UNITISATION OF SYLLABUS (CBCS)
ECONOMICS HONOURS

1st Semester

Code	Name of the paper	Teachers	Methodology
HC 1016	Introductory Microeconomics		
	Unit 3: The Households The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects; labour supply and savings decision - choice between leisure and consumption.	Kulen Ch Das	Lecture, notes
	Unit 1: Exploring the subject matter in 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; the basic competitive model; prices, property rights and profits; incentives and information; rationing; opportunity sets; economic systems; reading and working with graphs. **Unit 6**: Input markets Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input	Leena Bora Hazari	Lecture, notes

	demand curves; competitive labour markets; and labour markets and public policy.		
	Unit 2: Supply and Demand Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets. **Unit 4:** The firm & Perfect market structure Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run. **Unit 5**: Imperfect market structure Monopoly and anti-trust policy; government policies towards competition; imperfect competition.	Deepak Sarma	Lecture, notes, field work
HC 1026	Mathematical Methods for Economics I: Unit 1: Preliminaries Sets and set operations, relations and functions, number system Unit 2: Functions of one real variable Elementary types of functions: quadratic, polynomial, power, exponential, logarithmic, convex, quasi-convex and concave functions, limit and continuity of functions Unit 3: Differential calculus Differentiation of a function, Basic rules of differentiation, partial and total differentiation, second and higher order derivatives for single variable, economic applications of	Binod Goswami	Lecture, notes, assignment

differentiation
Unit 4: Single variable optimization
Local and global optima: geometric characterization, characterization using calculus: tests for maximization and minimization, applications: profit maximization, cost minimization, revenue maximization
Unit 5: Integration of functions
Meaning and significance of integration, basic rules of integration, significance of a constant after integration, applications: derivations of total functions (total cost, total revenue, consumption and saving functions) from marginal functions, consumer's surplus and producer's surplus, problems relating to investment and capital formation

2nd Semester

Code	Name of the paper	Teachers	Methodology
HC 2016	Introductory Macroeconomics		
	Unit 1: Introduction to Macroeconomics and National Income Accounting Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy; balance of payments: current and capital accounts.	Kulen Ch Das	Lecture, notes, test
	Unit 2: Money Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy. **Unit 3**: Inflation Inflation and its social costs;	Leena Bora Hazari	Lecture, notes, test

	hyperinflation.		
	Unit 4: Closed economy in the Short Run Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary multipliers.	Deepak Sarma	Lecture, notes
HC 2026	Mathematical Methods for Economics II Unit 1: Linear algebra Matrix: various types of matrices, vector and vector space-concept, matrix operations: addition, subtraction and multiplication; rank, norm and trace of a matrix, introduction to the concept of determinants and their properties, non-singularity of matrix, matrix inversion, solutions of simultaneous equations by using matrix inversion and Cramer's rule, simple market model and national income model Unit 2: Functions of several real variables Homogeneous and homothetic functions: concepts, Differentiable functions: concepts, Implicit Function Theorem and applications Unit 3: Multi-variable optimization Unconstrained optimization: geometric characterization, characterization using calculus and applications: price discrimination and multi-plant firm; constrained optimization with equality constraints, Lagrange multiplier, applications: consumer's equilibrium and producer's equilibrium Unit 4: Differential equations Meaning, first order differential equation, application to market model Unit 5: Difference equation	Bindo Goswami	Lecture, notes, test, field work

	First order difference equation, Cob-Web market model		

3rd Semester

Code	Name of the paper	Teachers	Methodology
HC 3016	Intermediate Microeconomics		
	Unit 1: Consumer Theory Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and inter-temporal choice; revealed preference.	Kulen Ch Das	Lecture, notes
	Unit 2: Production, Costs and Perfect competition. 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; review of perfect competition.	Deepak Sarma	Lecture, notes
HC 3026	Intermediate Macroeconomics		
	Unit 1: Aggregate demand and aggregate supply curves. Derivation of aggregate demand and aggregate and supply curves; interaction of aggregate demand and supply.	Leena Bora Hazari	Lecture, notes, powerpoint,
	Unit 2: Inflation, unemployment and expectations. Phillips curve; adaptive and rational expectations; policy ineffectiveness debate.	Kulen Ch Das	Lecture, notes
	Unit 3: Open economic models Short-run open economy models; Mundell-Fleming model; exchange rate determination; purchasing power parity; asset market approach; Dornbusch's overshooting model; monetary approach to balance of payments; international financial markets.	Deepak Sarma	Lecture, notes

HC 3036	**Statistical Methods for Economics**	Binod Goswami	Lecture, notes, powerpoint
	Unit 1: Introduction and overview The distinction between populations and samples and between population parameters and sample statistics; the use of measures of location and variation to describe and summarize data; moments – basic concepts and types. Unit 2: Elementary Probability Theory Sample spaces and events; probability axioms and properties; addition and multiplication theorem of probability, counting techniques; conditional probability and Bayes' rule; independence of events. Unit 3: Random variable and probability distribution Defining random variables; probability distributions; expected values of random variables and of functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, poisson and normal random variables). Unit 4: Random sampling and jointly distributed random variables Density and distribution functions for jointly distributed random variables- basic concepts; covariance and correlation coefficients. Unit 5. Sampling Principal steps in a sample survey; methods of sampling; Sampling techniques- random, stratified random, multi-stage random and systematic random sampling; the role of sampling theory;		

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	properties of random samples.		
HC 3014	**SEC: Data Collection and Presentation**		
	Unit 1: Use of data Use of data in social sciences; types and sources of data; data collection methods. Population census versus sample surveys. Random sampling. **Unit 2:** Questionnaire and Schedules Meaning; how to prepare a questionnaire and interview schedule; use of questionnaire and interview schedule for data collection.	Leena Bora Hazari	Lecture, notes
	Unit 3: Presentation of data Data presentation in tabular formats; use of diagrams for data presentation; creating charts and diagrams in MS-Excel – bar, line, pie, scatter, radar, bubble diagrams, population pyramids.	Kulen Ch Das	Lecture, notes

4th Semester

Code	Name of the paper	Teachers	Methodology
HC 4016	Intermediate Microeconomics II Unit 1: General equilibrium, efficiency and welfare Exchange Economy, Consumption Allocation and Pareto Optimality; Edgeworth Box and Contract Curve; Equilibrium and Efficiency under Pure Exchange. b) Pareto Efficiency with production: Concepts of PPF, Social Indifference Curves and Resource Allocation. c) Perfect Competition, Pareto Efficiency and Market Failure (Externalities and Public Goods), Property Right and Coase Theorem. Unit 2: Market structure and game	Deepak Sarma	Lecture, notes, powerpoint

	theory Monopoly, Pricing with Market Power; Degree of Monopoly, Price Discrimination- Different Degrees; Multi-plant Monopoly, Peak-Load Pricing. b) Monopolistic competition; Product Differentiation; Perceived and Proportionate Demand Curves; Price-Output Determination. c) Oligopoly and Game Theory (Two Person Zero Sum Game, Basic ideas and examples of non zero sum games, Prisoner's Dilemma), Applications of Game Theory in Oligopolistic Markets (Cournot Equilibrium, Bertrand Equilibrium, Stackleberg Equilibrium). Unit 3: Markets with asymmetric information Information Asymmetry, Adverse Selection, Moral Hazard, Signaling and Screening.			
HC 4026	Intermediate Macroeconomics II Unit 1: Economic Growth Harrod-Domar model; Solow model; golden rule; technological progress and elements of endogenousgrowth. Unit 2: Microeconomic foundations Consumption: Keynesian consumption function; Fisher's theory of optimal intertemporal choice; life-cycle and permanent income hypotheses; rational expectations and random-walk of consumption expenditure. b. Investment: determinants of business fixed investment; residential investment and inventory investment. c. Demand for money. Unit 3: Fiscal and monetary policy Active or passive; monetary policy	Kulen Ch Das	Lecture, notes, field work	

	objectives and targets; rules versus discretion: time consistency; the government budget constraint; government debt and Ricardian equivalence. Unit 4: Schools of macroeconomic thought. Classicals; Keynesians; New-Classicals and New-Keynesians.		
HC 4036	Introductory Econometrics Unit 1: Statistical Background Normal distribution; chi-sq, t- and F-distributions; estimation of parameters; properties of estimators; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples. Unit 2: Simple linear regression model: two variable case Estimation of model by method of ordinary least squares; properties of estimators; Gauss-Markov theorem; goodness of fit; tests of hypotheses; scaling and units of measurement; confidence intervals; forecasting. Unit 3: Multiple linear regression model Estimation of parameters; properties of OLS estimators; goodness of fit - R^2 and adjusted R^2 ; partial regression coefficients; testing hypotheses – individual and joint; functional forms of regression	Binod Goswami	Lecture, notes, powerpoint

Code	Name of the paper	Teachers	Methodology
	models; qualitative (dummy) independent variables. Unit 4: Violations of classical assumptions: Concequences, detection and remedies Multicollinearity; heteroscedasticity; serial correlation. Unit 5: Specification analysis Omission of a relevant variable; inclusion of irrelevant variable; tests of specification errors.		
SEC 4014	Data Analysis Unit 1: Data entry Unit 2: Univariate frequency distribution Unit 3: Bivariate frequency distribution Unit 4: Estimation of population parameters from sample data.	Leena Bora Hazari	Lecture, notes, field work

5th Semester

Code	Name of the paper	Teachers	Methodology
HC 5016	Indian Economy I Unit 1: Economic development Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment. Unit 2: Population and human development Demographic trends and issues; education; health and malnutrition. Unit 3: Growth and distribution Trends and policies in poverty; inequality and unemployment. Unit 4: International comparison With China, Pakistan, Banglade3sh, Sri Lanka, Nepal and Vietnam	Deepak Sarma	Lecture, notes

HC 5026	Development Economics I Unit 1: Conceptions of development Alternative measures of development, documenting the international variation in these measures, comparing development trajectories across nations and within them. Unit 2: Growth models and empirics The Harrod-Domar model, the Solow model and its variants, endogenous growth models and evidence on the determinants of growth. Unit 3: Poverty and inequality: Definitions, measures and mechanisms Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes. Unit 4: Political institutions and the functioning of the state. The determinants of democracy; alternative institutional trajectories and their relationship with economic performance; within-country differences in the functioning of state institutions; state ownership and regulation; government failures and corruption.	Kulen Ch Das	Lecture, notes, videos
DSE HE 5026	Money & Financial Markets Unit 1: Money Concept, functions of money; concept of money supply and its measurement; money multiplier theory, RBI's approach to money supply. Unit 2: Financial institutions, markets, instruments and financial	Leena Bora Hazari	Lecture, notes, assignment

	innovations Meaning and types of financial institutions, nature and role of financial institutions; financial markets: definitions and types-money market and capital market, their characteristics and functions, call money market, treasury bill market, commercial bill market including commercial paper and certificates of deposits, government securities market, primary and secondary market for securities, financial sector reforms in India, financial derivatives – meaning, types ,distinctive features of financial derivatives and its benefits. Unit 3: Interest rates Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India. Unit 4: Banking system Meaning and types; Functions of Commercial banks, process of credit creation and its limitations, Balance sheet of Commercial banks, portfolio management-meaning and objective of portfolio management, theories of portfolio management; banking sector reforms in India. Unit 5: Central banking and monetary policy Functions of central bank; monetary policy-objectives, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.		
DSE HE 5036	Public Finance Unit 1: Theory 1. Normative Theory of Public Finance –Nature and Scope: Allocation Function, Distribution Function and Stabilization Function.	Binod Goswami	Lecture, notes, field work

	Coordinating the functions.		
	2. Public Goods and their characteristics. Free Rider Problem and Market Failure, Externalities vis-à-vis Public Good.		
	3. Direct and Indirect Tax. Concepts of taxation: tax rate, buoyancy & elasticity of a tax. Proportional, Progressive and Regressive Taxation. Benefit Principle and Ability to Pay Theory. Unit 2: Issues from Indian public finance 4. Fiscal Policies: Definition and Objectives. Instruments of Fiscal Policy.Adopting Monetary		
	24 Policy to complement Fiscal Policy: The Indian Experience. 5. Indian Tax System. Direct Taxes: Income Tax, Corporate Tax, Customs Duty etc. Reforms in the Indirect Tax Structure: Goods and Service Tax. 6. Structure of the Public Budget. Types of Deficits and their significance: Revenue Deficit, Fiscal Deficit and Primary Deficit 7. Fiscal Federalism in India: Principles of Fiscal Devolution, Horizontal and Vertical Fiscal Balance. Federal Finance and the Finance Commission. 8. State and Local Finances. The State Subjects and its Budget. Fiscal decentralization: Role of Municipalities and Gaon Panchayats.		

6th Semester

Code	Name of the paper	Teachers	Methodology
HC 6016	Indian Economy II Unit 1: Macroeconomic policies and their impacts	Leena Bora Hazari	Lecture, notes, test,

	Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation. Unit 2: Policies and performances in agriculture Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement. Unit 3: Policies and performances in Industry Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment. Unit 4: Trends and performance in services.		
HC 6026	Development Economics II Unit 1: Demography and development Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation;migration. Unit 2: Land, labour and credit markets The distribution of land ownership; land reform and its effects on productivity; contractual relationships between tenants and landlords; land acquisition; nutrition and labor productivity; informational problems and credit contracts; microfinance; inter-linkages between rural	Binod Goswami	Lecture, notes, field work

	factormarkets. Unit 3: Individuals, communities and collective outcomes Individual behavior in social environments, multiple social equilibria; governance in organizations and in communities; individual responses to organizational inefficiency. Unit 4: Environment and sustainable development Defining sustainability for renewable resources; a brief history of environmental change; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change. Unit 5: Globalisation Globalization in historical perspective; the economics and politics of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world.		
DSE HE 6016	Environmental Economics Unit 1: Introduction Unit 2: The theory of externalities Unit 3: The design and implementation of environment policy Unit 4: International environmental problems Unit 5: Measuring the benefits of environmental improvements. Unit 6: Sustainable development.	Kulen Ch Das	Lecture, notes, videos
DSE HE 6026	International Economics Unit 1: Introduction Basic concepts: Environment, Ecology, Economy and the ecosystem. Definition and scope of environmental economics, why study environmental economics.Interaction between	Deepak Sarma	Lecture, notes, assignment

	the environment and the economy, environmental economics and ecological economics, environmental economics and resource economics.Review of microeconomics and welfare economics: the utility function, social choice mechanism, the compensation Principle and social welfare function (concepts only). Unit 2: Theories of international trade Pareto optimality or Pareto efficiency, Externalities: meaning and types of externality, market failure: meaning, market failure in the presence of externalities; market failure and public goods, is environment a public good? Property rights and the coase theorem. Unit 3: Trade policy Environmental Policies: an overview; Nonmarket and market based instruments of Environmental Policy: command and control (CAC) approach, economic instruments like pigovian taxes and effluent fees, tradable permits and mixed instruments. Monitoring and Enforcement: What is monitoring and enforcement? Penalties, cost of abatement. Damages from pollution. Incentives to sources to comply with environmental regulations. Unit 4: International macroeconomic policy Nature of environmental		

	problems: transboundary pollution –Climate change, global warming, ozone depletion and bio-diversity loss; Trade and environment: pollution haven hypothesis. Unit 5 Measuring the Benefits of Environmental Improvements Non-Market values: use and non-use values and optional value, measurement methods: Direct method-contingent valuation and indirect method-hedonic pricing methods, value of statistical life; their applications and limitations. Unit 6 Sustainable Development Conventional development model: a critique, Alternative approach: Sustainable Development and its origin, objectives of Sustainable Development, Approaches to Sustainable Development: weak sustainability, strong sustainability, Safe minimum standard approach, ecological perspective and social perspective, Rules and indicators of Sustainable Development.		