts of salary income for the purpose of tax implications	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Financial Risk Management • Derivative as a tool of FRM • Major categories of derivatives • Forex market structure • Eurocurrency Inter Bank Markets: LIBOR & LIBID • Currency quotation price & timings 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
4	Derivative Instruments: FORWARDS	To understand the core concepts of Forward Rate Agreements (FRAs)	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Concept of Forwards • Categories of Forwards • Forward rate Agreements (FRA) 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
5	Derivative Instruments: FORWARDS	To understand the core concepts of Forward Rate Agreements (FRAs)	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Concept of discount/premium in FRAs • Hedging using the Forwards • Calculation of Profit/Loss using 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class

			<p>Forwards</p> <ul style="list-style-type: none"> • Cost of Forwards 	required		
6	<p>Derivative Instruments: FORWARDS</p>	To understand the core concepts of Forward Rate Agreements (FRAs)	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Close out of a Forward Contract • Calculation of hedge Efficiency using Forwards 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
7	<p>Derivative Instruments: FUTURES</p>	To understand the core concepts of Future Contracts	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Concept of Futures • Difference between Forwards & Futures • Categories of Future 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
8	<p>Derivative Instruments: FUTURES</p>	To understand the core concepts of Future Contracts	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Future contracts sizing & Pricing • Hedging using the Futures • Cost of Futures 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
9	<p>Derivative Instruments: FUTURES</p>	To understand the core concepts of Future Contracts	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Calculation of Profit/Loss using Futures • Calculation of hedge Efficiency using Futures 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
10	<p>Derivative Instruments: OPTIONS</p>	To understand the core concepts of Negotiated and traded Options	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Concept of Options • Difference between Forwards, Futures & Options • Categories of Options • Currency Options 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
11	<p>Derivative Instruments:</p>	To understand the core concepts of Negotiated and traded Options	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> • Negotiated & Traded Options • American, European & Asian 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class

	OPTIONS		<ul style="list-style-type: none"> options Option pricing Hedging using the Options 	case studies wherever required		
12	Derivative Instruments: OPTIONS	To understand the core concepts of Negotiated and traded Options	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> Cost of Options Calculation of Profit/Loss using Options Hedge Efficiency using Options 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	
13	Derivative Instruments: SWAPS	To understand the core concepts of Swap arrangements by Financial institutions	<p>To clearly explain the following:</p> <ul style="list-style-type: none"> Concept of Swaps Risks associated with swaps Counter parties in swaps Categories of Swaps Negotiated & Traded Swaps Interest rate Swaps Single & Cross Currency Swaps Concept of Quality Spread Differential(QSD) 	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	
14	Ethical Issues in Derivatives: Case of sustainability	To understand the ethical issues, malpractices and sustainability involved in derivatives	To clearly explain clearly the ethical practice to use financial derivatives as a tool of speculation along with sustainability	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class
15	Financial Derivatives International Viewpoint	To Understand the international scenario for derivative trading	To explain the international frameworks used in the international financial market for derivatives trading	Prescribed readings, class discussions and applications of concepts using numerical problems and local & International case studies wherever required	Anyone of the following: Class Assignments, Class Participation, Quiz	To be announced in class