



Central University of Bihar

School of Education

BA. BEd. (Four Years Integrated Programmes)

Economics Syllabus

List of Courses

Course Code	Course Title	Credits
Semester -I		
ECO 101	<i>Basic Principles of Economics</i>	4
Semester - II		
ECO 151	<i>Microeconomics</i>	4
Semester –III		
ECO 201	<i>Macroeconomics</i>	4
Semester –IV		
ECO 251	<i>Indian Economy: Problems and Prospects</i>	4
Semester V		
ECO 301	<i>Elements of Statistics for Economic Analysis</i>	3
ECO 302	<i>Elements of Mathematics for Economic Analysis</i>	3
Semester VI		
ECO 351	<i>International Trade and Balance of Payments</i>	3
ECO 352	<i>Growth and Development</i>	3
Semester VII		
ECO 401	<i>Public Finance</i>	3
ECO 402	<i>Money, Financial Institutions and Markets</i>	3
Semester VIII		
(Any two electives from the following)		
ECO 451	<i>Environmental Economics</i>	3
ECO 452	<i>Basic Econometrics</i>	3
ECO 453	<i>Financial Economics</i>	3
ECO 454	<i>Human Development</i>	3

ECO 101: Basic Principles of Economics

Unit I

The subject matter of economics:

Why study Economics? Scope and Method of Economics; The Economic Problem: Scarcity and Choice; the question of What to Produce, How to Produce and How to Distribute Output; Science of Economics; Economic System: Capitalism, socialism and mixed economy; Problem of resource allocation.

Basic elements of Supply and Demand:

Demand and Supply Schedule, Equilibrium of Supply and Demand, Elasticity and Applications - Price Elasticity of Demand and Supply, Application to Major Economic Issues

Demand and Consumer Behaviour: Utility and Consumers' Purchasing Decisions, Substitution and Income Effect, Consumer Surplus, Introduction to Indifference Curve Analysis.

Unit II

Production and Cost:

Production Principles and Productivity Measurement, The nature of the firm; Costs of Production and Cost Relationships: Economic Analysis of Costs, Link between Production and Costs, Economic Costs, Opportunity Costs; Price and output determination under different market situations: Pure competition, monopoly and monopolistic competition, oligopoly

Unit III

The Measurement and Interpretation of Macroeconomic Activity:

Concept of Macroeconomics; Distinction between micro and macroeconomics; GDP; Unemployment; Inflation and Growth Rates.

Indicators of Macroeconomic Performance: Standard of Living, Productivity Growth Rate, Investment and Saving Rates, Economic Cycles.

Aggregate Demand and Supply; Fiscal Policy; Balance of Payments

Money, Financial Markets, Interest Rate Determination, Central Banking and Monetary Policy

Readings:

N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007

Samuelson, Paul A and Nordhaus, : *Economics*, 18th Edition, Tata McGraw Hill Publishing Company Limited, New Delhi.

ECO 151 : Microeconomics

Unit I

Theory of Consumer Behaviour:

Cardinal utility; law of diminishing marginal utility; derivation of the Marshallian demand curve and its elasticity implications. Ordinal utility – axioms; indifference curves, budget constraint and consumer's equilibrium; comparative static: price – consumption curve, income-consumption curve and Engel's curve; demand elasticities and classification of commodities: normal, inferior and Giffen goods; substitution and income-effects and law of demand; compensating and equivalent variation.

Unit II

Production and Cost:

Technology, Isoquants, production with one and more variable inputs, Returns to scale, short run and long run costs, cost curves in the short run and long run

Unit III

Market Structure:

Review of perfect competition and monopoly; Pricing with market power; price discrimination, peakload pricing, two-part tariff; monopolistic competition and oligopoly.

Unit IV

Theory of Distribution and Factor Prices:

Concept and measurement, Net economic welfare, distribution of national income, marginal productivity theory of distribution, theories of rent, wages, interest and profit.

Readings:

C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.

Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010.

Koutsoyiannis, A, *Modern Microeconomics*, Second Edition, 1979

Pindyck, Rubinfeld and Mehta: *Microeconomics*, Pearson Education Asia, 2009

ECO 201: Macroeconomics

Unit I

National Income Accounting:

GDP, GNP, NDP, NNP and NI; Circular flow of income; Measurement of National Income – problems encountered; CPI, WPI and GDP deflator; National Income as a measure of welfare; Environmental Concerns in National Income Accounting – Green Accounting.

Unit II

Classical Macroeconomics:

Say's law – saving and investment, Quantity theory of money, Labour market, Determination of income, employment, wage and interest rate, Dichotomy between real sector and monetary sector ; neutrality of money

Unit III

Simple Keynesian Model:

Keynesian consumption function, Equilibrium in the commodity market, Stability of equilibrium, Multiplier, Paradox of thrift

Determination of Income and Interest Rate:

Commodity market equilibrium and IS curve. Money market equilibrium and LM curve, Simultaneous equilibrium in commodity and money markets – determination of income and interest rate, Comparative Statics - Monetary policies and fiscal policies

Unit IV

Consumption Function:

Empirical findings regarding Consumption Function – Alternative Theories regarding its behaviour – Keynes, Smithies, Duesenberry, Friedman, Ando-Modigliani.

The Investment Function:

The Keynesian analysis of Investment – The Marginal Efficiency of Investment, and its relation with the amount of Investment – Shortcomings of Keynesian analysis Net Present Value criterion and Marginal Efficiency criterion of Investment, The Fixed Accelerator Principle of Investment – its Implications and Limitations.

Unit V

Introduction to Post Keynesian Developments: Monetarism; New-Classical and New-Keynesians

Readings:

Dornbusch, Fischer *Macroeconomics*, McGraw Hill, 6th edition

Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.

Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.

N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.

Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.

Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

ECO 251: Indian Economy: Problems and Prospects

Unit I

Nature and Structure of Indian Economy:

Growth and composition. Sectoral development of the Indian Economy and their interrelationship. Utilization of resource - human and natural. Problems of population and population policy of India. Need, Objectives and strategy of planning in India. Poverty, unemployment, its nature and extent, Employment policy.

Unit II

Agriculture:

Trends in production and productivity, reforms, tenurial system, distribution of land, ceilings consolidation of holdings. Agricultural labour and wages, employment and under-employment. Financial and physical capital in agriculture. Problems of irrigation and supply of inputs. Organizational issues. Market cooperative farming, community development project, Agricultural and rural development programmes. Technology. Change in Agriculture strategy: Agricultural production strategy. Price policy in agriculture.

Unit III

Industry and Service Sector:

Growth and Structure of industry. Industrial Policies. Industrial finance, foreign capital and multinationals. Industrial labour – wages and wage regulation, social security, housing, industrial peace, Trade Union movement. Service Sector: Nature, Structure and Development.

Unit IV

Macroeconomic stabilisation:

Trade, Fiscal and Monetary policy issues

Unit V

India's development prospects - looking ahead

Readings:

Government of India Annual – Economic Survey

Mishra and Puri : Indian Economy

Reserve Bank of India: Annual Reports

Rudra Dutt & Sundaram – Indian Economy

ECO 301: Basic Statistics for Economic Analysis

Unit I

Data Presentation:

Statistical Data – classification and presentation – methods of collection of data – difference between variable and attributes – frequency distribution and its diagrammatic presentation – choice of class interval – diagrammatic representation of frequency distribution – frequency curve – cumulative frequency distribution (more than and less than) Ogive.

Unit II

Measures of Central Tendency:

Arithmetic mean, median and mode (for both grouped and ungrouped data) – comparison of mean, median and mode – geometric mean and harmonic mean (for both grouped and ungrouped data) – composite mean (average from combined data) – properties for all these measures.

Unit III

Measures of Dispersion:

Absolute measures – Range, mean deviation and Standard deviation and Quartile Deviation – Relative measures – curve of concentration.

Measurement of economic inequality:

Nature of distribution of income and wealth graduating from income distribution – Lorenz Curve representation of income distribution – Gini Coefficient and Lorenz Curve.

Moments and measures of skewness and Kurtosis:

Moments, skewness and kurtosis – definition – relationship between central and non-central moment – Sheppard's correction.

Unit III

Simple Correlation and Regression:

Scatter diagram – simple correlation coefficient and its properties, its calculation from grouped and ungrouped data, limitations of correlation coefficient. Simple regression analysis – properties of regression line – relationship between correlation coefficient and regression coefficient. Spearman's rank correlation coefficient (without tie) – Kendall's rank correlation coefficient.

Unit IV

Index Numbers:

Purpose and uses of index number, problems of construction, different formulae for price and quantity index numbers, tests for index numbers, chain index, and cost of living index.

Unit V

Time Series:

Nature and decomposition of time series – analysis of trend—polynomial trend – exponential trend – non-linear growth curves – moving average method – seasonal component

Unit VI

Introduction to Probability Theory:

Sample Space, Probability Space, Events, Classical Definition of Probability, Laws of Probability, Unconditional and Conditional Probability, Baye's theorem, Mathematical Expectation.

Readings:

Gupta and Kapoor – Fundamental of Mathematical Statistics.

Goon, Gupta and Dasgupta – Basic Statistics

Nagar & Das: Basic Statistics

S P Gupta: Statistical Methods

ECO 302: Basic Mathematics for Economic Analysis**Unit I****Set, Relation and Function:**

Types of Set, Set operations, Ordered pairs, Cartesian products of sets. Relations. Functions: one-to-one and onto functions, composite functions, the inverse function. Limit of a function, Limit Theorems, Continuity of a function. The real numbers: natural numbers, integers, rational and irrational numbers; absolute value and intervals; inequalities.

Unit II**Determinants and Matrices:**

Concept of scalar, vector, matrices and determinants. Matrix operations: Addition, Subtraction, Multiplication, Inversion of matrices (2x2 model only), Technique of solving simultaneous equation by Cramer's rule.

Unit III**Differentiation:**

Rate of Change and Derivative, Economic Interpretation of Derivative, Basic Rules of Differentiation with Single Explanatory Variable, Rules of Differentiation involving two or more functions of the same explanatory variable, Rules of differentiation Involving Functions of Different Variables. Second and Higher Order Derivative. Economic Application of Derivative. Partial and Total Differentiation, Total Derivatives, Derivatives of Implicit Function. Economic Application of Partial and Total Differentiation.

Unit IV**Integration:**

Concept of Integration as a reverse process of differentiation – Rules of Integration – Techniques of definite integral. Application of Integration in Economics.

Readings:

Allen, R. G. D. (1959) Mathematical Economics, Second edition, Macmillan

Chiang, A: Fundamental Methods of Mathematical Economics, Third Edition

Chiang & Wainwright: Fundamental Methods of Mathematical economics, McGraw Hill

Schaum Series : Mathematics for Economics

Srinath Barua: Mathematical Economics, Macmillan

Sydsaeter, Knut; Peter Hammond, and Arne Strom (2012) Essential Mathematics for Economic Analysis 4th Edition. Pearson Education.

Yamane, Taro: Mathematics for Economists

ECO 351: International Trade and Balance of Payments

Unit I

Trade Theories:

Importance of International Economics – Distinction between inter-regional and International trade – trade and economic development – basis of trade ; Absolute Advantage, Comparative Advantage and opportunity cost – Heckscher p Oflin Theory of Trade; Features, assumptions and limitation. Foreign Trade in India - Recent changes in the Composition and direction of Foreign trade. trade Reforms: Features and Orientation – Export Formation: Policy Initiatives – WTO and India.

Unit II

Gains from Trade:

Gains from trade – Measurement and distribution- Concepts of terms of Trade and their Importance – Doctrine of Reciprocal demand; Impoortance and Limitations

Unit III

Trade Restrictions:

Case for Protection – Tariffs and Quotas – Importance and effects: Effects of Tariff in a Partial Equilibrium Situation – Concept of Optimum Tariff – Effective Rate of Protection.

Unit IV

Balance of Payments:

Concept – Different types of Deficits -The mechanism of adjustment under fixed exch. Rates – automatic adjustment under Gold Standard- expenditure reducing and Expenditure switching policies – devaluation, the elasticity and absorption approaches – direct controls- mechanism of adjustment under flexible exchange rate and uncertainty, speculation and the stability of exchange rate and inflation- costs and benefits of flexible exchange rates. Causes and effects of deficit in balance of Payments – Measures adopted to correct the deficit since 1991.

Readings:

Kennen, P: International Economics

Salvatore: International Economics (A Schaum Series introduction to International trade theory.

ECO 352: Growth and Development

Unit I

Economic Growth and Economic Development:

The Difference between economic growth and economic development, Measuring economic development, Sen's contributions, Characteristics of Low Developed Countries, Obstacles to underdevelopment – Vicious circle of poverty

Unit II

Theories of Economic Growth and Development:

Classical growth models – Contributions of Adam Smith – David Ricardo- Karl Marx – Joseph Schumpeter – Neo-Classical Growth models – Solow and Meade – Harrod – Domar – Growth model and its relevance to LDC – Partial Theories of Economic growth-Lewis's labour surplus model –Rosentein Rodan's Big- Push Theory-Balanced and Unbalanced growth strategies –Dualism in LDC's Critical Minimum effort Thesis-Mahalanobis Model.

Unit III

Factors in Economic Development:

Labour : Population growth and economic development-the optimum theory of population – The theory of demographic transitions. Capital; Role of Capital – Development of Capital formation – Capital output ratio –incremental capital output ratio – Technical Progress: Technology and development – Capital and labour saving technologies – Appropriate technology- Human Resource Development – Human Capital formation – Manpower Planning.

Unit IV

Role of Agriculture, Industry and Trade in Economic Development.

Readings:

Debraj Ray: Development Economics, (OUP)

Thirlwall A P: Growth and Development

Charles I. Jones, Introduction to Economic Growth

ECO 401: Public Finance

Unit I

Introduction to instruments and objective of Public Finance:

Public goods and private goods; The bases of public finance; Externalities; Public Economics and Public Finance; Provisioning of Public Goods and Public Finance

Unit II

Public Expenditure and Taxation:

Public expenditure: Causes and effects; Trends in Public Expenditure: Growth of Public Expenditure in India; Taxation: Meaning and significance; Classification of taxes Division of Tax burden; Impact and incidence of taxes; Effects of Taxation, Taxable capacity, Benefits and Ability to Pay Approaches, Characteristics of a good tax system, Major trends in tax revenue of the central and state governments in India, Government Spending and Taxation as tools of fiscal policy, Fiscal federalism in India.

Unit III

Public Debt and Financial Administration:

Sources of Public borrowing; Effects of Public Debt; Methods of Debt Redemption; Growth of Indians Public Debt; Budget - Kinds of Budget, Economic and Functional Classification of the budget, Preparation and Passing of budget in India

Readings:

Economic Survey, Government of India (Latest)

Jha, R: Modern Public Economics

Musgrave, R.A. and P B Musgrave: Public Finance in Theory and Practice

Musgrave: Theory of Public finance

Report of the 13th Finance Commission, 2010-15

State Finances: A Study of Budgets, Reserve Bank of India (Latest).

ECO 402: Money, Financial Institutions and Markets

Unit I

Money:

Concept, functions, measurement; theories of money supply determination.

Unit II

Financial Institutions, Markets, and Instruments:

Role of financial markets and institutions; Money market and Capital Markets; Financial Instruments: REPO, TBs, Equities, Bonds, Derivatives, etc.; Characteristics of Financial Instruments: Liquidity, Maturity, Safety and Yield.

Problem of asymmetric information – adverse selection and moral hazard; financial crises.

Unit III

Interest Rates:

Understanding Interest Rates; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India

Unit III

Commercial and the Central Bank:

Nature and function of Central Bank and the money supply; Role of commercial banks; Central Bank and money market – Techniques of management- bank rate policy, open market operations and variable reserve ratio and selective instruments of credit control

Unit IV

Non-Banking Financial Intermediaries (NBFIs):

Distinction between commercial banks and NBFIs- validity of the distinction-Central bank's control over the NBFIs

Readings:

Bhole: Indian Financial System

Bhole and J. Mahukud: Financial Institutions and Markets

F. S. Mishkin and S. G. Eakins: Financial Markets and Institutions

Reserve Bank of India Report on Trend and Progress of Banking in India, (various years), Mumbai.

Reserve Bank of India, Report on Currency and Finance (Annual) Mumbai.

S.B. Gupta: Monetary Economics-Institutions, Theory and Policy

ECO 451: Environmental Economics

UNIT I

Economy and environment: Interlinkages:

An introduction to Environmental economics-Definition, scope and importance-Economic activities and their correspondence with nature- laws of thermodynamics governing the inter relationships- entropy law and Economics.

UNIT II

Market and environment:

Market failures for environmental assets- incomplete market- lack of property rights- Coase theorem- externalities etc. - role of non-market institutions and government for efficient allocation of resources

UNIT III

Natural resources:

Biotic and abiotic - stock and flow of resources- carrying capacity –maximum sustainable yield – development threshold- trade-off between harvesting of resources and economic growth

UNIT IV

Eco-system:

Concept, structure and functions - ecological succession
Bio-diversity and its conservation - sustainable development

UNIT V

Climate change and economic growth:

Definition – Role of IPCC (Intergovernmental Panel on Climate Change)- Factors responsible for climate change- Development implications for developing countries vis-à-vis developed countries-steps taken to counter rising trend of climate change

Readings:

Bhattacharya, Rabindra N, 2001, Environmental Economics An Indian Perspective (ed), Oxford University Press.

Erach Bharucha, 2005, Textbook of Environmental Studies, University Grant Commission, University Press, New Delhi

Pretty, Jules and others, 2007, Environment and Society (ed) Sage Publications, New Delhi.

J. Shogren and Ben White Hanley, Nick, 1997 Environmental Economics, Theory and Practice, Macmillan India Ltd. Chennai.

Benton, T, 1998, Sustainable Development and Accumulation of Capital: Reconciling the irreconcilable? In Dobson, A (ed) Farness and Futurity, Oxford, Oxford University Press.

Shiva, Vandana (1996), Ecological, Economic and Political Costs of the Green Revolution, Delhi, INTACH.

Herman E. Daly and Joshua Farley, Ecological Economics, Principles and Applications, Island Press, New Delhi

Magdoff Fred, 2011, "Ecological Civilisation" Analytical Monthly Review

ECO 452: Basic Econometrics

Unit I

Review of Statistics:

Descriptive statistics: (a) the univariate case, (b) the bivariate case; Random Variables and Probability distributions; Estimation of parameters; Testing of hypotheses.

Unit II

Classical Linear Regression Model:

Two Variable Case - Descriptive Aspects; Properties of Least Squares estimates; tests of hypotheses and confidence intervals; Gauss - Markov Theorem; Forecasting

Unit III

Classical Multiple Linear Regression Model:

Descriptive Aspects : Least Squares Estimation ; R^2 and Adjusted R^2 ; Partial Correlations. The Classical Model : Gauss - Markov Theorem ; Standard Error of Estimate; Standard errors of regression coefficients; Tests of Hypotheses : Single Parameters ; Sets of Parameters, Forecasting

Unit IV

Violations of Classical Assumptions:

Multicollinearity, Heteroscedasticity, Auto-correlation

Readings:

D. Gujarati, *Essentials of Econometrics*, McGraw Hill, 1999

Dougherty Christopher, *Introduction to Econometrics*, (4th Edition). Oxford University Press, 2011

Nagar A.L. & Das R.K, *Basic Statistics*, OUP, 1976

ECO 453: Financial Economics

Unit I

Introduction:

Nature, scope and objectives of financial management; Time value of money and mathematics of Finance. Concept of Risk and return.

Unit II

Investment and Financing Decision:

Financial instruments and financial structure; Capital budgeting process: Estimation of Relevant cash flows, Non-discounted and discounted cash flow techniques – Pay back, ARR, NPV, IRR and Profitability index. Cost of Capital and Financing Decision: Estimation of components of cost of capital; Equity capital and external & internal retained earnings, Debt and Preference Capital, Weighted average cost of capital (WACC) and marginal cost of capital. Capital structure theories - NI, NOI, traditional approach and MM approach. Factors determining capital structure.

Unit III

Overview of Asset Pricing Models:

Portfolio theory, capital asset pricing model, arbitrage pricing theory; efficient market hypothesis-basic concept.

Unit IV

History of Capital Market in India; Major Reforms in Primary and Secondary Market.

Readings:

Brealey, Myers, Allen and Mohanty, Principles of Corporate Finance, 8th Edition, Tata McGraw-Hill

L.M. Bhole, Indian Financial Systems and Markets, Tata McGraw Hill

M.Y. Khan, and P. K. Jain, Indian Financial System, Tata McGraw Hill

Prasanna Chandra, Financial Management-Theory and Practice, Tata McGraw Hill.

ECO 454: Human Development

Unit I

Human Development and Socio-Economic Change:

Conceptual Understanding of Human Development, Role in Socio-Economic Change, Genesis of the evolution of the concept, Relevance to both developing and developed countries.

Unit II

Indicators and Measurement of Human Development:

Importance of Health and Education - Education and Health as Joint Investments for Development – Human Capital Approach; Other indicators of Human Development; Human Development Index (HDI): Methodological underpinnings and how they have influenced HDI overtime

Unit III

Gender issues in Human Development:

Gender-Related Development Index (GDI), Gender Empowerment Measure (GEM) and their limitations – moving towards Gender, Institutions and Development (GID) - Social Institutions and Gender Index (SIGI).

Unit IV

Human development and Millennium Development Goals; Comparative Performance of India in Human Development vis-à-vis rest of the world.

Readings:

Fukuda-Parr and Shiva Kumar: *The Handbook on Human Development* (Oxford University Press)

Fukuda-Parr and Shiva Kumar: *Readings in Human Development* (Oxford University Press)

‘Technical Notes’ in *Human Development Report*, (any recent years)

UNDP, *Human Development Report* (Annual Publications), OUP.