

Central University of Kerala Department of Economics School of Economics

M A Programme: Economics

Revised Syllabus w.e.f 2018-'19

Approved by the PG Board of Studies held on 13-14th December 2017 to be placed before the Academic Council

Programme Name: M.A. Economics Programme Code: EEC05 Duration: 2 years

(As per Choice Based Credit System w.e.f. the academic year 2018-19)

Programme Outcome

After successful completion of MA programme in Economics, students will be able to:

- Inculcate the knowledge of optimum utilization of resources for the improvement and betterment of the society in a sustainable manner.
- Evaluate existing theoretical arguments in economics.
- Assess daily developments in the economy and social sectors.
- analyse economic data and produce research outputs.
- Suggest appropriate policy prescriptions for the development of the country.
- Successfully face competitive examinations and interviews.
- Prepare them to pursue higher studies such Ph.D.
- Successfully compete for job opportunities.
- Sensitive to sustainability of environment and gender equality.
- Responsible citizens with ethics.

PROGRAMME SPECIFIC OUTCOME

- PSO-01 To provide in-depth knowledge to students about economic theory and its applications for the optimum utilization and allocation of resources including labour, capital, natural resources and technology.
- PSO-02 To make the students able to assimilate how various markets function and the factors influencing the market dynamics.
- PSO-03 To impart clear understanding about the behaviour of regional, national and global economy.
- PSO-04 To enable the students to analyse macroeconomic policies including fiscal, monetary, and trade policies.
- PSO-05 To determine economic variables including inflation, unemployment, poverty, GDP, Balance of Payments using statistical and econometric methods.
- PSO-06 To understand the behaviour of financial and money markets and perform cost-benefit analysis for making investment decisions.
- PSO-07 To link daily developments in the economy with existing insights in economics.

Central University of Kerala

Department of Economics, School of Economics

M. A. (Economics)

Course Structure for MA Programme in Economics

Course Code	Courses	Credits	Lecture Hours per week	Tutorial Hours per week	
Semester – I					
EEC 5101	Microeconomic Theory I	4	4	2	
EEC 5102	Macroeconomic Theory I	4	4	2	
EEC 5103	Mathematics for Economic Analysis	4	4	2	
EEC 5104	Economics of Growth and Development	4	4	2	
EEC 5105	Indian Economy	4	4	2	
	<u>Semester – II</u>				
EEC 5201	Microeconomic Theory II	4	4	2	
EEC 5202	Macroeconomic Theory II	4	4	2	
EEC 5203	Statistics for Economic Analysis	4	4	2	
EEC 5204	International Economics: Theory and Policy	4	4	2	
EEC 5205	Regional Economics	4	4	2	
	<u>Semester – III</u>		1	1	
EEC 5301	Basic Econometrics	4	4	2	
EEC 5302	Public Finance	4	4	2	
EEC 5303	Research Methodology	4	4	2	
EEC 50	Elective I	4	4	2	
EEC 50	Elective II	3	3	2	
	<u>Semester – IV</u>		ı		
EEC 5401	Dissertation	6	-	-	
EEC 50	Elective III	4	4	2	
EEC 50	Elective IV	3	3	2	
	Total Credits 72				

ELECTIVE COURSES

Electives with 4 Credits

EEC 5001: Industrial Economics

EEC 5002: Advanced Econometrics

EEC 5003: Agricultural Economics

EEC 5004: Health Economics

EEC 5005: Labour Economics

EEC 5006: Environmental Economics

EEC 5007: Financial Economics

EEC 5008: Institutional Economics

EEC 5009: Tourism Economics

EEC 5010: Public - Private Partnership and Infrastructure

Electives with 3 Credits

EEC 5011: Monetary Economics

EEC 5012: Population and Development

EEC 5013: International Political Economy

EEC 5014: Gender and Development

EEC 5015: Economics of Education

EEC 5016: India in the Global Economy

EEC 5017: Economics of Infrastructure

EEC 5018: Finance and Capital Market

EEC 5019: Decentralization and Development

EEC 5020: Economic Thoughts

EEC 5021: Welfare Economics

EEC 5022: Economics of Insurance

Course Code	EEC 5101	Semester	I
Course Title	MICROECONOMIC THEORY - I		
Credits	4	Туре	Core

Course Description

Aim of the course is to provide advanced microeconomic theories with analytical vigour by means of analyses and applications of microeconomic theories in contemporary issues.

Course Outcome

By the end of the course, students are expected to be able to:

- Identify and assess concepts and theories of the Microeconomics.
- Apply market issues with practical problems
- Engage in rigorous research on issues of microeconomics
- Suggest policy prescriptions

Course Structure

Module 1: Theory of Consumer Behaviour

An overview of Cardinal and Ordinal Approaches: Marshall's Approach - Indifference curve and its applications - Price, income and substitution effects - Slutsky theorem and derivation of demand curve - Revealed Preference Theory and derivation of demand and indifference curve - Consumer Surplus and Elasticity of Demand and its applications. Recent developments in demand theory: Pragmatic Approach - The Linear Expenditure systems - Indirect utility function. Consumer behaviour under risk and uncertainty: Bernoulli- Neumann-Morgenstern - Friedman-Savage Hypothesis - Markowitz Hypothesis.

Module 2: Theory of Production and Costs

Production: Basic concepts - Production functions (Cobb-Douglas, CES and VES, Fixed coefficient type and Translog) - Returns to scale and Returns to factors of production - Duality in production - Output maximization and cost minimization - Producer's equilibrium. Traditional Cost Theories: Basic concepts - Short-run and Long-run Costs, Envelope curve. Modern theories: Short-run and Long-run, L-shaped scale curve - Engineering cost curves - Economies of scale.

Module 3: Price and Output Determination in Perfect and Imperfect Markets

Perfect competition: Short-run and long-run equilibrium of the firm and industry — Dynamic changes and industry equilibrium. Monopoly: Short-run and long equilibrium - Price discrimination - Tax incidence - Pricing Techniques (Peak-load Pricing etc.)- Monopoly power - Control and regulation. Monopolistic competition: Behaviour of monopolistic competition - General and Chamberlin model - firm and group equilibrium with product differentiation.

Module 4: Oligopoly Market and Game Theory

Non-Collusive Oligopoly: Cournot - Bertrand – Stackelberg. Kinked demand curve. Collusive Oligopoly: Cartels and mergers - Price Leadership and Basic point price system. Theory of Games: Two-person and Zero-sum game - Pure and Mixed strategy - Saddle point solution – Nash equilibrium. Price Determination under Bilateral Monopoly.

Module 5: Alternative Methods of Pricing

Critique of Traditional theories of Pricing, Hall and Hitch Report. Pricing principle - Average cost pricing - Mark up pricing - Limit pricing theory - Bains version, Sylos-Labini model of limit pricing - Franco-Modigliani - Bhagwati - Pashigian model - Cross-subsidy free pricing - Public Sector Pricing.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

- Koutsoyiannis, A. (1979). Modern Microeconomics (2nd edition). Macmillan Press, London.
- Mankiw, N. G. (2009). Principles of Microeconomics (5th Edition). South-Western, Cengage Learning. USA.
- Pindyck, R.S. D.L. Rubbinfeld, P.L Mehta (2009). Microeconomics (7th Edition). Pearson, New Delhi.
- Henderson, J.M., and Quandt, R.E. (2003). Microeconomic Theory: A Mathematical Approach (3rd Edition). Tata McGraw Hill, New Delhi.
- Varian, H. (2010). Intermediate Microeconomic (8th Edition). New York: W.W Norton.
- Varian, H.(1992). Microeconomic Analysis (3rd Edition). New York: W.W Norton.
- Stigler, G. (1996). Theory of Price (4th Edition). New Delhi: Prentice Hall of India.
- Samuelson, P.A. and Nordhaus, W.O. (1998). Economics (16th Edition). New Delhi: Tata McGraw Hill.
- Dominick Salvatore. (2011). Schaum's Outline of Microeconomics (4th Edition). New Delhi: Tata McGraw Hill.
- William J. Baumol, Economic Theory and Operation Analysis 4 th Edition Prentice Hall India, New Delhi 1982.
- Da Costa G. C., (1980) Production, Prices and Distribution, Tata Mc Graw Hill, New Delhi.
- Gravelle, H and Rees, R. (1981), Microeconomics, Longman, London, 2nd Edition.

Course Code	EEC 5102	Semester	I
Course Title	MACROECONOMIC THEORY - I		
Credits	4	Туре	Core

Course Description

This course deals with the economy as a whole, and examines the main principles of the determination of real income, employment, price level and inflation. It also discusses the conduct of macroeconomic policies. The course intends to provide a thorough understanding of the Classical, Keynesian, Monetarist analysis of the macro economy.

Course Outcome

At the end of the course, the students are expected to be able to:

- Examine the functioning of economy as a whole, and to get acquainted with policy instruments for macroeconomic management.
- Evaluate the functioning of goods market, money market and labour market in an economy.
- Analyse how the economic agents like consumers, producers and the external sector react to changes in macroeconomic policy environment.
- Assess the macroeconomic environment with a specific knowledge on India Economy to sharpen their understanding of some of these macro concepts and models, and policy instruments.

Course Structure

Module 1: National Income Accounting

Concepts- approaches and problems in National Income Accounting - Price Indices and GDP Deflator – Circular flow of income and expenditure

Module 2: Macro Economic Systems

Alternative approaches to the determination of employment, output and income- The Classical system – Money, prices and interest under the Classical system. Keynes' Critique on the Classical system – Keynes model of income determination – Money, interest and income under the Keynesian system. The Neo-classical synthesis - IS-LM analysis – extension of IS-LM with the government sector - policy analysis - relative effectiveness of monetary and fiscal policy- extension of IS-LM with labour market-Classical and Keynesian labour market analysis- Theoretical Controversies -Keynes Effect, Pigou effect and Real Balance effect.

Module 3: Behavioural Foundations of Macro Economics

Consumption and Savings function – Theories of consumption function – Current Income theories (Absolute, Relative Income Hypothesis) – Normal income theories (Life Cycle Hypothesis and Permanent Income Hypothesis). Endogenous income theorem – Empirical evidences. Investment function – Cost of capital and investment – user cost – Present value criterion - Marginal Efficiency of

Capital and Investment – Acceleration theory of investment – Neo-classical theory of investment – Tobin's Q-ratio.

Module 4: Demand for and Supply of money

Portfolio allocation and demand for assets – Demand for Money – Quantity theory approach – Keynes approach – Post Keynesian Theories of demand for money – Tobin-Baumol - Modern Quantity theory of money - Empirical evidences. Supply of Money – Behavioural model - H Theory of money supply – Methods of Monetary Control- Fisher effect.

Module 5: Open Economy Macro Model

Balance of Payments and Exchange rates – IS-LM analysis for an open Economy – Keynesian approach to current account- Mundel Fleming model – role of fiscal and monetary policies under alternative exchange rate regimes and capital mobility - Internal and External Balance - Policy dilemma- Monetary approach to balance of payments.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Assignment, Midterm exam and final End semester examination.

- Andrew.B.Abel and Ben S. Bernanke, (2005), Macroeconomics, (5th Edition), Pearson Education, Inc, Singapore.
- Brian Snowdon and Howard.R.Vane (2002) Modern Macroeconomics, The origin, Development and current state, Edwal Elgar, U.K.
- Brian Snowdon, Howard R.Vane and Peter Wynarczyk (2001) A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought, Edward Elgar Publishers.
- Dornbush,R, Stanley Fischer and Richard, Startz (1998) Macroeconomics, (7th Edition), Tata McGraw Hill, New Delhi.
- G.K.Shaw, Michael J, McCroshie and David Greenway, Macro economics, theory and Practice, Blackwell.
- Gardner Ackley, Macroeconomics, Theory and Problems (1961), McMillan, London
- Gregory N Mankiw, (2002), Macroeconomics, (8th Edition), Worth Publishers, New York
- Levacic, Rosalined and Rebmann, Alexander (1982) Macroeconomics: An Introduction to Keynesian Neo-classical controversies, Macmillian Press Limited (2nd edition)
- Richard.T. Froyen (2002) Macroeconomics, Theory and Practice (7th Edition) Pearson Education Inc, Singapore.

Course Code	EEC 5103	Semester	I
Course Title	MATHEMATICS FOR ECONOMIC ANALYSIS		
Credits	4	Туре	Core

Course Description

This course is aimed at introducing the students of economics to certain basic concepts and techniques in mathematics which are considered to be indispensable to an understanding of economic theory.

Course Outcome

At the end of the course, the students are expected to be able to:

- Examine the functioning of economy as a whole, and to get acquainted with policy instruments for macroeconomic management.
- Evaluate the functioning of goods market, money market and labour market in an economy.
- Analyse how the economic agents like consumers, producers and the external sector react to changes in macroeconomic policy environment.
- Assess the macroeconomic environment with a specific knowledge on India Economy to sharpen their understanding of some of these macro concepts and models, and policy instruments.

Course Structure

Module 1. Linear and Non-linear Equations and Functions

Linear functions – graphical solutions to linear equations – simultaneous linear equations – macroeconomic equilibrium. Quadratic functions and their graphical presentations – Exponential functions and logarithms - Applications in economics.

Module 2. Derivatives and its Applications in Economics

Limit theorem – the differential and linear approximation – Rules of differentiation – Higher order derivatives and rule of maximum and minimum values – point of inflection – Convex and concave functions. Rules of partial derivatives – Maximization and minimization with two or more independent variables – Saddle points. Constrained optimization – The Langrange multiplier method – Economic applications.

Module 3. Optimization using Linear Algebra

Vectors, matrices, and Matrix Operations - Rank of a Matrix, Transposition, the Determinant of a matrix – Matrix inversion - Cramer's rule – The Gaussian method. The Jacobian, Hessian, Discriminant – Bordered Hessian for Constrained Optimization – Characteristic roots and vectors – Applications in economics.

Module 4. Optimization using Linear Programming

Graphic solutions – Extreme point theorem – Slack and surplus variables. Simplex method of maximization and minimization – Marginal value or shadow pricing – The Dual theorem – Economic applications.

Module 5. Integration and Difference and Differential Equations

Rules of integrations - Definite integral and indefinite integral – Economic applications: area under a curve – consumer's surplus and producer's surplus. First-order differential equations and applications – Difference equations – Applications in economics.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Assignments, Exercises, Midterm exam and final End semester examination.

- Bradley, T. and Patton, P. Essential Mathematics for Economics and Business, Wiley publications.
- Renshaw, Geoff, Maths for Economics, 2nd edn., Oxford Publishers.
- Intriligator, M.D., Mathematical Optimization and Economic Theory, Prentice-Hall, 1971
- Chiang, A.C. and Wainwright, K., Fundamental Methods of Mathematical Economics, 4th edn., McGraw Hill Publishers (2005)
- Dowling, E.T., *Introduction to Mathematical Economics*, 2nd edn., Schaum's Outline Series, McGraw Hill, 1992.
- Allen, R.G.D, Mathematical Anaysis for Economists, Macmillan Press
- Yamane, Taro, Mathematics for Economists, Prentice Hall of India
- Henderson, J.M. and Richard E. Quandt, Microeconomic Theory: A Mathematical Approach,
 3rd edn., McGraw Hill, 1980.

Course Code	EEC 5104	Semester	I
Course Title	ECONOMICS OF GROWTH AND DEVELOPMENT		
Credits	4	Туре	Core

Course Description

The course provides concepts, theories and debates in the field of development economics. The course is divided into five modules. Basic concepts, tools and approaches are introduced in the first module while second module outlines established views and theories of development. Module 3 offers major growth strategies including principal indigenous theories and new growth theories are included in the module 4. Finally, a succinct understanding of Indian agriculture and labor market along with latest developments such as farm laws and labour codes are offered in the module 5.

Course Outcome

By the end of the course, students are expected to be able to:

- Identify and assess concepts and theories of the development.
- Outline methods for measuring poverty and inequality
- Apply measures of underdevelopment to practical problems
- Engage in rigorous research on issues of development
- Suggest policy prescriptions

Course Structure

Module I: Introduction to Development

Development economics – definition, origin and its significance- Basic challenges of development-concept of development gap- Poverty, inequality and their measurement, Inverted U-hypothesis, investing in, nutrition, education and health -human capital approach and capability approach to development, Role of institutions and governance

Module II: Theories of Development

Importance of Adam Smith's view in development, Schumpeterian theory of development, Poverty trap, Critical minimum Effort, Big push theory- Rostow's stages of growth, balanced v/s Unbalanced growth strategy, Lewis model of surplus labour and Fei Rains model,

Module III: Theories of Economic Growth

Mahalanobis model, Wage goods model, Harrod-Domar model, Solow model: capital, Population and technological progress, Growth convergence-conditional and unconditional convergence, Ms.Joan Robinson and concept of Golden Age.

Module IV: New Theories of growth and Development

Romer's endogenous growth model, Underdevelopment as co-ordination failure, Kremer's O-Ring theory of development, Dependency theories of underdevelopment, Path dependence in development-QWERTY, Geography and Development-Krugman's theory

Module V: Agriculture and Labour Market

Land size and productivity, ownership and tenancy, formal and informal rural credit markets, Farmer's access to agriculture inputs, infrastructure development in agriculture, agriculture market and reforms in India; Population growth, migration and urbanization, unemployment-Harris-Todaro model and labour turnover model. Unorganized labor market and labor market reforms in India

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

References

Required Text Books:

- Debraj Ray (1999) Development Economics, Oxford University Press
- Michael P. Todaro and Stephen C. Smith (2015) Economic Development, Pearson.

Additional references

- Daron Acemogulu and James A. Robinson (2012) Why Nations Fail: The origins of power, prosperity and poverty, Profile Books
- Amartya, Sen, (2000) Development as Freedom, Oxford University Press
- Uma Kapila (2017) Indian Economy since Independence, Academic foundation
- Thirlwall, (2006) Growth and development with special reference to developing countries,
 Palgrave Macmillan

Course Code	EEC 5105	Semester	I
Course Title	INDIAN ECONOMY		
Credits	4	Туре	Core

Course Description

The objective of this course is to enhance students' understanding in important issues facing the economy including economic planning and reforms in different sectors of economic activity.

Course Outcome

At the end of the course, the students are expected to be able to:

- Assess the evolution of Indian economy from historical perspectives, including institutional changes.
- Evaluate the relevance of database on Indian economy.
- Examine sector-wise policy and performance of Indian economy.
- Analyse the major development issues and policy questions faced by Indian economy.

Course Structure

Module 1: Development Phases of Indian Economy

The Colonial legacy - State of the economy at independence - Policy of planned development - Growth and structural changes till 1980's - New Economic Policy (NEP) - Performance of the economy since 1991 - Major features of economic transformation - Recent developments.

Module 2: Agriculture and Rural Development Strategies

Agriculture: Role of agriculture in Indian Economy - Share of agriculture - Interrelationship between agriculture and industry. Technologies and institutional aspects: Land reforms - Green revolution - Agricultural inputs and shifts in production function (modern farm inputs and marketing) - Price policy - Subsidies - Rural credit. Rural development: Rural development programmes including poverty alleviation programmes - Development of economic and social infrastructure - New Rural Employment Guarantee Scheme.

Module 3: Industry, Service and Foreign Trade

Industry: Industrial development during the planning period - Some major industries of India - Small-Scale and Cottage industries - Industrial Policy - Public Sector in the Indian Economy - Privatization and Disinvestment - Private sector - Industrial Sickness — India's Labour Market and Reforms - Labour Relations, Social Security and Exit Policy. Service: Growth and contribution of services sector - Share of services in employment - Information and Communications Technology - India's IT and ITES Industry - Foreign trade and services. Foreign Trade: Salient features of India's foreign trade - Composition - Direction - Organization of trade - Recent changes in trade policy — Foreign Direct Investment - Balance of payments - Tariff policy - Exchange rate - India and WTO requirements.

Module 4: Financial Sector Reforms

Financial sector reforms - Organization of India's money market - Changing roles of the Reserve Bank of India - Commercial banks - Development finance institutions - Foreign banks and non-banking financial institutions - Indian capital market and SEBI - Development in Global Financial Market and its relationship with Indian Financial Sector.

Module 5: Measures of Poverty and Unemployment, Urbanization and Migration

Poverty and Unemployment: Estimates of inequality and poverty measures for India - Appraisal of Government measures - India's Human Development record in global perspective - India's population policy and development - Types of unemployment - Economic reforms and the incidence of unemployment - Strategies for employment generation. Urbanization and Migration: Different types of migratory flows and their impact on the economies of their origin and destination - Process of growth of urban settlements - Urban development strategies.

Testing & Evaluation

Continuous evaluation consisting of Assignments, Presentation, Midterm exam and final End semester examination.

- Ahluwalia,I.J. and I.M.D. Little (Eds.). (1999). India's Economic Reforms and Development. Oxford University Press, New Delhi.
- Puri, V.K., and Misra S.K. (2015). Indian Economy (33rd Edition). Himalaya Publishing House, New Delhi.
- Bawa, R.S. and P.S. Raikhy. (1997). Structural Changes in Indian Economy. Gurunanak Dev University Press, Amritsar.
- Chakravarty, Sukhamoy (1987), Development Planning: The Indian Experience, Oxford University press, New Delhi, Chapter 3.
- Bhagwati, Jagadish (1993), India in Transition: Freeing the Economy, Oxford University Press,
 New Delhi, PP 71-99.
- Rao, J. Mohan and Storm, Servaas (1998), Distribution and Growth in Indian Agriculture, in The Indian Economy: Major Debates since Independence, Edited by T J Byres, Oxford University press.
- Bhagwati, J N and T N Srinivasan (1976), Foreign Trade Regimes and Economic Development: India, NBER, New York.
- Panagariya, Aravind (2008), India: The Emerging Giant, Oxford University Press, New York.
- Carrasco, Bruno etal (Ed.) (2014), Managing Capital Flows, Oxford University press, New Delhi
- Dandekar, V.M and N. Rath (1976), Poverty in India, School of Political Economy, Pune.
- Datt,R.(2001), Second Generation Reforms in India, Deep and Deep Publication, New Delhi
- Kapila, Uma (2016), Indian Economy, Academic Foundations, New Delhi
- Economic Survey of India, 2016-17, Government of India

Course Code	EEC 5201	Semester	П
Course Title	MICROECONOMIC THEORY - II		
Credits	4	Туре	Core

Course Description

This course offers advanced theories and approaches in the microeconomics to develop a solid background in advanced topics such as general equilibrium analysis in order to pursue research in the applied fields of economics and related disciplines, and for students wishing to specialize in economic theory.

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate advanced theories in the microeconomics.
- Analyze the business strategies undertaken by firms when there is interdependence among them
- Analyze and present in a scientific way the markets for factors of production and apply comparative static analysis.
- Demonstrate knowledge and understanding of the issues concerning efficiency, general equilibrium and general welfare.
- Apply microeconomic theory and microeconomic models to real economic situations.
- Explain, analyze and predict the effects of interventions and structural changes in the economy on the welfare of individuals.

Course Structure

Module I: Factor Pricing

Neo-Classical: Factor Pricing under Perfectly Competitive Markets. Factor pricing under imperfect competitive market: Monopolistic and Monopsonistic powers - Bilateral Monopoly - Elasticity of factor Substitution - Technological Progress and Income Distribution - Pricing of fixed factors - Non-homogenous factors and wage differentials - Product Exhaustion Theorem.

Module 2: General Equilibrium

Absolute versus relative prices, perfectly competitive price and general equilibrium models, General Equilibrium: Partial Equilibrium versus General Equilibrium analysis - Walrasian general equilibrium - Uniqueness and stability of equilibrium - Two-sector model.

Module 3: Welfare Economics

Welfare Economics- Welfare theorems, - Pareto Optimality - Kaldor-Hicks Compensation Criteria – Scitovsky, Bergson Criteria – Social Welfare Functions: Maximization of Social Welfare- Arrow's Impossibility Theorem - Theory of Second Best- Rawl's theory of social justice

Module 4: Markets with Asymmetric Information

Economics of Information: Informational asymmetrics and Market for lemons - Adverse selection and Insurance market - Solution to principal agent problem - Moral Hazard - Signaling and Screening.

Module 5: Economics of Risk and Uncertainty

Investment behaviour under risk and uncertainty - Expected utility - Risk aversion (demand for insurance) - Risk pooling and risk spreading - Mean-variance analysis - Measuring risk - Counterparty risk - Equilibrium in a market for risky assets.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

References

Required Text Books:

- Koutsoyiannis, A. (1979). Modern Microeconomics (2nd edition). Macmillan Press, London.
- Dominick Salvatore (2003) Microeconomics: Theory and Applications, Oxford University Press

Additional references

• Varian, H. (2010). Intermediate Microeconomic (8th Edition). New York: W.W Norton.

Course Code	EEC 5202	Semester	II
Course Title	MACROECONOMIC THEORY - II		
Credits	4	Туре	Core

Course Description

The course selectively covers theoretical issues and recent developments in open economy. The topics covered will include post Keynesian macroeconomics, the new classical macroeconomics, the new Keynesian school and business cycles. The course will also include structuralist critiques of mainstream macroeconomic policy proposals.

Course Outcome

By the end of the course, students are expected to be able to:

- Clarity about different schools of modern macroeconomics
- Recent developments in theories of unemployment, business cycle and inflation
- Macroeconomic stabilisation and role of budget, fiscal policy and monetary policy

Course Structure

Module 1: Theories of Inflation and Unemployment

Classical, Keynesian and monetarist approaches of inflation - Philips Curve analysis - the NAIRU hypothesis Policies to control Inflation and Unemployment - adaptive expectations and rational expectations - NRU and hysteresis hypothesis - New Micro Economics in Labour market - Search Theory - DMP paradox.

Module 2: Business Cycles

Cyclical behaviour of economic variables – direction and timing – Aggregate demand shocks and aggregate supply shocks – Business Cycle theories of Samuelson, Hicks and Lucas - Real business cycle theory – Great Depression, Financial Crisis and Global Slowdown of 2008 – Alternative Explanations of economists - Eugene Fama, Paul Krugman, Joseph Stiglitz etc.

Module 3: Recent Developments in Macroeconomics: Classical

The counter revolution – Monetarism – Rational Expectation revolution – New Classical Macro Economics – Views of Muth, Wallas, Sargent and Lucas – Supply side economics – The Dynamically Stochastic General Equilibrium model (DSGE).

Module 4: Recent Developments in Macroeconomics: Keynesian

The Keynesian counter revolution – Re-interpretation of Keynes by Clower and Leijonhufvud – The dual decision hypothesis – Post Keynesians – Minsky's financial instability theory. The New Keynesian Economics – The New Political Macroeconomics.

Module 5: Macroeconomic Stabilization Policies

Monetary Policy – conduct of monetary policy – rules vs. discretion – Taylor Rule - The Time inconsistency proposition – Monetary targeting and inflation targeting – Fiscal policy –Budget deficits – Seigniorage – Ricardian debt equalization problem – Alternative strategies - Gradualism vs cold Turkey – Disinflation and sacrifice ratio – Okun's Law.

Testing & Evaluation

Internal Evaluation consisting of Seminar, Group discussions, Assignment, Mid-term exam and final end semester examination.

References

Required Text Books:

- Brawn Snowdon and Howard.R.Vane, (2006), Modern Macroeconomics, The origin, Development and current state, Edwal Elgar, U.K.
- Dornbush, R, Stanley Fischer and Richard Startz (1998) Macroeconomics, (7thedn.), Tata McGraw Hill, New Delhi.
- Errol D'Souza (2008) Macroeconomics, Pearson.
- G.K.Shaw, Michael J., McCrostie and David Greenway (1997) Macro Economics, Theory and Practice, Blackwell Publishers
- Gardner Ackley, Macroeconomics, (1969), Theory and Problems (1stedn.) McMillan,London
- Levacic, Rosalined and Rebmann, Alexander (1982) Macroeconomics: An Introduction to Keynesian Neo-classical controversies, Macmillian Press Limited (2ndedn.)
- Mankiw N. Gregory (2012), Macroeconomics, (8thedn⁻), Worth Publishers, New York.

Additional References

- Oliver Blanchard (2011) Macro Economics, (4thedn), Pearson Education, Inc.
- Richard T.Froyn (2005) Macroeconomics, Theory and Practice (8thedn.) Pearson Education, Inc.
- Andrew.B.Abel and Ben S. Bernanke, (2005), Macroeconomics, (5th Edition), Pearson Education, Inc,Singapore.

Course Code	EEC 5203	Semester	II
Course Title	STATISTICS FOR ECONOMIC ANALYSIS		
Credits	4	Туре	Core

Course Description

This course is aimed at introducing the students of economics to certain basic concepts and techniques in statistics which are considered to be Very useful to an understanding of economics. This course is intended to give an idea on fundamentals of sampling Distribution and inferential statistics with its applications

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate advanced theories in the statistics
- Teach applications of statistics in Economics
- Training in Statistical Packages in STATA and SPSS

Course Structure

Module1: Elements of Probability

Set Theory-Principles of Counting-concept of factorial-permutation and combinations-event-random excise-simple probability-joint probability-conditional probability-bayes theorem-cumulative Distribution Function-Mathematical Expectation-theorems of expectation-theory of variance

Module 2: Understanding Distribution

Discrete and continuous Distribution- Theoretical distribution of Binomial, Poisson and Normal distributions; Log normal Distribution, Pareto Distribution, Chi-square distribution — F distribution sampling distribution of a statistic-law of statistical regularity-inertia of large number-central limit theorem- Testing Normality.

Module 3: Theory of Estimation

Concept of estimation-estimator-types and properties-point and interval estimation-standard errors of estimators-confidence limits for a population parameter

Module 4: Inferential statistics

Formulation of statistical hypothesis – Null and alternative hypothesis; Goodness of fit; Confidence intervals and level of significance-one tailed and two tailed test-Types of Errors; Type 1 and Type 2 errors. Hypothesis testing based on Z, t, F, Chi-square) for both large and small samples and F tests-ANOVA- Practical Exercises

Module 5: Non-Parametric Methods

Definition-non parametric data-concept and use-tests for non-parametric Data-Lickert Scale, Sign Test, Kusker value, Kendall's Coefficient of Concordance - practical exercises

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid term exam and final end semester examination.

Readings:

- Speigal. M.R. (1992), Theory and Problems of Statistics, McGraw Hill, London.
- Croxton, Frederick E., Dudley J. Cowden and Sidney Klein (1988): *Applied General Statistics*, Prentice-Hall of India Private Ltd., New Delhi.
- Hamilton, Lawrence C. (1990) *Modern Data Analysis: A First Course in Applied Statistics*, Brooks/Cole, California.
- Anderson, Sweeney, and Williams, Statistics for Business and Economics, 8e, CENAGE learning,
 2010
- Marsh, Catherine (2009) Exploring Data: An Introduction to Data Analysis for Social Scientists,
 Polity Press, UK, Second Edition
- Myatt, Glenn J. (2007): Making Sense of Data: A Practical Guide to Exploratory Data Analysis and Data Mining, Wiley-Interscience, New Jersey.
- Nagar, A.L. and R. K. Das (1987) Basic Statistics, Oxford University Press, New Delhi.
- Sanders, Donald H. (1990): Statistics: A Fresh Approach, McGraw-Hill Publishing Company, New York.
- Myles Hollander, Douglas A. Wolfe, Eric Chicken (2013) Nonparametric Statistical Methods, Wiley

Course Code	EEC 5204	Semester	II
Course Title	INTERNATIONAL ECONOMICS: THEORY AND POLICY		
Credits	4	Туре	Core

Course Description

This course deals with the theoretical and empirical aspects of international trade and finance. The topics covered include Hecksher-Ohlin, factor price equalisation theorem, monopolistic competition in international trade, theory of immiserising growth, forms of economic integration as well as fundamentals of international finance.

Course Outcome

Upon completion of this course, the students are expected to:

- Critically evaluate the contributions of various theories in explaining the patterns, directions, and gains from international trade.
- Assess the controversies related to the political economy and welfare effects of trade policy.
- Describe the role of world trading system and critically analyse the issues related to the WTO negotiations and the regional trading arrangements.
- Analyse the recent developments in the field of international economics.

Course Structure

Module 1: Classical Trade Theory

Pure theory of International Trade- Theories of Absolute advantage and comparative advantage — Opportunity cost approach- Specific factor model-Specific factors and income distribution — Heckscher-Ohlin model - Factor price equalisation theorem — Rybisinski theorem — Empirical testing of H.O theorem- Leontief Paradox — Factor intensity reversal- Theory of immiserising growth-Demand and supply- offer curves-terms of trade.

Module 2: Modern Trade Theory

Monopolistic competition and international trade – Technology differences and trade- Trade based on product differentiation- Intra industry trade – Imitation gap and product cycle models- empirical test of intra industry trade.

Module 3: Trade Barriers

The case for free trade and protection — Trade restriction — Tariff and non-tariff barriers- Effects of trade — Partial Equilibrium Analysis- Effective Rate of Protection —General Equilibrium Analysis- Small Country and Large Country Cases - Optimum Tariff - Stolper-Samuelson Theorem-Metzler Paradox — Lerner Symmetry Theorem

Module 4: Balance of Payments

Anatomy of Balance of payments (BoP)- Function of Foreign Exchange Markets- Hedging, Speculation, Interest arbitrage, Exchange rate determination- Purchasing power parity theory- Fixed and flexible exchange rates — Foreign Exchange Management - BoP disequilibrium- Adjustment mechanism-Automatic mechanism-Price and income adjustments under fixed and flexible exchange rate system-Policy measures- Devaluation- Revaluation- Elasticity approach- J curve effect- Absorption approach-Monetary approach and devaluation.

Module 5: World Trading System

Forms of economic integration- Free Trade Agreement (FTA), Common Market, Economic Union, Trade creating and trade diverting custom union – The working of integration in the present world-European Union- ASEAN-UNCTAD-WTO emerging issues- WTO rounds- SAARC- Role of trade in emerging less developed countries.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Assignment, Midterm exam and final End semester examination.

- Dominick Salvatore (2011), International Economics.
- Paul Krugman and Maurice Obstfeld (2003), International Economics: Theory and Policy.
- Bo Sodersten, Geoffrey Reed (2011), International Economics.
- Peter Dicken (2007), Global shift: Mapping the changing contours of the world economy.
- Jagdish Bhawati, V N Balasubtramanyam (1988), Writings on International economics.
- David Greenaway (1983), International Trade Policy.
- T N Srinivasan (1999), Developing countries in the world trading system.
- Michael W.Klein (2009), Exchange Rate Regimes in the Modern Era.
- C P Kindleberger (1976), International Economics.

Course Code	EEC 5205	Semester	II
Course Title	REGIONAL ECONOMICS		
Credits	4	Туре	Core

Course Description

The objective of the course is to familiarize the students with the basic tenets of subnational governments in the Federal structure of Indian economy. This course aims to give insight to the students in the concepts of regional development and growth. It broadly comprises the models, theories and policies of regional growth and development.

Course Outcome

At the end of the course, the students are expected to be able to:

- Appreciate the diversity and challenges involved in the growth potentials and the actuals of each region in India.
- Conceive alternative ideas on state specific development challenges and way forward.

Course Structure

Module 1: Concepts, Definition and Scope

Objectives and scope of Regional Economic Analysis - Difference between Region and a nation - Regional income, Leontief Input output Accounting - indicators of regional development - Regional economic problems - Economics of Geography (Krugman).

Module 2: Regional Economic Theories - I Theories of Regional /Economic development

Cumulative Causation (Perroux, Myrdal, Hirschman) - Export Base Theory - Central Place theory (Christaller) - Sector theory (Colin Kuznets) - stages theory (Rostow).

Module 3: Regional Economic Theories II

Theories of location: Growth Foci - Weber's – Florence - Migration and Regional Development - Three Dimensions of Regional Development (Density, Distance and Economic Divisions).

Module 4: Regional Disparities and Regional Economic Planning in development.

Regional disparities: Interstate variations of poverty and unemployment - Intra- Regional concentration - Problems of developing the backward areas. Urban decentralization: Housing market - Urban transportation - Role of migration. Regional planning in India and Kerala – Need for local level data base in Regional Planning - Integration of local development plans with the District development plan.

Module 5: Regional Economy of Kerala

Kerala: Socio Economic profile of Kerala - Inter district disparity in development. Regional backwardness in development: Perspectives - Challenges and opportunities - Sectorial performance of Kerala by district level analysis - Human Development Reports by district in Kerala- implications and

Policy interventions - Case study of Panchayath Development Reports for local level planning and development.

Testing & Evaluation

Continuous evaluation consisting of Assignments, Presentation, Midterm exam and final End semester examination.

- Mishra J and Chakadar Sinha (1988), Planning and Regional Development in India (Guarav Publishing House, Jalandhar).
- Mishara R P (2002), Regional Development Planning in India (Vikas, New Delhi)
- Harry W Richardson- Elements of Regional Economics, Penguin Modern Economic Text Harvey Armstrong and Jim Taylor (1978), Regional Economic Policy and its Analysis, First Edition, Philip Allan Publishers Limited, Oxford OX5 4SE
- Myrdal G (1968), Economic Theory and under developed Region, Vora, New Delhi. Maccann (2013), Urban and Regional Economics, second edition. Oxford University Press. Rakhee Bhattacharya (2015), Regional Development and Public Policy Challenges in India, first edition, springer.
- Jagdish Bhagwati and Arvind Panagariya (2014), Why Growth Matters: How Economic Growth in India reduced Poverty and the Lesson for other Developing Countries, first edition, Public Affairs, U.S.
- Thomas Piketty (2015), The Economics of Inequality, Harvard University Press.
- Joseph Stiglitz (2013), the Price of Inequality, Penguin UK.
 Misra R P (1974), Regional Development Planning in India, Vikas, New Delhi.
- BA Praksash
- M. Kuttapan(2017): Data base for Decentralised governance. A hand book mannas publishing house - Trivananthapuram

Course Code	EEC 5301	Semester	III
Course Title	BASIC ECONOMETRICS		
Credits	4	Туре	Core

Course Description

The course is to introduce basic econometrics to the students and to equip them with basic tools of Econometric analysis. Course will be supplemented by Practical Class by using STATA and Gretl Software.

Course Outcome

By the end of the course, students are expected to be able to:

- Understanding in basic concepts application of econometrics
- Construction of simple econometric models
- Applications of software and interpretation of result

Course Structure

Module 1: Introduction to Different Methods in Econometrics: Basic Concepts and Methodology of Econometrics-Single Equation Regression Model- The Problem of Estimation-The method of Ordinary Least Squares - The Gauss-Markov Theorem-assumptions - Properties of OLS Estimators- Normality Assumption-Hypothesis Testing. Maximum Likelihood Method.

Module 2: Multiple Regression and Estimation: Multiple regression: estimation, testing the significance of coefficients— ANOVA-F test- The Coefficient of Determination and adjusted R²

Module 3: Model Diagnostics: The Problems of Non-Linearity, Multicollinearity, Heteroscedasticity and Autocorrelation - Detection and Remedial Measures —Specification Problem-- Errors in Measurement.

Module 4: Regression with Dummy Variables: Dummy independent variables —uses-slope and intercept-Dummy Variable trap- Interactive Effects; Seasonal Analysis-Piecewise linear regression — Structural Stability- Chow Test and its applications- Dummy Dependent Variable- Logit, Probit, Tobit models.

Module 5: Introduction to Time series: Introduction to time series - seasonality issues - Stationarity and Non-Stationarity-Test for Nonstationary—cointegration. Prerequisites

Testing & Evaluation

Internal Evaluation consisting of Seminar, Assignment, Lab, Mid-term exam and final end semester examination.

References

Required Text Books:

• Dougherty, Christopher, Introduction to Econometrics, Oxford University Press.

- Studenmund, A.H. (2006): *Using Econometrics: A Practical Guide*, Pearson Addison Wesley, New York.
- Angrist, Joshua D. and <u>Jorn-Steffen Pischke(</u> 2008): *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, New Jersey, USA.
- Greene, William H. (2003): *Econometric Analysis*, 5th Edition, Pearson Education, Inc., New Jersey.
- Gujarati, D. N. and Sangeetha (2007): Basic Econometrics, , 4th Edition, Tata McGraw-Hill Publishing Company Ltd., New Delhi.
- Johnston, J. and John DiNardo, (1997): *Econometric Methods*, 4th Edition, McGraw-Hill Companies, Inc., London.
- Judge, G. et al. (1988): *Introduction to the Theory and Practice of Econometrics*, 2nd Edition, John Wiley & Sons, New York.
- Kmenta, Jan (1986): Elements of Econometrics, Macmillan Publishing Company, New York.
- Lardaro, Leonard (1993): Applied Econometrics, HarperCollins College Publishers, New York.
- Maddala, G. (1977): Econometrics, McGraw Hill Kogakusha, Ltd., Tokyo.
- Mukherjee, Chandan, Howard White and Marc Wuyt (1998): *Econometrics and Data Analysis for Developing Countries*, Routledge, London.
- Wooldridge, Jeffrey M. (2003): *Introductory Econometrics: A Modern Approach*, Second Edition, Thomson South Western, USA.

Additional References & Data Sources

- Dandekar, V. M. (ed.) (1972): Database of the Indian Economy, Vol. II, Statistical Publishing Society, Calcutta.
- Government of India (1999): *Guide to Official Statistics*, 4th Edition, Central Statistical Organisation, New Delhi.
- Government of India (1989): *National Accounts Statistics: Sources and Methods*, Central Statistical Organisation, New Delhi.
- Krishna, K. L. (1997): Econometric Applications in India, OUP, New Delhi.
- Minhas, B. S. (ed) (2002): *National Income Accounts and Data Systems*, Oxford University Press, New Delhi.
- Mukherjee, M. (1969): National Income of India: Trends & Structure, Statistical Publishing Society, Calcutta.
- Rao, C. R. (ed.) (1972): Database of the Indian Economy, Vol. I, Statistical Publishing Society, Calcutta.
- Roy Choudhury, Uma Dutta (1995): National Income Accounting, Macmillan, New Delhi
- www.rbi.org.in
- http://mospi.nic.in/mospi_nsso_rept_pubn.htm
- http://development.thinkingwithdata.com

Course Code	EEC 5302	Semester	III
Course Title	PUBLIC FINANCE		
Credits	4	Туре	Core

Course Description

Role of the government in the modern economy has been a born of contention in the economics. Given such a background, this course is primarily intended to expose students to the fundamental concepts and principles in the public economics. In addition to this, this course will also be useful to enhance the understanding of the students about various aspects of the role played by the government and thereby prepare them to analyze issues in the public sector and suggest appropriate measures to deal with them. Particular emphasis is given to recent developments in public economics, including GST, GST council and subsidy reforms

Course Outcome

By the end of the course, students are expected to be able to:

- Explores the role of government in the economy
- Applying tools of microeconomics to answer important policy questions.
- Discuss critically key issues in public finance
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Structure

Module 1: Introduction to Public Finance

The role of government in the economy: Allocation - Distribution - Stabilization. Public goods: Market failure - Public goods - Free-rider problem - Externalities - Information asymmetry - Merit goods. Social choice: Social choice- Preference revelation - Majority voting paradox and Arrow's impossibility theorem, Public-Private Partnership (PPP).

Module 2: Public Revenue

Taxation - Types of taxes - Types of non-tax revenue, Theories of taxation - Desirable features of good taxation - Approaches to division of tax burden - Horizontal and vertical equity - Efficiency and dead weight loss - Incidence and effects of taxation on consumers and producers, Theory of optimal taxation - Tax reforms and GST in India.

Module 3: Public Expenditure

Public expenditure: Various concepts - Principles of public expenditure - Peacock-Wiseman Hypothesis - Wagner's theory - Samuelson's Pure Theory of public expenditure – Structure and Growth of Public Expenditure in India - Effects and evaluation of public expenditure - Subsidy- Targeting - Leakages and reforms - Fiscal Crisis and Fiscal Reforms in India - Fiscal consolidation and FRBM Act and its relevance

Module 4: Budget and Public Debt

Budget: Types of budget, Overview of latest budget of union government, Theories of Public debt: Growth of public debt in India – Sources and structure of public debt in India - Management of Public Debt - Deficit financing and implication – Public Debt Policy.

Module 5: Federal Finance

Fiscal federalism: Principles and hypothesis - Fiscal federalism in India - Fiancé Commission, recent developments in the Centre-State relations in India- GST Council and Financial devolution under 15th finance commission.

References

Required Tex Book

- Joseph E Stiglitz, The Economics of Public Sector, 3rd edition, Norton
- Richard A Musgrave and Peggy B Musgrave, public finance in theory and practice, 5th edition, McGraw-Hill.

Additional References

- Amaresh Bagchi, Readings in Public Finance, OUP, 2005
- Govinda Rao M. and T. K. Sen, Fiscal Federalism in India: Theory and Practice, 1996
- Economic Survey, 2020-21, Govt of India.

Course Code	EEC 5303	Semester	III
Course Title	RESEARCH METHODOLOGY		
Credits	4	Туре	Core

Course Description

The purpose of this course is to enhance the students' knowledge to formulate a research question and translate it into an empirical step-by-step approach for working with data.

Course Outcome

Upon completion of this course, the students are expected to:

- Develop the most appropriate methodology for the research studies in social sciences.
- Familiarize and differentiate the use of various research methods and techniques.
- Define a research problem and prepare the appropriate research design for the research problem.
- Illustrate the data collection techniques and data analysis and presentation.
- Demonstrate the sampling techniques and its fundamentals.
- Familiarize the task of interpretation and the art of writing research reports.

Course Structure

Module 1: Introduction to Research

The meaning of research - types of research - importance of research - research and policy- specific characteristics of Research in Social Sciences - Methods of Research — Deductive and Inductive Reasoning — Steps of scientific methods in research — Qualitative and Quantitative Approach - Mixed Methods.

Module 2: Steps in Research

The Research Process: Formulation of a Research problem – Guiding principles in the choice of a Research topic and Formulation of Research Questions – Writing a Proposal - Role of Review Literature – Theoretical and Conceptual Framework-Formulation of Research Design – Hypothesis; concept, definition, formulation and testing.

Module 3: Survey based research

Sampling Techniques - field survey - Primary Data Collection - Tools — Observation, Schedule, Questionnaire — principles underlying construction of a questionnaire — data processing and Analysis — Use of Statistical packages.

Module 4 Introduction to Secondary Database

Introduction to databases: Important Secondary data sources: NSSO, CSO, Economic survey, Season & Crop Report, Agricultural Census, Livestock Census, Annual Survey of Industries, RBI Reports, CMIE PROWESS database.

Module 5: Writing a Research Report

Writing a Research report - research paper — Bibliography - reference styles - Ethics in Research - Plagiarism - Writing a thesis - Do's and Dont's.

Testing & Evaluation

Continuous evaluation consisting of Quiz, Presentation, Research Proposal, Midterm exam and final End semester examination.

References

Selected References:

- Kothari C.R., Research Methodology, New Age International, New Delhi, 2008.
- Wilkinson T.S., and Bhandarkar P.L.: *Methodology and Techniques of Social Science Research*, Himalaya Publishing House, New Delhi, 2006.
- Panneerselvam, R., Research Methodology, Prentice Hall of India Pvt Ltd, 2009.
- Young P.V., Scientific Social Surveys and Research, Prentice Hall of India Pvt Ltd, 2008.
- Parsons C.J., Thesis and Project Work, Allen &Unwin., 2006.
- Dipak Kumar Bhattacharya, Research Methodology, Excel Books, 2006.
- Cochran W.G., Sampling Techniques, John Wiley, New York, 1963.
- Babbie, Earl. R. 2013. "The Practice of Social Research." Cengage Learning, Canada.
- John W. Creswell. 2014. "Research Design: Qualitative, Quantitative and Mixed Methods Approaches." Sage Publication, Washington, USA.
- Goode J. William and Hatt K. Paul. 1952. "Methods in Social Research." McGraw-Hill Publishers, New York.
- Kate L. Turabian. 2006. "A Manual for Writers of Term papers, Theses and Dissertations." The University of Chicago press, Chicago.
- Blaug, Mark. 1994. "The Methodology of Economics." Cambridge University Press, Cambridge.
- Daniel M. Hausman. 2007. "The Philosophy of Economics: An Anthology." Cambridge University Press, Cambridge.

ELECTIVE COURSES

Course Code	EEC 5001	Semester	III/IV
Course Title	INDUSTRIAL ECONOMICS		
Credits	4	Туре	Elective

Course Description

The objective is to provide a thorough knowledge about the economics of industry in a cogent and analytical manner, particularly in the Indian context.

Course Outcome

Upon completion of this course, the students are expected to:

- Evaluate the role of industries in economic development.
- Explore the motives of mergers and diversification.
- Conceptualize the industrial organization forms and the ownership structure in industrial sector.
- Assess the industrial policies in India.

Course Structure

Module 1: Framework of Industrial Economics:

Meaning and scope of industrial economics – Industrial efficiency: concepts and measurement – Industrial classifications – Concepts of plant, firm and industry – Role of industries in economic development.

Module 2: Industrial Location:

Theories of industrial location: Weber's theory of location, Sargant Florence theory — Factors influencing location — Balanced regional development of industries — Diversification — Integration and merger of industrial units.

Module 3: Organizational Form and Industrial Productivity:

Industrial organization and ownership structure – Public, private, joint and co-operative sectors – Industrial productivity: Measurement and determinants.

Module 4: Major Industries:

Structure of large-scale industries in India – Sugar, Cotton, Iron and Steel, Agro processing industries – Small and medium enterprises – Rural industrialization – Emerging global competition and Indian industry – Impact of liberalization, privatization and globalization on industrial development.

Module 5: Industrial Policies in India:

Capital markets in India – Industrial financing – Role of IFCI, SFC's NIDC, SIDC, ICICI and IDBI in industrial development – Recent industrial policies in India.

Testing & Evaluation

Continuous evaluation consisting of assignments, presentations, Midterm exam and final End semester examination.

- Barthwal, R.R., *Industrial Economics An Introductory Textbook,* New Age Intl. Publishers.
- Cherunilam, F. (1994), *Industrial Economics : Indian Perspective* (3rd Edition), Himalaya Publishing House, Mumbai.
- Desai, B. (1999), *Industrial Economy in India* (3rd Edition), Himalaya Publishing House, Mumbai.
- Kuchhal, S.C. (1980), *Industrial Economy of India* (5th Edition), Chaitanya Publishing House, Allahabad.

Course Code	EEC 5002	Semester	IV
Course Title	ADVANCED ECONOMETRICS		
Credits	4	Туре	Elective

Course Description

The main objectives of the course are to introduce students to the advanced econometrics techniques and to prepare them to do their own applied work. Students are encouraged to think of the course as a preparation toward their PG dissertation. The prerequisites of the course are thorough knowledge in statistics and basic econometrics. The knowledge of some computer-programming is welcome.

Course Outcome

Upon completion of this course, the students are expected to:

- Develop the most appropriate methodology for the research studies in social sciences.
- Familiarize and differentiate the use of various research methods and techniques.
- Define a research problem and prepare the appropriate research design for the research problem.
- Illustrate the data collection techniques and data analysis and presentation.
- Demonstrate the sampling techniques and its fundamentals.
- Familiarize the task of interpretation and the art of writing research reports.

Course Structure

Module 1: Simultaneous Equation Models:

Structural and Reduced form equations - The Simultaneous equation bias – The identification problem – Rules of identification – Test of simultaneity - Estimation of Simultaneous equations – Indirect Least Squares method – 2SLS method.

Module 2: Dummy Variable Regression Models and Qualitative Response Models:

ANOVA models and ANCOVA models – Dummy variable and Chow test – Interaction effects – Piecewise Linear Regression. Nature of Qualitative Response Models – Linear Probability Model – Logit Model – Probit model – Tobit model

Module 3: Dynamic Econometric Models:

Distributed-lag models – Koyck approach to distributive lad models – Rationalization of Koyck model – Estimation of autoregressive model – Durbin h-test.

Module 4: Time-series Analysis:

Stochastic process – Stationary and Non-stationary – Spurious regression - Integrated Stochastic Processes – Test of stationarity - Unit root test –Transforming non-stationary time series – Cointegration analysis.

Module 5: Panel Data Analysis:

Panel data estimation issues – Panel data estimation models: Fixed Effect Model and Random Effect Model – The Hausman Specification Test - Panel cointegration tests

Testing & Evaluation

Continuous evaluation consisting of Quiz, Assignments, Practical Exercises, Midterm exam and final End semester examination.

- Jeffrey M. Wooldridge Econometric Analysis of Cross Section and Panel Data-The MIT Press (2001)
- James Douglas Hamilton Time Series Analysis-Princeton University Press (1994)
- Damodar Gujarati, Basic Econometrics-McGraw-Hill Education (2008)
- Damodar Gujarati Econometrics by Example-Palgrave (2014)
- Badi Baltagi Econometric Analysis of Panel Data-J. Wiley & Sons (2005)
- Panchanan Das Econometrics in Theory and Practice: Analysis of Cross Section, Time Series and Panel Data with Stata 15.1-Springer Singapore (2019)
- Vijayamohanan Pillai N. Panel Data Analysis with Stata Part 1
- Jonathan D. Cryer, Kung-Sik Chan Time Series Analysis_ With Applications in R-Springer (2008)

Course Code	EEC 5004	Semester	III/IV
Course Title	HEALTH ECONOMICS		
Credits	4	Туре	Elective

Course Description

Health economics is a growing field of economics primarily dealing with issues relating to scarcity in the allocation health and health care. The aim of this proposed course is to familiarize the students with economic ideas and motivate them into undertaking future research and build their careers in health economics. This is an introductory course giving the application of economic principles to policy relevant questions in the arena of health and health care. The course begins with an overview of health economics and students will learn about the health care sector and how to apply economic tools in analyzing structure and performance of health care sector.

Course Outcome

By the end of the course, students are expected to be able to:

- Explores the role of health system
- Applying tools of microeconomics to answer important policy questions.
- Discuss critically key issues in health economics
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Structure

Module 1 Introduction to Health Economics: concepts in Economics— Utility, Demand and supply analysis, Elasticity, Expenditure Function, Production Possibility Frontier (PPF), Externalities and Market Failure: Approaches to Economics-Positive and Normative, Welfare economics and health.

Module 2Economic Evaluation: What is economic evaluation? Various types of economic evaluation used in health care, measuring outcome, Cost effectiveness analysis (CEA), Cost-Benefit Analysis (CBA), Divergence between social and private costs and benefits in health care, Limitations of economic evaluation, Consumer Impact Assessment. The importance of costing in Health Economics, Alternative definitions of cost, types of cost - monetary and non-monetary, measurement and valuation issues in cost, production cost and discounting, Constraints in measuring health cost.

Module 3. Concepts and Measures of Health Inequalities: Defining health inequality, Why measure health inequality; Health equity and inequality: Concept and definitions; Understanding of the concepts such as need, access and utilisation; cardinal and ordinal health variables; Presence of inequality: Review of some elementary measures of health inequality: Index based approach Axiomatic approach to measurement; Individual-mean and inter-individual comparison; WHO Index, Coefficient of Variation, Generalised Entropy Index, Lorenz Curve and Gini Coefficient\

Module 4. Health Financing and Health Insurance: Health care financing system, source of health care spending, The Health Insurance – intermediary agent, The private health insurance, Regulation of health insurance, Government as health insurer in India, Equity in health care finances, Future investment strategies in health sector, Willingness to pay for health care, User charges as determinant

of health financing, Health financing and insurance in India, Health Polices and NHRM

Module 5. Global Pandemic and Development: Plague, Cholera, Spanish Flue and COVID 19

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

References

Essential

- Rexford E. Snterre and Stephen P. Neun, Health Economics: Theories, Insights and Industry Studies, Thompson South – Western, 3rd Edition (614, San/Hea, 073226) Note: 4th Edition is out in 2007 (ISBN: 032432068X; ISBN13: 9780324320688)
- Paul J Feldstein, Economics of Health Care, CENGAGE learning, 2011
- Drummond MF, Sculpher MJ, Torrance GW, O'Brien B, Stoddart GL, eds. Methods for economic evaluation of health care programmes, Third Edition, Oxford University Press, 2005.
- O'Donnell O, Doorslaer E v, Wagstaff A and Lindelow M. Analyzing Health Equity Using Household Survey Data, AGiide to Techniques and Their Implementation
- Gold Marthe R, Joanna E Siegel, Lousie B russel, and Milton C Weinstein, 1996, Cost effectiveness in health and medicine, new York: Oxford University Press. http://www.sciencedirect.com/science/handbooks/15740064

Reading List: Suggested

- Zweifel and Breyer, 1997, Health Economics, Oxford University Press)
- Health economics: 3rd Edition by Phelps
- The economics of health and health care, 2nd edition by Folland, Goodman and Stono (FGS)
- Handbook of Health Economics (Anthony J. Culyer and Joseph P Newhouse eds., Elsevier Science, 2000: Available online at:
- Culyer A J and J P Newhouse, 2000, The state and scope of health economics, Handbook of Health Economics, Volume 1A, Eds. Culyer and Newhouse, Elsevier, 2000, pages 1-7.

Recommended Journals:

- Health Policy and Planning
- Health Policy
- Inequalities in Health
- Bulletin of the World Health
- The Lancet

Course Code	EEC 5006	Semester	III
Course Title	ENVIRONMENTAL ECONOMICS		
Credits	4	Туре	Elective

Course Description

Aim of the course is to make the students enable to understand the role of economics to solve environmental issues, estimate the monetary value of environment resources and services and necessity of balance between economic growth and environmental quality.

Course Outcome

By the end of the course, students are expected to be able to:

- Inter-linkages between and economy and environment
- Identify and analyse the environmental issues and related theories
- Applications of economic valuation and environmental resources
- Issues of sustainable development and policies

Course Structure

Module 1: Economic System and Environmental System

Economic System and Environmental System: Inter-linkages - Material Balance Model. Types of Pollution: Cumulative and non- cumulative - Local, régional and global - Point source and non-point source. Welfare Effects of Pollution: Air Pollution (acid rain, ozone depletion, global warming) - Water Pollution - Municipal Solid Waste - Bio-Medical Waste.

Module 2: Market Failure, Government Failure and the Environment

Market: Conditions for efficient functioning of markets - Market failure - Environmental damage as an externality - Environmental goods as public goods - Asymmetric information and environmental damage - Adverse selection - Moral hazard - Property rights and environmental damage (coase theorem) - "Government failure" and Environmental damage. Pollution Control Policies: Commandand-control policy - Market based instruments (pollution taxes, tradable permits and subsidies).

Module 3: Economic Valuation of Environmental Resources

Cost-Benefit Analysis - Types of environmental value and need for environmental valuation. Methods of Environmental Valuation: Revealed preference methods - Hedonic pricing method - TCM - Stated preference approach - CVM.

Module 4: Renewable, Non-Renewable and Common Property Resources

Types of natural resources and Mckelvey classification - Measuring Resources Scarcity: Resource lifetime - Unit cost measures - Real prices - Economic rent. Allocation of Non-Renewable Resources: The Hotelling theorem. Renewable Resources: Forests (Frontier and Immiserisation Models of Deforestation) - Consequences of deforestation - Fisheries ("Efficient Sustainable Yield") - Water

(Efficient Allocation of Surface and Ground Water). Common Property Resources: Characteristics - Tragedy of the Commons - Ostrom's principles for sustainable local CPR governance.

Module 5: Economic Growth and Sustainable Development

Economic Growth and Environment: The environmental Kuznet curve - The "Limits to Growth" Club of Rome model. Economics of Sustainable Development: Definition - Weak and strong sustainable development - Sustainability rules (Hartwick Rule) - Safe minimum standard - Measuring the sustainable development (Green National Accounting) - Link between poverty and environmental degradation - Economics of climate change.

Testing & Evaluation

Internal Evaluation consisting of Seminar, Assignment and final end semester examination.

References

Required Text Books:

- Hanley, Nick, J.F. Shogren, and Ben White. (2001). Introduction to Environmental Economics (2nd Edition). Oxford University Press, Oxford, UK.
- Karpagam M. (1998). Environmental Economics (1st Edition). Sterling Publishers, New Delhi, India.
- Hanley, Nick, J.F. Shogren, and Ben White. (1997). Environmental Economics: In Theory and Practice (1st Edition). Macmillan Publishers, Chennai, India.
- Kolstad, Charles D. (2010). Environmental Economics (2nd Edition). Oxford University Press, Oxford, UK.

Additional References

- Sankar U. (2001). Environmental Economics. Oxford University Press, New Delhi, India.
- Gopal K. Kadekodi. (2004). Environmental Economics in Practice: Case Studies in India. Oxford University Press, Oxford, UK.
- Field, Barry C. (2001). Natural Resource Economics: An Introduction. Tata McGraw Hill, London.

Course Code	EEC5007	Semester	III/IV
Course Title	LABOR ECONOMICS		
Credits	4	Туре	Elective

Course Description

This course aims to acquaint students with traditional and contemporary topics in labor economics and to encourage the development of independent research interests. The class provides a systematic development of the theory of labor supply, labor demand, human capital, compensating wage differentials, worker mobility, discrimination in the labor market, role of unions and unemployment. Beside, each and every concepts and theories in the course outlined below would be evaluated based on the Indian labour market experiences. Leaners are expected to contrast what they study in the course with empirical evidences from Indian economy as part of their course requirements such as assignment

Course Outcome

By the end of the course, students are expected to be able to:

- Evaluate concepts and developments in the real labor market in the economy-both domestic and global
- Anlyse the inherent strengths and weakness of the labor market.
- to undertake advanced studies and researches in the field of Labor Economics
- appraise pressing issues in the macroeconomics and suggest appropriate policy suggestions

Course Structure

Module 1: Introduction and basic concepts: labor force, unemployment, working of labor market, Applications of theory, demand for labor, profit maximisation, demand for labour in competitive and monopolistic product market, maximising monopoly profits and Policy application: impact of pay roll tax and employment subsidies.

Module 2: Elasticity of labor demand, wage elasticity, Hick-Marshall law and its application, Cross elasticity of demand and application of law of derived demand, minimum wage law and its theoretical and employment effects, minimum wage and poverty reduction.

Module 3: Frictions in the labour market and law of one price, supply of labor and the decision to work, labor market participation- trend, the theory of decision to work and labour- leisure choice, income and substitution effects, the reservation wage, policy applications.

Module 4: Household production model, basic model for an individual and applications, labor supply decisions within an household, specialisation function, role of productivity, labor supply in recession-discouraged versus added worker effect, life cycle aspects of labor supply, child labor, empirical evidences.

Module 5: Compensating wage differentials and labor markets, job matching, the role of worker

preferences and information, hedonic wage theory and risk of injury, hedonic wage theory and employee benefits, the joint determination of wages and benefits. Investment in human capital - human capital investments, present value, demand for education, education and earnings

References

Main Text Book

 Ronald G Ehrenberg and Robert S Smith (2012) Modern Labor Economics, Theory and Public Policy, 11th edition, Pearson

Additional References

- McConnell, Brue and Macpherson (2009) Contemporary Labor Economics, 8th edition, McGraw-Hill
- Paul McNulty (1984) The Origin and Development of Labor Economics, MIT Press.

Course Code	EEC 5012	Semester	III/IV
Course Title	POPULATION AND DEVELOPMENT		
Credits	3	Туре	Elective

Course Description

This course is aimed to explain (i) the divergent views on Population and Development by discussing the theories and debates; (ii) the paradigm shift in concept and definition of development; (iii) population and development linkage: challenges, trends and programmatic responses; and (iv) the socio-economic implications of population growth, taking case studies from developing countries.

Course Outcome

By the end of the course, students are expected to be able to:

- Introducing basic issues in Demography
- Demonstrate a familiarity with a range of policy issues and relevant analytical and empirical tools

Course Outline

MODULE I Concepts and Measures of Population Changes: Meaning and scope of demography – Components of population growth and their interdependence measures of population change – Growth, structure and distribution and sources of population data – Demographic data in India – Censuses, Civil Registration system and sample surveys – Sample registration – Methods and drawbacks – Measure of fertility and mortality – Standardize birth rates and death rates – concepts of life table – Meaning of its column and uses – Population distribution.

MODULE II Trends in Population: Trends in growth, composition and distribution of population – Regional variations in rates of growth – African, Asian, Latin American, North American, Europe, Russia, Oceana and estimates of sizes and rates of growth – 'shifting proportions of human population in recent years and density in different regions – Population projections – stable stationary and quasi stable population.

MODULE III Sex and Age Structure: Patterns of sex and age structure in developed and less developed countries – Determinants of sex and age structure – Demographic effects of sex and age structure – Ageing and younging of population – Long term protections of sex and age structure of population.

MODULE IV Fertility, Nuptiality, Mortality: Fertility: Levels and Trends – Factors affecting fertility in developed and LDCs – Differential fertility – Ecological factors regional differences – Urban-rural – Socio-economic factors – Educational attainment, economic status, occupation of husband, employment status of wife, religion, caste, race, etc. Nuptiality: Concepts – Analysis of marital status from Census – Mean age at marriage – Synthetic and decadal synthetic cohort methods – Mean age at widowhood and divorce – Trends in age at marriage – Change in age pattern of marriage. Mortality: Level and trends of mortality in developed and LDCs – Sex and age patterns of mortality – Fetal and infant mortality – Still birth, abortion and perinatal mortality, levels and

trends of infant mortality – Factors affecting – Mortality differentials – Rural, urban – Geographical, occupational, ethnic, etc. – Factors in mortality declines in developed and LDCs.

MODULE V Migration: Basic concepts and definitions – Importance of migration in the study of population – Types of migration – Internal, international, temporary, international migration – Levels, trends and differentials in developed and LDCs – Effects of immigration and emigration – Economic, social - Social-economic aspects of migration – Theories concerning internal migration – Costs and benefits of internal migration and outmigration.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

Readings

- Birdsall, N, A.C. Kelley and S.W. Sinding (eds.) (2001). *Population Matters: Demographic Change, Economic Growth and Poverty in the Developing World*, OUP.
- Birdsall, N. (1988) "Analytical approaches to population growth", in H. Chenery & T. N. Srinivasan (eds.), *Handbook of development economics, vol. 1*.
- Bloom, David, E at al. (2003), *The Demographic Dividend: A new Perspective on the Economic Consequences of Population Change, Population Matters*, Rand, USA.
- Caldwell, J and P. Caldwell (1986). "Routes to low mortality in poor countries *Population and Development Review*, 12.
- Cassen, R. (1994). *Population and Development: Old debates and new conclusions*, Washington, D.C. Overseas Development Council.
- Dasgupta, P. (1995) "The population problem: Theory and evidence", *Journal of economic Literature* 33, 1879-1902.
- Demeny, Paul and McNicoll, Geoffrey (1998), *The Earthscan Reader in Population and Development*, Earthscan Publications Ltd. UK.
- Dyson, Tim. (2001), "A partial theory of world development: the neglected role of the demographic transition in the shaping of modern society", *International Journal of Population Geography*, 7, 67-90.
- Dyson, Tim, R.Cassen and Leela Visaria. (eds.) (2004), Twenty-First Century India: Population, Economy, Human Development and Environment, Oxford University Press.
- Harris, J.R and Michael P. Todaro (1970) Migration, Unemployment and Development: A Two-Sector Analysis The American Economic Review, Vol. 60, No. 1. (1970), pp. 126-142.
- Kelley, A.C. (1988) "Economic consequences of population change in the Third World", Journal of Economic Literature 26.
- World Bank, (1984) World development Report 1984: Population, World Bank, Washington DC.
- World Bank(2000) Beyond Economic Growth Chapter III on 'World Population Growth'.

Course Code	EEC 5016	Semester	III/IV
Course Title	INDIA IN THE GLOBAL ECONOMY		
Credits	3	Туре	Elective

Course Description

This course is aimed to introduce the students to India's position and role in the Global economy. India is expected to lead a surge in emerging-market growth in recent years. The main objective of the course is to enable the students to assess how much India matter for the global economy.

Course Outcome

By the end of the course, students are expected to be able to:

- Describe the process of globalization and its impacts.
- Assess India's role in global economy and its emergence as a global economic power.
- Evaluate trade policies in India in the context of various international economic crises.
- Explain the pattern of international factor movements.

Course Outline

Module I. Introduction to Globalization: Concepts and definitions – Evolution – Objectives – Why globalization? – Process, dimensions and features – How to measure the extent of globalization? – Advantages and disadvantages – Gainers and losers of globalization.

Module II. India and Global Economy: India's role in global economy – Share in global trade and capital flows – BoP position – Dependence on capital inflows – FDI and FPI – Impact of Global Economic Crisis – WTO and Indian economy – Regional and other trade blocks – SAARC, BRICS, RICS, IBSA, and G20 – India as an emerging global power.

Module III. Trade Policy in India: Trade problems and policy changes in India – Trade reforms since 1991 – Implications on BoP, exchange rate, and factor movements – East Asian crisis and India – International reserves and foreign debt problem in India – Working of MNCs and their regulation – EXIM policy – WTO and competitiveness of Indian trade – Agenda for future trade policy.

Module IV. International Factor Movements: International capital and labour movements – Foreign Direct Investment (FDI), its composition, direction and trends – Factors determining FDI – MNCs and their operations – International trade in services and knowledge-based industries – GATS, TRIPS, TRIMS – Trade problems of developing countries.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

References

• Shahid Yusuf, Simon Everett, Weiping Wu (ed) (2001), Facets of Globalization: International and Local Dimensions of Development, The World Bank.

- Joseph E Stiglitz (2003), Globalization and Its Discontents, W. W. Norton & Company.
- Goldin, Ian; Reinert, Kenneth. (2006), Globalization for Development: Trade, Finance, Aid, Migration, and Policy. Washington, DC: World Bank and Palgrave Macmillan.

Course Code	EEC 5020	Semester	III/IV
Course Title	ECONOMIC THOUGHT		
Credits	3	Туре	Elective

Course Description:

This course reviews the evolution of economic thought, beginning with that in ancient civilizations. The course concludes with a consideration of the 'Epic' recession and the recent financial crisis. Throughout the course, economic theories will be examined in the light of the interrelationships between theory, policies and conditions, including responses to the current financial and economic global crises. To increase the students understanding and appreciation of the development, progression, and regression of human understanding of how humans do and should act in "the ordinary business of life". Beginning with ancient civilizations we will progress historically (as far as we are able) to the present day, taking a broad view of what constitutes 'economic thought', (e.g., a mixture of institutional, philosophical, policy oriented, and 'purely' theoretical) put into the general historical context of human affairs.

Course Outcome

By the end of the course, students will have a thorough understanding of the development of economic ideas. It will also help to understand the theoretical framework Economics.

Course Outline

Module I: Introduction and Early Economic Thought: Why study History of Economic Thought? – Economic Ideas of Aristotle, Plateau – Iben Khaldun - St. Thomas Aquinas – Main Economic Ideas of Mercantilists and Physiocrats (mention important economists of Mercantilism and Physiocracy and their major works. Need not go into the details).

Module II: Classical, Socialist and Marxian School: Important contributions of: a Adam Smith – naturalism and optimism, division of labour, theory of value, concept of laissez-faire b. David Ricardo – theory of value, stationary state c. J.B. Say - law of market d. Malthus – population theory and theory of glut e. J.S. Mill – reciprocal demand. f. Jeremy Bentham – utilitarianism Early Socialists: ideas of Owen, Fourrier, saint Simon, Sismondi Basic tenets of Marxian Political Economy: stages of development – theory of surplus value, theory of capitalist crisis.

Module III: Marginalism and Neo-classical School: Difference between classical and neo-classical approach – important ideas of Carl Menger, Leon Walra, Frederich List, Veblen, Wilfredo Pareto, A.C. Pigou, W.W. Rostow. Importance of Alfred Marshall in Neo-classical economics (avoid microeconomic theories).

Module IV: Keynes and Post-Keynesians: Keynes as a critic of Classical Economics (introduce important books of Keynes). Keynesian concept of Welfare State Post-Keynesian developments – monetarism, rational expectation school, neoliberalism, dependency school and neo-institutionalism (details are not expected).

Module V: Indian Economic Thought: Mention the economic ideas of Kautilya and Thiruvalluvar. Drain theory of Dadabhai Navoroji. Trusteeship and other economic ideas of Gandhiji – economic ideas of

Ambedkar. Introduce important Indian economist like MG Ranade, DR Gadgil, CN Vakil, PR Brahmanada, Pranab Bardhan, KN Raj, PC Mahalanobis, VKRV Rao, IG Patel, Sukhamoy Chakraborthy, Amartya Sen, CT Kurian, Krishna Bharadwaj.

Testing & Evaluation

Internal Evaluation consisting of Presentation, Assignment, Mid-term exam and final end semester examination.

Suggested Readings

- Schumpeter, Joseph Alois, (1954) History of Economic Analysis, Oxford University Press, USA.
- Blaug, Mark, (1997) Economic Theory in Retrospect, 5th Edition, Cambridge University Press, Cambridge, UK.
- Rothbard, Murray N., (1995) Economic Thought Before Adam Smith: An Austrian Perspective on the History of Economic Thought (Vol. I), Edwadr Elgar Publishers, UK.
- Rothbard, Murray N., (2006) An Austrian Perspective on the History of Economic Thought (Vol. II), Ludwig von Mises Institute, Auburn, Alabama.
- Brian Snowdon, Howard A. Vane and Peter Wynarczyk, (1994) A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought, Edwadr Elgar Publishers, USA.
- Backhouse, Roger E., (2004) The Ordinary Business of Life: A History of Economics from the Ancient World to the Twenty-First Century, Princeton University Press, Princeton, New Jersy.
- Brue, Stanley L., (2000) The Evolution of Economic Thought, 6th ed., Dryden Press, Oak Brook, Illinois, USA.
- Canterbury, E. Ray, (2003), The Making of Economics, 4th ed., World Scientific Publishing Co. Ltd., Singapore.
- Coleman, William Oliver, (2002) *Economics and Its Enemies: Two Centuries of Anti- Economics*, Palgrave MacMillan, New York.
- Ekelund, Robert B., (1996) A History of Economic Theory & Readings in Economic Thought, McGraw-Hill, UK.
- Ekelund, Robert B. and Herbert, Robert F., (1997) A History of Economic Theory and Method, McGraw-Hill, UK.