Department of Management and Finance

Sher-e-Bangla Agricultural University, Dhaka-1207

M. S. Syllabus

Master of Science in Management and Finance

M. S. in Management and Finance

M. S. in Management & Finance

Courses

Compulsory Courses:

First Semester:

Code	Course Name	Credit Hours
MAFI 501	Financial Management in Agriculture	3
MAFI 502	Capital Market in Agriculture	3
MAFI 503	Corporate Governance and Restructuring	3

Second Semester:

Code	Course Name	Credit Hours
MAFI 511	Advanced Financial Research Methodology	3
MAFI 512	Public Finance	3
MAFI 513	Fundamentals of Investment	3

Elective Courses:

First Semester:

Code	Course Name	Credit Hours
MAFI 504	International Financial Management	3
MAFI 505	Structure and Organization of Capital	3
MAFI 506	Agricultural Operations Management	3
MAFI 507	Principles of Bank Management	3
MAFI 508	Leasing and Real Estate Business	3
MAFI 509	Local Level Planning and Evaluation	3
MAFI 510	Fixed Income Investments	3
AGEC 513	Advanced Econometrics	3
AGBM 513	Market Structure Economics	3

Second Semester:

Code	Course Name	Credit Hours
MAFI 514	Security Analysis and Portfolio Management	3
MAFI 515	Financial Auditing, Income Tax and VAT	3
MAFI 516	Financial Derivatives	3
MAFI 517	Introduction to Management Accounting	3
MAFI 518	Rural Credit, Project Appraisal and Management	3
MAFI 519	Micro-Finance and Rural Banking	3
MAFI 520	Strategic Management	3
MAFI 521	Advanced Risk Management and Insurance	3
MAFI 522	Management of Multinational Enterprises	3
AGBM-523	Agribusiness Project Analysis	3
DEPS 521	Agribusiness Entrepreneurship Development	3
MAFI 615	Financial Management in Poultry Indstry	3

Third Semester

Code	Course Name	Credit Hours
MAFI 599	Research Work	16

Summary of the course credit:

Particulars	Credit	Credit
Compulsory Courses	18	
Elective Courses	12	
Total Course Work		**30**
Seminar Courses		01
Research Work		16
Total Credit		**47**

MAFI 501: Financial Management in Agriculture
Credit hours: 3

1. Nature of Financial Management: Scope and objectives: Scope of financial management, objectives of financial management, role of financial manager and management goals, importance of financial management.

2. Financial Planning in Agriculture: Meaning, steps in financial planning, characteristics, estimating financial requirements. Financing of assets: current, intermediate and fixed assets. Cash flow budgeting/ cash flow statements. Proforma financial statements, analyzing financial feasibility.

3. Financial Analysis and Control: Financial statements: Balance sheet- assets, liabilities and owner's equity; Income statement. Ratio analysis, profitability measures, Liquidity measures.

4. Capital Budgeting and Long Term Decision Making: Time value of money: Concepts: compounding, determining future values of present investment and present value of investments. Capital budgeting: Meaning, capital budgeting method, capital budgeting versus periodic budgeting. Appraisal of capital budgeting proposal (methods): Average rate of return, Internal rate of return, Net present value. Adjusting capital budgeting in inflation and risk.

5. Leverage and Liquidity Management: Meaning, types of leverages, return on instrument leverages, asset leverage, financial leverage and firm growth leverage, choice/degree of leverage. Determining optimal capital structure. Liquidity and cash flow analysis. Checklists for capital structure decisions.

6. Cash Management: Importance, methods of cash management, cash forecast. Advantages and disadvantages of cash management.

7. Inventory Management: Meaning, types, objectives. Advantages of holding inventory, effect of holding high and low inventory risk. Problems of inventory management.

8. Alteration of Capital: Issue of Right Share, Issue of Bonus Share, Forfeiture and re-issue of Shares.

9. Dividend Policy: Cash dividend Vs stock dividend, Factors that affect the dividend policy.

MAFI 502: Capital Market in Agriculture
Credit hours: 3

1. Money Market and Capital Market: Money Market: Meaning, nature and features of money market. Structure of money market, constituents of money market (lenders' and borrowers, sector), credit instruments of money market, different components of money market. Working of money market, function, significance and importance of money market. Structural integration and money market linkages, distinction between developed and under developed markets (examples).

Capital Market: Comparing money market with capital market. Structure of capital market: Role, functions, importance and significance of capital market.

Capital market in Bangladesh: Institutional (banks and non banks), non-institutional. Features of special credit programmes (rice, jute, rabi crops, landloss and small cottage industries).

2. Cooperative Credit: Short term and intermediate credit societies, aims and objective, definitions and nature of credit. Internal provision of funds. Size of primary societies and liabilities of members. Central and apex bank's participation. Long term cooperative credit. Credit marketing and supply. Warehousing. Integration of credit, marketing and supply. Multipurpose societies.

3. Supervised Credit: Characteristics and objectives of supervised credit, types of borrower, problems for sanctioning and distributing loans, costs and sources of funds, administrative aspects, and relation with other credit programmes.

4. Role of Central Bank in Agricultural Credit: Functions in relation to agricultural credit, promotion of banking facilities, provision of finance, complementary activities.

5. Small Farmers' Credit Programmes: Political economy of financing small farmers in developing countries. Institutional alternatives for small farmers' credit programmes in Bangladesh.

6. Loan Recovery: Concepts and measures, repayment problems of developing countries, present situation of loan recovery in Bangladesh, role of government and financial intermediaries in loan recovery.

MAFI 503: Corporate Governance and Restructuring
Credit hours: 3

1. Development of corporate governance as an issue: Historical background and recent questions.

2. Corporate governance in the eye of stakeholder: Shareholders/investors, employees, customers, suppliers, trading partners, community and environment and State.

3. Impact of size: Stages of growth, corporate governance and the smaller company.

4. Key people: Chairman, Board of Directors, Executives and non-executive directors.

5. Future influences: Parliament, Stock Exchange, Corporate sector pressure group, the green movements, cooperatives and mutual.

6. New approaches to corporate governance: Five golden rules, corporate governance as an integral part of strategy process, internal and external analysis, stakeholder analysis, formulating strategy, and implementation.

7. Legal framework: Laws governing mergers, acquisitions and tenders, securities laws, business judgment rule, Antitrust laws, regulation of insider trading.

8. Merger strategy: Growth, synergy, diversification, and hypotheses of takeovers.
Hostile takeovers: Antitakeover measures, preventive antitakeover measures, and active takeover defenses and takeover tactics.

9. Corporate Restructuring: Divestitures, Voluntary Liquidation or Bustups, Restructuring of the 1990s.

10. Restructuring in Bankruptcy: Business failure, costs, reorganization vs. liquidation, prepackaged bankruptcy, corporate control and default, liquidation and investing in distressed companies.

11. Valuation of Mergers and Acquisitions: Financial Analysis, valuation of corporations and tax issues.

MAFI 511 Advanced Financial Research Methodology
Credit hour: 3

1. **Introduction to Research Methodology:** Meaning, objectives, Motivation, types, significance, research process, criteria of good research.
2. **An overview of research problems:** Clarifying the research questions, proposing research, data collection and preparation, data analysis and interpretation, reporting the issues.
3. **Defining research problem:** Research problem, selecting the problem, necessity of defining problem, technique involved in defining problem.
4. **Research Design:** Meaning, need, Features, Important concept, Classification, Exploratory studies, descriptive studies, causal studies, Qualitative research.
5. **Sampling Design:** Nature of sampling, Types of sample design, steps in criteria of selecting a sampling design, Random sampling, complex random sampling.
6. **Measurement and Scaling Technique:** Measurement in research, measurement scale, sources of errors in measurement, reliability, validity, test of sound measurement, scaling, meaning of scaling, scale classification bases, important scaling techniques, and scale construction technique.
7. **Questionnaire and Instruments:** Guideline for constructing questionnaire, guideline for successful interview, difference between survey and experiment, revisiting the research question hierarchy, constructing and refining the measurement questions and drafting and refining the instrument.
8. **Methods of data collection:** Collection of primary data, observation method, interview method, collection of data through questionnaire, collection of data through schedule, focus group discussion, Collection of secondary data, selection of model for data collection.
9. **Factor Analysis:** Definition, Vocabulary, difficulties, problems and cautions.
10. **Regression Analysis of Economic Time series data:** Introduction to time series data and serial correlation, Time series regression with additional predictors and the autoregressive distributed lag model, Nonstationarity.
11. **Analysis and presentation of data:** Factor analysis, data preparation and description, test of hypothesis parametric and non parametric), chi-square test, regression analysis, analysis of variance and covariance, multivariate analysis technique.
12. **Impact assessment and market survey technique.**
13. **Interpretation and report writing:** Meaning, technique, precautions of interpretation, research report components, steps in report writing, layout of research report, presentation of statistics, mechanics and precautions of writing a research report and oral presentation.

MAFI 512 Public Finance
Credit hours-3

1. Introduction: Definition, subject matter and importance of public Finance, Public finance versus private finance, Principles of maximum social advantage

2. Public and Private Goods: Definition, characteristics and price determination of private and public goods

3. Public Revenue: Sources of public revenue, measures to increase revenue income of the Government of Bangladesh, Tax, fee and commercial revenue

4. Taxation: Meaning and characteristics of tax, Canons of taxation, Proportional, progressive, regressive and digressive taxes, Specific and advalorem taxes, Direct and indirect taxes, Impact and incidence of tax, Characteristics of a good tax system, Tax structure of Bangladesh, VAT- Definition, objectives and methods of VAT, Advantages and disadvantages of VAT

5. Public Expenditure: Meaning and types of public expenditure, Heads of public expenditure, Causes of increase in public expenditure, Role of public expenditure in developing countries

6. Public Debt: Types, Need for public debt, Sources and redemption of public debt, Burden of public debt, Public debt in Bangladesh

7. Budget: Definition, Types- balanced, surplus and deficit budgets, Balanced budget multiplier, Characteristics of a good budget, Budget formulation, Deficit budgeting versus deficit financing, Budget and plan, Budgets of Bangladesh

8. Fiscal Policy: Objectives and instruments of fiscal policy, Fiscal policies in Bangladesh

MAFI 513 Fundamentals of Investment
Credit hours-3

1. Introduction: The investment environment, The nature of investment, Importance of investment. Investment decision process, Types of financial assets, Types of financial market. Market index, Brokerage transaction, How order works? Margin, Investment Companies, Short Sales, Types of investment companies, Types of mutual fund, The mechanics of indirect investment companies.

2. Return and Risk: Components of return, Types of risk, Sources of risk, Total return. Return relative, Cumulative wealth index, Arithmetic mean, Geometric mean. Inflation adjusted return, Measuring risk, standard deviation, and variance, risk premium. Calculation of expected return and risk, Portfolio return and risk, Measuring co movement in security return, correlation co-efficient, co-variance. Calculating portfolio risk, two security and n security case, Efficient portfolio, Systematic and non-systematic risk. Mathematical Problems

3. Fixed Income Securities : Measuring bond yield ,current yield, YTM, yield to call, Realized compound yield, bond valuation maculay duration, Term structure of interest rates, yield curves, yield spread, Term structure theory, Bond strategy- passive and active strategy

4. Common Stock Valuation : Approaches to equity valuation-discounted cash flow techniques (DDM, PV of operating cash flow, PV of free cash flow), Relative valuation techniques-P/E ratio, P/CF,P/BV,P/S. Determinant of P/E ratio. Impact of overall market on individual stock, the required rate of return, passive and active strategy, Analyzing and selecting stock, concepts and forms of market efficiency, Evidence on market efficiency and market anomalies

5. Security Analysis: The economy and stock market, the business cycle, the relationship between stock market and bond market. Stock market concept, determinants of stock prices, Valuing the market forecasting changes in the market, Industrial analysis-Performance of industries over time, classifying and analyzing industries.

6. Fundamental Analysis: Analyzing companies profitability, Earning estimate, **P/E** ratio, Technical analysis-Stock price and volume techniques, Technical indicators of technical analysis.

7. Derivative Securities: Options- introduction, understanding options, payoffs and profits from option position. Option, strategies, option valuation, Futures, understanding future markets, the structure of the future market, The mechanics of trading using future contracts, financial futures.

8. Modern Investment theory: Building of portfolio, alternative methods of obtaining the efficient frontier. Selecting optimal asset classes, borrowing and lending possibilities. The separation theorem, Mathematical problem

9. Capital Market Theory: CAPM, Equilibrium risk return trade off, Estimating SML, APT, How APT overcome CAPM? Mathematical problem.

MAFI 504: International Financial Management
Credit hours-3

1. Multinational Financial Management: An Overview: Goal of the MNC, Theories of international business, International business methods, International opportunities, Exposure to international risk, overview of MNC cash flows, Valuation model of an MNC.

2. International Flow of Fund: Balance of payment, International trade flows, Factors affecting International trade flows, Agencies that facilitate international flows.

3. International Financial market and Exchange rate determination: Motives for using Foreign Markets, Currency Futures and Options Markets international Money Market, International Bond Market, International Stock Markets. Measuring Exchange rate movement, Exchange rate equilibrium, Factors that influences Exchange rate.

4. Government Influences on Exchange rate: Exchange rate system, Reason for Government Intervention.

5. International Arbitrage and Interest rate policy

6. Relationship among Inflation, Interest rates and Exchange rate: Purchasing Power Parity (PPP), why purchase power parity does not occur, International Fisher Effect Theory.

7. Forecasting Exchange Rates: Why firms Forecast exchange rates, forecasting techniques.

8. Managing Transaction Exposure: Techniques to eliminate transaction exposure, Comparison of hedging technique, Hedging policies of MNCs, Hedging long term transaction exposure.

9. Foreign Direct Investment: Motives for foreign direct investment, Benefits of International Diversification, Host government views of DFI.

10. Multinational Capital Budgeting: Subsidiary Vs Parent Perspective, Inputs of Multinational Capital Budgeting and Example, Factor Considered in Multinational Capital Budgeting

11. Country Risk Analysis: Why country risk analysis is important, Types of Country Risk, Measuring Country Risk.

12. Long Term Financing: Long Term Financing Decision, Cost of debt Financing, Reducing exchange rate risk.

13. Financing International Trade: Payment Methods of international trade, Agencies that motivate international trade.

14. International Cash management: Cash flow analysis: Subsidiary perspective, Techniques to optimize cash flows, Complication in optimizing cash Flows, Investing excess cash.

MAFI 505: Structure and Organization of Capital
Credit hours: 3

1. Capital: Its role and requirement in farming and related business. capital, saving, investment, capital formation relations methods of financing capital formation. Determinants of capital formation: Conceptual and factual considerations, prospects of capital formation in Bangladesh.

2. Farm credit policy in the early stages of agricultural development: Aspects of demand for and supply of credit and credit formation.

3. Increasing supply of funds into agriculture: Mobilization and accumulation of household savings through rural financial markets. Transfer of funds into agriculture. Deposit mobilization schemes. Role of government and financial institutions in deposit mobilization in Bangladesh.

4. Interest rate theories and interest rate determination: Theories of interest rate, Arguments for interest rate reform, rational for different interest rates, structure of interest rate on consumption loans.

5. Transaction costs in rural borrowing: Nature of transaction cost of institutional and non-institutional credit, interest rate calculation for different institutions.

6. Approaches to the agricultural credit problem: Credit rationing. Rural credit and financial policies in Developing countries. Experiences of agricultural credit programmes of developing countries.

MAFI 506 Agricultural Operations Management
Credit hours: 3

1. **Introduction to operations management**: Meaning, Difference between manufacturing and services, Trend in operations management, three views of operations management (function, profession, decisions), corporate and operations strategies.

2. **Product Design and Competitive Priorities:** Product Planning, competitive priorities, time-based competition, positioning strategies.

3. **Process Design:** Process design, facets of process design, process analysis, work force management.

4. **Work Measurement:** Work standards, methods of work measurements, learning curves, managerial considerations.

5. **Capacity Decisions:** Measuring capacity, economies of scale, focused facilities, capacity strategy, and systematic approaches to capacity planning.

6. **Location Analysis:** Factors affecting location decisions, locating a single facility, locating within a network of facilities, globalization of operations.

7. **Layout Analysis:** Layout planning, strategic issues, hybrid layouts, designing process layouts, process layouts for warehouses and offices, product layouts.

8. **Supply Chain Management:** The strategic importance of the supply chain management, Purchasing, Supply chain strategies, Vendor selection, Managing the supply chain, Material management, Benchmarking of Supply chain management.

9. **Inventory Management:** Functions, types of Inventory. Inventory management, Inventory models for Independent demand, probabilistic models with constant lead time, fixed period system.

10. **Project Management:** The strategic importance of project management, project planning, Project Scheduling, project controlling, Project Management Techniques-PERT and CPM, Cost-Time Trade-off and project crashing, Analysis of project scheduling to service firms.

MAFI 507 Principles of Bank Management
Credit hours: 3

1. Introduction of Banking, Role of banking in present day economy- its functions and classification.
2. Central bank it's functions with special reference to Bangladesh-Credit Control.
3. **Commercial Bank-** It's nature, function and importance. Relation between commercial bank and Central Bank, Creation of credit by commercial banking in Bangladesh, Various types of deposits in Commercial Bank.
4. Different types of accounts in commercial banks.
5. Islamic Banking: Concept and objectives of Islamic banking, Islamic banking versus traditional banking, some credit programs of Islamic banking, advantages of Islamic banking.
6. Electronic Banking: Introduction, Objectives, Debit card, Credit card, Point of sales service, Automated clearing House, SWIFT, Internet Banking.
7. Green Banking and Mobile banking.
8. Banker's Credit: Different forms of Bank Credit:
- Letter of Credit
- Importance of uses of Letter of Credit.
- Kinds of Letter of Credit
- Travelers Cheque.
- Banker's Draft.

9. Loan Management: Different Types of Loan and Advances, Characteristics of bank loan, Classification of bank loan, Sources of credit information, Credit analysis, Documentation of loan, Loan supervision activities, Guideline for Bank loan in Bangladesh Bank, Credit rating, large loan and credit information Bureau, Loan classification, Loan write off.
11. Negotiable Instruments:
- Meaning, Objectives, types of Negotiable Instruments.
- Cheques, Features of valid cheque, parities to a cheque, Kinds of cheques.
- Bill of Exchange: Definition, features, kinds, acceptance, payment of honor, presentation of Bills, Renewal of bills, Transfer of Bills.

12. Foreign Exchange: Meaning, Foreign Remittance, Meaning of Rate of Exchange, Determination of Rate of Exchange, Fluctuation of Rate of exchange.
13. Money Market: Meaning, Necessity of Developed Money Market, Features of Developed Money Market.
14. Inflation and its Control: Monetary Policy, Problem and Limitations of monetary policy in an underdeveloped country.
15. Money and Banking development in Bangladesh.

MAFI 508 Leasing and Real Estate Business
3 Credit hours

1. **Overview of lease financing:** Leasing credit criteria, terms and rates, types of leases, tax aspects of leasing, comparison of leasing with ownership, accounting implication of leasing.
2. **Tax aspects of lease financing**: Federal tax requirement, Factors indicating a sale, Tax effect of sale, Tax effect sale and lease back, Tax effect of leverage lease.
3. **Legal aspect of lease finance:** Lease of real property, termination of the lessee's obligation to pay rent, Expiration of lease, Sale and lease back of real estate, Lease agreement.
4. **Economics of lease finance:** The time value of money in lease versus buy analysis, The economic rationale of leasing, Evaluating the cost of leasing, Equipment lease financing.
5. **Sale and lease back in real estate:** Introduction, Installment sales, Tax aspect of a sale and lease back, purchase options.
6. **Project lease financing:** Characteristics of a viable project financing, causes of project financing failures, credit impact objectives, Project lease financing Leasing in Bangladesh.
7. **An introduction to real estate investment:** Legal concept, property rights and estates, interests and easements, assurance of title, methods of title assurance, limitation of property right.
8. **Financing, Notes and Mortgages:** The mortgage instruments, assumption of mortgage, assumption of mortgage, financing sources, land contact, foreclosures, bankruptcy.
9. **Financing residential properties:** Fixed rate mortgage loan, adjustable rate and variable payment mortgage, Residential financing analysis, Single family housing-pricing, investment, and tax consideration.
10. **Real Estate Finance in Bangladesh:** Role of House Building Finance Corporation (HBFC), Delta Brac Housing Finance Company Limited (DBH), National Housing Finance and investment Limited (NHFIL) and other Financial Institutions' Operating in Real Estate Development in Bangladesh.

MAFI 509 Local Level Planning and Evaluation
Credit hours: 3

1. Introduction: Concepts of Local Level Planning, History and importance of local level planning, Decentralization, Functions of different local government bodies, Local government institution and resource mobilization, Sources and uses of fund of local government

2. Participation and Stakeholder Analysis: Different types of participation of the stakeholders in the planning process, Tools and methods of stakeholder analysis

3. Collection, Analysis and Presentation of Data: Role of data in planning, Questionnaire preparation, Storing data, Organizational machinery for handling data, Tools and methods for data analysis and presentation- concept, methods and application of PRA and RRA, checklist, sketch, map and diagrams, activity chart, activity profile and case study

4. Modeling and Forecasting: Nature of models, Forecasting techniques, Constraints to the use of mathematical models

5. Implementation, Monitoring and Evaluation: Meaning and importance of implementation, Monitoring and evaluation, Factors affecting plan implementation.

MAFI 510: Fixed Income Investment
Credit hours-3

1. **Features of Debt Securities :** Introduction, Indenture and Covenants **,** Maturity, Par Value **,** Coupon Rate, Provisions for Paying Off Bonds **,** Conversion Privilege **,** Put Provision **,** Currency Denomination, Embedded Options **,** Borrowing Funds to Purchase Bonds.
2. **Overview of Bond Sectors and Instruments:** Introduction **,** Sectors of the Bond Market, Sovereign Bonds, Semi-Government/Agency Bonds **,** State and Local Governments, Corporate Debt Securities, Asset-Backed Securities, Collateralized Debt Obligations, Primary Market and Secondary Market for Bonds.
3. **Risks Associated with Investing in Bonds:** Introduction, Interest Rate Risk , Yield Curve Risk, Call and Prepayment Risk , Reinvestment Risk ,Credit Risk, Liquidity Risk, Exchange Rate or Currency Risk ,Inflation or Purchasing Power Risk ,Volatility Risk, Event Risk , Sovereign Risk.
4. **Introduction to the Valuation of Debt Securities:** Introduction, General Principles of Valuation, Traditional Approach to Valuation, The Arbitrage-Free Valuation Approach, Valuation Models.
5. **Introduction to the Measurement of Interest Rate Risk:** Introduction , The Full Valuation Approach, Price Volatility Characteristics of Bonds , Duration , Convexity Adjustment, Price Value of a Basis Point, The Importance of Yield Volatility.
6. **Term Structure and Volatility of Interest Rates:** Introduction, Historical Look at the Treasury Yield Curve, Treasury Returns Resulting from Yield Curve Movements, Constructing the Theoretical Spot Rate Curve for Treasuries, The Swap Curve (LIBOR Curve), Expectations Theories of the Term Structure of Interest Rates, Measuring Yield Curve Risk, Yield Volatility and Measurement.
7. **Mortgage-Backed Sector of the Bond Market:** Introduction, Residential Mortgage Loans, Mortgage Pass through Securities, Collateralized Mortgage Obligations, Stripped Mortgage-Backed Securities, Non agency Residential Mortgage-Backed Securities, Commercial Mortgage-Backed Securities.
8. **Asset-Backed Sector of the Bond Market:** Introduction, The Securitization Process and Features of ABS, Home Equity Loans, Manufactured Housing-Backed Securities, Residential MBS Outside the United States, Auto Loan-Backed Securities, Student Loan-Backed Securities, SBA Loan-Backed Securities, Credit Card Receivable-Backed Securities, Collateralized Debt Obligations
9. **Valuing Mortgage-Backed and Asset-Backed Securities:** Introduction, Cash Flow Yield Analysis, Zero-Volatility Spread , Monte Carlo Simulation Model and OAS, Measuring Interest Rate Risk, Valuing Asset-Backed Securities, Valuing Any Security

MAFI 514: Security Analysis and Portfolio Management
Credit hours: 3

1. The investment setting: What does investment mean? Measures of risk & return, determinants of required rates of return, relationship between risk & return, calculation of variance & standard deviation.

2. Security-Market Indexes: Uses of security market indexes, Differentiating factors in constraining market indexes, Stock-market indexes, Bond-market indexes, Composite Stock-Bond Indexes, Comparison indexes over time.

3. Efficient capital markets: Why should capital markets be efficient? Alternative efficient market hypothesis (EMH), tests & results of alternative EMH, implications of efficient capital markets.

4. Introduction to portfolio management: Some background assumptions, Markowitz portfolio theory.

5. Introduction of asset pricing models: Capital market theory an overview, the CAPM, the APT, the empirical tests of CAPM & APT.

6. Introduction of security valuation: Overview of the valuation process, why a three-step valuation process? Theory of valuation, valuation of alternative investments, relative valuation techniques, the required rate of return and the expected growth rate of valuation variables.

7. Stock market analysis: Applying the DDM valuation model, estimating the growth rate of dividends, valuation using the relative valuation approach, estimating expected EPS, estimating earnings multiplier fora stock market series calculating the expected rate of return on common stocks.

8. Industry analysis: Why do industry analysis? the business cycle and industry sectors, industry analysis using the relative valuation approach, other relative valuation ratios.

9. Company analysis & **stock selection:** Company analysis versus the selection of stock, company analysis, estimating intrinsic value, estimating company EPS & earnings multipliers, analysis of growth companies.

10. Technical analysis: Underlying assumptions & advantages of technical analysis, challenges to technical analysis, technical trading rules and indicators.

11. Evaluation of portfolio performance: What is required of a portfolio manager? Composite portfolio performance measures-Tremor's measure, Sharpe's measure, Jensen measure, application of portfolio performance measures, factors that affect use of performance measures.

MAFI 515: Financial Auditing, Income Tax and VAT
Credit hours: 3

1. Introduction: Origin of audit - definition of audit, auditing and investigation, qualities of an auditor, objects of audit, advantages of an audit, and different classes of an audit.

2. **Erros and frauds**: Nature and types, position of auditors in regard to errors and frauds affecting financial statements.

3. Internal control: Meaning and importance of internal control, internal check, evaluation criteria for good internal check, internal check for various transactions, internal audit and statutory audit.

4. Vouching: Meaning, voucher, points to be noted in a voucher, vouching of cash transactions and trading transactions.

5. Audit under the Companies Act: Auditors appointment, remuneration, rights, duties and liabilities, auditor's certificate and reports.

6. Audit report: Unqualified and Qualified Report, verification and valuation of assets and liability.

7. Income tax authorities in Bangladesh: Organization. Structure, administrative and judicial authorities, powers, functions, duties and responsibilities of administrative and judicial authorities.

8. Exemption and Allowances: Non-Assessable Income, tax Free Income.

9. Companies of total income: Salaries, interest on securities, income from house property, agricultural income, income from business or profession, share of income from partnership from, income of spouse or minor child, capital gains, income from other sources, unexplained investments as income, statutory deductions from all heads of income, set off and carry forward of losses, investment tax credit and tax rebate.

10. Advance Tax Income: Advance Payment of Tax, Deduction of Tax at Source.

11. Assessment of individuals and companies.

12. Return of Income

13. **Value Added Tax (VAT):** Introduction to Value Added Tax, Important terms, taxable goods and services, VAT authorities, computation, method and time for payment of VAT. First Schedule: VAT Exempt Goods, Second Schedule: VAT Exempt services, Third Schedule: Supplementary Duty-able Goods and Services, Value Added Tax rules, VAT deducted at source.

MAFI 516 Financial Derivatives
Credit hours-3

1. **Introduction** – Derivatives – Forward Contract, Future Contract, Options, Swaps, Other derivatives, Types of traders.
2. **Forward Contract:** Forward Market, Participation, Forward Quotation, Forward Premium or Discount, Futures Contract – Futures Market, Clearing Houses, Positions, Taxation, Open interest, Marking to Market, Margin, Basis Spreads, Returns on Futures, Financial Futures, Convergence of Futures prices into spot prices, Hedging using futures.
3. **How to determine forward price** – Relationship between forward and Sport price, Arbitrage argument, the market value of forward contract, Cost of Carry, Stock Index Future and hedging using stock index futures, Implication for Financial Management.
4. **Interest Rates and Duration** – Types of Rates, Zero rates, Bond pricing, Constructing Spot (zero) rates, Forward rates, Terms structure of interest rates ; Duration, Duration based hedging strategies and Convexicity.
5. **Options** – Definitions, Characteristics, Principles for listed options, Pricing Relationship and Graphical Presentation of Option's Payoff, Warrants and Convertibles; Factor that affects prices of option's Upper and Lower Bounds for Options prices, Early exercise, Equity as a Call Option, Put-Call Parity and Synthetic Construction of Options, Effect of Dividends.
6. **Model of Behavior of Stock Price:** Markov Property, Wiener Process, The Process for Stock Prices, and Process for derivative securities; Parameters, Ito's Lemma.
7. **Pricing Models** – Analytical Pricing Formula – Derivation of the Black-Scholes Differential Equations, Black-Scholes Formula, Assumptions, Implied validities, Dividend Correction.
8. **Pricing of Corporate Securities,** Options on Stock Indices, Currencies and Future Option**.**
9. **Value at Risk**, Dailies Volatilities, Calculation of VaR, a liner model, How interest rates are handled, A Quadratic model**.**
10. **Managing Equity Risk:** Portfolio Insurance using put options, Portfolio Insurance using dynamic replication strategy.

MAFI 517 Introduction to Management Account
Credit hours: 3

1. Introduction to Management Accounting: Accounting and its branches, concepts of management accounting, role of management accounting in organizations, relations and differences between financial accounting, management accounting and cost accounting. Tools and techniques of management accounting and its limitations.

2. Cost Concept and its Classification: Cost concepts relating to income measurement, profit planning, controlling and decision making.

3. Direct Costing and Absorption Costing: Meaning and differences, period and product cost, income measurement under direct costing and absorption costing. Uses of direct costing in planning, controlling and decision making.

4. Cost-Volume-Profit Analysis: Computation of break-even point, construction of break-even chart, break-even analysis for decision-making, changes in fixed cost, volume, price, sales mix and margin of safety.

5. Variable Costing: A Tool for Management: Unit cost computation, Variable costing for decision making.

6. Relevant Cost for Decision Making: Cost Concept for decision Making, Adding and Dropping Product Lines and Other Segments, The Make or Buy Decision, Special Orders, Utilization of a Constrained Resources.

7. Process Costing: Introduction, Application of process costing, Normal and abnormal losses, Abnormal gain, inter process profit.

8. Budgetary Control: Meaning, object, essential conditions, methods of budgetary control, budget committee, budget manual, benefits and limitations of budgetary control. Time elements in the preparation of forecast and budget. Comparison of actual performance with budget and remedial actions.

9. Standard Costing and Analysis of Variance: Setting standard costs, General model for variance analysis, Using standard cost-Direct material variance, Direct labour variance, variable manufacturing overhead variance.

10. Flexible Budget: Capacity and volume, relevant range, analysis of cost behavior, separation of fixed and variable elements of semi-variable costs. Preparation of flexible budget.

MAFI 518 Rural Credits, Project Appraisal and Management
Credit hours: 3

1. Project and Project Appraisal: Project analysis, appraisal of project structure, technical appraisal, marketing appraisal, financial appraisal, macro appraisal, project evaluation.

2. Nature and scope of farm financial management: Concepts and tools of farm financial management, financial analysis in public decision making, economic analysis of project versus policies, financial and economic aspects of project analysis.

3. **Technical Appraisal:** Materials and inputs, Production Technology, Product mix, Machinery and equipments, Structure and civil works, project chart and layout, Work scheduling.

4. Investment appraisal techniques: Introduction to benefit-cost analysis, welfare basis of benefit-cost analysis, valuation of benefit-costs, the discounting process, treatment of risk and uncertainty, sensitivity analysis.

5. Issues in rural financial policies: Agricultural credit policies, project approach to rural development, innovations in rural banking, savings mobilization through cooperatives, Swanirvar and Grameen Bank, Loan repayment computation, loan recovery issue, problems of agricultural credit system of Bangladesh.

6. Preparation and design of rural credit projects: Case studies Technique of writing report. Special credit programme for small farmers/ rural poor, financing poultry project, financing dairy project, financing pond fishery financing minor irrigation project.

7. Project Management in Bangladesh: Project processing procedures related to industrial project in the public sector-organizations involved with project processing in the public sector-monitoring and evaluation system.

MAFI 519: Micro-Finance and Rural Banking
Credit hours-3

1. Introduction: Poverty and Finance in Bangladesh: concept and definition, Evolution of micro credit, Poverty situation in Bangladesh, Role of micro credit in poverty reduction.

2. Management of NGOs: Sources and procurement of fund, Credit operation policy (COP) of different NGOs.

3. Savings Mobilization: Group fund, Emergency fund, Rate of interest and insurance

4. Comparative Studies between GOs and NGOs: Micro credit programmes by GOs- micro credit programmes by commercial banks and specialized banks, Compare processes and performances of the programmes of GOs and NGOs

5. Micro Credit Models in Bangladesh: Different types of micro credit models in Bangladesh: Grameen Bank, BRAG, PROSHIKA, ASA, etc.

6. Case Studies and Evaluation of Micro Credit Programmes: Impact studies of different micro credit programmes.

7. Rural Development-Concepts - Rural Poverty - Poverty line - Reasons for rural poverty - Rural Banking for Rural Development, Characteristics of Rural - Econorny -Socio-political Characteristics of the rural economy with reference to Bangladesh - Dilemma of developmental issues -Need for founds of the Rural households-Farm and non-farm activities in the rural areas-Farm sector's need for finance: long term investment and short term working capital needs - Factors determining the demand for and the supply of credit -Unorganized Credit-Vicious cycle of poverty - gap of invertible funds - measurement of investment gap - sources of unorganized supply - conditional ties and securities of unorganized supply - Benefits and advantages of unorganized supply - Disadvantages and ills of unorganized supply of credit- Credit Risks involved from Lenders as well as Borrowers View points.

8. Organized Credit- Co-operative: Traditional and IRDP co--operative-Background of establishment, objectives, policies and operational mechanisms of other institutional agencies-Terms of repayments; Non Government Organizations-Non Government Organizations (NGOs)-Sources of funds-Savings mobilization-Refinances and foreign founds-Rural and Micro Credit Supervision-Meaning and aspects of rural credit supervision-steps to Supervision of particular types of bank credit-Role of the Central Bank in the Provision of Rural Credit-Developing appropriate and adequate institutional arrangements-Central.

10. Case Study- Analyzing cases from the view points of [i] Lending banks/agencies and [ii] Borrowers for both farm and non-farm activities.

MAFI 520 Strategic Management
Credit hours: 3

1. **Strategic Management:** Meaning, nature and background-characteristics and task of Strategic Management, responsibility for strategy-making-benefits of strategic approach to managing, Strategic Management as an ongoing process, strategic planning, merits and demerits, factors of consideration is strategic planning. Management of strategic change strategic management perspectives, Strategic Management model, competitive advantage-business strategy and competitive advantage-architecture of strategy.

2. **Strategic Management Process:** Developing strategic vision and business mission, communicating mission, need for objectives, setting long range and short range objectives, crafting a strategy, operation business, corporate and international levels coordinating strategy effect, factors shaping the strategy, approaches to strategy making task.

3. **Strategic Analysis:** external Vs. internal- Situation in strategy-making-methods of industry and competitive analysis profiling industry's dominant economic Characteristics- concepts of driving farces-analyzing, strength of Competition forces-assessing position of rivals-noting key factor of competitive success.

4. Evaluating strategic-SWOT analysis-cost analysis,- competitive strength assessment determining strategic issues.

5. **Five generic types of competitive strategy**- offensive strategic-defensive, strategic-vertical integration strategies-first inner advantages and disadvantages.

6. Evaluating and Implementing strategy: Strategy implementation framework-key tasks, organization building, budget linking, internal support, commitment, culture and leadership- who will implement strategy-leading the implement process.

7. **International strategic management:** Components-developing, international strategies, level of international strategies analyzing foreign market.

8. Designs and management or strategic alliance and wholly owned subsidiaries (MNC's): Strategic alliances and International Joint Venture and MNC's reasons for creating strategic alliance- management pattern of strategic alliance and International Joint Venture-requirement for making Strategic alliances and International Joint Venture successful.

MAFI 521 Advanced Risk Management and Insurance
Credit hours: 3

1. **Risk and its Management:** Meaning, Objectives of risk management, Types, Risk management process, risk management methods, Risk management organization.
2. **Risk Identification and Measurement:** Basic concepts from probability and Statistics, Evaluating the frequency and severity of loss.
3. **Pooling Arrangements and Diversifications of Risk:** Risk reduction through pooling independent losses, pooling arrangements with Correlated Risk.
4. **Risk Aversion and Risk Management by Individuals and Corporations**: The effect of insurance on wealth, risk aversion, factors affecting an individual's demand for insurance, shareholders diversifications.
5. **Insurance Regulations**: Scope and operations of state insurance regulation, History and efficacy of state regulation, objectives of regulation, regulation and political pressure.
6. **Insurance Pricing:** Insurance cost and fair premiums, Expected claim cost, Administrative cost, price regulation.
7. **Legal liability and Injuries:** Some background of Law, Overview of Tort liability rules and procedures, Liability from negligence, Economic objectives of the tort liability system, Tort liability and safety regulations.
8. **Life Insurance and Annuities:** Life insurance and product overview, Traditional products: Term, Endowment, and whole life, Tax benefit from life policies, Annuity contract, Life insurance pricing, Life insurance cost comparison.
9. **Automobile Insurance:** Auto insurance pricing and underwriting, Alternative to compulsory insurance.
10. **Retirement Plan:** Overview of retirement plan, Tax advantage of retirement plan, Incentives effects of employer-sponsored pension plan, Types of defined contribution plans, retire plan provision and regulations.
11. **Workers' Compensation and Employee Injuries:** Overview of workers' compensation law, workers' compensation benefit, workers compensation insurance and self-insurance, problems and reforms in workers compensation, Government safety regulation and other sources of liability.

MAFI 522 Management of Multinational Enterprises
Credit hours: 3

1. Introduction: Concept of MNCs, international business, foreign direct investment (FDI), international management and comparative management - Historical development of international business - Importance of MNCs in the world economy - Theories of international business - Trends of FDI by MNCs.

2. Variations in the Organization Structure of MNCs: Purpose of structure - Theoretical and conceptual considerations - Structural formats - Organizational structures of USA MNCs, European, MNCs and Japanese MNCs - Organizational structure versus multinational strategies - Examples of Corporate Structure: Problems in geographical/regional organization, problems in centralization / decentralization, company experiences with matrix organization, general trading companies.

3. MNCs Design and Process: Approaches to designing organizations - Questions for organizational designs, Incorporating changes in the design process and managing the process - Comparison of American, European and Japanese MNCs - Rise of the Third world MNCs.

4. Subsidiary - Host Country Relation: History of MNCs relations with host governments - Politicization of relations between MNCs and third world host countries -Areas of conflict / conflict matrix between MNCs and host governments - Financial dimensions of the conflict

   – A code' of conduct for decisions in the conflict matrix.

5. Headquarter and Subsidiary: Relation between headquarters and subsidiary - Culture and control Communication between the headquarters and subsidiary

   – Critical issues and issues of decision making - Staffing the Subsidiary - Issues of staffing policies - Issues relating to expatriate managers.

6. Managing Foreign Investment/Foreign Investment Strategies: Motives for direct investment-Foreign investment strategies - Wholly owned subsidiaries and international joint ventures (IJV) - Strategic alliances and IJVs-Causes for increasing popularity of IJVs-Problems of IJVs-Portfolio investment and Disinvestment. .

7. International Marketing Management: International market assessment - Path to follow for successful export business - How to succeed in export market - Strategic options in international marketing - Marketing mix in international marketing.

8. International Financial Management: Strategic issues -Decision making in international financial management - International banking - Financing of foreign subsidiaries - Managing foreign exchange risks.