

NORTH-EASTERN HILL UNIVERSITY

PROPOSED REVISED SYLLABUS IN ECONOMICS (Semester System)

Elective & Honours Courses

The Board of Undergraduate Studies (BUGS) in Economics, NEHU, Shillong, in its meeting held on 14th September, 2010 felt the need to revise and update the existing syllabus in Economics (Pass & Honours) Courses in the light of the UGC Model Curriculum (Economics) 2001 as circulated by the UGC, New Delhi.

There have been several changes in the world economy in general and Indian economy in particular during the last decade or so. This has significantly affected economic theory and policy. Keeping these issues in mind, this exercise has been undertaken to reorganize the curricula in view of the proposed semester system to be introduced by the University.

The syllabus has been prepared in consultation with many subject experts from various colleges and within the Department of Economics, NEHU, Shillong.

Proposed Course Structure for Bachelor of Arts (B.A.) Economics Honours		
Semester	Paper	Marks
I	Paper-I: Microeconomics*	100
II	Paper-II: Macroeconomics*	100
III	Paper-III: Indian Economy*	100
IV	Paper-IV: Public Economics	100
V	Paper-V: International Economics	100
	Paper-VI: Mathematics	100
VI	Paper-VII: Statistics	100
	Paper-VIII: Development and Environmental Economics	100
*Paper I, II & III are to be offered as elective papers in Economics		800

Each question paper would consist of 8 (Eight) essay type questions taking 2 (Two) questions from each unit of the syllabus. Each question would carry 20 marks. A candidate would be required to answer five questions taking at least one from each unit.

Paper – I
MICROECONOMICS

Unit-I

Introduction: Nature and scope of micro-economics, role of price mechanism, market equilibrium; elasticity of demand – types, methods of measurement (point & Arc methods), relationship between the price elasticity of demand and the slope of the demand curve. Consumer behavior: principle of equi-marginal utility, indifference curve analysis— basic assumptions, properties, consumer's equilibrium. Price effect— decomposition (Hicks & Slutsky), concept of consumer's surplus and Engel's curve.

Unit-II

Theory of Production: Production function: Cobb-Douglas and C.E.S.: Concepts and properties; returns to factor, law of variable proportion, returns to scale, producer's equilibrium, elasticity of factor substitution and expansion path; Concepts of cost and revenue.

Unit-III

Market Structure: Perfect and imperfect markets— equilibrium of a firm— perfect competition; monopoly and price discrimination, meaning of monopoly power. Monopolistic competition— Short and long run and Chamberlin's model. Oligopoly: Kinked demand curve theory.

Unit-IV

Factor Pricing and Welfare Economics: Rent- modern theory of rent; Wage- Marginal productivity theory of wages; Interest- Loanable fund and Liquidity theories; Profit- Knight's theory. Classical welfare economics; Pareto optimality and social welfare function.

Suggested Readings:

1. Baumol, W.J (1977), *Economic Theory and Operation Analysis* (3e), Prentice Hall of India, New Delhi.
2. Henderson J. M. and R.E. Quant (1980), *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New Delhi.
3. Koutsoyanis, A. (1990), *Modern Microeconomics*. Macmillan, London.
4. Lipsey R.J. and K.A. Chystal (1999), *Principles of Economics* (9e), Oxford University Press, Oxford.
5. Mankiew N.G. (2006), *Principles of Microeconomics*, Cengage Learning India Pvt. Ltd., New Delhi.
6. Mankiew N.G. (2007), *Economics – Principles and Application*, Cengage Learning India Pvt. Ltd., New Delhi.
7. Mankiew N.G. (2007), *Principles Of Economics*, Thompson South-western, India Edition, Akash Press, Delhi.
8. Samuelson P.A. and W.D. Nordhaus (1998), *Economics*, Tata McGraw Hill, New Delhi.
9. Stonier, A. W. and D. C. Hague (1999), *Text Book of Economic Theory*, ELBS & Longman Group, London.
10. Varian, H.R. (2000), *Intermediate Microeconomics: A Modern Approach* (5e), East-West Press, New Delhi.

Paper – II
MACROECONOMICS

Unit-I

National Income: Meaning, concepts and their inter-relationship; methods of measuring national income and their limitations; national income identities with government and international trade; circular flow of income – four sector model; green accounting.

Unit-II

Output and Employment: Classical theory of employment; Keynesian theory of income and employment; the principle of effective demand; consumption and saving functions; investment multiplier: marginal efficiency of capital; savings and investment: ex post and ex ante (concepts only); equality and equilibrium (classical approach).

Unit-III

Money, Banking and Inflation: Demand for money (Classical and Keynesian); supply of money- Fisher and Cambridge equations, high powered money; commercial banks: functions and credit creation; central bank: functions and instruments of credit control; inflation: types, causes, effects and control.

Unit-IV

Trade Cycle: Nature and characteristics; Hawtrey monetary theory, Hayek's over-investment theory and Keynes' view on trade cycle; the concept of accelerator; Hicksian interaction model; control of trade cycles. Balance of Trade and Balance of Payments: concepts and components, equilibrium and disequilibrium in the balance of payments; consequences of disequilibrium and measures to correct the deficit in the balance of payments.

Suggested Readings:

1. Ackley, G. (1976), *Macroeconomics: Theory and Policy*, Macmillan Publishing Company, New York.
2. Gupta, S. B. (1994), *Monetary Economics*, S. Chand and Company, Delhi.
3. Jhingan, M.L. (2007), *Monetary Economics*, Vrinda Publications, New Delhi.
4. Mankiew, N.G. (2007), *Principles of Macroeconomics*, Thomson Learning INC., New Delhi.
5. Mukherjee, Sampat (1990), *Modern Economic Theory*, Wiley Eastern Ltd., New Delhi.
6. Samuelson P.A. and W.D. Nordhaus (1998), *Economics*, Tata McGraw Hill, New Delhi.
7. Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.

Paper – III
INDIAN ECONOMY

Unit-I

Features of the Indian Economy: India as a Developing Economy; Natural resources- Land, water and forest resources; Demographic features- Population: composition, occupational distribution, Population Policy; Poverty and Inequality; Unemployment and Price Rise; National Income- Pre and Post-Reforms period.

Unit-II

Agriculture and Industry: Agriculture- Trends in agricultural production and productivity; Land Reforms; agricultural finance and marketing; New agricultural strategy and green revolution; Public Distribution system; Food security. Industry: Industrial policy of 1948, 1956, and 1991; FEMA; competition act; small-scale industries: role, growth and policy measures.

Unit-III

Planning and External Sector: Planning in India: Broad Objectives; Five year plan (current and preceding); resource allocation; economic reforms since 1991: Liberalization, Privatization and Globalization. External Sector: Composition and direction of India's foreign trade; Trends in exports and imports; Balance of payments crisis; EXIM Policy; Foreign capital: Aid, FDI and FII.

Unit-IV

Features of the North-Eastern Region: Basic features; Income; composition and trends; Natural resources-Land, Water and forest resources; Occupational patterns; Agriculture: Importance; New Agricultural Strategy; Industry: Importance; Industrial policy of 1997 and 2007; Growth of Small Scale Industries, Role of NEC and NEDFI; Tourism- Importance, Potential and challenges.

Suggested Readings:

1. Alam, K.(ed) (1993), *Agricultural Development in North East India: Constraints and Prospects*, Deep & Deep Publications, New Delhi.
2. Bora, S and M.C. Bora (2005), *The Story of Tourism: An Enchanting Journey Through India's North-East*, UBS Publishers' & Distributors Pvt. Ltd., Delhi.
3. Datt, Ruddar and K.P.M. Sundharam (2012), *Indian Economy*, S. Chand & Co. Ltd., New Delhi.
4. Dhingra, I.C. (2001), *The Indian Economy: Environment and Policy*, Sultan Chand & Sons, New Delhi.
5. Gopalakrishnan, R. (1995), *The North East India: Land, Economy and People*, Har Anand Publications, Delhi.
6. Kapila, Uma (Ed) (2007), *Indian Economy- Performance and Policies*, Academic Foundation
7. Misra and Puri (2012), *Indian Economy*, Himalaya Publication, New Delhi.

Paper – IV
PUBLIC ECONOMICS

Unit-I

Introduction to Public Economics: The nature, scope and significance of public economics; public goods, private goods and merit goods; models of efficient allocation of public goods, free riding; The Principle of Maximum Social Advantage; Externalities- the problem and its solutions; Market failure.

Unit-II

Public Expenditure and Public Revenue: Public expenditure- Meaning and classification; Canons and effects of public expenditure; Wagner's law of increasing state activities; Wiseman-Peacock hypothesis; Structure and growth of public expenditure; Public expenditure in India – its pattern and growth. Public Revenue: Taxation– classification of taxes and canons; the benefit and ability to pay approaches; impact and incidence of taxes; Taxable capacity; effects of taxation; recent tax reforms – VAT & GST.

Unit-III

Fiscal Policy and Fiscal Federalism: Objectives of fiscal policy; interdependence of fiscal and monetary policies; budgetary deficit and its implications; Balanced Budget Multiplier; Fiscal federalism in India; Finance Commission (latest); Devolution of resources and grants.

Unit-IV

Public Debt and Budget: Sources of public borrowing; effects of public debt; methods of debt redemption; growth of India's public debt; Budget: kinds of budget, economic and functional classification of budget, preparation and passing of budget in India.

Suggested Readings:

1. Atkinson, A. B. and J.E. Stiglitz (1980), *Lectures on Public Economics*, Tata McGraw Hill, New York.
2. Auerbach, A. J. and M. Feldstein (eds.) (1985), *Handbook of Public Economics*, Vol. 1, North Holland, Amsterdam.
3. *Buiter, Willem H. (1990), Principles of Budgetary and Financial Policy*, The MIT Press.
4. Ghosh, A. and G. Chandana (2008), *Economics of the Public Sector*, Prentice Hall of India Pvt. Ltd., New Delhi.
5. Government of India, *Economic Survey (Annual)*, New Delhi.
6. Hyman, D.N. (2007), *Public Finance: A Contemporary Application of Theory to Policy*, Thomson Asia.
7. Jha, R. (1998), *Modern Public Economics*, Routledge, London.
8. Lipsey, R. and A. Chrystal (2011), *Economics*, Oxford University Press, New York.
9. Mishra, B. (2006), *Fiscal Policy in North-East India*, Akansha Publishing House, New Delhi.
10. Musgrave, Richard A. (1959), *The Theory of Public Finance*, Tata McGraw Hill, New York.
11. Purohit, Mahesh (2001), *Value Added Tax*, Gayatri Publications.
12. Srivastav, D.K. (ed.) (2000), *Fiscal Federalism in India*, Har Anand Publications Ltd., New Delhi.

13. Stiglitz, J.E. (1986), *Economic of Public Sector*, Norton, New York.

14. Ulbrich, H. (2004), *Public Finance in Theory and Practice*, Thomson Asia Pvt. Ltd., Singapore.

Paper – V
MATHEMATICS FOR ECONOMISTS

Unit-I

Basic Concepts: Sets, Variables, Functions, Equations, Identities, Systems of Simultaneous Linear Equations, Homogenous functions, The Straight line and its slope.

Unit-II

Matrix and Determinants: Types of Matrices, Rules of addition and multiplication; Determinants: Definition and properties; Solution of linear equations: Matrix Inversion Method and Cramer's Rule. Concept of Linear Programming- Solution by Graphic Method.

Unit-III

Differential Calculus: Concepts of Limit and Continuity; Rules of Differentiation, Partial and Total Differentiation; Maxima and Minima (one variable); Elasticity; Equilibrium of a firm and consumer; Inter-relationships among total, marginal and average costs and revenues.

Unit-IV

Integration: Concept, Rules of Integration, Methods of Integration, Integration by parts; Definite Integrals; Consumer's and Producer's surplus.

Suggested Readings:

1. Allen, R.G.D (1980), *Mathematical Analysis for Economists*, Macmillan Press, London.
2. Black, J. and J.F. Bradley (1973), *Essential Mathematics for Economists*, John Wiley and Sons.
3. Chiang, A.C. (2005), *Fundamental Methods for Mathematical Economics*, McGraw Hill, New Delhi.
4. Hoy, Livernois, Mckenna, Rees and Stengos (2004), *Mathematics for Economics*, Prentice Hall, New Delhi.
5. Mehta, B.C. and G.M.K. Madnani (1992), *Mathematics for Economists*, S. Chand, New Delhi.
6. Taro, Yamane (1999), *Mathematics for Economists: An Elementary Survey (2e)*, Prentice Hall of India, New Delhi.

Paper – VI
INTERNATIONAL ECONOMICS

Unit-I

Introduction, Basic tools and Trade theories: Nature and significance of international economics, production possibility curves, community indifference curves, offer curves, box diagrams, the law of absolute advantage, the law of comparative advantage, the Heckscher – Ohlin trade model, factor reversal and leontief paradox.

Unit-II

Terms of trade and Gains from trade: Concepts of terms of trade, factors affecting terms of trade, theory of reciprocal demand, gains from exchange and gains from specialization, gains from trade and income distribution, the theory of immiserising growth.

Unit-III

Tariffs and Quotas: Types of tariffs and quotas, effects of tariffs under partial equilibrium and optimum tariff, effects of import quotas, Tariff-quota controversy and less developed countries with reference to India, non-tariff barriers to trade.

Unit-IV

Balance of Payments and Foreign Exchange: Problems, adjustment process, absorption approach, foreign trade multiplier, spot and forward rates of exchange, purchasing power parity theory, current account convertibility of the rupees, move towards capital account convertibility; Functions of IMF, World Bank and W.T.O., India and W.T.O.

Suggested Readings:

1. Bhagwati. J. (ED) (1981), *International Trade*, Selected Readings, Cambridge University Press, Mass.
2. Carbaugh, R.J. (2004), *International Economics* (9e), Thomson South Western, Singapore.
3. Joshi, V. and I.M.D. Little (1998), *India's Economic Reforms*, Oxford University Press, Delhi.
4. Kindleberger, C.P. (1973), *International Economics*, R.D. Irwin, Homewood.
5. Mannur, H.G. (1997), *International Economics*, Vikas Publishing House, Pvt. Ltd.
6. Panchamukhi, V.R. (1978), *Trade Policies of India: A Quantitative Analysis*, Concept Publishing Company, New Delhi.
7. Salvatore, D.L. (1997), *International Economics*, Prentice Hall, Upper Saddle River, N.J.
8. Singh, M. (1994), *Indian Export Trends and Prospects for Self-sustained Growth*, Oxford University Press, Oxford.
9. Sodersten, Bo (1991), *International Economics*, Macmillan Press Ltd., London.

**Paper – VII
STATISTICS**

Unit-I

Central Tendency and Dispersion: Measures of Central Tendency: Mean, Median, Mode, Geometric Mean and Harmonic Mean. Measures of dispersion: Range, Mean Deviation, Standard Deviation, Coefficient of Variation, Quartile deviation, Lorenz Curve, Skewness and Kurtosis.

Unit-II

Correlation and Regression: Correlation: Scattered diagram; Coefficients of correlation: Karl Pearson and Rank Correlation; Simple Linear Regression: Least Squares method, Interpretation of regression coefficients (two variables only).

Unit-III

Time Series and Index Numbers: Time series analysis: Concept and Components: determination of regular trend; Index numbers: Concept, price relative, quantity relative, value relative; Laspeyer's, Paasche's and Fisher's indices; Problems in the construction and limitations of index numbers; Tests for ideal index number.

Unit-IV

Probability and Sampling: Probability: Concept, Rules of Probability (Addition and Multiplication); Random variables, Mathematical expectations, Theoretical distributions: Binomial, Poisson and Normal-their properties and uses. Sampling: Simple, Random, Stratified, Systematic and Cluster Sampling; Sampling Distribution: Distribution of sample mean and variance- t-distribution; Test of Hypothesis; Types of hypothesis, Types of errors, Application of t-test.

Suggested Readings:

1. Croxton, F.E., D.J. Cowden and S. Klein (1988), *Applied General Statistics*, Pitman.
2. Goon, A.M., M.K. Gupta and B. Dasgupta (2005), *Fundamentals of Statistics, Vol. I & II*, The World Press Ltd., Kolkata.
3. Gupta, S.C. and V.K. Kapoor (1993), *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi.
4. Kendall, M.G. and Stuart, Alan (1994), *The Advanced Theory of Statistics, Vol. I, II, III*, Griffin (latest edition).
5. Medhi, J. (2006), *Statistical Methods: An Introductory Text (2e)*, New Age International, New Delhi.
6. Nagar, A.L. and R.K. Das (1997), *Basic Statistics (2e)*, Oxford University Press, New Delhi.
7. Speigal, M.R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book, London.

Paper – VIII
DEVELOPMENT AND ENVIRONMENTAL ECONOMICS

Unit-1

Concepts and Measurement: Economic growth and Economic development, Factors affecting economic growth; Measurement of development: Per capita income, Physical Quality of Life Index; Human Development Index; Gender related Development Index, Population and Economic development; Theory of Demographic transition.

Unit-II

Theories of Economic Development and Economic Growth: Classical theory of development, Karl Marx's theory of Social change; Neo-Classical growth models: Harrod and Domar; Solow; Theory of Unlimited supply of labour, Balanced and Unbalanced growth; Duality - Technical, Behavioral and Social.

Unit-III

Types of Planning - Democratic, Decentralized, and Indicative planning; Micro-level planning, Review of Indian Plan models: Mahalanobis' Two-sector and Four- sector models; The Choice of techniques, Technical progress of Hicks and Harrod; Appropriate technology and employment; Investment Criteria: Need for an investment criterion in LDCs; Alternative investment criteria; Cost-Benefit analysis.

Unit-IV

Environment and Ecology: Environment and Ecology linkage; Environment as a necessity and luxury; Population, Poverty and Environment linkage; Environmental use and Environmental disruption as an allocation problem; Market failure for environmental goods; Environment as a public good; The Common's problem; The Property right approach to Environmental problem. Pollution Control: Prevention, Control and Abatement of pollution; Sustainable development and its indicators.

Suggested Readings:

1. Chakravarti, S. (1987), *Development Planning: The Indian Experience*, Clarendon Press, Oxford.
2. Kolstad, C.D. (1999), *Environmental Economics*, Oxford University Press, New Delhi.
3. Pearce, D.W. and R. Turner (1991), *Economics of Natural Resource Use and Environment*, John Hopkins Press, Baltimore.
4. Pearce, D.W. and R. Turner (1991), *Economics of Natural Resource Use and Environment*, John Hopkins Press, Baltimore.
5. Ray, Debraj (2001), *Development Economics*, Oxford University Press, New Delhi.
6. Shankar, U. (ed.) (2001), *Environmental Economics*, OUP, New Delhi.
7. Sodersten, Bo (2003), *International Economics*, Macmillan Press Ltd., London.
8. Thirwall, A.P. (1999), *Growth and Development* (6e), Mcmillan, U.K.
9. Tietenberg, T. (1994), *Environmental Economics and Policy*, Harper Collins, New York.
10. Todaro, M.P. (1996), *Economic Development* (6e), Longman, London.
11. UNDP, Human Development Reports for various years.