Appendix-44
Resolution No. 38-27
EC dated 17.01.2025

INDEX

Bachelor of Business Administration (Financial Investment Analysis) [BBA (FIA)]

SEMESTER VII

DISCIPLINE SPECIFIC CORE (DSC) COURSES

DSC 19: BEHAVIORAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Behavioral Finance DSC-19	4	3	1	0	Class XII	NA

Course Objectives

- To introduce the students to the role of human behaviour in financial decision making with the aim to provide a comprehensive view of the psychological foundations and their applications to Corporate Finance and understanding Investor Behavior.

Learning Outcomes

After studying this course the student will be able to:

- Establish a strong foundation of the basic concepts of Behavioral Finance.
- Understand the psychological biases and heuristics which affect financial decision making.
- Understand the application of Behavioral finance in Corporate Finance, Individual and Institutional Investor Trading Behavior.

Unit 1: Foundation and Key Concepts (9 Hours)

Introduction to Behavioural Finance – Overview, Evolution, Key Themes, and Applications. Traditional versus Behavioural Finance: Limits to Arbitrage – Market Efficiency, Fundamental Risk, Noise Trader Risk, Implementation Costs. Theoretical and Empirical underpinnings of Behavioral Finance – Prospect Theory, Framing Effects, Heuristics and Biases, and Affect Theory. Emotional Finance: Concept, Emotional Finance in Practice – Risk, Momentum, Bad News Anomaly.

Unit 2: Psychological Concepts and Behavioral Biases (12 Hours)

Heuristics or Rules of Thumb, Disposition Effect, Prospect Theory and Behavioral Finance, Overconfidence, Representativeness Heuristics, Familiarity Bias, Limited Attention, Ambiguity aversion, Loss aversion, Framing, Self-deception, Mental Accounting, Self-control, Regret avoidance, Availability bias, Anchoring bias, Optimism and Wishful Thinking, Overreaction and Underreaction, Self-attribution, Endowment Effect, Herd Behavior, Hindsight bias, Winners' Curse, Cognitive Dissonance, Status Quo bias.

Unit 3: Behavioural Corporate Finance (12 Hours)

Financing Decisions: Financing Decisions of an Optimistic Manager, Financing Decisions of an Overconfident Manager, Trade-off Model: Incorporating Manager-Shareholder Conflicts, Trade-off Model: Incorporating Bondholder-Shareholder Conflicts. Capital Budgeting and Other Investment Decisions: Effects of managerial overconfidence and optimism on the capital budgeting decisions, Factors Affecting the Impact of Managerial Biases, Theories of Investor Biases, Theories of Managerial Biases.

Unit 4: Investor Behavior (12 Hours)

Individual Investor Trading: Rational Explanations, Behavioral Explanations; Aspects of Individual Investor Trading – Disposition Effect, Local Bias, Learning over Time; Implications of Individual Investor Trading – Asset Prices, Cost of Time. Individual Investor Portfolios: Biases and Diversification. Cognitive Abilities and Financial Decisions: Investor Age and Investment Decisions?; Cognitive Abilities and the Three Puzzles. Institutional Investors: Holding and Trades of Institutional Investment Managers, Capital Flows to Institutional Investors. Culture in Finance: Impact of Culture. Social Interactions and Investing: Herding and Information Cascades.

Essential Readings:

- Baker, H. K., & Nofsinger, J. R. (Eds.). (2010). Behavioral finance: investors, corporations, and markets (Vol. 6). John Wiley & Sons. Publication
- Shleifer, Andrei. "Inefficient Markets-An Introduction to Behavioural Finance". Oxford University Press.
- Forbes, W. (2015). *Behavioural finance*. John Wiley & Sons.
- Ackert, L. F., & Deaves, R. (2011). Understanding behavioral Finance. Cengage Publication.

Additional Readings

- Barberis, N. (2003). A Survey of Behavioral Finance. *Handbook of the Economics of Finance*, *1*.
- Kahneman, D., & Tversky, A. (2000). "Choices, Values and Frames". Cambridge University Press

The latest published research papers and books should be used for teaching.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DISCIPLINE SPECIFIC ELECTIVE (DSE) COURSES

DSE 13: ADVANCED DERIVATIVES

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Advanced Derivatives DSE-13	**4**	**3**	**1**	**0**	**Class XII**	**Basic Derivatives**

Course Objectives:

- To equip students with understanding and implications of Greeks, Financial Swaps and Cryptocurrencies.

Learning Outcomes:

After studying the course the student will be able to:

- Understand Greeks, Financial Swaps, Cryptocurrencies etc.
- Understand Interest rate Futures
- Understanding of Exotic options
- Understand the concept of hedging, speculation and arbitrage.

Unit 1: Greeks (12 hours)

Calculation of delta, gamma, rho, theta and Vega for stock options (with and without dividend) and currency options. Relationship and comparison among stock Greeks. Delta Hedging, Gamma Hedging. Making a portfolio Delta Neutral, Gamma Neutral, Delta positive Gamma Neutral and Delta positive Gamma Neutral.

Unit 2: Swaps & Interest rate Futures (9 hours)

Introduction to Swaps, Interest rate swaps, currency swaps, cross-currency swaps. Understanding Credit default swaps (CDS), Valuation of CDS. CDS: Forwards and Options. Interest rate Futures, Interest rate cap and floor, FRA.

Unit 3: Exotic options (12 hours)

Nonstandard American options, Gap options, Forward start options, Cliquet options, Compound options, Chooser options, Barrier options, Binary options, Lookback options, Shout options, Asian options, Options to exchange one asset for another, Basket options.

Unit 4: Weather, Energy and Insurance Derivatives: (12 hours)

Introduction to Weather derivatives, Understanding HDD & CDD and its calculation. Energy Derivatives: Trading of Crude Oil, Natural Gas and Electricity, Modeling Energy prices, Understanding Insurance derivatives.

Essential Readings:

1. John C. Hull. Options, Futures and Other Derivatives (Eighth ed.). Pearson Education.

Additional Readings:

1. JurgenFranke, Wolfgang Hardle and Christian Hafner. Introduction to Statistics of

Financial Markets.

2. R. Madhumathi, M. Ranganatham. Derivatives and risk management (1st ed.) Redhead,

K. Financial Derivatives- An introduction to futures, forwards, options, swaps. Prentice

Hall of India

3. McDonald, Derivatives Markets, (latest ed.), Pearson.

4. Robert Reitano, 2010, Introduction to Quantitative Finance, MIT Press.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 15: INFRASTRUCTURE FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Infrastructure Finance DSE-15	**4**	**3**	**1**	**0**	**Class XII**	**Financial Management**

Course Objective:

- To equip the students to understand the basic project financing framework; the rationale for using project financing as opposed to direct conventional financing; the identification and management of risks associated with a large scale project; evaluating a project's viability using analytical tools; sources of project funds; using public-private partnerships as a mode of project financing; and the crafting of contractual arrangements to allocate a project's risk and economic rewards among the parties involved.

Learning Outcomes:

After studying the course the student will be able to

- Understand the basic project financing framework and the circumstances in which project financing is likely to be appropriate.
- Integrate and apply the necessary qualitative and quantitative tools and techniques (learned in real estate and corporate finance) to evaluate project viability
- Engineer financial arrangements to allocate the risks and returns of the project to the participants in the project.

Course Contents:

Unit 1 Introduction to Infrastructure Finance (9 hours)

Infrastructure financing: Rationale, Corporations, Finance and Projects, Project company Business Model, Project Cycle, Private Finance Initiative- Origin, Types and Features, Procurement process principles , Contract and control structure , special purpose or project vehicle and financing, Public Private collaboration: Types of PPP, Financial risk in PFI and PPPs, Challenges for PFI and PPP

Unit 2- Managing Risk in Project Finance Transactions (12 hours)

The project cycle revisited, Risk management approaches, The project company and risk identification, Risks in the construction phase, Risk during operations- Revenue Risks, Operating Cost Risks, Technical Risks, Environmental and Social Risk, Financial Risks – Interest rate risks, Currency risks, Loan and investor syndication, Taxation risks, Legal and political risks ,Project insurance.

Unit 3- Financial Evaluation and Financial Structure (12 hours)

Sources of Finance: Project funding: equity and debt, Private equity: infrastructure funds, Sovereign wealth funds, Equity: issues facing investors, Debt - International development banks- A/B loans, National development banks, Export credits, Commercial bank loans, Bonds, Leasing, Offsets.

Valuation and the project company, Valuation and the project company as a single-asset business, Capital budgeting decisions

Quantitative analysis, Measures used by investors, Payback period, Present values and internal rates of return, Measures used by lenders, Debt service cover ratio, Interest cover ratio, Coverage ratios, Cash flow models

Unit 4: Project Process and Contractual Framework (12 hours)

The contractual framework, corporate identities and issues, Preliminary documents, Construction contract, Operations and maintenance contract, Supply contract, Sales contract, Payment structures, Tolling contract, Contracts for difference, Availability payment, Loan agreement, Intercreditor agreement, Shareholder's agreement.

The project process, Project/public private partnership unit, Project process structure, Business plan/project information memorandum, Activities in the bid process, Procurement laws and infrastructure, Timetable and bid costs, Innovative proposals, Raising the funds, Mandate letter, Due diligence, Project monitoring

Essential Readings:

1. Blaiklock, M. (2014). *The infrastructure finance handbook: principles, practice and experience*. Euromoney Books

2. Pretorius, F., Chung-Hsu, B. F., McInnes, A., Lejot, P., & Arner, D. (2008). *Project finance for construction and infrastructure: principles and case studies*. John Wiley & Sons.

Additional Readings:

1. Esty, B. C., & Sesia, A. M. (2007). An overview of project finance and infrastructure finance 2006 update. Boston, MA: Harvard Business School.

2. Pouliquen, L. Y. (1970). Risk Analysis in project appraisal. World Bank staff occasional papers, No.11 (Washington D.C., IBR), 52-62.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GENERIC ELECTIVE (GE) COURSES

GE 11: INTRODUCTION TO DIGITAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/Practice		
Introduction to Digital Finance GE- 11	4	3	1	0	Class 12	None

Learning Objectives

- To provide a foundational understanding of digital finance, encompassing key concepts, technologies, and trends shaping the financial landscape.
- To provide insights into digital payment systems, financial technology platforms, and emerging innovations, preparing them to navigate and contribute to the evolving field of digital finance.

Learning Outcomes:

After completing the Introduction to Digital Finance course, students will be able to:

- Understand financial technology's foundations,
- Understand digital payment systems,
- Understand fintech platforms, and emerging trends.
- Analyse the impact of digital finance on traditional models, evaluate regulatory considerations, and recognize opportunities and challenges in the rapidly evolving digital financial landscape.

Unit 1: Foundations of Digital Finance (12 hours)

Introduction to Financial Systems; Definition and Components of financial systems, Traditional vs. digital financial systems. **Evolution of Digital Finance**; Historical overview of financial technology (fintech), Key milestones in the development of digital finance. **Key Concepts in Digital Finance**; Digital currencies and cryptocurrencies, Mobile payments and digital wallets, Peer-to-peer lending and crowdfunding. **Regulatory Landscape**; Overview of global and Regional Regulations, Compliance and risk management in digital finance.

Unit 2: Digital Payment Systems (12 hours)

Electronic Payments; Credit and debit cards, Automated Clearing House (ACH) transfers. **Mobile Payments;** Mobile wallets and apps, Near Field Communication (NFC) technology. **Cryptocurrencies and Blockchain;** Introduction to blockchain technology, Bitcoin and other cryptocurrencies. **Cross-Border Payments;** Challenges and solutions in international transactions, Role of digital finance in reducing friction in cross-border payments.

Unit 3: Financial Technology Platforms (11 hours)

Digital Banking; Online banking services, Neobanks and their features. **Peer-to-Peer Lending;** Overview of P2P lending platforms, Risks and benefits for borrowers and lenders. **Robo-Advisors and Wealth Management;** Automation in investment advisory services, Role of artificial intelligence in financial decision-making. **Insurtech and Digital Insurance;** Innovations in the Insurance Industry, Digital platforms for insurance services.

Unit 4: Emerging Trends and Future Perspectives (10 hours)

Artificial Intelligence in Finance; Applications of AI in financial services, Challenges and ethical considerations. **Internet of Things (IoT) and Finance;** IoT in banking and personal finance, Security and privacy implications. **Regulatory Technology (RegTech);** Role of technology in regulatory compliance, Impact on financial institutions and regulators. **Future of Digital Finance;** Emerging technologies and trends, Social, economic, and cultural implications of digital finance.

Essential Readings:

- Hines, B. (2021). Digital finance: security tokens and unlocking the real potential of blockchain. John Wiley & Sons, Inc.
- Lewis, A. (2018). The Basics of Bitcoins and Blockchains.

Additional Readings:

- Gupta, P., & 8; Tham, M. (2018). Fintech: The New DNA of Financial Services (1st ed.).
- Vigna, P., & Casey, M. (2016). The Age of cryptocurrency: How bitcoin and the Blockchain are challenging the global economic order. First Picador edition. New York, New York, Picador/St. Martin's Press.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE 13: ENTREPRENEURIAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/Practice		
Entrepreneurial Finance GE- 13	4	3	1	0	Class 12	None

Learning objectives:

- To build knowledge and skills in entrepreneurial finance.

- To understand the financing of small and medium-sized businesses from the perspective of both the entrepreneur and investors.

Learning Outcomes:

After completing the Introduction to Digital Finance course, students will be able to:

- Understanding of the requirements of funding for entrepreneurs.
- Analyse company's capital structure and its impact on profitability.
- Assess the present and future of any entity.

Course Contents:

Unit 1: Entrepreneurial Finance and Funding Opportunities (12 hours)

The concept of entrepreneurial finance. Understanding financial management: objectives, concept of risk and return, time value of money.

Financing a new venture: seed fund, boot strapping, angel funding, VC funding, funding rounds. Long-term & short term financing. Term sheets; Financing from Government Agencies like Startup India Seed Fund Scheme.

Unit 2: Investment Techniques for Growth (12 hours)

Cost of capital: meaning, classification & computation. Capital budgeting techniques. Capital structure and its impact on EPS.

Unit 3: Assessing Working Capital Requirements for Business (12 hours)

Working capital, factors determining working capital. Estimation of working capital requirements. Financing of working capital. Optimum Inventory level, cash conversion cycle.

Unit 4: Business Analysis and Exit Strategies (9 hours)

Break even Analysis. Ratio Analysis for evaluation of operating and financial performance. Fundamental analysis. Growth and exit strategies. Process of IPOs.

Essential/Recommended Readings:

- Leach, C.J. and Melicher, R.W (2021): Entrepreneurial Finance, Thomson.
- Stanton, J.M., (2003) Entrepreneurial Finance – For New and Emerging Businesses, Thomson

Additional Readings:

- Smith, J.K., Smith, R.L. and Bliss, R.T., Entrepreneurial Finance, Stanford University Press
- Smith, J.K. and Smith, R.L., Entrepreneurial Finance, Wiley
- Rogers, S., Entrepreneurial Finance, McGraw Hill
- Chandra, P., Financial Management, McGraw Hill

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

SEMESTER-VIII

DISCIPLINE SPECIFIC CORE (DSC) COURSES

DSC 20: FIXED INCOME SECURITIES

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Fixed Income Securities DSC-20	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To provide a lasting conceptual framework in which to view fixed income assets and to examine new ideas, concepts, and instruments as they evolve in the future.

Learning Outcomes:

After studying this course the student will be able:

- Understand the importance of fixed income market and how fixed income securities are structured.
- Understand interest risk and term structure
- Understand the pricing of these instruments
- Learn various strategies for investing in such instruments

Course Contents:

Unit 1: Introduction to Fixed Income Market **(9 hours)**

Fixed Income Markets and its role in the Indian economy, Money market instruments and Debt market instruments. Market Regulation and the Role of regulator. Sectoral Reforms and contemporary issues. Interest Rate determination: Monetary Policies and Interest rate markets

Unit 2: Pricing Bonds **(12 hours)**

Pricing of Bonds and Bond Price Theorems. Bond Yield. Spot rates and Forward rates. Yield Curve – Par yield curve and Zero-coupon yield curve. Theories of Term Structure of Interest rates. Fitting of yield curve.

Unit 3: Risks in fixed income investments **(9 hours)**

Bond Price Volatility. Interest Rate Risk and its measures. Purchasing Power Risk. Call Risk. Default risk of Bond investment.

Unit 4: Strategies for Fixed Income Assets **(15 hours)**

Passive Bond Investment Strategies. Bond Index. Active Bond Investment Strategies. Portfolio Performance measures and evaluation. Portfolio management by pensions funds and other institutions. Introduction to Structured Finance products. Securitisation. Mortgage Backed and Asset Backed Securities. Collateralised Debt Obligations. Bond and Credit Derivatives.

Essential Readings:

1. Fabozzi, F. J. (2016). Bond Markets, Analysis, and Strategies. USA: Pearson Education
2. Alexander, C. (2008). Market Risk Analysis Vol. I – Quantitative Methods in Finance. England: John Wiley & Sons.
3. Choudhry, M. (2010). An Introduction to Bond Markets. UK: John Wiley & Sons.

Additional Readings: (latest editions should be referred to)

1. Fabozzi, F. J. (2007). Fixed Income Analysis. New Jersey: John Wiley & Sons.
2. Hull, J. C. (2018). Risk Management and Financial Institutions. New Jersey: John Wiley & Sons.
3. Jorion, P. (2011): Financial Risk Manager Handbook. New Jersey: John Wiley & Sons.
4. Martellini, L., Priaulet, P.,& Priaulet, S. (2003). Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies. England: John Wiley & Sons.
5. National Stock Exchange of India. (2009). FIMMDA-NSE Debt Market (Basic) Module. Mumbai: NSE.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DISCIPLINE SPECIFIC ELECTIVE (DSE) COURSES

DSE 1: STRATEGIC CORPORATE FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Strategic Corporate Finance DSE-1	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To know the details of corporate finance and the strategies involved in the corporate decisions.
- To enable the students to steer the corporate issues and challenges in better manner.

Learning Outcomes:

After studying this course the student will be able:

- To enable the student to identify the key themes in corporate finance.
- To understand the principal role of finance in an organization and the implication of overarching strategic application of its efficient use on the bottom line of the organization.
- To facilitate the understanding on the impact of risk and cost of capital on investment appraisal besides their cumulative impact on the value of a capital project.

Course Contents:

Unit 1 **(12 hours)**

Introduction to strategic corporate finance: Strategy Vs Planning, significance of strategy in financial decisions, Different types of financial strategy for Shareholders Wealth Maximization, Economic Value Addition, Value added statement. Strategic Cost Management: Traditional costing Vs Strategic Costing, Relevant costs Vs Irrelevant costs, Different types of strategic costing and their relevance-

Target Costing, Activity based Costing, Life Cycle Costing, Quality Costing, Zero Based Budgeting, Strategic cost reduction techniques and value chain analysis.

Unit 2 **(12 hours)**

Management Buy-outs: Establishing feasibility of the buy-out, Negotiating the main terms of the transaction with the vendor including price and structure, Developing the business plan and financial forecasts in conjunction with the buy-out team for submission to potential funders.

Management Buy-ins: Management Buy-in/Buy-outs ("BIMBOs"), Vendor-initiated buyouts/buy-ins.

Real options: Financial and real options compared, various types of real options, the Black Scholes model, Decision tree analysis, application of Real options, Drawbacks of Real options.

Unit 3 **(12 hours)**

Financial Distress and restructuring: Meaning of Bankruptcy, Factors leading to bankruptcy, symptoms and predictions of bankruptcy, reorganization of distressed firms, liquidation of firms. Company disposals: sale of a non-core subsidiary, Exit strategy, valuation, timing of sale and tax planning opportunities and calculation of the various tax implications.
Fundraising: identification of different sources of development capital, determination of capital structure and factors affecting the capital structure, cost of capital and cost saving strategy.

Unit 4 **(9 hours)**

Company Valuation: an overview of valuation, valuation principles and practices, the impact of "what if" scenarios. Other strategic issues: managing credit ratings, dividend and share repurchase policy. Strategic risk management, substitutability of capital structure, risk management choices, financial, physical and operational hedging.

Essential Readings:

1. Justin Pettit: Strategic Corporate Finance Applications in Valuation and Capital Structure; John willey & sons, Inc.

2. Aswath Damodaran: Corporate finance theory and practice; John willey & sons.

Additional Readings:

1. Jakhotia: Strategic Financial Management, Vikas Publication.
2. Aswath Damodaran: Applied Corporate Finance, John willey & sons.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 2: CORPORATE ANALYSIS & VALUATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Corporate Analysis & Valuation DSE-2	4	3	1	0	Class XII	NA

Objective:

- To enable the students to analyse the health of a company through their annual reports and will equip them to understand how to determines its value.

Learning Outcomes:

After studying this course the student will be able to understand:

- Financial Health of a company through qualitative and quantitative analysis.
- The use of financial ratios for financial health determination.
- The various valuation techniques for company's valuation.

Course Contents

Unit 1: Analysis of Corporate Financial Statements (12 hours)

Analysis of Corporate Financial Statements: Income statements and Balance sheets through ratio analysis and analysing the Chairman's statement, Directors' report, management discussion & analysis, report on corporate governance, auditor's report to evaluate the financial soundness of the company. Understanding financial statements of manufacturing and service organisations. Common size analysis and relevant ratios (Study from the Annual Reports of the companies).

Unit 2: Introduction to Valuation Techniques & Cash Flows Forecasting (12 hours)

Introduction to Valuation: Value and price, Balance sheet-based methods, Income statement-based methods. Cash flow discounting-based methods. Deciding the appropriate cash flow for discounting, The free cash flow to the firm, free cash flow to equity. Forecasting Cash flows: simple model for forecasting income and cashflows. Earnings, Tax effect, Reinvestment needs, dividend.

Unit 3. DCF Valuation, Discount Rates & Beta **(12 hours)**

Discounted Cash flow Valuation: Valuation of a company with no growth, constant growth, variable growth and infinite life. Estimating Discount Rates – cost of equity, cost of debt, tax shield, weighted average cost of capital. Calculation of beta, instability of beta, adjusted beta, levered and unlevered beta.

Unit 4: Relative Valuation & Other Applications **(9 hours)**

Relative Valuation: standard multiples, comparable companies, potential pitfalls; estimating multiples using regression. Valuation of brands and intellectual capital. Interest rates and company valuation. Impact of inflation on valuation. Reconciling relative and discounted cash flow valuation. Case studies in valuation.

Essential Readings:

1. Damodaran, A., Damodaran on Valuation, Security Analysis for investment and Corporate Finance (2nd ed.). Wiley India Pvt. Ltd.
2. Chandra, P., Corporate Valuation and Value Creation, (1st ed). Tata Mcgraw Hill.

Additional Readings:

1. Foster, George Financial Statement Analysis, Pearson Education Pvt Ltd

2. Pablo Fernandez, Valuation and Common Sense, Free download from SSRN (https://web.iese.edu/PabloFernandez/Book_VaCS/ContentsValuation.pdf).

Latest Editions of the Readings may be used.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 4: FINANCIAL ECONOMETRICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Financial Econometrics DSE-4	4	3	1	0	Class XII	Basic Econometrics

Course Objectives: We define financial econometrics as 'the application of statistical techniques to problems in finance'. Although econometrics is often associated with analysing economics problems such as economic growth, consumption and investment, the applications in the areas of finance have grown rapidly in the last few decades.

Prerequisites: Before starting this course, we recommend that you first complete the course Basic Econometrics.

Learning Outcomes:

By the end of this course, you will be able to:

- Understand the properties of financial returns.
- Formulate models and analyse the properties of models using matrix notation.
- Understand the principles of autoregressive time series models and evaluate their ability to forecast financial variables.
- Understand the principles of maximum likelihood, and use maximum likelihood estimation and hypothesis testing.
- Understand ARCH and GARCH models and be able to apply them to financial time series which display volatility clustering and asymmetry.
- Estimate Vector Autoregressive (VAR) models and interpret the results.
- Apply limited dependent variable methods.

Course Contents:

Unit 1: Statistical Properties of Financial Returns & Univariate Time Series and Applications to Finance (15 hours)

Introduction Asset Returns, Calculation of Asset Returns (Continuous and discreate both), Compare Continuous return with non-Continuous return and explain its benefits. Facts about Financial Returns, Distribution of Asset Returns, Time Dependency, Linear Dependency across Asset Returns.

Introduction to Univariate Time Series, The Lag Operator, Properties of AR Processes, Properties of Moving Average Processes, Autoregressive Moving Average (ARMA) Processes, The Box-Jenkins Approach.

Unit 2: Modelling Volatility – Conditional Heteroscedastic Models (9 hours)

Introduction to Modelling Volatility, ARCH Models, GARCH Models, Estimation of GARCH Models, Forecasting with GARCH Model.

Unit 3: Modelling Volatility and Correlations – Multivariate GARCH Models (9 hours)

Introduction to Modelling Volatility and Correlations, Multivariate GARCH Models, The VECH Model, The Diagonal VECH Model, The BEKK Model, Estimation of a Multivariate Model

Unit 4: Vector Autoregressive Models (VAR), Granger Causality Test (GCT) and Johansen Cointegration Test (JCT) (12 **hours)**

Introduction to VAR, Deep understanding of VAR, Issues in VAR, Hypothesis Testing in VAR.
Introduction to GCT, Deep understanding of GCT, Issues in GCT, Hypothesis Testing in GCT
Introduction to JCT, Deep understanding of JCT, Issues in JCT, Hypothesis Testing in JCT.

Essential Readings:

1. Christopher Dougherty. Introductory Econometrics. Oxford University Press.
2. Gujarati, N. Damodar. Basic Econometrics. New Delhi: McGraw Hill.
3. Gujarati, N. Damodar. Econometrics by Examples. New Delhi: McGraw Hill.

Additional Readings:

1. Chris, Brooks (2019). Introductory Econometrics for Finance. Cambridge University Press.
2. Pindyck, Robert S. and Daniel L. Rubinfeld Econometric Models and Economic Forecasts. Singapore: McGraw Hill.
3. Ramanathan, Ramu (2002). Introductory Econometrics with Applications (5th ed.). Thomson South Western

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 8: MARKETING OF FINANCIAL SERVICES

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Marketing of Financial Services DSE-8	4	3	1	0	Class XII	NA

Course Objective:

- To introduce students to the marketing of financial services. All financial institutions, including consumer banks and corporate finance services, practice some form of marketing. Some firms market themselves better than others, as evidenced in the competitive value of their brands. This course also operationalizes several marketing concepts such as segmentation, targeting, and positioning.

Learning Outcomes:

After studying this course the student will be able to:

- Explain and illustrate some of the frameworks and approaches that are helpful in marketing financial services.
- Outline how to efficiently manage multiple product or brand portfolios across multiple customer segments, and how to develop an effective marketing strategy in modern financial service organizations.

Course Contents:

Unit 1: Introduction to Marketing of Services (12 hours)

Growth of the Service Sector – The Concept of Service – Characteristics of Services, Classification of Services, Service Marketing Mix (Additional Dimensions in Services Marketing – People, Physical Evidence and Process). Internal Marketing of a Service - External versus Internal Orientation of Service Strategy, Service Encounter, Service Failure and Service Recovery, learning from customer feedback.

Unit 2: Marketing Strategy (12 hours)

Planning, organizing and implementing marketing operations; marketing as a management function. Market Research – Establishing a marketing information system; the marketing research process. Market segmentation – Target marketing; Market segmentation, targeting and positioning the financial services organization in the market place.

Unit 3: Banking and Insurance Services (12 hours)

Retail Financial Services: Retail banking, meaning of banking business, introduction to various bank products, selling bank products. Concept of cross selling, Impact of technology on bank marketing (Internet banking, mobile banking and UPI). Insurance – Meaning, advantages various types of insurance, financial planning process. Risk Management – Strategy to cover risk, introduction to IRDAI, selling of insurance plans. Bancassurance – Bank as a distribution channel for insurance services**.**

Unit 4: Regulations Governing Financial Services Marketing (9 hours)

Ethical issue in the marketing of financial services, Ethics in relation to the individual and society as a whole. Mutual Fund Structure, sales and distribution channels. Distribution channels; the impact of technology; online marketing, The dimension of customer care; services quality and services recovery; global marketing.

Essential Readings:

1. Zeithaml, Bitner, Gremler & Pandit: SERVICES MARKETING, McGraw Hill.

2. V. A. Avdhani: Marketing of Financial services, HPH.

3. P. K. Gupta: Insurance and Risk Management, HPH.

4. Marketing Financial services – Hooman Estelami

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 10: ENTREPRENEURIAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Entrepreneurial Finance DSE-10	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To build the knowledge and skills in entrepreneurial finance.
- To study the financing of small and medium sized businesses from the perspective of both the entrepreneur and investors and learn about valuation methods.

Learning Outcomes:

On successful completion of his course, the students will be able to:

- Understanding the financial aspects related to setting up of new Enterprises.
- Carrying out short and long term Financial Planning and Forecasting for the Enterprises.
- Comprehend different methods for valuing new Ventures.
- Be aware of various financing alternatives and design security structures.

Course Contents

Unit I: Introduction to Finance for Entrepreneurs (9 hours)

Principles of Entrepreneurial Finance, Role of Entrepreneurial Finance. The Successful Venture Life Cycle. Key Elements of a Business Plan. Forms of Business Organisations and Choosing the Appropriated Organization. Financing through the Venture Life Cycle, Financial Bootstrapping and Business Angel Funding. Life Cycle Approach for Entrepreneurial Finance.

Unit 2: Financial Planning for Enterprises (12 hours)

Short Term Financial Planning: Short Term Cash Planning Tools, Cash Planning from a Projected Monthly Balance Sheet. Long Term Financial Planning: Systematic Forecasting – Forecasting Sales for Seasoned Firms, Forecasting Sales for Early-Stage Ventures. Estimating Sustainable Sales Growth Rates. Estimating Additional Financing needed to support Growth.

Unit 3: Valuing Ventures (12 hours)

Valuing Early-Stage Ventures: Concept, Basic Mechanics of Valuation – Present Value Concept, Estimates and Discounted Cash Flow. Just in Time Equity Valuation. Venture Capital Valuation Methods: Review of Basic Cash Flow Based Equity Valuations, Basic Venture Capital Valuation – Using Present Values and Future Values. Earning Multipliers and Discounted Dividends.

Unit 4: Structuring Financing for Growing Venture (12 hours)

Professional Venture Capital – History and Overview, Professional Venture Investing Cycle. Other Financing Alternatives – Business Incubators and Seed Accelerators; Intermediaries, Facilitators and Consultants; Business Crowdsourcing and Crowdfunding; Commercial and Venture Bank Lending, Foreign Investor Funding Sources. Designing Security Structures – Common Stock, Preferred Stock, Convertible Debt, Warrants and Options, Other Concerns.

Essential Readings

1. Leach, C. J. and Melicher, R.W: Entrepreneurial Finance, Cengage Learning.
2. Stancill, J.M., Entrepreneurial Finance – For New and Emerging Businesses, Thomson.

Additional Readings:

1. Rogers, S., Entrepreneurial Finance, McGraw Hill.
2. Chandra, P., Financial Management, McGraw Hill.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 12: WEALTH MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Wealth Management DSE-12	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To equip students with the knowledge and practical understanding of important dimensions of wealth management.
- To understand and do planning for their tax liabilities, investments, insurance coverage, retirement and estate needs.

Learning Outcomes:

After the completion of this course the student will be able:

- To provide an overview of various aspects related to wealth management.
- To acquaint the learners with issues related to taxation in wealth management.
- To study the relevance and importance of insurance in wealth management.
- To understand the importance and process of choosing right investments.
- To understand various components of retirement and estate planning.

Course Contents

Unit I: Basics of Wealth Management and Tax Planning (12 hours)

Introduction to Wealth Management, Need for Wealth Management, Components of Wealth Management, Process of Wealth Management, Code of Ethics for Wealth Managers, Wealth Management in India. Tax Planning – Tax Avoidance versus Tax Evasion, Fundamental Objectives of Tax Planning, Tax Structure in India for Individuals, Common Tax Planning Strategies – Maximizing Deductions, Income Shifting, Tax-Free and Tax-Deferred Income.

Unit 2: Managing Insurance Needs (12 hours)

Basics Concepts – Risks, Risk Management and Underwriting. Insuring Life – Benefits of Life Insurance, evaluating need for Life Insurance, Determining the Right Amount of Life Insurance. Choosing the Right Life Insurance Policy – Term Life Insurance, Whole Life Insurance, Universal Life Insurance, Variable Life Insurance, Group Life Insurance, Other Special Purpose Life Policies. Buying Life Insurance – Compare Costs and Features, Select an Insurance Company, and Choose an Agent. Life Insurance Contract Features. Insuring Health – Importance of Health Insurance Coverage. Making

Health Insurance Decision – Evaluate Your Health Care Cost Risk, Determine Available Coverage and Resources, Choose a Health Insurance Plan. Types of Medical Expense Coverage. Policy Provisions of Medical Expense Plans. Property Insurance – Basic Principles, Types of Exposure, Principle of Indemnity, and Coinsurance.

Unit 3: Managing Investments (12 hours)

Role of Investing in Personal Financial Planning, Identifying the Investment Objectives, Different Investment Choices. The Risks of Investing, The Returns from Investing, The Risk-Return Trade-off. Managing Your Investment Holdings – Building a Portfolio of Securities, Asset Allocation and Portfolio Management, Keeping Track of Investments. Investing in Equity – Common Considerations, Key Measures of Performance, Types of Equity Stocks, Market Globalization and Foreign Stock, Making the Investment Decision. Investing in Bonds – Benefits of Investing in Bonds, Bonds Versus Stocks, Basic Issue Characteristics, The Bond Market, Bond Ratings. Investing in Mutual Funds and Exchange Traded Funds (ETFs) – Concept of Mutual Funds and ETFs, Benefits of Investing in Mutual Funds or ETFs, Some Important Cost Considerations, Services Offered by Mutual Funds, Selecting appropriate Mutual Fund and ETF investments, Evaluating the performance of Mutual Funds and ETF.

Unit 4: Retirement Planning and Estate Planning (9 hours)

Retirement Planning – Role of Retirement Planning in Personal Financial Planning, Pitfalls to Sound Retirement Planning, Estimating Income Needs, Sources of Retirement Income.
Estate Planning – Fundamentals of Estate Planning, Impact of Property Ownership and Beneficiary Designations, Estate Planning Documents, and Executing Basic Estate Planning.

Essential Readings:

1. Randall S. Billingsley, Lawrence J. Gitman, and Michael D. Joehnk (2017): Personal Financial Planning. Cengage Learning.

2. Susan M. Tillery, and Thomas N. Tillery: Essentials of Personal Financial Planning. Association of International Certified Professional Accountants.

Additional Readings:

1. Introduction to Financial Planning (4th Edition 2017) – Indian Institute of Banking & Finance.

2. Sinha, Madhu. Financial Planning: A Ready Reckoner. July 2017. Mc Graw Hill.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 14: EENVIRONMENTAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Environmental Finance DSE-14	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To provide technical knowledge on the contribution that environmental finance can make to sustainable development, and on how sustainable finance may be deployed in the real-world policy or business context.

Learning Outcomes:

On successful completion of his course, the students will be able to:

- Explain the potential contribution of environmental finance to achieving the Sustainable Development Goals and the goals of the Paris Agreement on Climate Change.
- Explain the core concepts of environmental finance and the relevance of sustainability considerations for the key actors in the financial system.
- Describe the role that regulation and industry initiatives (self-regulation) play in shaping sustainable finance.
- Describe different sustainable finance products, such as bonds and loans, that may be available to provide the capital needed to support the delivery of the Sustainable Development Goals and the goals of the Paris Agreement on Climate Change.

Course Contents:

<u>Unit I</u> **(9 hours)**

Sustainable Finance in Context: What is Sustainable Finance - broad concept of sustainable finance, Financing International Agreements on Climate Change and Sustainable Development - potential contribution that sustainable finance can make to achieving the Sustainable Development Goals and the goals of the Paris Agreement on Climate Change.

Unit II **(12 hours)**

Fundamentals of Sustainable Finance: Sustainable Finance: The Case for Action, Key Actors and organisations in the finance system, why finance sector actors are interested in sustainability-related issues, Introduction to Environmental, Social and Governance (ESG) Risk Management, Key approaches that investors, banks and insurers can use to take account of sustainability-related issues in their decisions, Financial and Sustainability (Impact) Reporting and Communication, Task Force on Climate-related Financial Disclosures (TCFD), Recommendations of the TCFD.

Unit 3 **(12 hourts)**

Regulation and Self-regulation: Policy and Regulation - how regulation shapes and influences sustainable finance, Responsible Banking and Sustainable Insurance, how industry initiatives contribute to the goals of a sustainable finance system, Responsible Investment.

Unit 4 **(12 hours)**

Sustainable Finance Strategies and Products: An Overview, The Five Pillars of Sustainable Finance, proceeds and performance-based instruments Green Bonds, Green Loans, key elements of a sustainability-linked bond or loan instrument, Performance-based Instruments, In Focus: Sustainable Finance in India- key features of sustainable finance policy and practice

Essential Readings: (latest editions should be referred to)

1. Rodney R. White and Sonia Labatt: Environmental Finance: A Guide to Environmental Risk Assessment and Financial Products
2. Simon Thompson: Principles and Practice of Green Finance
3. Dirk Schoenmaker and Willem Schramade: Principles of Sustainable Finance

Additional Readings: (latest editions should be referred to)

1. Anonim: Sustainable Finance in the Green Economy
2. Jonathan Gheyssens and Marc Chesney: Environmental Finance and Investments

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 17: HEDGE FUNDS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Hedge Funds DSE-17	4	3	1	0	Class XII	NA

Course Objectives:

- To provide an in-depth understanding of Hedge Fund Industry and the various strategies employed with emphasis on understanding their fundamental investment process.

Learning Outcomes:

After studying the course, students will be able to:

- Understand the hedge fund industry and current developments.
- Learn useful tools currently employed within the industry.
- Gain in-depth knowledge of mechanics of popular hedge fund trading strategies.
- Experience the hedge funds industry from an “active” participant vantage.

Course Contents:

Unit 1: Introduction and Performance Measures **(15 hours)**

General background on origins of hedge funds and fund of funds, An Overview of strategies employed – Convertible Arbitrage, Dedicated Short Bias, Emerging Markets, Equity Market Neutral, Statistical Arbitrage, Event Driven, Fixed Income Arb, Global Macro, Long/Short Equity, Managed Futures, Multi Strategy Risk exposure decomposition for hedge funds, Performance Measures Data Biases, Strategy Development Components, Back-Testing Common Mistakes in the Search for Alpha, Investment Process – Case Study

Unit 2: Global Futures Strategies **(9 hours)**

About the Landscape and Players Involved, Global liquid futures markets, Trend-following vs Momentum, “The trend is your friend,” how to a build simple model? (MACD, RSI), Micro-structure issues, t-costs, the forward curve, open interest and volume, Indices: GSCI, CRB, Roger, Historical Performance

Unit 3: Currency and Global Macroeconomic Perspective **(12 hours)**

An overview of the stakeholders involved and the various products,

Theoretical background (PPP, covered/uncovered parity), Portfolio Construction, "Carry-Me-Out", which short-term interest rates to employ? , Majors and minors (Intra-day mean reversion, How to create a FX-Carry Index?), Historical Performance and Risk Profile

Unit 4: Other Alternatives – Distressed/ SPAC **(9 hours)**

What is a Merger Arbitrage Index, How is it created, Converted Bond Arbitrage Basics, Historical Performance and Risk Profile, Basic Arbitrage Strategies using Quants, Execution Challenges and Realities

Essential Readings:

- Liew and Vassalou (2000), "Can Book-to-Market, Size, and Momentum be Risk Factors that Predict Economic Growth?," The Journal of Financial Economics 57, pp. 221-245..
- Fama and French (2007), "Dissecting Anomalies," working paper.
- Pojarliev and Levich (2010),"Detecting Crowded Trades in Currency Funds," Financial Analysts Journal, Jan/Feb, 2011, 26-39.
- Asness, Moskowitz, and Pedersen (2008), "Value and Momentum Everywhere," working paper.
- Ribeiro and Loeys (2006), "Exploiting Cross-Market Momentum,"
- Edwards and Liew (1999), "Hedge Funds versus Managed Futures as Asset Classes," The Journal of Derivatives, Summer 1999.

.

Additional Readings: (latest editions should be referred to)

- Liew (2003), "Hedge Fund Index Investing Examined," Journal of Portfolio Management, Winter 2003.
- Fung and Hsieh (1999), "A primer on hedge funds," Journal of Empirical Finance, vol. 6, pp. 309-331

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

DSE 18: PRIVATE EQUITY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Private Equity DSE-18	4	3	1	0	Class XII	NA

Course Objectives:

- To provide students with the necessary theoretical and conceptual tools used in private equity deals

Learning Outcomes:

After studying this course, students will be able to:

- Understand key variables in play in the development of a successful PE eco-system.
- Develop a sophisticated understanding of the PE industry.
- Analyze and simulate the decisions that private equity investors make in the fundraising, investing and exit stages of the PE cycle.

Unit 1: Introduction to Private Equity **(12 hours)**

Meaning and history of private equity, key players in PE market, types of PE, drivers of value creation and how do they vary, relations with debt and public capital, opportunities and the risks for investors, J-curve

Unit 2: The Private Equity Process **(12 hours)**

Determining the size of the fund, through fund raising, sourcing portfolio investments, acquiring the portfolio companies and converting equity value back to cash by liquidating portfolio holdings. The means by which private equity firms create value and enhance the valuation of their portfolio.

Unit 3: Valuation and Exit Strategies **(12 hours)**

Valuation techniques in a highly leveraged setting, including a discussion of how private equity firms create value and how deals are structured to realize such value

When to exit an investment and why, variety of exit options and pros and cons of each, valuation in different scenarios, impact of terms negotiated at the time of making an investment

Unit 4: Due Diligence **(9 hours)**

Intellectual framework necessary to perform due diligence in PE settings, challenges to due diligence in the PE environment, framework and guidance to conduct private equity investment due diligence.

Essential Readings: (latest editions should be referred to)

- Cendrowski, Harry, Martin, James P., Petro, Louis W., and Wadecki, Adam A, Private Equity Second Edition: History, Governance, and Operations (Wiley Finance © 2012)

Additional Readings: (latest editions should be referred to)

- Rogers, Holland & Haas, "Value Acceleration: Lessons from Private Equity Masters”

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GENERIC ELECTIVE (GE) COURSES

GE 2: FINANCIAL MANAGEMENT OF FAMILY BUSINESS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Financial Management of Family Business GE-2	4	3	1	0	Class XII	NA

Course Objectives:

- To familiarize students with various financial and quantitative techniques of analysis required at different stages for management of family business.
- To acquaint the students with qualitative aspects related to starting a new venture and various options for financing.

Learning Outcomes:

On successful completion of his course, the students will be able to:

- Understand the process of screening of ideas and carrying out appraisal of new venture.
- Apply various quantitative methods for demand forecasting and making financial projections.
- Use capital budgeting techniques for financial evaluation and selection of projects.
- Carry out risk analysis for business projects and identify alternative sources of financing.

Course Contents

Unit 1: Capital Investments & Starting a Venture (9 hours)

Capital investments importance and difficulties, types of capital investments, phases of capital budgeting, levels of decision making, facets of project analysis, key issues in major investment decisions. Generation of ideas, monitoring the environment, corporate appraisal, tools for identifying investment opportunities, scouting for project ideas, preliminary screening, project rating index, sources of positive net present value.

Unit 2: Demand Forecasting & Financial Projections (12 hours)

Methods of demand forecasting: qualitative methods – jury of executive and Delphi method. Time series projection methods: trend projection, exponential smoothing and moving average method. Causal methods: chain ratio, consumption level, end use, bass diffusion, leading indicator and econometric method. Uncertainties in demand forecasting, improving forecasts, coping with uncertainties.

Financial estimates and projections: cost of project, estimates of sales and production, cost of production, working capital requirement and its financing, profitability projections, projected cash flow statement, projected balance sheet and multi-year projections.

Unit 3: Capital Budgeting & Project Selection (12 hours)

Project appraisal: market appraisal, technical appraisal, financial appraisal, economic appraisal, and managerial appraisal. Project cash flows: components of cash flow, basic principles of cash flow estimation, cash flows for a replacement project. Biases in cash flow estimation: overestimation and underestimation of profitability. Time value of money: concept, present and future value of a single amount, present and future value of an annuity. Investment evaluation criteria: payback period, accounting rate of return, net present value, profitability index, internal rate of return (IRR), modified internal rate of return (MIRR). Assessment of various methods, investment evaluation in practice.

Unit 4: Risk Analysis and Financing (12 hours)

Risk Analysis: sources and measures of risk. methods of assessing risk: sensitivity analysis, scenario analysis, break-even analysis, simulation analysis, decision tree analysis. Managing risk. Project selection under risk – judgmental evaluation, payback period requirement, risk adjusted discount rate method, certainty equivalent method. Risk analysis in practice.

Financing: capital structure, choices of financing, internal accruals, equity capital, preference capital, debentures (or bonds), term loans, raising capital in international markets, venture capital, private equity, venture capital vs private equity. Credit rating and appraisal by financial institutions – what information they want and how they appraise.

Essential Readings:

1. Chandra, Prasanna: Projects – Planning, Analysis, Selection, Financing, Implementation, and Review. 2019 Edition. McGraw Hill Education.
2. Agrawal, R., & Mehra, Y. S. (2017). Project Appraisal and Management. Taxmann Publications.

Additional Readings:

1. Goodpasture, C. John: Quantitative Methods in Project Management. J. Ross Publishing.
2. Prasanna Chandra: Financial Management: Theory and Practice, McGraw Hill Publishing.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE4: FUNDAMENTALS OF ECONOMETRICS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Fundamentals of Econometrics GE-4	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To provide a comprehensive introduction to basic econometric concepts and techniques.
- To cover estimation and diagnostic testing of simple, multiple regression models, panel data models, and dummy variable regression with qualitative response regression models.

Learning Outcomes:

The course will help the student to**:**

- Understanding of basic econometrics and its assumptions and the impact of violations of classical assumptions.
- Interpretation of functional forms of regression model.
- Understanding of models using dummy variables and Qualitative Response Regression Models.

Unit 1 **(9 Hours)**

Introduction to Econometrics and an overview of its applications; Simple Regression with Classical Assumptions; Least Square Estimation and BLUE, Properties of estimators, Multiple Regression Model and Hypothesis Testing Related to Parameters – Simple and Joint. Functional forms of regression models.

Unit 2 **(12 Hours)**

Violations of Classical Assumptions: multicollinearity, heteroscedasticity, autocorrelation, and model specification errors, their identification, their impact on parameters; tests related to parameters and impact on the reliability and the validity of inferences in case of violations of Assumptions; methods to take care of violations of assumptions.

Unit 3 **(12 Hours)**

Understanding the impact of change in scale of variables on output. Understanding and calculation of information criteria for model selection: AIC, BIC, and HQC. Understanding and calculation of R Square and adjusted R Square. Understanding of outliers and their impact on the model's output.

Unit 4 **(12 Hours)**

Dummy variables: Intercept dummy variables, slope dummy variables, Interactive dummy variables, Use of Dummy Variables to model qualitative/Binary/Structural changes, Other Functional Forms, Qualitative Response Regression Models or Regression Models with Limited Dependent Variables - Use of Logit, and Probit Models

Recommendation Computer Package to be Used: Use of softwares like E-Views, R, and STATA to solve real-life problems and check assumptions, taking care of assumption violations, and test goodness of fit, and for estimation of Logit, and Probit Models is recommended.

Essential Readings:

1. Christopher Dougherty. Introductory Econometrics. Oxford University Press.

2. Gujarati, N. Damodar. Basic Econometrics. New Delhi: McGraw Hill.

3. Gujarati, N. Damodar. Econometrics by Examples. New Delhi: McGraw Hill.

Additional Reading

1. Pindyck, Robert S. and Daniel L. Rubinfeld Econometric Models and Economic Forecasts. Singapore: McGraw Hill.

2. Ramanathan, Ramu (2002). Introductory Econometrics with Applications (5th ed.). Thomson South-Western.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE 6: PERSONAL FINANCE

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Personal Finance GE-6	**4**	**3**	**1**	**0**	**Class XII**	**NA**

Course Objectives:

- To equip students with the knowledge and practical understanding of important dimensions of managing one's personal finance.
- To understand and plan for their tax liabilities, investments, insurance coverage, and retirement.

Learning Outcomes:

On successful completion of his course, the students will be able to:

- Understand the fundamentals of Personal Financial Planning.
- Learn the basics of managing personal tax liabilities.
- Able to ascertain and choose appropriate insurance policies for managing personal risks.
- Appreciate the importance of choosing right investments for managing personal finance.
- Learn the basic concepts and underlying principles for Retirement Planning.

Course Contents

Unit 1: Basics of Personal Finance and Tax Planning (12 Hours)
Understanding Personal Finance. Rewards of Sound Financial Planning. Personal Financial Planning Process. Personal Financial Planning Life Cycle. Making Plans to Achieve Your Financial Goals. Common Misconceptions about Financial Planning. Financial Planning as a career choice. The Financial Planning Environment. Personal Tax Planning – Tax Avoidance versus Tax Evasion, Fundamental Objectives of Tax Planning, Tax Structure in India for Individuals, Common Tax Planning Strategies – Maximizing Deductions, Income Shifting, Tax-Free and Tax-Deferred Income.

Unit 2: Managing Insurance Needs **(12 Hours)**

Basics Concepts – Risks, Risk Management and Underwriting. Insuring Life – Benefits of Life Insurance, evaluating need for Life Insurance, Determining the Right Amount of Life Insurance. Choosing the Right Life Insurance Policy – Term Life Insurance, Whole Life Insurance, Universal Life Insurance, Variable Life Insurance, Group Life Insurance, Other Special Purpose Life Policies. Buying Life Insurance – Compare Costs and Features, Select an Insurance Company, and Choose an Agent. Life Insurance Contract Features. Insuring Health – Importance of Health Insurance Coverage. Making Health Insurance Decision – Evaluate Your Health Care Cost Risk, Determine Available Coverage and Resources, Choose a Health Insurance Plan. Types of Medical Expense Coverage. Policy Provisions of Medical Expense Plans. Property Insurance – Basic Principles, Types of Exposure, Principle of Indemnity, and Coinsurance.

Unit 3: Managing Investments **(12 Hours)**

Role of Investing in Personal Financial Planning, Identifying the Investment Objectives, Different Investment Choices. The Risks of Investing, The Returns from Investing, The Risk-Return Trade-off. Managing Your Investment Holdings – Building a Portfolio of Securities, Asset Allocation and Portfolio Management, Keeping Track of Investments. Investing in Equity – Common Considerations, Key Measures of Performance, Types of Equity Stocks, Market Globalization and Foreign Stock, Making the Investment Decision. Investing in Bonds – Benefits of Investing in Bonds, Bonds Versus Stocks, Basic Issue Characteristics, The Bond Market, Bond Ratings. Investing in Mutual Funds and Exchange Traded Funds (ETFs) – Concept of Mutual Funds and ETFs, Benefits of Investing in Mutual Funds or ETFs, Some Important Cost Considerations, Services Offered by Mutual Funds, Selecting appropriate Mutual Fund and ETF investments, Evaluating the performance of Mutual Funds and ETF.

Unit 4: Investing in Real Estate and Retirement Planning **(9 Hours)**

Investing in Real Estate – Some Basic Considerations. Modes of Real Estate Investment – Raw Land, Commercial Properties, Residential Properties, Real Estate Investment Trusts (REITs).

Planning for Retirement – Role of Retirement Planning in Personal Financial Planning, Pitfalls to Sound Retirement Planning, Estimating Income Needs, Sources of Retirement Income**.** NPS- its importance, benefits and choices/alternatives available under this scheme

Essential Readings:

1. Randall S. Billingsley, Lawrence J. Gitman, and Michael D. Joehnk (2017): Personal Financial Planning. Cengage Learning.

2. Susan M. Tillery, and Thomas N. Tillery: Essentials of Personal Financial Planning. Association of International Certified Professional Accountants.

Additional Readings:

1. Introduction to Financial Planning (4th Edition 2017) – Indian Institute of Banking & Finance.

2. Sinha, Madhu. Financial Planning: A Ready Reckoner. July 2017. Mc Graw Hill

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE 8: WORKING CAPITAL MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Working Capital Management GE-8	4	3	1	0	Class XII	NA

Course Objective(s):

- To provide understanding of the concept and importance of sound working capital strategies of a firm.
- To have an understanding of the impact of working capital policies relating to Cash management, inventory and receivables management on firm's profitability.

Learning Outcomes:

On successful completion of his course, the students will be able to:

- Evaluate the importance of effective working capital management and its role in meeting the firm's strategic objectives and its impact in value creation.
- Understand the management of cash and marketable securities
- Formulation of optimum inventory and receivables management plan.
- Formulate appropriate working capital management policies to achieve corporate objectives.

Course Contents:

Unit 1: Working Capital Management – Introduction (15 Hours)

Concept and Scope of Working Capital, Types of working Capital, Determinants of working capital, Working Capital Cycle, Assessment and Computation of Working Capital Requirement, Profitability–Liquidity trade-off, Working Capital Policies. Brief about working capital financing.

Unit 2: Management of Cash & Marketable Securities (12 Hours)

Meaning of Cash, Motives for holding cash, objectives of cash management, factors determining cash needs, Cash Management: basic strategies, techniques, Lock Box system and concentration banking. Marketable Securities: Concept, types, reasons for holding marketable securities.

Unit 3: Management of Receivables (9 Hours)

Concept & cost of maintaining receivables, objectives of receivables management, factors affecting size of receivables, policies for managing accounts receivables, analysis for optimum credit policy including credit analysis, credit standards, credit period, credit terms, etc.

Unit 4: Inventory Management (9 Hours)

Inventory: Need for monitoring & control of inventories, objectives of inventory management, Benefits of holding inventory, risks and costs associated with inventories, Techniques of Inventory Management – EOQ, Minimum order quantity, ABC Analysis, JIT etc.

Essential Readings:

1. Bhattacharya – Working Capital management ,2e, PHI.

2. Rustagi – Working capital Management, Taxmann's.

3. Bhalla V.K - Working Capital management, Text and cases, Anmol Publication.

4. Periasamy – Working Capital Management –Theory & Practice, Himalaya Publishing House.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE 10: INTRODUCTION TO MUTUAL FUNDS

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical/Practice		
Introduction to Mutual Funds GE- 10	4	3	1	0	Class 12	None

Learning Objectives

- To develop an understanding of fundamental concepts of mutual funds, channels for mutual funds distribution, financial planning as an approach to investing in mutual funds, accounting, valuation, and taxation aspects underlying mutual funds.

Learning outcomes

After studying this course, the students will be able to:

- Understand the basic principles and characteristics of mutual funds.
- Explore and understand the different distribution channels for mutual funds, including direct channels and intermediaries.
- Assess the impact of regulatory frameworks on the distribution of mutual funds.
- Apply financial planning concepts to create investment strategies using mutual funds.
- Analyse the methods used for the valuation of mutual fund assets.
- Understand the tax implications associated with investing in mutual funds, including capital gains taxation and other relevant tax considerations.

Unit 1: Foundations of Mutual Funds **(12 hours)**

Introduction to Mutual Funds: Definition and purpose of Mutual Funds, historical evolution, significance in the financial market; Types and structure of Mutual Funds: Equity Funds, Debt Funds, Hybrid Funds, Close-ended vs Open-ended Funds, ETFs; Net Asset Value (NAV); Risk and Return in Mutual Funds, Diversification and portfolio management, Fund Managers and Investment objectives

Unit 2: Distribution Channel and Intermediaries (9 hours)

Direct vs Indirect Channels; Online Platforms and Fintech in distribution, Financial Intermediaries in the Mutual funds Market; SEBI Regulations and Guidelines; AMFI; Compliance and Code of Conduct; Investor Protection Measures

Unit 3: Financial Planning and Management of Mutual Funds (12 hours)

Role of Mutual Funds in Goal Achievement; Investment Horizons and Strategies; Systematic Investment Plans (SIPs) and Lump-Sum Investments; Performance Evaluation of Managed Funds using Sharpe's, Treynor's, and Jensen's measures.

Unit 4: Accounting, Valuation and Taxation in Mutual Funds (12 hours)

NAV Calculation; Mark-to-Market Valuation; Fair Value Accounting, Capital Gain Taxation, Dividend Distribution Tax (DDT), Tax Planning with Mutual Funds; Latest developments in the Mutual Fund industry.

Essential/Recommended Readings:

1. Sankaran, S. (2018). Indian Mutual Funds Handbook (5th Edition): A Guide for Industry Professionals and Intelligent Investors. Vision Books.

2. Mishra, S. K. (2018). A guide to Indian mutual fund investments. Independently Published.

3. Halan, M. (2023). Let's talk mutual funds: A Systematic, Smart Way to Make Them Work for You. Harper Collins.

4. Tripathy, N. P. (2007). Mutual funds in India: Emerging Issues. Excel Books India

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.

GE12 : INTRODUCTION TO FOREIGN EXCHANGE MARKET

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical /Practice		
Introduction to Foreign Exchange Market **GE- 12**	**4**	**3**	**1**	**0**	**Class 12**	**None**

Learning objectives:

- To develop a comprehensive understanding of the foreign exchange market, including its structure, key players, and fundamental principles.
- To equip students with skills in analysing currency trends, risk management, and making informed trading decisions. This course serves as a foundation for navigating the dynamic world of foreign exchange.

Learning Outcomes:

After studying this course students will be able to :

- comprehend fundamental concepts such as currency pairs, exchange rates, market, participants and chart reading.
- Analyse the impact of economic indicators, geopolitical events, and risk management strategies.
- Gain practical insights into trading platforms and develop a foundational understanding of global currency markets.

Unit 1: Basics of Foreign Exchange Market (9 hours)

Introduction to Foreign Exchange Market: Definition and purpose of the Forex market, Historical evolution and significance. **Market Participants:** Major players: banks, financial institutions, corporations, retail traders, Understanding the role of brokers and liquidity providers. **Currency Pairs:** Definition and classification, Major, minor, and exotic pairs, Reading currency pair quotes. Overview of Over-The-Counter (OTC) trading, Current monetary system.

Unit 2: Forex Market Structure (12 hours)

Spot market, and forward market**:** Various kinds of transactions and their settlement dates, forward rates, Swaps, Quotes for various kinds of Merchant transactions; Exchange Rate determination and Forecasting: Purchasing power parity and Interest rate parity, relationship between PPP and IRP, reasons for deviation from PPP and IRP;

Unit 3: **Fundamental Analysis in Forex** **(12 hours)**

Economic Indicators: Impact of economic indicators on currency values, Key indicators: GDP, inflation, employment, etc. **Central Banks and Monetary Policy:** Role of central banks in the Forex market, Interest rates and their influence on currency values, Central bank interventions. **Political and Economic Events:** Elections, geopolitical events, and their effects, Market reactions to news and economic releases

Unit 4: Technical Analysis in Forex **(12 hours)**

Forex Trading Platforms: Introduction to popular trading platforms, Using charts, indicators, and order types. Price charts and timeframes, Support and resistance levels. **Technical Indicators:** Moving averages, RSI, MACD, and other popular indicators, Using technical indicators for trend analysis and trading signals. **Chart Patterns:** Head and shoulders, double tops/bottoms, triangles, etc., Recognizing and trading chart patterns. **Practical Exercises and Case Studies:** Analyzing real-world trading scenarios.

Essential/Recommended Readings:

1. Matthew Driver (2013)- An Introduction to Forex Trading: A Guide for Beginners.
2. Michael Rosenberg: Currency Forecasting: A Guide to Fundamental and Technical Models of Exchange Rate Determination.
3. John J. Murphy: Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications.
4. Joel Greenblatt and Andrew Tobias: The Little Book That Beats the Market.

Examination scheme and mode:

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi.