



**INTERNATIONAL MANAGEMENT INSTITUTE
BHUBANESWAR**

Course Outline

COURSE NAME: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

CREDIT: 3

PROGRAM: PGDM 2021

SESSION DURATION: 60 Minutes

Term: VI

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Course Introduction:

The World of Financial Investment is a fascinating one - full of promises, challenges, excitements, greed, and fear. However, this place is not simply for FUN but a serious one. Therefore, Investment Management is a serious subject matter and of late, it is becoming more and more technical and thus, assuming largely a shape of SCIENCE. Nevertheless, it is still to some extent an ART. This Course will focus on the Science as well as Art aspect of Investment Management. Whatever securities we shall be discussing the framework will be as thus - first understand about the security; next, evaluating the security in terms of its risk and return parameters; next, proper valuation at which one should buy the security; next, how to reduce the risk through diversification and by constructing suitable portfolio of securities; and finally, how to evaluate the performance of that portfolio. The Course is aimed at equipping the participants with necessary knowledge, tools, and skills to evaluate securities under consideration; to make suitable portfolios to take the advantages of diversification and to evaluate their performance. By the end of the Course, it is expected that the participants must feel themselves as one of the competent and confident players of financial markets as an investment manager.

Learning Outcomes:

- To understand the investment process, asset classes, financial market, trading mechanism. (LO 1)
- To measure the risk and return of the asset classes (LO 2)
- To be able measure the risk and return of fixed income securities, able to construct and manage the portfolio of fixed income securities. (LO 3)
- Would be able to study the price pattern using technical analysis. LO 4)
- Would be able to estimate the fundamental value of the equity using different methods of valuation (LO 5)
- Would be able to construct the equity portfolio and measure its performance (LO 6)

Course Pedagogy:

The thrust of the pedagogy adopted would essentially be problem solving. Sessions are designed to take up problems related to investment management either through cases or through some events reported in financial media and then, deliver necessary technical and conceptual knowledge through lectures and to appreciate the diversity of various issues through discussions. A number of problems in the form of assignments will be given to the participants and they will be encouraged to use computers to find solutions of the problems. Students will be asked to make their own portfolios and track them over the Course. On the whole, the driving force behind the pedagogy will be learn and apply.

Career:

Investing in appropriate financial assets is becoming day by day a highly specialized job. To provide such specialized services, a number of institutions have emerged in financial markets like investment firms and mutual funds. These institutions look for those finance professionals who can evaluate scientifically fixed income securities as well as variable income securities; who are capable of making optimum portfolios of various securities for themselves/clients; and who can provide constantly objective ways of monitoring the performance of various investment managers. Further, the corporate also requires investment analysts to invest their unutilized funds so as to earn maximum returns with commensurate level of risk. The present course is aimed to prepare the participants to look for career as an investment analyst in corporates, investment firms, mutual funds, and other financial institutions.

Additional requisite:

Regular reading of The Economic Times/ The Business Standard

Text Book:

Investments by Bodie, Kane, Marcus, and Mohanty Tata McGraw Hill 8th ed. (referred to as BKMM subsequently)

References:

1. Trading & Exchanges by Harris, Oxford University Press, 1st Ed., 2007 (Referred to as H subsequently)
2. Investment Analysis and Portfolio Management by Reilly and Brown, Cengage Learning 8th Ed.2006. (referred to as RB subsequently)
4. Security Analysis and Portfolio Management by Fischer and Jorden, Pearson education, 6th Ed. 2006 (referred to as FJ subsequently)

Evaluation:

Criteria	Weightage in %	Learning Outcomes
Quiz 1	10%	LO1, LO2, LO3
Quiz 2	10%	LO4, LO5, LO6
Class Participation & Case Discussion	10%	LO1-LO6
Project Submission	20%	LO4-LO6
Report Writing	10%	LO4-LO6
End – Term Exam.	40%	LO1-LO6

Session – Plan

For pedagogical reasons, the whole course is divided broadly into four modules – while the first module will be introductory in nature dealing with some basic issues like risk, return, investors, and their expectations, the second module deals with variable income securities, i.e., equities. The third module on fixed income securities, i.e., bonds will deal with the valuation on bonds and construction of bond portfolio. The fourth and last module deals with construction and management of portfolio.

Session No.	Topic	Learning Outcomes	Reading
Module 1: Introduction to Investment			
1-2	Understanding the investment environment: An overview of investment, its process and management, Quick review of necessary concepts – Real Assets, Financial Assets, Risk, Returns, Time Series of past returns, Investment process, Investors: Types, expectations, behavior, Investment options: Fixed income, equity, alternate investments	LO1	BKMM: Chapters 1-2
3-4	Markets, Instruments and Security Trading: How securities are traded, Conventional investments; Investment companies; Exchange traded funds; Alternate investments: income trusts, hedge funds, Markets, and trading: trading orders, Short selling, leverage and arbitrage	LO2	BKMM: Chapters 2-4 Live Trading on ICICI Direct Trading Platform
5	Market Efficiency: Random Walk and Efficient Market Hypothesis (EMH), Types of market efficiency, Tests of market efficiency, Market efficiency and investment decisions, Arbitrage opportunities in efficient markets	LO2	BKMM: Chapters 11 Case: Global Equity Markets: The case of Royal Dutch & Shell
Module 2: Fixed Income Securities			
6-7	Introduction to bonds: Bonds: characteristics and types, Bond indentures, Bond market in India	LO3	BKMM: Chapters 14
8-9	Bond Mathematics: Bond pricing, Bond yields, Default risk and bond pricing, Term structure of interest rates	LO3	BKMM: Chapters 14
10-12	Managing bond portfolio: Duration: meaning and calculation, Convexity, Active vs. passive bond management, Immunizing a bond portfolio	LO3	BKMM: Chapters 16 Case: Fixed Income Valuation
Module 3: Variable Income Securities			
13-14	Technical Analysis: Theoretical basis of technical analysis, Charting, Technical indicators.	LO4	BKMM: Chapter 12 Live technical analysis using Investar 6.2

15-16	Fundamental Analysis: Top-down investing (The E-I-C analysis framework), Bottom-up investing: Value approach, Growth approach, Principles of Growth & Value investing.	LO5	BKMM: Chapters 18 & 19 Case: GMO: The Value vs. Growth Dilemma
17-18	Company Analysis-Cash Flow based valuation: Discounted cash flow analysis, Cost of capital estimation	LO5	BKMM: Chapters 18 & 19 Case: Sula Vineyard
19-20	Company Analysis-Relative Valuation: Relative valuation metrics and investment decisions, Valuation multiples: P/E, Price to book value, EV/EBITDA, Price to sales	LO5	BKMM: Chapter 18
Module 4: Portfolio Construction & Management			
21	Introduction to Portfolio Management: Need for portfolio construction, Asset classes and their impact on portfolio.	LO6	BKMM: Chapters 7&8
22-24	Theory of Portfolio construction: Portfolio construction process, Markowitz portfolio selection model, Determining the efficient frontier, Portfolio construction and index models	LO6	BKMM: Chapters 7&8 Case: Partners Healthcare.
25	Portfolio performance measurement and revision: Measuring portfolio performance	LO6	BKMM: Chapter 24
26-28	Theory of Active Portfolio Management: Optimal portfolios and Alpha values, Treynor-Black model, Black-Litterman model, Value of Active Management	LO6	BKMM: Chapters 27
29-30	Single and multi-index models: The CAPM model: expected risk and return, F&F three factor model, Arbitrage pricing theory (APT)	LO6	BKMM: Ch 8-10 & 13

Additional Reading:

- Eugene F. Fama, “The behavior of Stock-Market Prices”, The Journal of Business, Vol. 38, No. 1. (Jan., 1965), pp. 34-105
- William S. Sharpe, “A theory of market equilibrium under conditions of risk”, The Journal of Finance, Vol. 19, No. 3 (Sep., 1964), pp. 425-442.
- Stephen A. Ross, “The Arbitrage Theory of capital Asset Pricing”, Journal of Economic Theory, No. 13 (1976), pp. 341-360
- Eugene Fama and Kenneth R. French, “The Cross Section of Expected Stock Returns”, The Journal of Finance, Vol. XLVII, No. 2 (June 1992), pp. 427-465.
- Bin Jiang and Timothy Koller, “The truth about growth and value stocks”, Mc Kinsey on Finance, winter, 2007.
- Harry Markowitz, “Portfolio Selection”, The Journal of Finance, Vol. 7, No. 1 (Mar., 1952), pp. 77-91

Guidelines for project:

Each student needs to mandatorily undertake a project and make a presentation at the end of the term. Since it is a group project, the contribution of each member needs to be clearly delineated although it is expected that each member should know the project thoroughly. The final report needs to be submitted before the presentation with the following components:

- Title page (format same as that of SIP report)
- Index
- Introduction about the topic (about 500 words)
- Data Source
- Methodology
- Discussion of result
- Conclusion

Plagiarism:

We are committed to upholding the highest standards of academic integrity and honesty. Plagiarism is the use of or presentation of ideas, works that are not one's own and which are not common knowledge, without granting credit to the originator. You may refer the already available content just for your reference and to get the basic ideas. Only 20% of such content is acceptable, above that comes under the definition of Plagiarism which is unacceptable in IMI and will be treated seriously. All such cases will be referred to the appropriate body of the Institute for suitable disciplinary action.
