

MG258 Jan 3:0

Financial Instruments and Risk Management Strategies

Instructor

Shashi Jain Email: shashijain@iisc.ac.in

Teaching Assistant

Email:

Department: Management Studies

Course Time:

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

In this course I would like to cover in detail financial instruments that across the following asset classes:

- 1. Fixed Income (Interest rate linked instruments, inflation linked instruments, corporate and sovereign bonds etc)
- 2. Foreign Exchange
- 3. Equities

The course will also go into details of different derivative types, like swaps, options, forwards and futures.

There would be an introduction to pricing of these instruments, why they are traded in the markets and risk associated with these instruments.

Prerequisites

"none"

Syllabus

1. Introduction to financial markets

- 1(a) Risk neutral portfolio
- 1(b) Black Scholes Model
- 2. Introduction to fixed income
- 2.i. Interest Rates
- 2.i.(a) Bootstrapping yield curves
- 2.i.(b) Pricing bonds
- 2.i.(c)Interest rate models
- 2.i.(d)Derivatives on interest rates
- 3. Stock Market
- 3.i.(a) Asset price models
- 3.i.(b)Options in Stock market
- 3.i.(c)Calibration (On smiles and skews)

Course outcomes

The course is designed to help students appreciate the various aspects of financial markets, need for their existence, and risk management for financial derivatives. The course lays the foundation for more advanced topics in Quantitative finance.

Grading policy

10 percent for assignments

- 30 percent for mid term
- 20 percent project
- 40 percent end term

Assignments

Resources