

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR
Post Graduate Diploma in Management (PGDM)
Financial Derivatives FN603
CREDIT: 3 credits
SESSION DURATION: 60 Minutes

TERM: VI
YEAR: 2017-2019
BATCH: I

FACULTY: Prof. Sushil Kalyani
Phone No.: 0674- 3042138
E-Mail: sushil.k@imibh.edu.in
Office hours: 9:30 AM – 5:30 PM

Course Introduction:

The purpose of this course is to Equip the students with the required set of skills to value and to employ options, futures, Swaps and related financial contracts. In order to provide a useful treatment of these topics in an environment that is changing rather rapidly, it is necessary to understand the fundamentals and to study some important applications. The course will provide the students the knowledge about Futures Markets & the characteristics of instruments, including the pricing and use of futures contracts on stock indices and other instruments. The students will learn about Options Markets & the Applications, covering the valuation and use of options, including a discussion on the empirical evidence and dynamic asset allocation strategies and the Swaps, which are Complex Derivatives including Structured Securities. They will learn the use of derivatives in the context of corporate applications.

Learning Outcomes:

- LO1 – Understand and explain the nature of derivatives and describe the trading mechanisms and the key variables that determine their market values.
- LO2 – Classify and compare the different types of derivative instruments.
- LO3 – Identify and critically evaluate the nature and extent of a company's exposure to stock price risk, commodity price risk, currency risk, interest rate risk and credit risk.
- LO4 – Understand and calculate the pricing of Derivatives using models available
- LO5 – Explain and demonstrate the application of various hedging strategies and assess their suitability in relation to the identified risk.
- LO6 – Discuss and debate the links between credit derivatives and the financial crisis and critically evaluate the validity of some hypotheses explaining the existence of such links.

Course Evaluation criteria (%):

Quizzes	10
Midterm Exam	20
Class Participation	10
Project Report	20

End-term Exam	40
Total	100

Session Plan:

Session	Topics	Learning Outcome	Reading chapter
1, 2	Introduction to Derivatives	LO1	1, 2
3, 4	Futures and Forward Contracts	LO1, LO2	3
5, 6	Interest Rate Swaps & Interest rate risk management	LO1, LO2	6, 7
7, 8, 9	Forward Rate Agreements & Currency Swaps	LO1, LO2	5
10, 11, 12	Binomial Trees	LO4	13
13,14	Options Markets & Mechanics	LO3	17
15, 16, 17	Trading Strategies involving Options	LO5	12
18, 19, 20	The Black-Scholes-Merton Model	LO4	15
21, 22	Currency derivatives	LO2, LO4	34
23, 24	Mechanics of currency derivatives markets	LO5	34
25, 26	Exotic Options	LO5	26
27, 28, 29	Credit Default Swaps	LO5, LO6	25
30	Summary discussion	LO6	

Course Readings:

1. Hull, J.C. & Basu, S., Options, Futures and other Derivatives, Pearson Education India, 2010
2. Veronesi, P. Fixed Income Securities – Valuation, Risk and Risk Management, Wiley India, 2010
3. Hull, J.C., Risk Management and Financial Institutions, 3rd Edition, Wiley India, 2013 (Low Price Edition).

Projects –

1. The trading of derivatives on Stock market of India and any other markets of world – Extract the data* from two comparative stock exchanges and study the price movement of an instrument being traded on both the stock exchanges.
2. Possibility of Arbitrage on various platforms.

*Data Source - Bloomberg