

NATIONAL UNIVERSITY



Third Year Syllabus Department of Economics

Four-Year B.S.S. (Honours) Course
Effective from the Session: 2013–2014

NATIONAL UNIVERSITY

Syllabus for Four Year B.S.S. Honours Course

Subject: Economics

Session: 2013-2014

THIRD YEAR

Paper Code	Paper Title	Marks	Credit
232201	Intermediate Macroeconomics	100	4
232203	Statistics for Economics	100	4
232205	Studies on Bangladesh Economy	100	4
232207	Development of Economics	100	4
232209	International Economics-I	100	4
232211	Public Finance	100	4
232213	Urban Economics	100	4
232215	Agricultural and Rural Economics	100	4
	Total=	800	32

Detailed Syllabus

Paper Code	232201	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Intermediate Macroeconomics			

Paper Objective

To introduce students to basic measures of aggregate-level economic performance such as AD, AS, unemployment, the money supply, and to present the major (competing) theories of national income and employment, inflation as well as the policy recommendations to which the alternative theories give rise.

Paper Contents

- 1. An Overview of AD-AS Model:** Factors determining AD and AS; AD curve and AS curve implied by the Classical and Keynesian views;
- 2. Goods Market:** Simple Keynesian income determination model: Mathematical and Graphical; Various concepts of the multiplier: simple and extended; Theory of acceleration.
- 3. Consumption and Investment:** Absolute, Relative, Permanent and Life-cycle Hypothesis; Types of investment; Determinants of investment; PV criterion and MEI; Desired capital stock; Capital stock adjustment; Investment decision-making; TPV, NPV and IRR methods; Investment demand and output growth.
- 4. Money Market:** Quantity theories of money; Demand for money; Types of demand for money; Money supply; Interest rate & money supply; Interaction of demand for and supply of money; Interest rate sensitivity of transaction demand for money; Square root formula of Baumol-Tobin model, Friedman's model.
- 5. IS-LM Model:** Deriving the IS curve from the Goods Market; Deriving the LM curve from the Money Market; Putting IS and LM Together; Simultaneous equilibrium in the goods and money markets; **Deriving the AD curve;** Changes in equilibrium; Monetary and fiscal policy in the IS-LM model; Liquidity trap and crowding out effect
- 6. Labor Market and Aggregate Supply:** Demand for and supply of labour; Expectations and Aggregate Supply (AS); Introduction to formation of expectations; Supply side disturbances; Wage Determination in the labour market: Full Employment, Unemployment and Over Employment Equilibrium; Equilibrium unemployment;
- 7. Macroeconomic Equilibrium:** Putting AD and AS Together; Monetary and fiscal policy in the static model.
- 8. Inflation, Unemployment and Phillips Curve:** Short Run and Long Run

Recommended Books:

1. Rudiger Dornbusch, Stanley Fischer, and Richard Startz. Macroeconomics. New Delhi: McGraw Hill.
2. Richard T Froyen. Macroeconomics: Theories and Policies. New Delhi: Pearson Education.
3. Michael Parkin. Macroeconomics. Addison-Wesley.

Paper Code	232203	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Statistics for Economics			

Paper Objective

Statisticians help to design data collection plans, analyze data appropriately and interpret and draw conclusions from those analyses. The central objective of the undergraduate major in Statistics is to equip students with consequently requisite quantitative skills that they can employ and build on in flexible ways. Majors are expected to learn concepts and tools for working with data and have experience in analyzing real data that goes beyond the content of a service Paper in statistical methods for non-majors. Majors should understand the fundamentals of probability theory, statistical reasoning and inferential methods, statistical computing, statistical modeling and its limitations, and have skill in description; interpretation and exploratory analysis of data by graphical and other means; graduates are also expected to learn to communicate effectively.

Paper Contents

- 1. Probability:** Meaning; Events in probability law; Use of combinations; Conditional probability; Probability functions; Mathematical expectations; Theoretical distribution; Binomial, Poisson, Exponential and Normal distributions with applications to real world situations; Properties and uses; Area under the normal curve; Standard normal distribution; Applications of Standard Normal distribution; Normal approximation to Binomial; Central Limit Theorem
- 2. Sample Methods and Sample Survey:** Advantages of sampling; Types of sampling; Sampling error; Non-sampling error; Objectives and importance of sample survey; Appropriateness of data to be collected; Designing a questionnaire; Choice of the sample unit; Sample size; Sample design and sample selection.
- 3. Sampling and Sampling Distribution:** Population and sampling distribution; Mean and standard deviation of X; Sampling from a normally distributed population; Sampling from a non-normally distributed population; Applications of sampling distribution; Sampling distribution of population and sample proportion, mean and standard deviation; Sample size determination
- 4. Analysis of Variance:** Meaning, assumptions and computation of analysis of variance; One way classification model; Two way classification model; Multiple regression analysis.
- 5. Test of Hypothesis:** Introduction, statistical estimation and properties of a statistical estimator; Unbiased and biased estimator; Efficient and inefficient estimator; Point and interval estimators; Small sample properties; Confidence intervals, Construction of confidence intervals; Introduction, procedures of testing hypotheses; Confidence interval approach and test of significance approach; Type I and Type II errors; One tailed and two tailed tests; Tests concerning large samples; Tests about population mean
- 6. Statistical Tests:** Chi-square test; Normal test; T-test; F-test; Non-parametric tests
- 7. Time Series Analysis:** Time-series analysis; Components of time-series; Straight-line trend; Method of least squares; Method of moving average; Measurement of seasonal variations
- 8. Official Statistics of Bangladesh:** Sources; Characteristics; Limitations; Publishing agencies; Statistical publications.

Recommended Books:

1. Prem S Mann. Introductory Statistics. Wiley.
2. Paul Newbold, William L Carlson and Betty M Thorne. Statistics for Business and Economics. New Delhi: Prentice and Hall.
3. Murray R Spigel and Larry Stephens. Theory and Problems of Statistics. Schaum's Outline Series. New Delhi: McGraw Hill
4. Richard I Levin and David Rubin. Statistics for Management. New Delhi: Prentice Hall
5. CR Kothari. Research Methodology: Methods and Techniques. New Age International Publishers.
6. Douglas A Lind, William G Marchal, and Samuel Wathen. Statistical Techniques in Business and Economics. Boston: Irwin McGraw Hill

Paper Code	232205	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Studies on Bangladesh Economy			

Paper Objective

The main objective of this Paper is to introduce the students with the socio-economic context of Bangladesh from the different perspectives. The Paper will also help them to know recent issues of Bangladesh economy. The students will be able to understand the trend of economic variable and business phenomenon. The knowledge will help them to take step in the development of the country.

Paper Content

1. **The Economy of Bangladesh in Transition:** The historical perspective; Pre-colonial, Colonial and Pakistan periods
2. **Overview of the Economy of Bangladesh:** Features, composition and structure of the economy; GDP; Sectoral contribution and overall growth trend, Labor Force, Informal Sector, Non-market Activities (NMWs), Contribution of NMWs.
3. **Population and Human Resource Development:** Growth, size and composition of population; Population policy; Education and health; Resource allocation and realization
4. **Agriculture and Rural Economy:** Features and role of agriculture; Components of agriculture; Problems of agriculture; Sharecropping and efficiency; Farm size and productivity; Marketing, credit, modernization, Rural economic structure; Institution, recent approaches to rural development; Resources, development programmes of government and NGOs
5. **Industry:** Size and composition, large, medium, small and rural industries; Public and private: problems and prospects, finance, industrial policy
6. **Urbanization:** Features of urbanization; Components of urban growth; Urban concentration; Rural-urban disparity in resource allocation; Social implications of urbanization; and review of policies on urban issues
7. **Foreign Trade and Foreign Investment:** Volume, composition and direction of foreign trade; Balance of trade and balance of payments; Balance of payment policies; WTO and Bangladesh; Foreign investment and its effects; Foreign investment policy
8. **Globalization and Bangladesh Economy**
9. **Poverty:** Nature, dimensions; Poverty alleviation interventions; Role of GOB and NGOs

10. Women and Development: Gender issues; Women’s productive activities; Share of resources; Different policies and constraints

Recommended Books:

1. Reports of the Task Forces on Bangladesh Development Strategies for the 1990s. Dhaka: University Press Limited.
2. Annual Reports by the Centre for Policy Dialogue. Dhaka: CPD.
3. Statistical Yearbooks and Bulletins published by Bangladesh Bureau of Statistics. Government of Bangladesh.
4. Five Year Plan Documents. Government of Bangladesh.
5. Annual Economic Reviews. Government of Bangladesh.
6. Akhlaqur Rahman: Self Reliance and Foreign Aid.
7. Aoulad Hosen: Unpaid Underpaid and Non-market Activities: Application to Bangladesh, LAP Lambert, Germany.
8. Mahabub Hossain and Rushidan Islam. 2003. Development Strategies of Bangladesh Agriculture and Rural Development in Bangladesh (in Bengali, with Dr. Mahabub Hossain), UPL, 2003
9. Atiq Rahman et. al. Environment and Development in Bangladesh. Vols I & II. Dhaka: University Press Limited.
10. Sirajul Islam (ed). History of Bangladesh. Dhaka: Asiatic Society of Bangladesh
11. Kamal Siddiqui. Political Economy of Land Reform. Dhaka: University Press Limited.
12. Abdul Bayes and Anu Muhammad (ed). Bangladesh at 25. Dhaka: University Press Limited.

Paper Code	232207	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Development Economics			

Paper Objective

The goals of this Paper are for every student to describe the characteristics of and the special challenges facing developing nations, explain alternative theories of economic growth and evaluate their ability to explain the growth experiences of less-developed countries. Discuss the domestic problems that developing nations face assesses the seriousness of these problems, and evaluate the effectiveness of various policies designed to deal with domestic issues. Appreciate the value of empirical evidence in expanding our knowledge within economics.

Paper Content

1. **Concepts of Development:** Nature of development economics and its emergence & evolution.
2. **Global Development Mapping:** Growth, poverty, industrialization; Human development; Trade concept of third world; Developing economies; Underdeveloped economies; Least developed economies and backward economies.
3. **Economics of Growth:** Capital, labor and technology; Kuznet’s six characteristics of modern economics growth
4. **Development Models:** Classical, Marx and Schumpeter
5. **Growth Models and Linear Stage Theories:** Harrod-Domar; Neoclassical and endogenous growth theories; Rostow-Lewis model
6. **Growth Strategies:** Big-Push; Balanced and unbalanced growth; Export-led versus substitution strategies
7. **Structuralist Theories of Development**

8. **Applied concepts of Development:** Basic concept of MDG, MDG for developing countries, Structural Adjustment theory - prescription and practice for underdeveloped and developing countries.

Recommended Books:

1. Michael P Todaro and Stephen C Smith. Economic Development. New Delhi: Prentice Hall
2. Polly Hill. Development Economics on Trial. The Anthropological Case for a Prosecution. Cambridge: Cambridge University Press.
3. Joan Robinson. Aspects of Development and Underdevelopment. Cambridge: Cambridge University Press.
4. M Grillis, D Wight, H Perkins, M Roemer, and DR Snodgrass. Economics of Development.

Paper Code	232209	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	International Economics-I			

Paper Objective

Students will be able to discuss the major economic theories of international trade, and to analyze the economic implications of alternative trade policies. Students will be able to trace the development of the international financial architecture and of the international monetary system, and to evaluate the implications of different exchange rate regimes for domestic macroeconomic policy. Students will be able to identify major economic characteristics of selected world's regions. Students will be able to trace the origins of various processes of international (global or regional) economic integration, and to discuss their implications for the international patterns of productive specialization.

Paper Content

1. **The Pure Theory of International Trade:** The basis of international trade; The mercantilist theory; The trade theory of absolute and comparative advantage; Hecksher-Ohlin trade model; Factor-price equalization theorem; The gains from trade and income distribution; Leontief Paradox; Linder's thesis; Technological gap and product cycle theories; Some alternative theories of trade
2. **Economic Growth and International Trade:** Rybczynski theorem, Technical progress and international trade; Relationship between terms of trade and national income in the growth process; Economic growth and international trade during the 19th and the 20th centuries; Sources of economic growth; The effects of growth on small countries and large countries; Backwash effect; Growth in the world economy; The Prebisch-Singer thesis.
3. **Economies of Scale, Imperfect Competition and International Trade:** An overview of economies of scale and market structure; Theory of imperfect competition; Monopoly, monopolistic competition and trade; Effects of increased market size; Gains from an integrated market; Economies of scale and comparative advantage, the significance of intra-industry trade, why intra-industry trade matters.
4. **Trade Policy:** Instruments of trade policy; The theory of tariffs; The Stolper-Samuelson theorem on tariffs and income distribution; Relationship among tariffs; The terms of trade and domestic price; The optimum tariff; Quotas and quantitative restrictions; Equivalence of

tariff and quota; Relative efficiency of tariff; Quota and subsidy; Distortions in the commodity and factor markets due to tariffs and subsidies; The infant industry argument; Effective rates of protection; Import-substitution versus export-push strategy; Tariff and world welfare

5. **Instruments of Commercial Policy:** Export taxes; Export subsidies; Quantitative restrictions; International cartels; OPEC, Voluntary export restraints; Dumping; Other non-tariff barriers
6. **Theory of Economic Integration:** Concept of economic integration and its forms; Positive and normative analysis of economic integration; Customs union and free trade union; Theory of the second-best and other welfare effects; Dynamic benefits from customs union; Economic integration in South Asia.

Recommended Books:

1. Paul R Krugman and Maurice Obstfeld. International Economics: Theory and Policy. New Delhi: Pearson Education.
2. Miltiades Chacholiades. International Economics. New York: McGraw Hill.
3. B Sodersten and G Reed. International Economics. London: Macmillan.

Paper Code	232211	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Public Finance			

Paper Objective

Main Paper objectives are to introduce students to the public sector reform agenda with a focus on public finance issues; to demonstrate administrative, political, and economic constraints to public finance reforms; to develop analytical skills of the students in three major areas of public finance reforms (performance-based budgeting, mid-term financial planning, budget decentralization); to train students how to develop budgeting and performance evaluation systems for public sector institutions; to develop students' skills on how to write a public policy paper and make a presentation on public policy issue.

Paper Content

1. **Theory of Public Goods:** Definition and characteristics of public goods; Market and non-market methods of exclusion; Pure public goods and impure public goods; Public goods, private goods and club goods; Public goods and market failure- the free rider phenomenon, the Prisoners' Dilemma of public goods; Efficient provision of public goods- Samuelson's solution; Lindahl's solution.
2. **Public Income and Expenditure:** Sources of revenue, Major heads of public expenditure, Effects of public expenditure.
3. **Theory of Externalities:** Definition and characteristics of externalities; Externalities and market failure; Market correction in the presence of externalities- Pigou's solution; the Coase theorem; the tragedy of the commons
4. **Burden of Taxation:** Principles of taxation- benefit approach; voluntary exchange approach, ability to pay principle; equi-marginal principal of sacrifice; Taxable capacity- absolute and relative taxable capacity; taxable capacity in developed and developing nations; Causes of low taxable capacity in Bangladesh and steps/reforms taken by the government to improve the situation.
5. **Impact, Incidence and Effects of Taxation:** Impact, shifting and incidence of direct and indirect taxation; Incidence of taxation under different cost and market situation; Incidence and elasticity of

demand and supply; Shifting of various taxes- income tax, property tax, corporation tax; Effects of income tax on consumption, savings, capital formation, investment, work effort & leisure.

6. **Public Debt:** The rationale for public debt; Sources and problems with public debt; Burden of public debt; Effect of public debt and debt policy; Public debt in Bangladesh since liberation; Effect of public debt on consumption, investment and internal resource mobilization.
7. **Budget:** Government budget; Balanced, deficit and surplus budget; Revenue and capital budget; Budget multiplier, Characteristics of an ideal budget, Budget in developed and developing nations.

Recommended Books:

1. Joseph Stiglitz. Economics of the Public Sector. New York: Norton.
2. Harvey Rosen and Ted Gayer. Public Finance. New York: McGraw Hill.
3. David N Hyman. Public Finance. South Western College Pub.
4. Arye L Hillman. Public Finance and Public Policy: Responsibilities and Limitations of Government. Cambridge: Cambridge University Press
5. John Culis and Phillip Jones. Public Finance and Public Policy. New York: McGraw Hill.
6. Richard Musgrave and Peggy Musgrave. Public Finance in Theory and Practice. New York: McGrawHill.

Paper Code	232213	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Urban Economics			

Paper Objective

This Paper addresses economic development, problems and prospects for the urban sectors.

Paper Content

1. **Introduction:** Definition of urban economics; Major components in urban economics; Definitions of an urban area and differences in definitions; Market forces- land rent, and land use within cities.
2. **Market Forces in the Development of Cities:** Why do cities exist? A comparative advantage of urban development trade and transport cost-internal scale economics in production-agglomeration economics; Localization economics and urbanization; Shopping externalities; Imperfect substitutes and complementary goods; Retail clusters *Why do Cities develop?* Transfer-oriented and market-oriented firms; Principle of median location; Orientation towards local inputs; Transport cost versus local-input costs; Role of government in the location of cities *How many Cities?* The analysis of market areas; Determinants of market area; Central place theory; Regional hierarchy, retailing; How competition among firms leads to the development of hierarchical system of cities
3. **Urban Economic Growth:** Urban labour market and economic growth; Demand and supply sources of urban labour; Economics base and input-output analysis- Limitations of urban economic growth
4. **Land Rent, Urban Land Use Controls and Zoning:** Urban land rent; Fertility and accessibility; Land use in the mono-centric city; Bid rent functions of manufactures, office firms, residential, agriculture; Income and location; General equilibrium land use; Land use control and zoning; Types and market effects; Nuisance, fiscal and design zoning; City without zoning; Legal basis for zoning.
5. **Urbanization and Economic Development with Reference to Bangladesh:** Economic factors and environments that are responsible for urbanization; The prerequisites of urbanization; Factors that initiate and ensure continuity of the urbanization process; Differences in the growth pattern of urbanization in an advanced economy and developing economy; The political economy of organization; World urban order hierarchy.

6. **Urban Land Market:** Economic and spatial relationships within an urban area; Theories of urban land market including various distortions; The peculiarity of urban land rent and land use; Various models and interventions and policies of government including various land use control and zoning; The political economy of urban land
7. **Urban Housing Market:** Economics of housing production; Urban housing conditions; Demand and supply of housing; Residential location decisions; Housing models; Urban housing market imperfections and various sub-systems of housing; Why slums exist and persist; Government interventions and housing policy
8. **Urban Transportation:** Interrelationships between transportation and other urban market demand for urban transportation services; Short-run supply and pricing; Congestion and its implications
9. **Urban Labour Market:** Nature and characteristics of urban labour market; Urban labour market inefficiencies; Informal labour market and nature of employment.
10. **Urban Poverty:** Nature and extent of poverty; Various strategies the urban poor adopts to survive and its fall out; Policy implications

Recommended Books:

1. Arthur O'Sullivan. Urban Economics. New York: McGraw Hill.
2. Edwin S Mills and Bruce W. Hamilton. Urban Economics. New York: Harper Collins.
3. David Segal. Urban Economics. New York: Irwin Dorsey.
4. Paul N Balchin, David Issac and Jean Chen. Urban Economics: A Global Perspective. London: Palgrave Macmillan

Paper Code	232215	Marks: 100	Credits: 4	Class Hours: 60 hrs.
Paper Title:	Agricultural and Rural Economics			

Paper Objective

At the end of the program the graduates should be able to demonstrate the importance of agriculture in the national economy with particular importance to its contribution to development among rural communities in Bangladesh. Integrate the contribution of environmental and natural resources to sustainable agriculture and rural development in Bangladesh.

Paper Content

1. **Introduction:** Definition of Agricultural Economics, Need for a separate study, Concept and Importance of Rural Economics, Difference and Interrelationship between Agricultural Economics and Rural Economics, Agriculture in Developing and Developed Countries.
2. **Structure and Characteristics of Traditional Agriculture:** Basic Features of Traditional Agriculture, Development in Traditional Agriculture, Lessons from Traditional Agriculture.
3. **Contribution of Agriculture to Economic Development:** Product Contribution; Factor Contribution, Market Contribution and their Relative Importance: Importance of Agriculture for Industrial Development, Historical Transformation of Agriculture Sector in Bangladesh.
4. **The Dual Economy Models:** Nature of the Dual Economy Models, the Lewis Model, the Fei-Ranis Model and the Jorgenson Model.
5. **Types of Farming:** Farm Structure, Tenurial Relationship, Technical Changes and Productivity, Commercial, Cooperative and Collective Farming; Share Cropping, Subsistence Farming Vs. Capitalist Farming.

- 6. Agricultural Finance:** Importance of Agricultural Credit, Sources of Agricultural Credit, Institutional and non Institutional, Functions of Rural Money Markets in the LDCs, Rural Incensement, Price Policy in Agriculture Sector.
- 7. Land Reform:** Definition, Objectives of Land Reform, Features of Past and Modern Land Reforms, Difficulties of Implementing Land Reform.
- 8. Agricultural Marketing:** Role of Agricultural Marketing, Marketing Functions and Market Structure, Market Intelligence, Imperfections of Agricultural Marketing in LDCs.
- 9. Agricultural Supply Response:** Concept of Supply Response, Analysis of Supply Response, Evidence of Supply Response in the LDCs.
- 10. Role of Government:** Rationale for Government Intervention in Agriculture, Protections or Farmer's Income, Price Support and Input Subsidy-a Comparative Study.
- 11. Agricultural Sector and Economic Development.**

Recommended Books:

1. Ghatak and Ingersent : Agriculture and Economic Development.
2. Hill and Ingersent : Economic Analysis of Agriculture.
3. Mellor : Economic of Agricultural Development.
4. Southworth and Joshon : Agricultural Development.
5. Barkht, Zaman & Raihan : Political Economy of Khas land.
6. Bangladesh Economy : Rashed, Salim (1995)
7. The Design of Rural Development : Late U. (1995)
8. Rural Development : Theories of the Peasant Economy and Agrarian Economy.