CENTRE FOR STUDIES IN ECONOMICS AND PLANNING SYLLABUS FOR M.A.

Course code	Nature of Course	Course Title	No .of L/T	Credits
M.A. Semester I				
ECO401	Core compulsory	Microeconomics I	4+1	4
ECO402	Core compulsory	Macroeconomics I	4+1	4
ECO 403	Core compulsory	Statistical methods for economics	4+1	4
ECO 421-424	Core elective	Any one paper to be selected by the student from group A	4+1	4
ECO 441	Core	Field work & report writing	2	2
M.A. Semester II				
ECO 451	Core compulsory	Microeconomics II	4+1	4
ECO 452	Core compulsory	Macroeconomics II	4+1	4
ECO 453	Core compulsory	Mathematics For Economics	4+1	4
ECO 471-474	Core elective	Any one paper to be selected by the student from group B	4+1	4
ECO 491	Core compulsory	Field work & report writing	2	2
M.A. Semester III				
ECO 501	Core compulsory	Development Economics I	4+1	4
ECO 502	Core compulsory	Econometrics I	4+1	4
ECO 503	Core	Public Economics	4+1	4

Subject code		Title of the paper	Hours	Total credit
	compulsory			
ECO 521-524	Core elective	Any one paper to be selected by the student from group C	4+1	4
ECO 541	Core compulsory	Field work & report writing	2	2
M.A. Semester IV				
EC0551	Core compulsory	Development Economics II	4+1	4
ECO552	Core compulsory	Econometrics II	4+1	4
ECO553	Core compulsory	International Economics	4+1	4
ECO 571-575	Core elective	Any one paper to be selected by the student from group D	4+1	4
ECO 591	Core compulsory	Field work & report writing	2	2

Subject code	Title of the paper	Total credit
Group A		
ECO 421	Indian economy	4
ECO 422	Political economy of development	4
ECO 423	Economics of Social Sector	4
ECO 424	FDI And Development In India	4
Group B		
ECO 471	Economics of Agriculture	4
ECO 472	Industrial Economics	4
ECO 473	Economics Of Insurance	4
ECO 474	Economics of infrastructure	4
Group C		
ECO 521	Data analysis and computer applications in economics	4
ECO 522	Behavioural Economics	4

ECO 523	Experimental Economics	4	
ECO 524	Gender Economics	4	
Group D			
ECO 571	Economics of Health		4
ECO 572	Labour Economics		4
ECO 573	Financial Economics		4
ECO 574	Institutional Economics		4

MA. SEMESTER I

ECO 401   MICROECONOMICS   I

Objective

The objective of this course is to provide students an in-depth knowledge of theoretical concepts and tools dealing with the economic behaviour of individual economic agents and market structure. It familiarizes them with various theories dealing with demand, production, price and output determination and also alternative theories of the firm.

Unit I Theory of Consumer Choice

Consumer preference and utility function; Utility maximization problem; Walrasian/ Marshallian demand function and its properties; Indirect utility function and its properties; Expenditure minimization problem; Duality; Hicksian demand functions and expenditure function; Slutsky equation; Relationship between the Walrasian and Hicksian demand functions;

Choice and Revealed Preferences; Weak and strong axiom of revealed preference and the law of demand

Welfare Evaluation: Equivalent variation and compensating variation; Consumer's surplus.

Unit II Producer Theory and Costs

Technology and Optimal Production: Production sets and technology; Production function and its properties: Cobb-Douglas, constant elasticity of substitution, and variable elasticity of substitution production function; Returns to scale, technical progress; Processes/activities, isoquants and its different forms; Conditions for optimal production.

Profit maximisation: Profit function; factor demand function; supply function; Hotelling's lemma; profits and producer surplus

Duality and theory of cost: Cost minimisation and cost functions; derivation of cost function from production function; Shepard's lemma; Returns to scale and cost functions; Short run and long run cost functions; conditional factor demand functions.

Unit III Market Structure and Firm Behaviour

Perfect competition: Market characteristics; Equilibrium conditions; Short- and long-run considerations; Efficiency and welfare.

Monopoly: Market characteristics; Reasons for existence of monopoly; Natural monopoly; Equilibrium conditions; price discrimination; Welfare considerations.

Monopolistic competition: Market characteristics; Chamberlin's Approach for equilibrium of the firm and the group; Excess capacity considerations

Oligopoly: Market characteristics; Non-Collusive Models: Cournot Nash equilibrium, Bertrand equilibrium, Stackelberg behaviour- quantity leadership and price leadership models, Kinked demand curve model; Collusive oligopoly models.

Unit IV Economic Choice under Uncertainty and Asymmetric Information

Uncertainty: Expected value criterion; The St. Petersburg Paradox; Expected Utility Hypothesis and solution to the St. Petersburg Game; Expected utility function for risk aversion and risk loving; Certainty Equivalent

Asymmetric information: Market for lemons; Principal-agent problem; Adverse selection; Moral hazard.

Reading List

Andreu Mas-Colell, A., M. D. Whinston, and J. R. Green (1995), Microeconomic Theory, Oxford University Press.

Baumol, W. J. (1982), Economic Theory and Operations Analysis, Prentice Hall of India.

Henderson, J.E. and R.E. Quandt (1988), Microeconomic Theory - A Mathematical Approach, McGraw Hill.

Koutsoyiannis, A. (1979), Modern Micro Economics, Macmillan Press, London.

Kreps, D. M. (l990), A Course in Microeconomic Theory, Princeton University Press.

Muñoz-Garcia, F. (2017), Advanced Microeconomic Theory: An Intuitive Approach with Examples, The MIT Press.

Pindyck, R. S. and D. L. Rubenfeld, (2001), Micro Economics, New Delhi: Prentice Hall of India.

Reny, P. J. and G. A. Jehle (2011), Advanced Microeconomic Theory, 3rd ed., Addison Wesley.

Schotter, A. R. (2000), Microeconomics: A Modern Approach, Pearson.

Sen, A. (1999), Microeconomics; Theory and Applications, New Delhi: Oxford University Press.

Varian, H. (1992), Micro Economic Analysis, New York: W. W. Norton & Company, Inc.

Watson, D. S., M. A. Holman and M. Getz (1993), Price Theory and Its Uses, 5th Revised ed., University Press of America.

ECO 402   MACROECONOMICS-I

UNIT I National Income and its Measurement

Circular Flow of Income and expenditure in two, three, and four-sector economy. National Income Accounting, Concepts of GDP, GNP, GDP Gap, GDP Deflator and national income, Rules and Methods of Measurement of GDP (Income, expenditure and Out Put method), Classical and Keynesian Theories of Output and Employment

Unit II Theories of Consumption and Investment Spending

Consumption Function; Short run and Long run Consumption Function – Absolute Income, Relative Income, Permanent Income and Life Cycle Hypotheses. Factors influencing consumption expenditure- Rate of interest, Price level and expectation, distribution of income and financial assets. The Marginal Efficiency of Capital Approach, Theories of Investment- Profit and accelerator theories; Investment spending, the rate of interest and the role of finance. Influence of policy measures on investment.

Unit III Supply of and Demand for Money

Demand for Money, Post-Keynesian approaches to demand for Money - Patinkin and the Real Balance Effect; Approaches of Baumol and Tobin; Friedman and the modern quantity theory. Money supply; RBI approach to money supply; High powered money and money multiplier; budget deficits and money supply; Money supply and open economy; control of money supply.

Unit IV Neo-classical, Keynes and IS-LM approach

Neo-classical and Keynesian views on interest; The IS-LM model; Extension of IS-LM model, shift in ISLM; IS-LM model with government sector; Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices- Keynes & Pigou effects; crowding out hypothesis.

Basic Readings

Barro and Sala-i-Martin (2004), Macroeconomics , McGraw Hills

Brian Snowdon and Howard R. Vane, A Macroeconomics Reader. Routledge

N Gregory Mankiw(2016), "Macroeconomics", 9th Edition, Worth Publishers, New York

Rosalind Levacic and Alexander Rebman(1982), "Macroeconomics", McMillan

Rudiger D., Stanley F. and Richard S. (2010), Macroeconomics",2010, McGraw Hills

Additional Readings

Andrew Abel and Ben Bernanke "Macroeconomics", (2003) Pearson, Indian Ed

Brian Snowdon and Howard R. Vane.(2009), Modern Macroeconomics Its Origins, Development and Current State. Edward Elgar Publishing, Inc.

David Romer (2006), "Advanced Macroeconomics", McGraw-Hill

Richard T. Froyen(2003), "Macroeconomics", Pearson Indian Ed

ECO 403   STATISTICAL METHODS FOR ECONOMICS

Objective

The basic objective of this course is to provide students the basic understanding and knowledge of statistical tools that are used in the rational decision making in the field of applied economics.

Unit I Presentation and Descriptive Analysis of Data and Probability Theory

Classification and sources of data; Presentation: Graphs, Tabulation and Frequency distributions; Central tendency, dispersion, skewness, kurtosis, and moments.

Classical definition of probability; Axiomatic probability: sample space and event, axioms and laws of probability, conditional probability and independence; Random variables; Discrete and continuous probability distributions, Expectation, Cumulative distribution function and probability density function; Continuous probability distributions - Normal distribution, Law of large numbers, Central Limit Theorem; Discrete probability distributions-Binomial distribution, Poisson distribution, Geometric distribution, Negative binomial distribution.

Unit II Sampling Theory

Census and sample; Parameters and estimators; Properties of estimators; Systematic and sampling errors; Probability and non-probability sampling techniques; Meaning of sampling distribution: z, t, F, Chi-square (χ^2) statistic; Point and interval estimates of parameters.

Unit III Tests of Hypothesis and Correlation and Regression Analysis

Formulation of Statistical Hypotheses; Type I and Type II errors, Power of a test; Tests based on z, t, F and χ^2 statistic, Goodness-of-fit test, contingency tables and test for independence; Analysis of variance.

Simple and partial correlations; Rank Correlation; correlation and covariance; Linear regression - OLS estimation of relationship between variables.

Unit IV Index Numbers

Concept of an index number; Problems in the construction of index numbers; Laspeyres', Pasche's and Fischer's Ideal Index Numbers; Wholesale Price Index Numbers and Cost of Living Index Numbers.

Reading List

David P Doane and Lori E. Seward (2008), Applied Statistics in Business and Economics, 2nd edition, McGraw-Hill/Irwin.

Gupta S.P. (latest), Statistical Methods, New Delhi: Sultan Chand & Sons.

Gupta, S. C. (1982), Fundamentals of Statistics, Bombay: Himalaya Publishing House.

Gupta, S. C. and V K Kapoor (latest), Fundamentals of Mathematical Statistics, Sultan Chand & Sons.

James T. McClave, P. George Benson and Terry Sincich (latest), Statistics for Business and Economics, Prentice Hall.

John E. Floyd (2010), Statistics for Economists: A Beginning, University of Torontom Unpublished manuscript, available at: http://www.economics.utoronto.ca/jfloyd/stats/ecstats.pdf

Nagar, A. L. and R. K. Das (1985), Basic Statistics, New Delhi: Oxford University Press.

ECO 421   Indian Economy

Objective

The basic objective of this course is to understand theory in context of Indian economy. The subject also aims to let the student know the issues that Indian economy faces during its process of economic growth.

Unit I   Agriculture sector

Indian Agriculture in the pre-independence era-land system and its changes, land tenure system - and land reforms in the post-independence era, Green revolution and capital formation in agriculture, agricultural prices and PDS, impact of public expenditure on agricultural growth, trends in production and productivity of major food crops in India, sustainability of agriculture and flood security in India

Unit – II   industry sector

Industrial policy in the pre-reform period, role of private and public sectors, new industrial policy, and its impact, role of FDI and MNC's in industrial development

Unit – III Macro economic issues of Indian economy

The concept of external sector and BOP, trends in composition, volume and direction of foreign trade, new trade policy, exchange rate policy

Analysis of price, behaviour in India, financial sector reforms, interest rate policy, review of
monetary policy of RBI, money and capital markets, working of SEBI in India

Unit – IV   Globalisation and India

Rationale of internal and external reforms, globalization of Indian economy, WTO & its impact on different sectors of the economy, need for and issues in good governance

Reading List

Das Gurucharan(2015), India Unbound: from Independence to the Global Information age Paperback – 29 Sep 2015

Datt and Mahajan Ashwini (2016), Indian Economy , S. Chand, New Delhi.
Gupta K.R. (ed.), (2018)Studies in Indian Economy, Atlantic publishers

Misra, S.K & V.K. Puri (2018), Indian Economy, Himalaya Publishing House, New Delhi

Uma Kapila (2018), Indian Economy: Performance and Policies, 2018-19 19th edition

Uma Kapila (editor)(2018), Indian Economy Since Independence: A Comprehensive and Critical Analysis of India's Economy, 1947-2018, Academic Foundation

ECO 422   POLITICAL ECONOMY OF DEVELOPMENT IN INDIA

Objective

The objective of the paper is to analyse the parameters of political economy and the development of political thinking by leading economists. It will also focus on planning and policies in the contemporary economic scenario.

Unit I Fundamentals of Political Economy

Introduction: Meaning and definition of Political Economy, Methods of Political Economy.
Laissez faire and free market   Adam Smith
Government Intervention & Welfare   Keynes, Pigou, Piero Sraffa, Commodities and Capabilities: Amartya Sen

Unit II Growth and Redistribution

Marx   Surplus and Labour, Michal Kalecki; Growth as Redistribution, Fiscal Policy   Taxation & Revenue Generation, Distribution of revenue between the centre and states

Unit III Planning & Policies Pre- Reform India

Mixed Economy; Bombay Plan, Gandhian Model, Nehru Mahalanobis Model , Heavy Industrialisation in India. The Post-Independence Political Economy

Post-Reform   India   Neo-Liberal   Economic   Reforms,   Liberalisation

Privatisation Globalisation (LPG) Model. National Institution For Transforming India (NITI) Aayog, Make in India, Labour Policy and Social Security Parallel Economy, Black Money in India.

Unit IV Globalisation and India

Global India, Role of IMF and World Bank, Civil Society and NGO's

Reading list

Bardhan Pranab (1998), The Political Economy of Development in India, Delhi, OUP

Bhaduri Amit, (2015), A Model Of Development By Dispossession, Fourth Foundation

Byres Terence J. (ed.), (1998), The State, Development Planning and Liberalisation 'in India, Delhi, OUP
Frankel Francine R., (2004), India's Political Economy, Delhi. OUP
Jenkins Rob, 2000, Economic Reform in India, Cambridge, CUP

Joshi Vijaya and L.M.D. Little, (1998), India's Economic Reform 1991-2001, Delhi, OUP.

Mukharji Rahul (ed.)(2007), India's Economic Transition: The Politics of Reforms, edited by Rahul Mukherji, Oxford University Press , New Delhi.

Stuart and John Harris,(2000), Reinventing India, Cambridge Polity

Terry. J. Byres, (1999), 'The Indian Economy: Major Debates since Independence', Oxford University Press. (1999)

ECO 423   ECONOMICS OF SOCIAL SECTOR
Objective

With the growth in theoretical and practical importance of human capital formation, the social sector also has been gaining significance in economics. The objective of this subject is to acquaint the students with theoretical premises and empirical approaches to social sector.

Unit I Introduction to Economics of Education

Human capital— the concept, components of human capital; Human capital vs. Physical capital, Historical developments in the human capital theory; Human capital and human development; Public and private education; Cost of education— private costs and social costs; Education, employment and income; Education, poverty and income distribution.

Unit II Human Capital & labour market

Human Capital & the household, theories of human capital- classical and modern approaches, analysis of segmented labour market, on-the-job training- general & specific, financing of OJT
Approaches to educational planning; Economics of educational planning in developing countries with special reference to India; Educational planning and the problem of educated unemployment and brain drain; Role of financing in the development of education; Equity and efficiency effects of financing education in India.

Unit III Introduction to Economics of Health

The concept of health and health care; life expectancy and mortality rates, morbidity— Health as consumption and investment goods; Role of health in economic development; Comparison of education and health; Health as human capital; Determinants of health— Poverty and malnutrition; Economic dimensions of health care—Demand and supply of health Care.

Unit IV Financing and Institutional Issues in Health Care

Resource mobilization and utilization of health care in India; Pricing and subsidies to health sector; Equity and efficiency effects of health care financing; Health care and resource constraints; Inequalities in health and health care in India; Institutional issues in health care delivery; Implications of GATT for health sector and financing.

Reading list

Becker, G.S. (1974). Human Capital. 2nd edition, NBER, New York.

Blaug Mark, (1971), An introduction to Economics of Education, Penguin Publishers

Blaug Mark, (1974), Economics of Education, Vol. I and II, Penguin Publishers.

Folland, S., A.C. Goodman, and M. Stano (2001). The Economics of Health and Health Care. New Jersey: Prentice Hall.

Klarman, H.E. (1995). The Economics of Health. New York: Columbia University Press.

Panchamukhi, P.R. (1980). Economics of Health: A Trend Report. ICSSR Survey, New Delhi: Allied Publisher.

Phelps, Charles E. (2010). Health Economics. 4th edition, Prentice Hall.

Walker, Melanie, and Elaine U. (eds.) (2007). Amartya Sen's Capability Approach and Social Justice in Education. Macmillan.

William, Jack (2000). Principles of Health Economics for Developing Countries. WBI Development Studies.

World Bank (1993). The World Development Report 1993: Investing in Health. Oxford University Press.

ECO 424   FDI and Development in India

Objective

This course offers students the essential knowledge, theoretical and empirical, to understand India's development experience with FDI– inflows as well as outflows. What are the trends and patterns of FDI inflows to India and FDI outflows from it? Both M&As and greenfield foreign direct investments activities will be in focus and explore the risks and benefits for Indian economy.

UNIT I   Introduction: Definition and Measurement

Definition of Foreign Direct Investment; FDI vs. Foreign Portfolio Investment; FDI Stock and Flows; Quantity vs. Quality of FDI; Horizontal vs. Vertical FDI; Brownfield vs. Greenfield FDI. Classification of FDI by Motivations: Market-seeking FDI, Efficiency-seeking FDI, Resource-seeking FDI, Strategic asset-seeking FDI; Identifying a FDI Company Empirically: Equity based criterion and its limitation: Criterion Adopted by Indian Regulatory Bodies

and Researchers: Criterion Suggested by International Organization like IMF and OECD; Empirical Exercise: Based on actual data of a few companies, identify foreign firms and domestic firms operating in Indian markets.

UNIT II   Theories of FDI

Kojima-Ozawa Macroeconomic Theory (Kojima, 1973; Ozawa, 1979; Lee, 1984), Product Cycle Theory (Vernon, 1966), Investment Development Path model (Dunning, 1981; Dunning and Narula, 1996), Market Imperfection/Monopolistic Advantage Theory (Kindleberger, 1969; Hymer, 1970), Internalization Theory (Buckley and Casson 1976; Buckley, 1988), Eclectic Approach/ OLI Paradigm (Dunning, 1980, 1988), Stage theory of internationalization (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 2006)

UNIT III   FDI Policy Regime in India and FDI Flows

Policies and Trends: Inward FDI policy regime & Trends and Composition of FDI inflows (Rao et. al., 1999; Nagaraj, 2003; Satyanand and Raghavendran, 2011a), Outward FDI policy regime & Trends and Composition of FDI Outflows (Pradhan, 2008a b, 2009, 2011a; Narayanan and Bhat, 2009; Hansen, 2010; Sauvant and Pradhan, 2010; Satyanand and Raghavendran, 2011b); Review of Empirical Studies: Discussion of empirical studies using different FDI theories to explain Indian FDI position and those dealing with determinants of FDI inflows into India and FDI outflows from India: Explaining Indian FDI position through IDP Model (Hansen, 2010), Explaining FDI inflows into China and India at macro level (Wei, 2005), Explaining FDI outflows from India at macro level (Hattari and Rajan, 2010), Explaining Indian firms' decision to invest abroad and locational choice (Pradhan, 2004, 2011a)

UNIT IV Impact of FDI on Indian Economy

Macro Approaches: Direct contribution of foreign firms to GDP, capital formation, exports and R&D; impact of inward FDI on economic growth (Dua, and Aneesa, 1998; Pradhan, 2002a; Kumar and Pradhan, 2005; Chakraborty and Nunnenkamp, 2006; Das and Sharma, 2007); impact of inward FDI on domestic Investment (Kumar and Pradhan, 2005); impact of inward FDI on trade (Sharma, 2000; Das and Sharma, 2007); Impact of inward FDI on employment Patterns (Pradhan, 2006)

Micro Approaches: Comparison of the performance of foreign and domestic-owned firms in exports (Aggarwal, 2002; Pradhan and Sahu, 2008), productivity (Pradhan, 2002b; Kathuria, 2002, Sasidharan and Ramanatha,

2007; Iyer, 2009) and R&D intensity (Pradhan, 2002c; Kathuria, 2008; Pradhan, 2011b c); Impact of Outward FDI on domestic exports, employment and R&D (Pradhan, 2008b; Pradhan and Singh, 2009)

Reading list

Caves, R. E. (2007), Multinational Enterprise and Economic Analysis, 3rd Edition. Cambridge University Press.

Pradhan, J.P. (2008b), Indian Multinationals in the World Economy: Implications for Development, New Delhi: Bookwell Publisher.

Sauvant, K.P. and J.P. Pradhan, with A. Chatterjee and B. Harley (2010), (eds.) The Rise of Indian Multinationals: Perspectives on Indian Outward Foreign Direct Investment, New York: Palgrave Macmillan.

M.A. SEMESTER II

ECO 451   MICROECONOMICS- II

Objective

The basic objective of this course is to provide a comprehensive introduction to the theories of distribution, fundamentals of welfare economics, general equilibrium and alternative theories of the firm.

Unit I Theory of Distribution

Marginal productivity theory of pricing of factors of production; Product exhaustion theorem; Determination of rent, wages, interest and profit.

Unit II Welfare Economics

Welfare criterions; Pigouvian welfare economics; Pareto optimality conditions; Social welfare functions; Imperfections- market failure, decreasing costs, uncertainty, non-existent and incomplete markets; Theory

of second best; Arrow's impossibility theorem; Maximisation of social Welfare; Derivation of grand utility frontier; Determination of welfare maximizing state; Compensation Principle-Kaldor-Hicks-Scitovsky.

Unit III General Equilibrium

Walrasian General Equilibrium: A Pure Exchange Model - An aggregate Excess demand function- Walras Law- composite commodity theorem- existence of a general equilibrium- Mechanism for attaining Walrasian general equilibrium-Tatonnment process- Uniqueness and stability of General equilibrium –Perfect and imperfect stability.

Unit IV Alternative Theories of Firms

Average-cost pricing model; Bain's limit pricing model; Managerial theories of the firm: Baumol's theory of sales maximization, Morris's model of the managerial enterprise, Williamson's model of managerial discretion, Cyert and March's behavioural theory of the firm.

Reading List

Andreu Mas-Colell, A., M. D. Whinston, and J. R. Green (1995), Microeconomic Theory, Oxford University Press.

Broadway R.W. and N. Bruce (1984), Welfare Economics, London: Basil Blackwell.
Koutsoyiannis, A. (1979), Modern Micro Economics, London: Macmillan Press.

Mishan. E.J. (1969), Welfare Economics: An Assessment, Amsterdam: North-Holland.

Moore, J. C. (2007), General Equilibrium and Welfare Economics: An Introduction, Springer-Verlag Berlin Heidelberg.

Mukherjee, A.(1990), Walrasian and Non-Walrasian Equilibria, Oxford University Press.

Muñoz-Garcia, F. (2017), Advanced Microeconomic Theory: An Intuitive Approach with Examples, The MIT Press.

Qurk, J. and R. Saponnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, New York: McGraw Hill.

Varian, H. (1992), Micro Economic Analysis, New York: W. W. Norton & Company, Inc.

ECO 452   MACROECONOMICS- II

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Unit I Macroeconomics in an Open Economy

Mundell-Fleming model — Asset Markets, expectations and exchange rates; the new classical critique of micro foundations, the new classical approach; Policy Implications of new classical approach - empirical evidence

Unit II Aggregate Supply, Inflation and Unemployment

Models of Aggregate Supply, Classical, Keynesian and Monetarist and Structuralist approaches to inflation; Philips curve analysis (Short run and long run)-Natural rate of unemployment-expectation augmented Phillips curve-Nonaccelerating inflation rate of unemployment (NAIRU)- Tobin's modified Philips curve; Adaptive expectations and rational expectations hypothesis. Policies to control inflation.

Unit III Theories of Business Cycle and Macroeconomic Policies

Theories of Business Cycle-Introduction of Economic Fluctuations, Aggregate Demand and Aggregate Supply, Targeting monetary aggregates-Targeting interest rates-Inflation targeting-Budget deficits and money creation-The Barro-Ricardo equivalence theorem (The Ricardian equivalence)- Hyperinflation-Costs of inflation- The issue of Central bank autonomy-Rules vs discretion- The Taylor Rule-Time inconsistency of policy.

Unit IV Growth Theories

The Solow Swan Model, Framework and Assumptions of Theory of Endogenous Growth

Basic Readings

Barro and Sala-i-Martin (2004), Macroeconomics McGraw Hills

Brian Snowdon and Howard R. Vane, A Macroeconomics Reader. Routledge

N Gregory Mankiw(2016), "Macroeconomics", 9th Edition, Worth Publishers, New York

Rosalind Levacic and Alexander Rebman (1982),Macroeconomics, McMillan

Rudiger D., Stanley F. & Richard S. (2010), Macroeconomics", 2010, McGraw Hills

Additional Readings

Andrew Abel and Ben Bernanke "Macroeconomics", 2003, Pearson, Indian Ed
Richard T. Froyen "Macroeconomics", 2003, Pearson Indian Ed

Brian Snowdon and Howard R. Vane (2010), Modern Macroeconomics Its Origins, Development and Current State. Edward Elgar Publishing, Inc.

David Romer (2006), Advanced Macroeconomics, McGraw Hill

ECO 453   Mathematics for Economics

Objective

It intends to equip students with the knowledge and application of mathematical tools and techniques that are commonly used in the exposition and formulation of economic principles and theories.

UNIT I Introduction and Basic Concepts

Introduction and Use of Mathematics in Economics; Algebraic Expression: Monomial, Binomial, Trinomial, Multinomial and Polynomial; Concept and Rules of Exponents; Equation: Definition, Linear and Non-liner Equations (Quadratic, Polynomial and Rational) and their Graphs; Economic Application of Equation and Graphs: Budget Line, Supply and Demand Analysis, National Income Determination in a Two-Sector Economy, IS-LM

Analysis, etc.; Simultaneous Equations; Set Theory: Definition, Description, Special Sets of Real Numbers, Equality of Sets and Subsets; Intervals of Real Numbers: Closed, Open and Half-open Intervals; Set Operations: Set Union, Set Intersection, Set Difference, Set Complement, Cartesian Product; Real Number Line and Cartesian Coordinate Plane.

UNIT II   Relations, Functions, Limits and Continuity & Matrix and Determinant

Relations: Concept and Types; Concept of a Function; Types of functions: Linear and Non-linear Functions; Quadratic, Cubic, Exponential and Logarithmic Functions; Concept of limit of a variable; Left limit and right limit of a real valued function; Definition of limit of a real valued function; Continuity and discontinuity of functions; Applications in Economics: Total cost functions (fixed cost and variable cost); Average cost functions; interest (simple, compound); depreciation; etc.

Concept of Matrix; Types of Matrices; Matrix Operations: Addition, Subtraction and Multiplications; Row Operations; Matrix Inversion, Partitioned Matrix, Rank of a Matrix, Trace of a Matrix; Determinant of a Matrix; Minors and Cofactors; Principal Minors of a Matrix; Inverse Matrix: Gauss Elimination and Adjoint Matrices-Co-factor Methods; Solution to Simultaneous Equations: Crammer's Rule.

UNIT III   Differentiation

Comparative Statics and Concept of Derivative; Difference Quotient; Derivative and Slope of a Curve; Continuity and Differentiability of a Function; Basic Rules of Differentiation for Function(s) of Single Variable; Differentiation of Inverse and Implicit Function; Rules of Differentiation Involving Function(s) Different Variables: Partial Differentiation; Second and Higher Order Derivatives; Total Differentiation; Applications in Economics: Derivation of marginal functions (marginal cost, marginal revenue; marginal utility), etc.; Relationship between Marginal Revenue and Average Revenue; Marginal Cost and Average Cost; Increasing and Decreasing Functions; Curvature: Concavity and Convexity; Comparative Static Analysis of Market Equilibrium Model (Single Commodity) and National Income Determination in Three-Sector Model; etc.

UNIT IV Unconstrained and Equality Constrained Optimization & Integral Calculus

Optimization in Economics; Relative Vs. Absolute Extremum; First-Derivative Test for Relative Extremum; Second-Derivative Test for Relative Extremum; Necessary Vs. Sufficient Condition; N-th Derivative Test; Applications in Economics: Condition for Profit Maximization; Derivation of Minimum Average Cost from a given Total Cost; Maximization of Profit under Price Discrimination; Optimization Condition for Function with Two Choice Variables; Total Differential as a Quadratic Form: Positive and Negative Definites; Equality Constraint Optimization; Applications in Economics: Profit Maximization by a Multi-Product Firm; Price Discrimination by a Single-Product Firm; Utility Maximization; etc.

Definite integration: Definite integral as an Area under a Curve; Indefinite Integration: Indefinite Integral as an Anti-derivative, Basic Rules; Applications in Economics: Derivation of Total Function from Marginal Function (Total Cost, Revenue or Profit); Estimation of Consumer's Surplus and Producer's Surplus.

Reading List

Chiang, A.C. and K. Wainwright (2017), Fundamental Methods of Mathematical Economics, Fourth Edition, McGraw-Hill Higher Education.

Dadkhah, K.M. (2011), Foundation of Mathematical and Computational Economics, Second Edition, Springer.

Dowling, E. T. (2011), Introduction to Mathematical Economics, Third Edition, McGraw Hill.

Hoy, M., J. Livernois, C. Mckenna, R. Rees and T. Stengos (2011), Mathematics for Economics, MIT Press.

Knut, S. and P. J. Hammond (2002), Mathematics for Economic Analysis, Reprint of 1st 1995 Edition, Delhi: Pearson Educational India: Delhi.

ECO 471   Economics of Agriculture

Objective

India is predominantly an agriculture economy. The objective of this course is to provide a detailed treatment of theoretical and practical issues in agricultural economics. The objective is to familiarize students with policy

issues that are relevant to Indian agriculture and enable them to analyze the issues, using basic micro-economic concepts.

Unit 1 Agriculture and development

Role of agriculture in economic development; Interdependence between agriculture and industry; Features of pre capitalist and capitalist agriculture; Traditional agriculture and its modernization

Theories of agricultural development, Approaches of Schultz, Mellor and Boserup, Lewis, Fei-Ranis, Dale Jorgenson

Unit II   Demand and Supply factors in agriculture: A theoretical approach

Production relationships in agriculture – Laws of returns – Production functions – Factor-product, factor-factor and Product-product relationships – Cobb-Douglas production.
Factors determining Supply of and demand for farm products – Supply behaviour in agriculture. Features and problems of Agricultural marketing.

Unit III   Agricultural Price Policy
Marketing of agriculture produce: Marketing Efficiency, Marketing and pricing of agricultural inputs and outputs, price fluctuations and their cost, regulated Markets, Marketed and Marketable Surplus – Agricultural Prices in India: Objectives and Performance –Crop Insurance in Indian Agriculture – Food Security in India – Public Distribution System in India.

Unit IV   Agriculture: Finance Diversification and Sustainability

Rural Finance: Characteristics, Sources of Rural Credit – Role of NABARD in Agriculture Development – rural Cooperative Credit System – Sustainable Agriculture

White Revolution in India – Fishery, Poultry, Forestry, Horticulture and Floriculture – Rural Industrialization: Problems and Prospects – Agro-based industries in India – Crop Insurance: Advantages and Limitations in application – Green Revolution in India.

Suggested readings

Subba Reddy, Raghuram, Neelakanta Sastry and Bhavani Devi(1998), Agricultural Economics, Oxford & IBH, New Delhi.

Sadhu and Singh (2001), Fundamentals of Agricultural Economics, Himalaya Publishing House, Mumbai.

Singh, I.J.,(2002), Elements of Farm Management Economics, East-West Press Pvt. Ltd, New Delhi.

Acharya and Agarwal(2012), Agricultural Marketing in India, Oxford & IBH, New Delhi.

Gail L. Cramer, Clarence W Jensen, Douglas D .Southgate(2001), Agricultural Economics Wiley.

Darren Hudson(2006), Agricultural Markets and Prices, Blackwell Publishing

George W. Norton, Jeffrey Alwang, William A Masters(2006), The Economics of Agricultural Development, Routledge, an imprint of Taylor & Francis books Ltd.

John B Penson. Jr., Oral Capps Jr., C. Parr Rosson, Richard Woodward(2009), Introduction to Agricultural Economics, Prentice Hall.

Ronald A. Schrimper(2000), Economics of Agricultural Markets, Prentice Hall.

Douglas Southgate, Douglas H. Graham, Kuther Tweeten(2006), The World Food Economy, Blackwell Publishing.

Kym Anderson, Will Martin (Eds)(2010)., Agricultural Trade Reform and the Doha Development Agenda, World Bank.

ECO 472   Industrial Economics
Objective

In the contemporary world with globalization and liberalization more and more attention is being given to industry. The objective is to provide a thorough knowledge about the economics of industry in a clear and

analytical manner, particularly in the Indian context. This course intends to provide knowledge to the students on the basic issues such as productivity, efficiency, capacity utilization and debates involved in the industrial development.

Unit I Organizational Forms And Theories of Industrial Location

Types of organizational forms: process of Incorporation, commencement of business; Business motive- maximization, managerial motivation; Evaluation of goals.

Technology, production cost and demand, Optimum size of firm, Competitive equilibrium and welfare

General determinants of industrial location; advantages and disadvantages of localization; Decentralization of industries and its advantages; Approaches to industrial location analysis -Alfred Weber's theory; sergeant Florence's theory of industrial location, market area theory; industrial location trends in India.

Unit II Market structures and Industrial Efficiency

The Cournot model, Bertrand competition with homogeneous products. The Stackelberg equilibrium reinterpreted as subgame-perfect equilibrium Product differentiation and advertisement, Research & Development and Innovation; Market concentration, its measurement and effects on market Performance; Diversification, Integration and Merger.

Meaning of economic efficiency; measurement of efficiency level; optimum Firm; factors determining efficiency and firm size; limits and obstacles to the size of firm-a synthesis on the size of firm, efficiency and decision making process.

Industrial Productivity: Concept and measurement, Capacity utilization – concept and measurement; Changes in Industrial structure and economic development; MNC's and transfer of technology; Small Scale Industries; Public policy and industrialization; Privatization – concept, scope and relevance

Unit III Industrial Financing

Need for finance; types and sources of finance; choice of funding-external versus internal sources, role of financial institutions. Cost of capital to

industries; Capital structure decision; working capital financing; long term asset financing, Institutions for industrial finance, Venture capital financing,

Uncertainty in industrial organisation

Unit IV Research and Development, innovation and industry

Concept of R & D, R&D expenditure as an investment decision-Finance for R&D-Relationship between R&D inputs and outputs-market structure and the evaluation of R&D- the innovating firm-diffusion of new techniques

Reading list

Donald A Hay and D J Morris(1978), Industrial Economics theory and evidence.

K V Sivaya and V B M Da(2009) , Indian industrial economy, sultan chand.

I J Ahluwalia(1985), Industrial growth in India, oxford university press.

Singh, A and A.N. Sandhu (1988), Industrial Economics, Himalaya Publishing House, Bombay.

Martin, Stephen,(2001), Advanced Industrial Economics, Blackwell Publishing

Bains, J. S. (1996). Industrial Organization, Cheltenham, U.K. An Elgar Critical Writings Reader.

Barthwal, R. R. (2010). Industrial Economics: An Introductory Textbook. New Delhi: New Age International Publishers.

Hay, D. A and Morris, D. J. (1991). Industrial Economic: Theory and Evidence. Oxford University Press.

Lee, N., Jones, R. M., and Tyson, W. J. (1985). An Introduction to Industrial Economics. London: Allen and Unwin.

Marshall, A. (2003): Elements of Economics of Industry, Simon Publications, UK

Marshall, A. and Marshall, M. P. (2012): The Economics of Industry, Ulan Press, U

ECO 473   Economics of Insurance

Objective

In the recent times the insurance sector has been gaining significance. The objective of the subject is to make the students acquainted with the insurance sector.

Unit I   Economic analysis of Insurance

Economic security, Human quest for economic security through time: Definition of insurance; Risk polling and risk transfer; social Vs. private insurance; Life vs. Non-life insurance; Classification of life, health and general insurance policies.

Unit II   Risk and Risk Management

Fundamentals of uncertainty and risk; nature and source of risk, concept of risk, classification or risk-pure risk and speculative risk, demand for insurance, moral hazard and insurance demand, concept of risk management, Reinsurance, fundamentals of reinsurance, types of reinsurance;

Unit III   Insurance and Economic Development

Risk management and insurance in economic development, insurance institutions as financial intermediaries; Insurance institutions as investment institutions, insurance institutions in Indian capital market.

Unit IV Essentials of life and health insurance

Fundamentals of life and health insurance, functions of life and health insurance; mathematical basis of life insurance; Health Insurance and economic development-agriculture insurance and farmers' security

Reading list

Dionne, Georges (Ed.)(2013), Handbook of Insurance, Springer-Verlag New York

Dionne, Georges, Harrington, Scott E. (Eds.)(1992), Foundations of Insurance Economics, Readings in Economics and Finance, Springer Netherlands

Howard C Kunreuther (2013), Insurance and Behavioural Economics: Improving Decisions in the Most Misunderstood Industry, Cambridge University Press

K. Borch, Knut K. Aase And Agnar Sandmo(1990), Economics Of Insurance, North Holland, Bergen.

Zweifel, Peter, Eisen, Roland (2012), Insurance Economics, Springer-Verlag Berlin Heidelberg

ECO 474   ECONOMICS OF INFRASTRUCTURE

Objective
The main objective of this course is to familiarize the students with role of infrastructure in economic development and growth and key issues in financing, governance and inter-regional disparities. This paper also aims to exposit main categories of infrastructure, including physical and social with special reference to the Indian situation.

UNIT I   Role of Infrastructure in Economic Development

Infrastructure-Development Linkages; Infrastructure as Public Good – Issues in nonexcludability and non rivalrous consumption; Physical and Social Infrastructure; Nature of Public Utilities; The Peak-Load, Off-Load Problem; Issues in Privatisation of Infrastructure.

Governance and Regulation of Infrastructure

Infrastructure Policy and Regulation; Infrastructure Finance; Public-Private Partnership (PPP); Models and Examples in PPP; Regional Performance of Infrastructure; Question of Land

UNIT II Physical Infrastructure

Transportation Railways, Roadways, Airways and Waterways: Progress,

Pricing; Technological Advancement and Challenges. New policies/programmes related to each mode of transportation
Communication Tele-density, Mobile and Internet, Social Media; Growth of IT-ITES.

UNIT III   Economic Infrastructure

Energy, Electricity and Special Economic/Investment Zones Power Generation, Distribution and Pricing; Privatisation of Electricity; Coverage; Alternative (Renewable and Unconventional) Sources of Energy, including Nuclear, Solar and Wind Energy; Energy Conservation; Problems and Potential of SEZs, Export Processing Zones (EPZs) and Special Investment Region (SIR).
Banking and Financial Services Spread and Performance of Banking Services; Technology Interface of Financial Services; Financial Inclusion Initiatives.

UNIT IV Social Infrastructure

Health Services Medical Facilities; State and Provision of Health; Drinking Water and Sanitation; Centrally Sponsored Schemes in Health, Drinking Water and Sanitation; Issues in Privatisation of Health Services. Education Concept and Scope of Human Resource Development; Education and Economic Growth: Progress on Universalisation of Primary Education; Performance of Secondary, Technical, Professional and Higher Education; Right to Education and Discrimination.

Special Initiatives/Programmes in Rural and Urban Infrastructure Provision of Urban Amenities in Rural Areas (PURA); PMGSY; Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY); Reviving Water Harvesting Systems and Watershed; Swachh Bharat Mission (Rural and Urban); Smart City: Key Components, Performance and Challenges.

Reading List

Crew, M. A. and P. R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.

Das, K. (2010), 'Lopsided Infrastructure', in Alternative Survey Group (Ed.), Alternative Economic Survey, India: Two Decades of Neoliberalism, Daanish Books, Delhi,

Goel, M.M. (2011), Economics of Human Resource Management in India, VK Global Publications, New Delhi.

Government of India (2017), The India Infrastructure Report, Vols. I, II and III, NCAER and Government of India, New Delhi. (Chairman: Rakesh Mohan).

Morris, S. (2007), 'Infrastructure', in Kaushik Basu (Ed.), The Oxford Companion to Economics in India, Oxford University Press, New Delhi.

Panchamukhi, P.R. (1980), Economics of Health: A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.

Raghuram, G., R. Jain, S. Morris, P. Pangotra and S. Sinha (Eds.) (1999), Infrastructure Development and Financing: Public Private Partnership, Macmillan India Ltd, New Delhi.

Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi

ECO 501   DEVELOPMENT ECONOMICS I

Objective
Objective of this paper is to equip the learners with the theories of economic growth and development and making them aware about some critical issues.

Unit I Conceptual Issues and Measurement of development

Growth and Development- measurement-sources-per capita income-Basic Needs Capability Approach, Inclusive Growth Model- inequality of income- Human Development Index-

UNIT II Theories of development

Classical theory- Karl Marx and Capitalist Development- Entrepreneurship and Innovation-Functional Issues (Kuznets's inverted U-hypothesis), Inequality as constraint to growth (Kalecki). Balanced Growth, Unbalanced Growth (Hirschman-Prebisch Singer)**,** Stage Theory (Rostow Gershen Kron)

UNIT III Theories of Development and Underdevelopment

Low level equilibrium trap-Dualism (Lewis - Ranis – Fei), Dependency Theory of development-Myrdal's model of Circular and cumulative causation.

UNIT IV Critical Issues in Development

Poverty – Measurement & Identification issue, poverty and under-nutrition, Functional Effects Unemployment – Measurement, Types, alternative theories, linkage between unemployment and poverty.
Social Network as an institution- Social Capital, Globalisation and Climate Change
Informal Sector-Determinants of its size, linkage with rest of economy, Urbanisation and Rural – Urban migration – theories and empirical evidence, Rural – Urban linkages.
Social Network as an institution- Social Capital, Globalisation and Climate Change
Determinants of its size, linkage with rest of economy, Urbanisation and Rural – Urban migration – theories and empirical evidence, Rural – Urban linkages.

Reading list

Robert Barro and Xavier Sala-i-Martin (2003), Economic Growth, PHI, New Delhi

Todaro, Michael P. and Stephen C. Smith (2012)Economic Development, 11th Edition, Pearson India

Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics vol.3, Elsevier, Amsterdam.

Thirlwal, A.P.(1993), Growth and Development, Palgrave Macmillan.

Kindleberger, C.P.(1983), Economic Development, McGraw Hill,

Agrawal, A N and Singh S P (1982): Economics of Underdevelopment, Oxford University Press, 1958, London

ECO 502   Econometrics-I

Objective

The aim of this course is to endow students with the theoretical knowledge of basic econometrics tools that are generally used by social scientists and researchers in analyzing socio-economic phenomenon. Students get

familiarity with the simple and multiple regression models and learn the skills for formulating and developing econometric model for applications on real economic situations.

UNIT I Introduction to Econometrics

Definition and Scope of Econometrics; Classical Methodology of Econometrics: Theoretical Statement, Mathematical and Statistical Formulations, Data, Estimation, Testing of Hypothesis, Prediction and Policy Application; Concept of Population Regression, Sample Regression, Error term

UNIT II Simple Linear Regression Model

Concept of Regression; Estimation- Ordinary Least Square Method; Assumptions of OLS; Properties of OLS estimator: Gauss-Markov Theorem; Hypothesis Testing: Normality assumption for error term, t-test for individual regression coefficient; Analysis of Variance; Prediction: Mean and Individual Prediction

Extension to Multivariate Linear Regression Model Estimation, Assumptions and Properties; Analysis of Variance, R-squared; Hypothesis Testing: Individual and Overall Model Significance, t and F test.

UNIT III Heteroscedasticity

Heteroscedasticity: Meaning and Consequences for OLS estimator, Tests for heteroscedasticity, Remedial Measures.

Multicollinearity: Meaning and Consequences for OLS estimator, Tests for multicollinearity, Remedial Measures.

UNIT-IV: Autocorrelation: Meaning and Consequences for OLS estimator, Tests for autocorrelation, Remedial Measures.

Relaxing Other Assumptions of Classical Regression

Specification errors: Wrong Functional Form, Measurement Errors, Overfitting and Underfitting of the model; Non-normality

Reading List

Gujarati, D. N. and S Sangeetha (2007), Basic Econometrics, Fourth Edition, McGraw-Hill.

Johnston, J. and J. DiNardo (1996), Econometric Methods, Fourth Edition, McGraw-Hill.
Stewart, J. and L. Gill (1998), Econometrics, Second Edition, Prentice Hall.

Wooldridge, J.M., (2000), Introductory Econometrics: A Modern Approach, Southwestern College Publ.

ECO 503   Public Economics

Objective

The goal of the course is to make the students familiar with the theories that deals with the rationale, role and functions of government in an economy and the effects of its taxing, spending and borrowing activities on social welfare.

UNIT I The Economic Rationale for Government and Public Policy

Efficiency Arguments for Government Intervention: Market failure — Public Goods, Externalities, Imperfect Competition and Imperfect Information; Uncertainty and Non-existence of Futures Markets; Informational Asymmetry — Theory of Second Best; Cases of Failures in Insurance Markets Involving Adverse Selection and Moral Hazard and Capital Market Failures;

Arguments for Redistribution: Removing Distributional Inequalities: Vertical Equity, Horizontal Equity, Social Inclusion, Intergenerational Equity; Provision of Merit Goods; Improving Access to Basic Services Such as Health Care and Education; Social Goals of Poverty Alleviation and Removal of Regional Imbalances.

UNIT II Public Expenditure

Wagner's Law of Increasing State Activities; Wiesman-Peacock Hypothesis; Samuelson's Pure Theory of Public Expenditure, Meltzer and Richard's Median Voter Hypothesis; Baumol's Model of Unbalanced Growth; Brown and Jackson's Microeconomic Model; Criteria for Public Investment; Social

Cost-Benefit Analysis — Project Evaluation, Estimation of Costs, Shadow Pricing, Discount Rate.

UNIT III Taxation and Public Debt

Tax Incidence; Partial Equilibrium Incidence; Theory of Incidence: Allocative and Equity Aspects of Individual Taxes; Benefit and Ability to Pay Approaches (Models of Lindahl and Bowen), Deadweight Loss and Optimal Tax Theory, Types of Taxes, Characteristics of Good Tax System

Theories of Public Debt: Classical and Modern (Keynesian, Buchanan, Bowen-Devis-Kope)**,** Burden of Public Debt; Sources of Public Debt; Public Borrowings and Price Level; Crowding Out of Private Investment; Principles of Debt Management and Repayment.

UNIT IV Indian Public Finance

Budgeting; Indian tax system; Revenue of the Union, States and local bodies; Major taxes in India: base of taxes, direct and indirect taxes, taxation of agriculture, expenditure tax, reforms in direct and indirect taxes, taxes on services; Non-tax revenue of Centre, State and local bodies; Analysis of Central and State government budgets; Trends in public expenditure and public debt; Fiscal crisis and fiscal sector reforms in India.

Reading List

Atkinson A. (ed.) (1991), Modern Public Finance, Vol. I & II, Cambridge: Edward Elgar Publishing.

Auerbach, A. J. and M. Feldstein (ed.)(2010), Handbook of Public Economics, Vol. 2, Amsterdam: Elsevier.

Gruber, J. (2015), Public Finance and Public Policy, 5th Edition, Worth Publishers.

Jha, Raghbendra (1999), Modern Public Economics, London and New York: Routledge.

Laffont, J.J. (2009), Foundations of Public Economics, MIT Press.

Musgrave, R. A. and P. B. Musgrave (2017), Public Finance in Theory and Practice, 5th edition, New York: McGraw Hill Education.

Stiglitz, J. E. (1988), Public Sector Economics, W. W. Norton and Company.

Thompson, F. And M. T. Green (1998), Handbook of Public Finance, New York: Marcel Dekker.

ECO 521   Data Analysis And Computer Application for Economic Analysis

Objective

This course will equip the students with computer application in economics.

Unit I   Data Sources and data Extraction

The tools Sources of data –Familiarity with different data base such as: PROWESS, CMIE, National Sample Survey Organisation reports, Census data – National Health and Family Welfare reports.

Unit II   working with MS-Excel

Worksheet basics, creating worksheet, entering data into worksheet, data, text, dates, cell formatting values, saving & protecting worksheet. Working with single and multiple workbook – coping, renaming, moving, adding and deleting, coping entries and moving between workbooks, Working with formulas & cell referencing, Formatting of worksheet. Previewing & Printing worksheet, Graphs and charts, various charts type, formatting grid lines & legends, previewing & printing charts using Worksheet & MS Excel.

Unit III   Use of various functions in Economics

Data applications in Economics-Population census versus sample surveys, Frequency distribution and summary Statistics, use of Mathematical Functions, Financial functions, Statistical Functions, etc. in economics.

Unit IV Dealing with Data

Simple two variable regressions- correlation, Linear Regression- Getting regression output – Extensions to linear regression; Hypothesis Testing- A framework –Heteroscedasticity – Testing for Heteroscedasticity – Serial correlation-Multicollinearity problem - Dummy variable analysis

Reading list

Alexis Leon and Mathews Leon : Introduction to Computers with Ms-Office, TMH.

Ash Narayan Sah (2012): Data Analysis Using Microsoft, Excel Books, India. Asthana and Braj Bhushan : Statistics for Social Sciences (with SPSS applications), PHI

Box, G.E.P. and Jenkins, G.M. (1976), Time series Analysis, Forecasting and Control, Holden Day, San Francisco.

Dubey, Manoj (2013): P. C. Packages, Kamal Prakashan, Indore.

Hamilton. J. (1994), Time Series Analysis, Princeton University, Princeton.

Mansoor, A. I. T. (2014): Tools and Applications, Pragya Publications, Matura.

Rajaraman, V. (2014): Fundamental of Computer, Prentice Hall India Pvt. Limited, New Delhi.

ECO 522   BEHAVIOURAL ECONOMICS

Objective

This paper will enable the students to learn to incorporate descriptively accurate assumptions about cognitive ability, social interaction, moral motivation, and emotional responses into economic modelling and explore the implications of this for human behaviour and economic outcomes. The paper will help students of economics to generate theoretical insights, make more accurate predictions of field phenomena, and suggest welfare improving policies.

Unit 1 Introduction to Behavioural Economics

Behavioural Science Concepts - Affect heuristic- Anchoring- Decoy effect- Availability- Bounded rationality- Certainty/possibility effects- Choice architecture- Choice overload- Cognitive bias- Confirmation bias- Decision fatigue- Decision staging- Dunning-Kruger effect- Dictator game-, regret avoidance and mental accounting- Diversification bias- Dual-self model- Dual-system theory- Endowment effect-Framing effect-Gambler's fallacy- Halo effect-IKEA effect-Licensing effect-Mental accounting- Partitioning-

Peak-end rule-Possibility effect- Prospect theory- Regulatory focus theory-Risk-as a feeling- Trust game- Zero price effect

Unit II Behavioural Science in Practice

Behavioural Science In Practice- Principals, Agents, and Rational Choice-Prospect theory and the concept of loss aversion- applicability of the theory - Information Avoidance-Information avoidance in the information age-The social context of decisions-Evidenced-based management-Field experiments-The Psychology of Financial Decision-Making-Households, individuals, markets, and managers- Parsimony in behavioural economics

Unit III Behavioural Economics and Human Behaviour

How Behavioural Economics Is Shaping Our Live-new model of human behaviour- Integrating behavioural science with other complementary disciplines- global case studies- case of Hello Wallet and personalised financial management- case of RWE -confirmation bias and cultural problems--Behavioural Research to Understand the Barriers and Triggers to Using
Alternative Dispute Resolution- Google's People Analytics Team and Use of Behavioural Insights, Data Science and Quantitative Research to Improve Workplace Decision-Making and Wellbeing - Use of Behavioural Science to Reduce Perceived Barriers to Health

Unit IV Markets and Behavioural Approaches

Awareness and the willingness *as* Deciding Drivers of Behavioural Change - Social Norms and the Costs of Not Following Them- Psychological Costs and economic costs- Behavioural Change Matrix   as a methodology for compliance management   some case studies- behavioural science in financial decision making- decision making and Behavioural Factors- The ostrich effect

Behavioural   biases and   markets- Understanding consumer decision-making and using behavioural insights- Improving Consumer Outcomes-Use of Behavioural Insights in Policy Making

Reading List

Alain Samson (ed.) (2017), Behavioural Economics Guide, Behavioural Science Solutions Ltd

Wilkinson Nick and Matthias Klaes(2012), An Introduction to Behavioural Economics Palgrave McMillan

Cass Sunstein and Richard Thaler(2008), Nudge: Improving Decisions about Health, Wealth, and Happiness, Yale University Press New Haven & London

by Kahneman Daniel (2013), "Thinking, Fast and Slow". Farrar, Straus and Giroux; 1st edition

Robert B. Cialdini(2008), Influence: The Psychology of Persuasion, Allyn and Bacon; 5th edition

ECO 523   Experimental economics

Objective

Experimental economics is a growing field in economics. This subject will help the students in providing a method to test theoretical predictions, to explore human behaviour in specific economic environments, to help design institutions, to advice on policy and to search for patterns and regularities in economic wheeling and dealing. The range of experimental test beds can be from lab experiments, field experiments, and surveys.

Unit I Preliminaries of Experimental Economics

Nature and scope of Experimental Economics; Early history of experimental economics; Three paradoxes in Utility theory: The history of consumer choice theory. Anomalies in main-stream economics: Endowment effect, Loss aversion, Status quo bias; Ultimatums, Dictators and Manners, Winner's curse, Prisoner's dilemma; Philosophy of experimental economics; Micro-economic system as an experimental science.

Unit II Major Contributors to Experimental Economics

Early contributors: Daniel and Nicholas Bernoulli (18th century), LL Thurstone (1931), Edward Chamberlin (1933, 1948), Stephen Rousses and Albert Hart (1951), F. Masteller, F. and P. Nogee, P (1951), J von Neumann and Oscar Morgenstern (1944, 1954), H Sauer Mann (1959, 1960), D Davidson and J Marschke (1959), S. Siegel and LE Fourier (1960), Joseph

Bower (1965), C. Bruno (1968) Modern times Contributors: Vernon Smith, Daniel Kahneman, Alvin Roth, Richard Thaler, Colin Camerer, Reihner Seiten, Amos Tversky, Charles Holt.

Unit III Principles of Experiments and Experimental Design

Principles of economic experiments: Realism and models; Controlled economic environments; Induced value theory; Parallelism; Practical applications and von Hayek hypothesis. Experimental design: Direct experimental control: Constant and treatments. Indirect control: Randomization; The within-subjects design as an example of blocking and randomization; other efficient designs. Introduction to the major Laboratories of experimental economics: ICES (George Mason), XS-FS (Florida), XLAB (UC Berkeley), Camerer's Group (Caltech), EEPS (Caltech), SSEL (Caltech), PEEL (Pittsburgh).

Unit IV Major Areas of Experimental Economics

Individual decision making; Multi-criteria decision-making; Intransitiveness of preferences; Prospect theory: Decision under risk; Experimental research in Public Goods theory; Experiments in coordination problems; Bargaining experiments and auctions; Experiments in industrial organization; Experimental asset markets

Basic Readings

Friedman, D. and S. Sunder (1994): Experimental Methods: A Primer for Economists, CUP.

Kagel, J.H. and A.E. Roth (eds.) (1997): The Handbook of Experimental Economics, Princeton Univ. Press.

Additional Reading List

An Introduction to Experimental Economics available at (http://www.webng.com/ economics)

Thaler R.H. (1994), Anomalies: The Winner's Curse: Paradoxes and Anomalies of Economic Life, Princeton University Press

ECO 524 Gender Economics

Unit I Concept, Importance of Gender Studies: Demography of Gender

Importance of gender studies – Women in patriarchal and matriarchal societies and structures – Gender bias in the theories of values, distribution and population; Demography of female population – causes of declining sex ratios and fertility rates in LDCs and particularly India – Women and their access to nutrition, health, education and community resources and their impact in female mortality and fertility; Feminist criticism of development indices, theories of gender inequality.

Unit II Decision making, Economic Activity and Women

Factors affecting decision making by women; property rights, access to and control over economic resources, assets, power of decision making at household, class, community level; economic status of women and its effect in WPR, income level, health and education in developing countries; Concept and analysis of women's work; visible and invisible work, economically and socially productive work; Women in pre-industrial and industrial; societies, female contribution to national income.

Unit III Labour Market, Technology, Environment and Women

Factors affecting female entry in labour market, supply and demand for female labour in developed and developing countries; studies of female work participation in agricultural and non-agricultural rural activities, internal sector, cottage and small industries, organized industry and services sector, women & SHGS; Wage differentials in female activities; Determinants of wage differentials, gender, education, skill, productivity, efficiency, opportunity; structure of wage across regions and economic sectors; Impact of technological development and modernization on women's work participation; Female activities and ecological and environmental; concerns – Role of new technologies for helping women.

Unit IV Social Security, Gender Planning, Development Policies and Governance

Social security for women: entitlements, economic independence and risk coverage, access to Unit and insurance markets, SHGs & social security; Review of legislations for women's empowerment, social security & property rights – Need for affirmative action on the part of the government; Mainstreaming gender into development policies, gender planning

techniques, gender budgeting, gender sensitive governance; Democratic decentralization and women's empowerment.

Reading List

Amsden, A.H. (Ed.) (1980): The Economics of Women and Work, Penguin, Harmondswosrth.

Boserup, E. (1970): Women's Role in Economic Development, George Allen and Unwin, London.

Engles, F. (1985): The Origin of the Family, Private Property and the State, Progress Publications, Moscow.

Kabeer, N. (1994): Reversed Realities: Gender Hierarchies in Development Thought, Kali for Women, ND.

Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999): Gender, Population and Development, OUP, ND.

Kuhn, A. and A.N. Wolpe (Eds.) (1978): Feminism and Materialism, Routledge and Kegan Paul, London.

Mies, M. (1998): Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour, Zed Books, London

Mitra, A. (1979): Implications of Declining Sex Ratio in India's Population, Allied, ND.

Murthy, K.R. (ed.) (2001): Building Women's Capacities.

ECO 551   Development economics II
Objective

The course is about fundamental models used to analyze theoretical and empirical issues in economic growth and development. It will enable to students to comprehend theoretical and empirical development across countries and region for policy purposes.

Unit I Development Issues

Growth and Development, Changing Notions of Development: Traditional

Economic Measures, The New Economic View of Development, Amartya Sen's "Capability" Approach, Development and Happiness, Three Core Values of Development, The Central Role of Women, The Three Objectives of Development; Comparative Economic Development: Basic Indicators of Development: Real Income, Health, and Education, Holistic Measures of Living Levels and Capabilities, Characteristics of the Developing World: Diversity within Commonality, How Low-Income Countries Today Differ from Developed Countries in Their Earlier Stages,

Unit II Contemporary Models of Development

Underdevelopment as a Coordination Failure, Multiple Equilibria: A Diagrammatic Approach, Michael Kremer's O-Ring Theory of Economic Development, The O Ring Model, Implications of the O-Ring Theory, Economic Development as Self-Discovery. Hausmann-Rodrik-Velasco Growth Diagnostics Framework, Human Capital: Education and Health in Economic Development, The Central Roles of Education and Health, Education and Health as Joint Investments for Development, Improving Health and Education: Why Increasing Income Is Not Sufficient

Unit III Theoretical approaches to Economic Growth-I

Standard Primal Growth Accounting, Growth Accounting vs Sources of Growth, Factors affecting economic growth-capital, labour, technology; Technological progress – embodied and disembodied technical progress, Growth models- Harrod-Domar; Neo-classical growth models Solow and Meade; Joan Robinson's growth model;

Unit IV Theoretical approaches to Economic Growth-II

Cambridge criticism of neo-classical analysis of growth, the capital controversy, Growth models of Kaldor and Pasinetti, Golden Rule of Capital Accumulation, Theoretical dissatisfaction with Neoclassical Theory, Models with Endogenous Growth: One sector growth models- The AK model, learning by doing and knowledge spill over.

Reading list

Robert Barro and Xavier Sala-i-Matin (2003), Economic Growth, PHI, New Delhi

Todaro, Michael P. and Stephen C. Smith (2012)Economic Development, 11th Edition, Pearson India

Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics vol.3, Elsevier, Amsterdam.

Thirlwal, A.P.(2010), Growth and Development, Palgrave Macmillan.

Ghatak, S. (2013), An Introduction to Development Economics, Allen and Unwin

Kindleberger, C.P.(1983), Economic Development, McGraw Hill,

Agrawal, A N and Singh S P (1982): Economics of Underdevelopment, Oxford University Press, 1958, London

ECO 552   Econometrics-II

Objective

It is to complement the theoretical knowledge on econometric tools that students have learned in the Econometrics I course. It further introduces additional econometrics tools that are often used in the analysis of socio-economic phenomenon. Students shall learn about use of dummy variable in regression analysis, the role of time or lag in economic relationship, simultaneous equations, principal component analysis, etc.

UNIT I Classical Linear Regression Model in Matrix Form

CLRM in Matrix Formulation; OLS Estimation and Properties; ANOVA Analysis

Dummy Variable Regression Models - Concept of Dummy Variable; Dummy Independent Variable: Intercept and Slope Dummy; Dummy Dependent Variable: LPM, Logit, Probit, and Tobit models

UNIT II Dynamic Econometric Models

Distributed-Lag Models: Concept and Estimations; Koyck Model, Partial Adjustment Model, Adaptive Expectations; Instrumental Variables; Autoregressive Models; Almon Approach to Distributed - Lag Models; Granger Causality Test

UNIT III Simultaneous-Equation Models

Simultaneous Equation Models: Simultaneous Equation Bias and Inconsistency of OLS Estimators; Identification Problem; Identification-order and Rank Condition; Methods of Estimating Simultaneous Equation System.

Generalized Least Squares, Weighted Least Squares Estimators; Feasible Generalized Least Squares;

UNIT IV Nonlinear Regression Functions

Intrinsically Nonlinear Regression Functions; Estimation of Nonlinear Regression

Reading List

Gujarati, D., D. Porter and S. Gunasekar (2011), Basic Econometrics, McGraw Hill Education (India) Private Limited.

Johnston, J. and J. DiNardo(2010), Econometric Methods, Fourth Edition, McGraw-Hill, latest edition.

Kennedy. P. (2008), A Guide to Econometrics, 6th Edition, Wiley-Blackwell.

Kmenta, J. (1997), Elements of Econometrics, Reprint, New York: University of Michigan Press.

Kutner, M., C. Nachtsheim, J. Neter and W. Li (2004), Applied Linear Statistical Models, McGraw-Hill/Irwin.

Maddala, G.S. and K. Lahiri (2009), Introduction to Econometrics, John Wiley & Sons.

Stewart, J. and L. Gill (1998), Econometrics, Second Edition, Prentice Hall.

Wooldridge, J.M., (2000), Introductory Econometrics: A Modern Approach, Southwestern College Publ.

Objective

This subject will enable the students to understand the economic approaches to a global economy.

Unit I   Theories of Trade

The pure theory of international trade – theories of absolute advantage, comparative advantage and opportunity costs, modern theory of international trade; theorem of factor price equalization; Heckscher – Ohlin Theory of International Trade. Role of dynamic factors, i.e., changes in tastes, technology and factor endorsements in explaining the emergence of trade; the Rybczynski theorem.

Unit II   Gains and Terms of trade & Barriers to trade

Measurement of gains from trade and their distribution. Concept of terms of trade, their uses and limitations. Hypothesis of secular deterioration of terms of trade, its empirical relevance and policy implications for less developed countries. Trade as an engine of economic growth.

The theory of interventions – tariffs, quotas and non – tariff barriers. Economic effects of tariffs& quotas on national income, output, employment, terms of trade, income distribution; Balance of payments on trading partners. The political economy of non – tariff barriers and their implications.

Unit – III   Balance of Trade and Payments

Meaning and components of balance of payments. Equilibrium and disequilibrium in the balance of payments. The process of adjustment under system of gold standard, fixes exchange rates and flexible exchange rates. Expenditure – reducing and expenditure switching policies and direct controls for adjustment. Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes. Foreign trade multiplier with and without foreign repercussions and determination of national income and output.

Unit IV   Economic Cooperation

Forms of economic cooperation; Reforms for the emergence of trading blocs at the global level; static and dynamic effects of a custom union and free

trade areas. Rationale and economic progress of SAARC / SAPTA and ASEAN regions- problems and prospects of forming a customs union in the Asian region. Regionalism(EU, NAFTA) Multilaterism and WTO. Emerging international monetary system with special reference to post – Maastricht developments and developing countries. Reform of the international monetary system, India and developing countries.

Reading List

Bhagwati, J (Ed) International trade, selected readings, Cambridge University Press, Massachusetts

Carbough, R.J. Dana, M.S.   international Economics, International Thompson Publishing, New York

Kindle Berger(1996), C.P International Economics, Routledge, London

R.D. Irwin(1995), International Economics &International Economic Policy, Homewood International Economics, McGraw Hill International, Singapore

ECO 571   HEALTH ECONOMICS

Objective

This paper aims to equip student of an understanding that health is unlike any other good and train them in tools of health economics to analyse health outcomes, processes and policies.

Unit I   Basics of health economics

Why health Economics? Health care economy, uncertainty and contagious good, Health economics as public finance, linkages with welfare economics. Introduction / Demand for Health and Health Care: The Grossman Model, Socioeconomic Disparities in Health.

Unit II   Supply of Health care

Supply of Health care: Physician Supply: training and wages, barriers to entry, physician agency, discrimination**.** Hospitals industry: History of modern hospitals, relationship between hospitals and physicians, relationship between hospitals and payers.

Unit III   . **Economics of Health innovation**

Health Insurance: Demand, Adverse Selection, Moral Hazard. Economics of Health innovation: Pharmaceuticals, Patents, Regulations of pharmaceutical industry. Innovation and Technology, Technology Assessment

Unit IV   **Health Policy**

Health Policy conundrum: Arrow's impossibility thermos, health policy trilemma, regulations of health market, control over moral hazard, Regulation of health care provision, comparing national health policy; Nationalised health care, social health insurance, American model. Population Aging and the future of health policy.

Reading list

Jay Bhattacharya, Timothy hyde, Peter Tu (2014) Health Economics, Palgrave Macmillan.

Anthony J. Cuyler and Joseph P.(ed) (2000),Handbook of Health Economics, Newhouse, North-Holland, Elsevier Science.

Clewar, Ann, and David Perkins, (1998), Economics for Health Care Management. London: Prentice Hall.

Folland, Sherman, Allen Goodman, and Miron Stano. (2001), The Economics of Health and Health Care. New York: Macmillan, Third Edition.

Rice, Thomas(1998), The Economics of Health Reconsidered. Chicago: Health Administration Press.

Sherman Folland, Allen C. Goodman, and Miron Stano, (2004.), The Economics of Health and Health Care, 4th Edition, Prentice Hall.

Santerre and Neun, (2004) Health Economics: Theories, Insights, and Industry Studies, Thomson/South Western.

ECO 572   Labour Economics

Objective

Issues pertaining to the labour market, wage theories, employment policies in the globalized economy have become vitally important for developing countries. In a country like India where the bulk of the labour force is in the unorganized sector and the organized sector is witnessing "jobless" growth, the importance of issues such as employment and unemployment as well as livelihood and social security for the growing millions continues to assume significance. This paper exposes students to theoretical as well as empirical issues relating to the labour market with special reference to India.

Unit I

Labour market in Developing countries, Growth Distribution employment and poverty, Informality; Characteristics, measures, reason for existence and policy response to informality.

Unit II

Wages in developing countries: determinants, Classical and neoclassical theory of wage determination, empirical evidences, wages with unlimited supply of labour, macroeconomic perspective. Distribution of wages: based on individual characteristics, based on employer and industry, Role of minimum wages and Globalisation.

Unit III

Labour migration and development: trends and characteristics, Determinants of labour migration: theoretical underpinnings and evidences, Impact on home economy: theory and evidence, Impact on host economy: theory and evidence. Education and Human Capital: Education and Growth, Education and labour market.

Unit IV

Labour market institutions: Employment protection legislation, Minimum wages, Unemployment Benefits. Labour market policies for development: Theoretical arguments for the policies, policies around the world, challenges in implementing policies, evidence from global financial crises 2007-09, Do labour market policies work? Empirical evidences. Labour market

information and analysis systems: Conceptualisation of LIMA systems and indicators.

Reading List

Sandrine Cazes and Sher Verick (2012) Perspectives on labour economics for development; International Labour Office, Geneva.

Gupta P.K. (2012) Labour Economics, New Delhi Vrinda Publication (p) Ltd.

Lester, R.A. (1964) Economics of Labour (2nd Ed.), Macmillan, New York.

Papola, Ghosh and A. N. Sharma (1993) Labour Employment and Industrial Relations in India B.R. Publishing House, New Delhi

Datt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.

ECO 573   Financial Economics

Objective

This course will equip the students to an understanding of theoretical approaches to finance.

Unit I Introduction to Financial Economics

Nature and Role of Financial System, Financial Intermediate and Financial Intermediaries, The structure of the financial system, Financial Markets: functions of financial system, Financial Instruments, Equilibrium in Financial Markets, Financial System and Economic Development.

Unit II Basic Concepts in Finance

Time Value of Money: Future Value, Present Value, Future value of an annuity, Present value of annuity, Present rate of perpetuity. Investment Criteria: Net Present Value, Benefit Cost Ratio, Internal Rate of Return, Modified Internal Rate of Return, Pay Back Period.

Unit III Structure of Interest Rates

Determination of interest rates, Structure of Interest rates, Theories of term structure interest rates: Expectation Theory, Market Segmentation Theory and Liquidity Premium Theory; determinants of general structure of interest rates; Analysis of financial statement: Ratio Analysis, Different Kinds of Financial Ratios, Calculation and its importance in financial analysis; Risk and Return: Types of risk, Measurement of Risk and Return of an asset, Measurement of Risk and Return of a Portfolio, Determinants of Beta, Risk-Return trade off.

Unit IV Banking Institutions and NBFIs

Commercial Banks: Profitability and efficiency of Banks, Development Banks-Role and functions, Investment banking and Merchant banking, Definition and Types of Non Banking Financial Institutions: UTI, Mutual Funds: Valuation (NAV), UTI and Other Mutual Funds; Insurance Companies, Provident Funds and Pension Funds, Growth and impact of NBFIs, Control of NBFIs .

Basic Readings

Chandra, P (2012) Financial Management, Theory and Practice, McGraw Hill Education Pvt. Ltd. New Delhi.

Bhole, L. M. and J Mahakud (2009) Financial Institutions and Markets, McGraw Hill Education Pvt. Ltd. New Delhi.

Mishkin F S and S G Eakins (2011) Financial Institutions and Markets, Pearson, New Delhi.

Additional Readings

Khan, M. Y. and Jain, P. K. (2004), Financial Management, Text, Problems and Cases, McGraw Hill Education Pvt. Ltd. New Delhi.

Pandey, I. M. Financial Management, Vikas Publishing House, New Delhi.
Harker P. T. and S. A. Zenios (2000) (Eds) Performance of Financial Institutions Cambridge University Press, Cambridge.

Johnson , H. J. (1993) Financial Institutions and Markets, McGraw Hill, New York.

Khan M. Y. (1996) Indian Financial System Tata McGraw Hill, New Delhi.
Machiraju, M. R. (1999) Indian Financial System, Vikas Publishing House, New Delhi.

Brigham E F and M C Ehrhardt, (2012) Financial Management, Theory and Practice, Cengage Learning, New Delhi.

ECO 574   INSTITUTIONAL ECONOMICS

Objective

The objective of the paper is to acquaint the students with the role of institutions in economic growth.

Unit I Theory of Contracts

The definition of a contract; Legal and economic approach to contracts; Freedom of contract; Bounded rationality and contractual incompleteness; Asymmetric information (hidden characteristics, hidden information/ hidden action, hidden intentions) and opportunistic behaviour; Adverse selection and the closing of markets; Signalling, screening and self-selection; Asset plasticity and moral hazard; Principal-agent problem and agency costs; A simple principle-agent experiment in the classroom. Controlling and preventing moral hazard (controlling the agent, incentive contracts, bonding, do-it-yourself method); Attributes of transactions and the choice of a contract; Asset specificity, types of specific assets; Synergy effects, quasi rents appropriation and hold-up problem; Classification of contracts (classical, neoclassical and relational contracting). Discrete alternative governance structures: market, hybrids and hierarchy; Self-enforcing agreements (Telser) and hostages (Williamson); Hybrids: specific assets and their safeguards. Institutional environment and its role in the choice of contract; The role of trust; Economic approach to trust. Kreps: the trust game; Types of trust (contractual trust, competence trust and good will trust); Explaining the internal
structure of formal organizations: transaction costs approach.

Unit II The New Institutional Theory of the Firm

Neoclassical theory of the firm; Explanations of the firm in the new institutional theory (F. Knight, R. Coase, A. Alchian and H. Demsetz, O. Williamson, O. Hart); The market and the firm; Comparative analyses of the alternative coordination forms; Internal market and influence costs; The boundaries of the firm; Ownership structure of the firm. A theory of the owner-monitor (Alchian and Demsetz, 1972); Competing forms of economic organization, relative advantages of alternative structures (proprietorships, partnerships, open corporation, regulated firms, public enterprises, nonprofit organizations, labour-managed firms); Separation of ownership and control in the open corporation; Opportunistic behaviour of the managers and corporate control. Outsider and insider corporate governance; Privatization (Liberalization and Globalization) in India (and other transition economies): how to control the managers.

Unit III The Theory of Institutional Change

Stability of institutions and institutional change; The concept of institutional equilibrium; The main sources of institutional change; Centralized and spontaneous institutional change; The role of the state in the process of institutional change; The problem of compensation of the disadvantaged groups; Theories of selection of efficient institutions in the process of competition (Alchian, Friedman); Institutional change and path dependence; Forms of path-dependence (weak form, semi-strong and strong forms); Institutional changes in contemporary India.

Unit IV The New Institutional Theory of the State

Social mechanisms for constraining open access; Contractual theories of the state (Locke, Rousseau), Hobbes predatory theory of the state; North's model of the state; The regulatory role of the state in the Indian economy. The legal system in the institutional framework; Philosophy of jurisprudence before utilitarianism; Formalism and legal realism; Legal Pragmatism; Utilitarian basis of justice and jurisprudence; Analytic jurisprudence; Legal positivism; normative theories; Feminist jurisprudence; Law and the economy; Posner's Moral relativism. Corruption and its economics: the principal-agent framework; incentive structures; the threat system and the authority; collusion, pre-emptive collusion and ex-post collusion; Rent-seeking behaviour and free-riding; Rent-seeking in teams; Rent-seeking in hierarchical systems; Basil model of corruption and its analysis; Classification of Corruption models; Game-theoretical approaches towards

corruption study; Corruption in hierarchical structures; Dynamic corruption models; Welfare implications of corruption.

Reading List

Brousseau Eric and Jean-Michel Glachant EDS.),(2008), New Institutional Economics: A Guidebook, Cambridge University Press

Claude Menard & Mary M. Shirley(eds.)(2005), Handbook of New Institutional Economics, Springer-Verlag US

Douglass C. North,(1990), Institutions, Institutional Change and Economic Performance, University of Chicago Press.

Geoffrey M. Hodgson (2004), The Evolution of Institutional Economics (Economics as Social Theory) 1st Edition, Routledge, NY

Wolfgang Kasper, Manfred E. Streit, and Peter J. Boettke, (2012), Institutional Economics: Property, Competition, Policies, Second Edition, Edward Elgar, US