

INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR
PROGRAMME NAME: POST GRADUATE DIPLOMA IN MANAGEMENT
FINANCIAL ENGINEERING AND RISK MANAGEMENT (FN607)

CREDIT: Full (Three credits)
SESSION DURATION: 60 Minutes

TERM: V
YEAR: 2018-19
BATCH: II (PGDM 2017-19)

FACULTY (Name): Dr. Ansuman Chatterjee

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Office hours: 9:30 hr. to 17:30 hr.

Consulting hours: 15.30 hr. to 17.30 hr. (on working days with prior appointment)

Course Introduction:

This course primarily focuses on how to identify the financial risks that need to be managed and how the process of risk management can create value for the firm and individuals. Besides this course also attempts to inculcate skills among students to use derivative markets and contracts for creating risk management strategies, but it does not provide minute details of structure and trading mechanism of derivative markets and contracts which is rather covered in the course titled as 'Financial Derivatives'.

Learning Outcomes:

1. Understand when risk management creates value for firms and evaluate how much value risk management can create.
2. Know which types of risks a firm should hedge to create value.
3. Learn how to measure and manage the risk for a firm.
4. Understand the concept of risk preference, risk return relationship and market efficiency.
5. Learn the basic characteristics of derivatives markets and contracts.
6. Know the concepts of option pricing models and how this can be extended to reduce the risk.
7. Examine the risk response strategies exploiting the derivatives contracts.

Course Pedagogy: The course will use combination of class room discussion, lecture, presentation, small problems and relevant cases using excel models to create student centric participative learning.

Recommended Books:

1. Rene M. Stulz. "Risk management & derivatives". Thomson (I.E.). 2007. (referred as **Stulz** in course outline)
2. Don M. Chance & Robert Brooks. "An introduction to derivatives and risk management". Cengage learning (9/e) (Referred as **CB** in course outline)

Course Evaluation Criteria:

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| Research Based Assignments | 20% |
| Mid-term Exam | 30% |
| Class Participation | 10% |
| End term exam | 40% |

Session Progress:

| Session No. | Topics | Learning Outcomes | Reading chapters |
|--------------------|---|--------------------------|---------------------------|
| 1 to 5 | Creating value with risk management: Risk management, financial distress and Investment. | LO1, LO2 | 03(Stulz) |
| 6 to 9 | Firm wide approach to risk management: Measuring risk for corporations, VaR CaR & Firm Value. | LO3 | 04(Stulz) |
| 10 to 13 | Risk preference, risk-return relationship and market efficiency. | LO4 | 01(CB), 01(Stulz) |
| 14 to 17 | Introduction to derivative markets and Contracts. | LO5 | 02(CB), 08(CB), 05(Stulz) |
| 18 to 21 | Extending Binomial and Black Scholes – Merton model to reduce risk. | LO6 | 04(CB), 05(CB), 11(Stulz) |
| 22 to 25 | Dynamism of different factors and risk response strategies exploiting the options market. | LO7 | 06(CB), 10(Stulz) |
| 26 to 29 | Hedging strategies exploiting forwards and futures. | LO7 | 11(CB), 06(Stulz) |
| 30 | Summary Discussion | | |