

NATIONAL UNIVERSITY



Syllabus Department of Economics

**Four Year B.S.S Honours Course
Effective from the
Session: 2009–2010**

National University
Syllabus for Four Year B.S.S. Honours Course
Subject : Economics
Session : 2009-2010

Year-wise Courses and Marks Distribution

First year Honours.

Course Code	Course Title	Marks	Credits
	Basic Microeconomics	100	4
	Basic Macroeconomics	100	4
	Basic Mathematics	100	4
	Basic Statistics	100	4
	Introducing Sociology or Introduction to Social Work	100	4
	Introduction to Political Theory or Introduction to Business	100	4
	Total	600	24

Detailed Syllabus

First Year

Course Code : Basic Microeconomics Marks 100, 4 Credits, 60 Lectures

Course Objectives and Outcomes:

The objective of this course is to provide an understanding of the basic concepts of microeconomics within a market setting. The main focus of the course is to provide an introduction to the economic principles behind the determination of demand, supply and production functions and on how equilibrium price and quantity is reached in selected markets.

Course Contents:

- 1. Introduction:** Definition, Nature and Scope of Economics; The Economic Problem: Scarcity and Choice of Economics- Scarcity, Choice, Opportunity Cost, Comparative Advantage and Gains from Trade, Economic Systems; Microeconomics vs. Macroeconomics; Positive and Normative Economics.
- 2. Demand and Supply:** The Circular Flow of the Market; Demand & Supply and their Determinants; the Law of Demand and the Law of Supply; Movement and Shifts of Demand and Supply Functions; Market Equilibrium and Changes in Market Equilibrium- Excess Demand and Excess Supply; Consumer's and Producer's Surplus; Government Intervention in the Market.

3. **Elasticity of Supply and Demand:** Concepts and Measurements of Various Elasticities of Demand and Supply.
4. **Utility Analysis:** Total and Marginal Utility; Law of Diminishing Marginal Utility; Equi-Marginal Principle; Derivation of Demand Curves. Indifference curve, budget constraint. Optimizing behavior- consumer's equilibrium.
5. **Theory of Production:** Production Function and the Technology of Production; Production with One Variable Input- Average and Marginal Products, Average and Marginal Product of Labour Curve, The Law of Diminishing Marginal Returns; Production with Two Variable Inputs- Isoquants; Returns to Scale.
6. **Theory of Cost:** Accounting, Economic, Opportunity and Sunk Costs; Short-Run Total and Per-Unit Costs Curves; Costs in the Long-Run; Long-Run vs Short-Run Costs.
7. **Perfect Competition:** Assumptions and Implications of Perfect Competition; Profit Maximization- Demand, Average and Marginal Revenue; Profit Maximization in the Short-Run- Accounting and Operating Profits and Losses, Shut Down Point; Short-Run Supply Curve of the Firm and the Industry; Long-Run Competitive Equilibrium
8. **Monopoly:** Demand, Average and Marginal Revenue; Monopolist's Output Decision and Supply Curve; Monopoly Power; Perfect Competition and Monopoly Compared.
9. **Factor Markets:** Determination of factor prices- rent, wages, interest and profit Monopsony- Price and Output Determination, Determining the Demand for Labour.

Books Recommended:

1. Mankiw, N. Gregory. **Principles of Microeconomics.** Any Late Edition. South Western College.
2. Michael Parkin. **Microeconomics.** Any Late Edition. Prentice and Hall.
3. Karl Case and Ray Fair. **Principles of Microeconomics.** Any Late Edition. Prentice and Hall.
4. Paul Samuelson and William Nordhaus. **Economics.** Any Late Edition. McGraw Hill.

Course Code : Basic Macroeconomics Marks 100, 4 Credits, 60 Lectures

Course Objectives and Outcomes:

Macroeconomics studies the behavior of the main aggregates of the economy. The objective of this course is to teach macroeconomic analysis techniques, presenting models that help explain how the economy works.

Course Contents:

1. **Introduction:** Objectives and Instruments of Macroeconomics; Fundamental Concepts of Macroeconomics; Potential GNP, GNP Gap, Okun's Law; Natural Rate of Unemployment; Business Cycles; Budget Deficit and International Deficit; Aggregate Demand and Aggregate Supply.
2. **National Income Accounting:** Circular Flow of Income; Injections and Leakages; Various Concepts of National Income: Gross National Product (GNP), Gross Domestic Product (GDP), Net National Income (NNP), NI at Factor Cost, Market Price and Constant Price, Personal Income, Disposable Income, Real and Nominal GDP, Net Economic Welfare (NEW); The CPI and the GDP Deflator; Methods and problems of computing National

Income: The Expenditure Approach, The Income Approach, The Output Approach; Limitations of National Income accounting.

3. **Consumption and Saving Function:** Consumption and Consumption Function; Definition of Autonomous Consumption and Induced Consumption; Average Propensity to Consume (APC), Marginal Propensity to Consume (MPC) Saving and Saving Function; Average Propensity to Save (APS), Marginal Propensity to Save (MPS), Short Run and Long Run View; Kuznet's Puzzle.
4. **Investment Function:** Determinants of Investment; MEC, MEI, Present Value Criteria; Autonomous Investment and Induced Investment.
5. **Inflation:** Definition and Causes of Inflation; Source of Inflationary Pressure; Consequences of Inflation; Control of Inflation; Deflation.
6. **Money and Monetary Policy:** Meaning and Functions of Money; Different Types of Money (M1, M2, M3); Credit Creation of Banks; The Money Multiplier; Value of Money, Fisher's Quantity theory of money; Monetary Policy.
7. **Employment:** The Classical and Keynesian Models of Income and employment; Inflationary and Deflationary Gaps and Measures to Bridge the Gap; Theory of Multiplier and Accelerator; Measuring Unemployment and Its Impacts on the Economy; Types of Unemployment; Removing Unemployment.

Books Recommended:

1. Mankiw, N. Gregory. **Principles of Macroeconomics**. Any Late Edition. South Western College.
2. Michael Parkin. **Macroeconomics**. Any Late Edition. Prentice and Hall.
3. Karl Case and Ray Fair. **Principles of Macroeconomics**. Any Late Edition. Prentice and Hall.
4. Paul Samuelson and William Nordhaus. **Economics**. Any Late Edition. McGraw Hill.

Course Code : Basic Mathematics Marks 100, 4 Credits, 60 Lectures

Course Objectives and Outcomes:

The objective of this course is to provide an understanding of key techniques for using data to make decisions. The course focuses on the development of understanding of basic concepts and principles of mathematics used in the area of business and economics. The course gives ideas of calculus to solve business and economics problems.

Course Contents:

1. **Review of Some Core Concepts:** Nature of Mathematical Economics; Real Number System; Even, Odd, Prime, Composite Numbers; Fractions; Exponents; Variables, Constants and Parameters; Importance of Model Building, etc.
2. **Concepts of Sets:** Some Basic Definitions- Set, Elements, Finite, Infinite, Null, Unique, Equal, Equivalence, Subset, Comparability, Disjoint, Power, Family and Universal Sets; Venn Diagrams; Representation of Set-Basic Operation; Union, Difference and Intersection; De' Morgan's Law; Idempotent Law, Identity Law; Partition of Set.

3. **Elementary Static Analysis:** Meaning of Equilibrium; Partial Equilibrium in Markets; National Income Analysis and its Solution.
4. **Function, limit and Continuity:** Concept of function, classification and type, and their diagrammatic representation, graphs of the function, slope, intercept, graph of linear function, quadratic, cubic function, inverse function, and two variable function. Limit of a function, continuity of a function, exponential function, Rules for Logarithms; Common Logarithms; Calculation of Logarithm of a Number; Natural Logarithm.
5. **Equation System:** Solution of Equations; Simultaneous Equation System; Solution of Simultaneous Equation Systems with Specific Applications to Economic Problems; Inequalities.
6. **Geometry:** Cartesian Co-ordinate System; Distance between Two Points, Straight Line; Application of Linear Equations.
7. **Elementary Differential Calculus:** Derivative, slope of a curvilinear function, differentiation, higher order derivatives, concavity, convexity, curve sketching, inflection point, total derivative, partial derivative, total differential, partial differential, implicit and inverse function rule, differentiation of logarithmic and exponential function.
8. **Optimization:** Optimum value and extreme value, relative extremum values, first order and second order derivatives tests, McLaurin and Taylor series, N^{th} derivative test, optimization of multivariable function, the differential version, quadratic forms, optimizing with equality constraint, Lagrange multiplier.
9. **Elementary Integral calculus:** Definition of Integration- Rules of integration- definite and Indefinite integral.
10. **Elementary Matrix Algebra:** Concepts of Matrix and Vectors - Cramer's rule determinants - application to national income model.

Books Recommended

1. Alpha Chiang. **Fundamental Methods of Mathematical Economics.** Fourth Edition. McGraw Hill.
2. Edward Dowling. **Schaum's Outline to Mathematical Economics.** Third Edition. McGraw Hill.

Course Code : Basic Statistics Marks 100, 4 Credits, 60 Lectures

Course Objectives and Outcomes:

This course introduces the use of statistical methods and tools in evaluating data for business and economics decision making. The course is designed to explain statistical techniques to decision-making situations & how to interpret the results. Through out the learning session the students will be able to apply statistical techniques with the help of business and economics data.

Course Contents:

1. **Introduction to Statistics:** Population and Sample; Discrete and Continuous Variables; Random Variables; Statistical Methods; Scope, Importance, and Limitations of Statistics.
2. **Collection and Presentation of Data:** Data Sources; Methods of Collecting Data; Designing a Questionnaire; Types and Principles of Classification; Tabulation of Data; Arranging Data Using the Data Array and the Frequency Distribution; Construction of a Frequency Distribution; Graphical Representation of Quantitative and Qualitative Data (Histogram, Ogive, Pie-chart, Bar Diagram and Frequency Polygon etc.).

3. **Measures of Central Tendency:** Computation, Application, Advantages and Disadvantages of Different Measures of Central Tendency; Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode; Relationship between Mean, Median and Mode.
4. **Measures of Dispersion:** Definition, Importance and Computation, Application of Different Measures of Dispersion (Absolute and Relative)- Range, Quartiles, Percentiles, Inter-Quartile Range, Mean Deviation, Standard Deviation, Variance, and Coefficient of Variation, Properties of Standard Deviation.
5. **Moments, Skewness, and Kurtosis:** Concepts and Measures of Skewness, Moments and Kurtosis; Moments of Group Data; Population Moment.
6. **Correlation and Regression Analysis:** Types of Correlation-Coefficient of Correlation; Limitations of Correlation; Measures of Correlation; Relationship between Correlation and Regression; Definition of Regression; Scatter Diagram; Method of Least Square; Estimating with Regression Line.
7. **Index Number:** Index Number and Three Index Numbers- Price, Quantity and Value Indices; Methods of Constructing Index Numbers- Unweighted Aggregates Index, Weighted Aggregates Index; Shifting Bases of Index Numbers; Issues in Constructing an Index Number.

Books Recommended:

1. Prem Mann. **Introductory Statistics.** Any Late Edition. Wiley
2. Murray Spiegel and Larry Stephens. **Schaum's Outline of Statistics.** Any Late Edition. McGraw Hill.
3. Paul Newbold, William Carlson and Betty Thorne. **Statistics for Business and Economics.** Any Late Edition. Prentice Hall.

Course Code : Introducing Sociology

Marks 100, 4 Credits, 60 Lectures

1. **Definition, Nature & Scope of Sociology,** relationship with other social sciences. Development of Sociology: Contributions of Auguste Comte, Herbert Spencer, Emile Durkheim, Max Weber
2. **Culture, Beliefs & Values:** Norms, sanctions, symbols, language, subculture, counter-culture, hegemony & resistance
3. **Globalization, Culture and Society:** Globalization and its different dimensions, Cultural globalization, global culture and social change
4. **Urbanization and Social Formation:** Definition of urbanization and urbanism, Process of urbanization in developing societies and social formation, over urbanization, growth of slum & poverty in mega cities
5. **Gender and Society:** Discourse of WID, WAD and GAD, Why gender is important in the discourse of development, Gender inequality & women's subjugation in developing societies.
6. **Environmental Problems, Natural Disasters and Social Crisis:** Climate change and its impact on society, Natural disaster, social crisis and vulnerabilities, Climate change, deforestation and mal-development.

7. **Social Inequality:** Dimensions of social inequality: Class, gender, age, minority group (religious and indigenous), economic vulnerability, Social inequalities in developed & developing countries.
8. **Types of societies:** Marxist view on classifying societies on the basis of type of control over economic resources and Lenski's view on classifying societies by their main means of subsistence.
9. **Deviance & Social Control:** Definition of deviance, theories of deviance. Crime & justice system, agencies of social control
10. **Health, Illness and Society:** Nature & scope of the problem, Urbanizations, acute, chronic & life style diseases, Social, environmental & behavioural factors affecting health, Communicable & behavioural diseases: STD, HIV/AIDS, TB, Hep-B etc

Reference

Giddens Sociology

Tony Bilton et al Introductory Sociology

Course Code : Introduction to Social Work Marks 100, 4 Credits, 60 Lectures

1. Social Work: Meaning, Characteristics, Scope and Importance Relationship of Social Work with other Sciences- Sociology, Economics, Psychology and Political Science.
2. Evolution: Evolution of Social Work in UK, USA, India and Bangladesh.
3. Social Reformers and their Movements in Pre-partition India and Bangladesh: Raja Rammohan Ray, Ishwar Chandra Vidyasagar, A.K Fazlul Haque, Sir Syad Ahmed, Begum Rokeya.
4. Social Legislations Related to Social Security, Women Welfare, Child Welfare.
5. Profession and Social Work: Meaning and Characteristics of Profession, Social Work as profession, Philosophical, Religions and Ethical Basis of Social Work.
6. Industrial Revolution: Meaning, Impact on Society, Industrialization, Urbanization, Welfare State.
7. Social Problems and Social Services in Bangladesh.
8. Methods of Social Work: Basic and Auxiliary Methods and their Basic Issues such as Meaning, Elements, Principles and Area of Use. Importance of Social Work Methods in Bangladesh.

Books Recommended:

1. Barker, Robert L. :Social Work Dictionary, 3rd ed. NASW, New York, 1995.
2. Coulshed, Veronica Social Work Practice: An Introduction 2nd ed. London. Macmillan, 1991.
3. Friedlander, Walter A. : Introduction to Social Welfare. Prentice Hall, 2nd ed. New Delhi-1967.
4. Khalid, M. : Welfare State, Karachi, Royal Book, 1968

5. Morales, A. And Shaefor, B. Social Work – A Profession of many faces, 4th ed. Allyn and Bacon, Boston, 1986.

Course Code : Introduction to Political Theory Marks 100, 4 Credits, 60 Lectures

Political Science : Meaning, Nature, Scope, Methods, Relations to other Social Sciences, Importance to Study Political Science.

State : Definition, Elements, State and Government, State and Individual, State and Society, Theories of the origin of the state.

Fundamental concepts : Sovereignty, Law, Liberty, Equality, Rights and Duties, Nation, Nationalism, Internationalism.

Concepts of Political Sociology : Political culture, elite theory, Max Weber and Bureaucracy

Political Thinkers : Plato, Aristotle, St. Augustine, St. Thomas Aquinas, Machiavelli, Hobbes, Locke and Rousseau.

Books Recommended :

1. R.G. Gettell : *Political Science*
2. J. W. Garner : *Political Science and Government*
3. R. M. MacIver : *The Modern State*
4. G.H. Sabine : *A History of Political Theory*
5. William Ebenstein : *Great Political Thinkers-Plato to the Present*
6. H.G. Laski : *A Grammar of Politics*
7. মুহাম্মদ আয়েশ উদ্দীন : *রাষ্ট্রচিন্তা পরিচিতি*
8. এমাজউদ্দিন আহমদ : *মধ্যযুগের রাষ্ট্রচিন্তা*
9. মোঃ দরবেশ আলী খান : *প্লেটো ও এরিস্টটলের রাজনৈতিক চিন্তা*
10. সরদার ফজলুল করিম : *প্লেটোর রিপাবলিক*

Course Code: Introduction to Business Marks 100, 4 Credits, 60 Lectures

1. **Business Concepts:** Meaning of business, basic elements, Features, branches and their place in, economy of Bangladesh, business environment, business size, location of business, efficiency of business enterprise, social responsibility of, business and Government.
2. **Business Environment:** Definition, types, components of external and internal environment, international environment, factors influencing business environment, environment scanning - SWOT analysis, business environment in Bangladesh.
3. **Business Organizations:** Forms of ownership in Bangladesh, relative position of each form, sole proprietorship, partnership, Joint Stock Company, co-operative society, combination and state ownership, considerations in the choice of specific form of ownership.

4. **Development of Joint-Stock Companies in Bangladesh:** Phases of development types, domain of operations of each type, formation of Memorandum of Association, Article of Association and prospectus rights and rights and obligations of shareholders, directors, and government, Liquidation of a company, Company Management, Managing Agency System.
5. **State Enterprise:** Historical background, fields of state enterprises, objectives and features, classification, management of state enterprises in Bangladesh.
6. **Business Combination:** Objectives and features, types and forms of combinations in Bangladesh.
7. **Co-operative Societies in Bangladesh:** Development, Types (industrial, commercial and service), role of each type, formation, problems and approaches to problems.
8. **Institutions for Promotion of Business:** Support services of Government Institutions, Chamber of Commerce and Industry, Trade Associations, Stock Exchanges, Commodity Exchange, EPB-EPZ and Port Authority.
9. **Trade Practices in Bangladesh:** Commercial policy, import procedure, export procedure, formalities, problems, and measures to overcome the problems, documents used in export and import, L.C. shipping documents, commercial advices.
10. **Globalization and International Business:** Arguments in favour and against globalization, related agencies, WHO, IMF, SAPTA, ASEAN.

Books Recommended

1. Skinner and Vancevich, Business, For the 21st Century, Irwin.
2. Straub and Attner, Introduction to Business.