

MYRA School of Business

PGDM & PGPX – 2017-18

TITLE OF THE COURSE: OPTIONS, FUTURES AND DERIVATIVES

CREDITS: 3

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COURSE DESCRIPTION

This elective is for the second year PGDM, and PGPX students interested in financial markets. In past 20 years, we have seen tremendous growth in derivative dealings in India. A derivative is an instrument whose value varies with the underlying asset and it is an important tool to manage the risk of an organization or portfolio of securities. The broad application of derivative products such as in exotic options or structured finance necessitates every finance manager to have working knowledge of derivatives. We discuss the very basic concepts of derivatives market which enables the participants to understand financial crisis of 2007-08 and others happened in past. Also, practical issues can be highlighted and discuss through inviting practitioners from academia and industry.

COURSE OBJECTIVE

To discuss how derivative market works, various parties, the contract details, and the type of risk for the parties involved. One important highlight is to focus on the economic theory underlying the valuation and pricing of derivatives. We discuss about various types of trading strategies through using futures and options. The course is quantitative in nature and requires elementary knowledge of calculus and financial mathematics. However, important mathematical concepts will be reviewed in the beginning of the course.

RELEVANCE FOR OTHER COURSES

The concepts learned in this course are going to use in the next term course – Financial Risk Management. Therefore, it is a **compulsory course** for those who want to attend Financial Risk Management course in the next term. Audit of this course is **not** allowed.

ACADEMIC RULES

Since this course is in immersion mode a 90% attendance is compulsory. Students who will not maintain the attendance record may face penalty depending upon the circumstances.

A thorough reading of the assigned material is helpful to you to understand the session. So, it is expected that you come prepare for the class.

PEDAGOGY/TEACHING METHOD

Lecture, exercises, case discussion and project presentation

COURSE MATERIAL/TEXT BOOKS

1. John C Hull, Sankarshan Basu, Options futures and Other Derivatives, Hereafter, *JCH*
2. Notes, worksheets and exercises.

EVALUATION

Component	Evaluation (%age)
Attendance	10
Surprise Quiz (Best two out of three)	20
Assignment/ Project	30
Final Exam	40

SCHEDULE OF SESSIONS

There will be 18 sessions of 2 hours, each.

Session 1 & 2	Introduction: Futures, forward and options market
Session 3 & 4	Hedging with futures and options; Mechanics of futures market:
Session 5 & 6	Hedging strategies using futures; Pricing of forward and futures
Session 7 & 8	Interest rate futures; Forward rate Agreements (FRA);
Session 9 & 10	Interest Rate Swaps (IRS)
Session 11 & 12	Mechanics of Options; Properties of stock options;
Session 13 & 14	Trading strategies using options
Session 15 & 16	Option Pricing Models and Greeks
Session 17 & 18	Other Derivatives and Recap; Final Exam