

CENTRE FOR STUDIES IN ECONOMICS AND PLANNING
Syllabus for PH.D. IN ECONOMICS
Course Structure

Course code	Nature of Course	Course Title	No .of L/T	Credits
Ph.D. Semester I				
ECO 601	Core compulsory	Research Methodology I	2+1	2
ECO 602	Core compulsory	Advanced Economic Theory (Micro Economics)	3+1	3
ECO 621-625	Core Elective	Any one paper to be selected by the student from group G	3+1	3
ECO 641	...	Field work and research paper writing	2	2
Semester II				
ECO 651	Core compulsory	Research Methodology II	2+1	2
ECO 652	Core compulsory	Advanced Economic Theory (Macro Economics)	3+1	3
ECO 671-675	Core elective	Any one paper to be selected by the student from group H	3+1	3
691	core	Term paper writing	2	2

Subject	Title of the paper	Total credit
Group G		
ECO 621	Advanced Econometrics	3
ECO 622	Economics of Education	3
ECO 623	Financial Economics	3
ECO 624	International Trade and Finance	3
ECO 625	Environmental Economics	3
Group H		
ECO 671	Statistical soft wares for Econometrics	3
ECO 672	International Business	3
ECO 673	Health Economics	3
ECO 674	Global Economic issues	3
ECO 675	Agricultural Economics	3

ECO 601 RESEARCH METHODOLOGY IN ECONOMICS-I

Objective

The course is designed to strengthen students' capability to organize and conduct research on economic issues and problems. They will learn about the conceptual and philosophical basis of research methodology in economics. The course shall impart knowledge on to how to conduct applied economic research from topic selection, literature survey, formulation of research questions and hypothesis, selection of appropriate research method and empirical techniques, interpretation of results and inferences for policies.

UNIT I Introduction: Basic Concepts and Process of Economic Research

Research: Meaning and purpose; Process of economic research: (i) Research questions—Identifying the problematique (Research area/ questions/ concerns/topic), (ii) Survey of literature on the topic—Acknowledging existing knowledge and moving beyond the given, (iii) Theoretical framework—Application of economic theory to shed light on the problem, (iv) Empirical testing— Data gathering, processing, obtaining empirical results by applying appropriate tools to the data, (v) Presentation and Inference— Presenting and interpreting the results and drawing implications, conclusions, and recommendation; Research methodology and methods; Reasons to study methodology

Philosophical Foundations of Economic Methodology: Economic Positivism and Normativism; Evolution of Positivism in Economics: J.S. Mill, J.E. Cairnes, J.N. Keynes; Apriorism, Falsificationism and Conventionalism: L. Robbins; Falsificationalism and Methodology of Economics: Karl Popper; Testability in Economics: T. Hutchison; Instrumentalism: Milton Friedman; Operationalism: Paul Samuelson; Positivism in Economics: An Assessment.

Alternative Methodological Perspectives in Economics: Marxism, Comparative Historical Approach, Post-Modernism and Economics: Keynesian Economics, Institutional Economics, Feminist Economics, Inclusive Economics; Methodological Pluralism: Warren Samuels.

UNIT II Research Design and Approaches

Types of research questions: Exploratory, descriptive and causal questions; What is research design: purpose of research and research questions, specifying concepts, specifying variables to operationalize concepts, methodology (qualitative analysis vs. quantitative analysis vs. participatory analysis; empirical, exploratory, descriptive), Data needs (primary or

secondary), Methods to collect data — Primary (questionnaire surveys, in depth interviews, focus group discussions, key informant interviews, observation)], sources of secondary data, Methods to analyse data (descriptive statistics, case studies, content analysis, regression analysis etc); Nature of Research question and research design: What data/information needs to be gathered and what methods to be applied to analyse such data; Two Directions of Reasoning: Deductive reasoning and Inductive reasoning; Types of research design: Inductive (qualitative) vs. Deductive (quantitative); Data Types: Numerical and Categorical; Random variables: Quantitative and Qualitative (Categorical) Random Variable; Types of quantitative random variables: discrete and continuous random variables; Types of qualitative random variables: nominal (i.e. unordered) and ordinal (ordered) random variables;

Research Ethics: Professional Ethics, Scientific Misconduct, Plagiarism, Conflicts of Interest, External Funding and Objectivity of Research.

Empirical Example of a research proposal submitted for funding agencies to learn how the actual report was prepared; Example of a Ph.D. thesis proposal; Example of a published research paper.

Reading List

Ahuja, R. (2008), *Research Methods*, Rawat Publication.

Baronov, D. (2004), *Conceptual Foundations of Social Research Methods*, Paradigm Publishers.

Boettke, P.J., C. J. Coyne and P. T. Leeson (2013), 'Comparative Historical Political Economy', *Journal of Institutional Economics*, 9(3), pp. 285–301.

Caplin, Andrew and Andrew Schotter (2008) eds., *The Foundations of Positive and Normative Economics: A Handbook*, Oxford: Oxford University Press.

Davis, J.B. (2012), 'Samuels on Methodological Pluralism in Economics', in Biddle, J.E. and R. B. Emmett (ed.), *Research in the History of Economic Thought and Methodology: A Research Annual (Research in the History of Economic Thought and Methodology, Volume 30)*, Emerald Group Publishing Limited, pp.121-136.

Don Ethridge (2004), *Research Methodology in Applied Economics*, Blackwell Publishing.

Friedman, Milton (1953), 'The Methodology of Positive Economics', in Friedman (1953) *Essays in Positive Economics*, pp. 3-43, Chicago: University of Chicago Press.

Gerring, J. (2001), *Social Science Methodology*, Cambridge: Cambridge University Press.

Greenlaw, S. (2006), *Doing Economics: A Guide to Understanding and Carrying Out Economic Research*, Houghton Mifflin Company.

Hatton, T.J., K. H. O'Rourke and A. M. Taylor (2007), (eds.) *The New Comparative Economic History: Essays in Honour of Jeffrey G. Williamson*, Cambridge MA: MIT Press.

Hollis, M. (1994), *The Philosophy of Social Science: An Introduction*, New York & Cambridge: Cambridge University Press.

Kothari, C. R. (2012), *Research Methodology: Methods and Techniques*, 2nd Reprint, New Age International Publisher.

Neuman, W. L. (2008), *Social Research Methods: Quantitative and Qualitative Approach*, Pearson.

O'Leary, Z. (2004), *The Essential Guide to Doing Research*, SAGE Publications.

Ruccio, D.F., and J. Amariglio (2003), *Postmodern Moments in Modern Economics*, Princeton University Press.

ECO 602 ADVANCED ECONOMIC THEORY –I (Micro Economics)

Objective

The basic objective of this course is to familiarize the research students with the advanced topics in microeconomics covering new developments in theory of consumer choice, theory of firms, and game theory.

Unit I Recent Theoretical Developments in Consumer Behaviour

Slutsky Theorem; Revision of Demand Theory by Hicks; Linear Expenditure Systems; Stone and Rowe Model; Nerlov's stock adjustment principle; Houthaker and Taylor's Dynamic Model; Lancaster's Theory of Consumer Behaviour.

Unit II Realistic market structures and firm's behaviour

Monopolistic competition; Oligopoly: Chamberlin Model, Stackelberg Model; Kinked demand curve model: Cartels and Price Leadership Models.

Unit III Non-neoclassical theories of the firm

The marginalist controversy and critical analysis of marginal analysis; Hall and Hitch's average cost pricing principle; Baumol's Sales revenue

maximisation model; Marris model of managerial enterprise; Williamson's model of managerial discretion.

Static and dynamic games of complete and incomplete information; Market Failure and the Role of the Government.

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. (1990), 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. Rubinfeld, (2001), Micro Economics, New Delhi: Prentice Hall of India.

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

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

ECO 621 ADVANCED ECONOMETRICS

Objective

The basic objective of this course is to familiarize the research students with the advanced methods of econometric analysis.

Unit I Univariate Time series Modelling

Properties of time series, Properties of AR, MA, ARMA, ARIMA processes, Stationary stochastic process- Random walk and white noise, Tests for Stationarity- ACF and Sample Correlogram, Barlett's test, Box-pierce Q-test, Ljung-Box test, Unit Root Tests, Trend Stationary and Difference Stationary process, ARIMA models- identification, estimation, diagnostic testing, forecasting- MA(1), ARMA(1,1) and ARIMA(1,1,0) processes, Seasonality

Unit II Modelling Volatility

Linear time series model and its limitations, testing for nonlinear models; types of non-linear time series models: the ARCH model- testing for ARCH effects, estimation of ARCH model by iteration

Unit III Panel data Methods

Sources and types of panel data, why should one use panel data: their benefits and limitations, Simple panel data methods-Policy analysis with Pooled Cross Sections, Two period panel data analysis, policy analysis with two period panel data analysis, Differencing with more than two time periods; advanced panel data methods- Fixed effects estimation, Random effects model.

Basic Readings

Brooks Chris (2nd edition), (2008), Introductory Econometrics for finance, Cambridge University press

Walter Enders(2004), Applied Econometric Time Series, Wiley India (P) Ltd, New Delhi

Additional Readings

Gujarati, N. Damodar, and Sangeeta (2013), Basic Econometrics, McGraw Hill

Jack Johnston and John Dinardo,(1997), Econometric Methods, McGraw-Hill International Editions, Singapore.

ECO 622 ECONOMICS OF EDUCATION

Objective

In a globalised world, economies are becoming more skill based and the significance of education has been growing over the years. This subject will enable the learners to Develop an understanding of planning, financing and cost of education. It will also help develop an understanding of the link between the educational system and economic development. The subject will also develop an understanding of educational problems in the context of economic concepts. Theories and techniques.

Unit I Conceptual Issues in economics of Education

Meaning, definition, scope and importance of Economics of Education. The relationship between education and the economic system- The role of the economic system in financing of education and absorbing the educated manpower- Education as an industry- Education as consumption and Education as individual, social and national investment- Spill-over and inter-generational effects of education.

Economic Development and Education The concepts of economic development and economic growth - The interrelationship between education and economic development- Education as a prerequisite as an accelerator and a major determinant of economic development- Significance and Development of human resources through education-Human capital approach- Need for manpower planning and Estimation of manpower requirements. Human capital vs. Physical capital

Unit II Measuring the Contribution of Education to Economic Growth

Cost-Benefit Analysis in Education- Correlation Approach- Residual approach- Manpower Forecasting Approach- Wage-differential Approach. Productivity in Education-Productivity of the educational system - Internal and external efficiency of the Educational system- Dual approach, Process approach, Product approach.

Education, Equity and Income Distribution-Educational equity measures - the equal opportunity criterion- the cost – benefit criterion, and the ability to pay criterion - Education as a determinant of income variance, and the relevant contribution of different levels of education.- Tools to assess the equity and income distribution -The Gini coefficient, the Lorenz curve

Unit III Pricing and Financing of Education

Concept of Cost of Education. Types of Educational costs: Direct cost, Indirect cost, Private cost, Social cost and Opportunity cost- External and Internal Efficiency of Education- Micro and Macro aspects of pricing of education (Theoretical Study) - Practical solution to the pricing of education especially at the tertiary level Financing of Education- Sources of finance for education: private, public, fees, donations- Endowments and grants. Grant-in- aid principles and practices with special reference to higher education- Government's role in financing education at different levels with special reference to higher education.

Reading list

Baxter C. And O'Leary, P. J. and Westoby A. (1977) Economics and Education Policy a Reader London Longman Group Ltd.

Backer G. S, (1964) Human Capital New York: University press.

Blaug. M (1972) an Introduction to the Economics of Education, London: Penguin

Blaug, M. (ed) (1968). Economics of Education selected Readings. Vol. 1 and 2 London: Penguin Books.

Cohn, E. and Gesker (1990) T. G. The Economics of Education, Oxford: Pergamon Press

Hallak J. (1990) Investing in the Future UNESCO: Pergamon press

Johns R. I. & Morphet I: (1976) The Economics and financing of Education A system Approach New Jersey Prentice-Hall Inc.

Levin M. R. & Shank A (eds.) (1970) Educational Investment in an Urban Society: Costs, Benefits and Public Policy, New York Teachers College press

Majumdar, T. (1983) Investment in Education and social Choice, Cambridge, Cambridge University Press.

Natarajan S. (1990) Introduction to Economics of Education New Delhi. Sterling

Padmanabhan C. B. (1971) Economics of Educational Planning in India New Delhi. Arya Book Depot.

Panchamukhi P. R. (ed) (1989) Economics of Educational Finance Bombay, Himalaya publishing House

Ward, F. C. (ed) (1974) Education and Development Reconsidered New York: Praeger Publishers

Wykstra R. A. (ed) (1971) Education and the Economics of Human Capital New York: The Free press.

ECO 623 FINANCIAL ECONOMICS

Objective

This subject will enable the students to understand the issues of financial institutions in the process of economic growth.

Unit I Nature and Role of Financial System

Introduction to Financial institutions and Markets, Financial Intermediate and Financial Intermediaries, The structure of the financial system, Determination of interest rates, Structure of Interest rates, Theories of term structure interest rates,

Regulatory and Promotional Institutions: The Reserve Bank of India: Roles and Functions, Monetary Policy of the RBI, Techniques of Monetary Control, Recent Policy Developments, Liquidity Adjustment Facility (LAF), The Securities and Exchange Board of India: Genesis, Organizations, Objectives and Functions, Performance of SEBI, IRDA and its role in financial markets, Financial Sector reforms in India.

Unit II Valuation of Securities

Primary and Secondary Market for Securities Fundamentals of Valuation of Securities: Valuation of Bonds and Stocks; Bond Yield, Yield to Maturity. Equity Valuation: Dividend Discount Model, The P/E Ratio Approach; Irrelevance of Dividends: Modigliani and Miller Hypothesis; Relevance of Dividends: Walter's Model, Gordon's Model. The Cost of Capital: Debt and equity; Cost of Debt, Cost of Preference Capital and Equity Capital.

Unit III Derivative Markets

An introduction to financial derivatives: Types and uses of derivatives; Forward Contracts: basic concepts, determination of forward prices, Futures Contract: basic concepts, theories of future prices- the cost of carry model, the expectation model, capital asset pricing model. Relation between Spot and Future Prices, forward vs future contract, Hedging in Futures; Options: types, value of an option, the Pay-Offs from Buying and Selling of Options; the Put Call Parity Theorem; Binomial option pricing model (BOPM) and Black-Scholes option pricing model.

Basic Readings

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

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

John C. Hull, and S Basu (2013), Options Futures and other Derivatives, Pearson, New Delhi.

Additional Readings

Avadhani, V. A. (2003) security Analysis and Portfolio Theory, Himalaya Publishing House, Mumbai.

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

Gardener D. C. (2003), Derivatives, Macmillan India Limited, New Delhi

Gupta S.L. (2011), Financial derivatives, PHI Learning, New Delhi.

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

Swain PK (2012), Fundamentals of Financial derivatives, Himalaya Publishing House, Mumbai.

ECO 624 INTERNATIONAL TRADE AND FINANCE

Objective

To familiarize students with the theoretical and fundamental aspects of international trade and finance.

UNIT I Traditional and New Theories of Trade

Absolute advantage and comparative advantage approaches to international trade; The specific factors model; Heckscher-Ohlin model; Factor price equalization theorem; Rybczynski theorem; Leontief Paradox. Emergence of Intra industry trade: Grubel-Lloyd Index; Monopolistic competition and international trade: The Krugman's Model; Increasing returns in H-O model; External increasing returns and trade

Trade policies: concept and types; Tariff and non-tariff barriers (quota, VERs; Government procurement, safety, health, environmental and technical barriers), export subsidies; Theory of tariffs: types, welfare effects, effective protection; Theory of import quotas: welfare effects; The Strategic trade theory: Brander-Spencer Analysis; Arguments for free trade and protection

UNIT II Forms of Economic Integration

Free trade agreement (FTA); Common market; Economic union; Trade creating and trade diverting customs union; Customs union and conditions for increasing welfare; Regional Trading blocks in practice; WTO.

The Foreign Exchange Market: Definition of exchange rate and foreign exchange markets; Function of foreign exchange markets: Hedging, speculation, interest arbitrage; Determinants of exchange rates; Spot and forward exchange rate; Purchasing-power parity theory; The Monetary approach to exchange rate; Interest and exchange rates relationship: Covered and uncovered interest parities; The overshooting model; Portfolio-Balance Approach

UNIT III Balance of Payments

The Current Account; The Capital Account; BOP disequilibrium and 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

Reading List

Feenstra, R. C. and A. M. Taylor (2010), *Essentials of International Economics*, Worth Publishers.

Krugman, P., M. Obstfeld, and M. Melitz (2011), *International Economics: Theory and Policy*, Addison-Wesley.

Rivera-Batiz, L. A., M. Oliva (2004), *International Trade: Theory, strategies, and Evidence*, Oxford University Press.

Salvatore, D. (2011), *International Economics*, Wiley.

ECO 625 ENVIRONMENTAL ECONOMICS

Course Descriptions and Objectives

This paper undertakes theoretical and empirical studies of economic effects of national and local environmental policies around the world. It deals with particular issues which includes the cost and benefits of environmental

policies regarding air pollution, water pollution, toxic substances, solid waste management and global warming.

Unit I

Environmental Economics: Scope and method; Inter-linkages between economy and environment. Property rights, externalities, environmental problems and market failures.

Economic incentives for environmental protection: price rationing; liability rules; quantity rationing and evaluative criteria. Pollution taxes for efficient control of pollution. Tradable pollution permits: basic theory and issues in tradable permit market

Unit II

International Issues: Trans-boundary pollution problems; International trade and environment; International environmental treaties and Institutions.

Valuation and Environment: Concepts and methods; Theory of non-market valuation; Valuing direct and indirect environment costs and benefits.

Unit III

Resources and Sustainable Development: Dynamic efficiency and sustainable development; Allocation of Depletable and Renewable Resources: An overview of energy, water, land, forest and agriculture related issues.

Basic Readings

Baumol, William J. and Wallace E. Oates: *The Theory of Environmental Policy*, Cambridge University Press, 1988.

Fisher, A.C.: *Resource and Environment Economics*, Cambridge University Press, 1981.

Hanley, Nick and Shogren, Jason F. : *Ben White Environmental Economics: In Theory and Practice*, Oxford University Press, New York, 1997

Kolstad, Charles D.: *Environmental Economics*, Oxford University Press, New York, 2000.

ECO 651 RESEARCH METHODOLOGY IN ECONOMICS-II

Objective

The course is designed to complement the skills and knowledge that students' have learnt for conducting research on economic issues in the first research methodology course. Students will learn about methods and techniques of empirical economic research and prepare research proposal for their M.Phil. dissertation.

UNIT I Positivist and Alternative Methods of Research

Sampling Design – Methods; Hypothesis Formulation and Testing; Methods of Analysis: Simple and Multiple Regression, Multivariate Analysis: Factor Analysis/ Principal Component Analysis;

Qualitative Methods in Research: Case Study Methods (The Case Study, Differing Perspectives, Conflict of Methods, Current Debate in Case Study), Focus Groups (Focus Group in a Historical Perspective, Focus Group as a Quantitative Method, Use for Focus Group, Planning for Focus Group, Conducting and Analyzing Focus Group), Narrative Analysis (Locating Narrations, Theoretical Contexts, Practical Models, Doing Narrative Analysis), Participatory Research Methods (Participant Observer, Rapid Rural Appraisal, Participatory Rural Appraisal, Participatory Action Research); Objectivity, Reliability and Validity in Qualitative Research

UNIT II Economic Data and Sources

Primary Data and Secondary Data; Macroeconomic Databases on National Accounts, Government and Public Finance, Socio and Demographic, Labor Market, Foreign Trade, Investments, Inflation, Financial Market, Balance of Payments, Exports and Imports: National Accounts Statistics; RBI Bulletin; NSSO Surveys on Unorganized Sectors, Consumption Expenditures, Employment & Unemployment; Census of India; National Family Health Survey; Statistics of Foreign Trade of India; UN-COMTRADE; World Development Report (WDI); Secretary of Industrial Approval (SIA) Newsletter; World Investment Report; IMF Balance of Payment Statistics; Industrial Databases: Annual Survey of Industries; Prowess Database; etc.

Review of Statistical Packages like Excel, SPSS, E-Views and STATA for economic research.

Documentation Report Writing: Undertake review of literature and identify research problem, frame research objectives, develop hypotheses, explore availability of data and write the Research Proposal for M.Phil. dissertation or Ph.D. Thesis.

Reading List

Ahuja, R. (2008), *Research Methods*, Rawat Publication.

Baronov, D. (2004), *Conceptual Foundations of Social Research Methods*, Paradigm Publishers.

Bell, D. (1981), 'Models and Reality in Economic Discourse' in D. Bell and I. Kristal (ed.) *The Crisis in Economic Theory*, New York: Basic Books.

Caplin, Andrew and Andrew Schotter (2008) eds., *The Foundations of Positive and Normative Economics: A Handbook*, Oxford: Oxford University Press.

Chambers, R. (1992), 'Rural Appraisal: Rapid, Relaxed and Participatory', IDS Discussion Paper No. 311, Brighton: IDS.

Don Ethridge (2004), *Research Methodology in Applied Economics*, Blackwell Publishing.

Fernandes, W. (1986), *Participatory Research and Evaluation: Experiments in research as a Process of Liberation*, New Delhi: Indian Social Institute.

Fernandes, W. (2005), 'Experiments in Creative Research: Efforts to Combine Participatory with Conventional Methodology' in A. K. Giri (ed.) *Creative Social Research: Rethinking Theories and Methods*, New Delhi: Vistaar Publications.

Friedman, Milton (1953), 'The Methodology of Positive Economics', in Friedman (1953) *Essays in Positive Economics*, pp. 3-43, Chicago: University of Chicago Press.

Greenbaum, T A (1993), *Handbook for Focus Group Research*, New York: Lexington Books.

Greenlaw, S. (2006), *Doing Economics: A Guide to Understanding and Carrying Out Economic Research*, Houghton Mifflin Company.

Hamel, J., S. Dufoueu and D. Fortin (1993), *Case Study Methods*, Qualitative Research Method Series 32. New Delhi: Sage Publications.

Hirschman, A. O (1981), 'Morality and the Social Sciences: A Durable Tension' in Essays in Trespassing Economics to Politics and Beyond, New York: Cambridge University Press.

Kirk, J. and M. L. Milha (1986), Reliability and Validity in Qualitative Research, Methods. Qualitative Research Method Series 1, New Delhi: Sage Publications.

Kothari, C. R. (2012), Research Methodology: Methods and Techniques, 2nd Reprint, New Age International Publisher.

Krueger, R A (1988), Focus Group: A Practical Guide for Applied Research, New Delhi: Sage Publications.

Latsis, S. J (1976), Method and Appraisal in Economics, Cambridge: Cambridge University Press.

Morgan, D. L. (1988), Focus Group as Qualitative Research, Qualitative Research Method Series 16, New Delhi: Sage Publications.

Nagaraj, R. (1999), 'How Good Are India's Industrial Statistics? An Exploratory Note', Economic and Political Weekly, 34(6), pp. 350-355.

Narayan, D. (1996), 'Towards Participatory Research', World Bank Technical Paper 307, Washington: The World Bank.

Neuman, W. L. (2008), Social Research Methods: Quantitative and Qualitative Approach, Pearson.

O'Leary, Z. (2004), The Essential Guide to Doing Research, SAGE Publications.

Reissman, C. K. (1993), Narrative Analysis, Qualitative Research Method Series 30, New Delhi: Sage Publications.

Samuels, W. J. (ed.) (1980), The Methodology of Economic Thought, New Brunswick, NJ: Transaction Books.

ECO 652 ADVANCED ECONOMIC THEORY-II (Macroeconomics)

Objective

The basic objective of this course is to familiarize the research students with the advanced topics in macroeconomics covering new developments in theory.

Unit I Theories of Growth

Some Basic Facts about Economic Growth, Solow growth model: The Dynamics of the Model, The Impact of a Change in the Saving Rate, Quantitative Implications, The Solow Model and the Central Questions of Growth Theory, Framework and Assumptions of Endogenous Growth Models, AK model.

Consumption and Investment: Consumption under Uncertainty: The Life Cycle and The Permanent-Income Hypothesis, The Interest Rate and Saving, Investment and the Cost of Capital, A Model of Investment with Adjustment Costs, Tobin's q , Analyzing the Model, The Effects of Uncertainty, Financial-Market Imperfections

Unit II Unemployment, Inflation and Monetary Policy

Theories of Unemployment, Inflation, Money Growth and Interest Rates, Seignorage and Inflation, Cost of Inflation, Some Macroeconomic Policy Issues.

Unit III Business Cycle Theory

Introduction to Fluctuations, Aggregate Demand and Supply, Goods Markets and Money Markets, IS-LM Models, The Theory of Real Business Cycle, New Keynesian Economics

Open Economy Macroeconomics: Mundell-Fleming model with Fixed and Floating Exchange Rates, Expectations, Exchange rates and Interest rates; Openness in Financial and Goods Markets, Macroeconomic Policy for Stabilisation and Growth.

Basic Readings

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

David Romer(2019), Advanced Macroeconomics, 5th Edition, Mc Graw Hills

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

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

Additional Readings

Andrew Abel and Ben Bernanke “Macroeconomics”, 2003, Pearson, Indian Ed

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

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

ECO 671 STATISTICAL SOFT WARES FOR ECONOMETRICS

Objective

This paper will equip the students with the use of soft ware in econometric analysis.

Unit I Cross-sectional Analysis

Simple and Multiple Regressions with practical data and examples), Identifying and Solving the problems of heteroscedasticity in cross-sectional data analysis

Analysing Univariate Time series Modelling for AR, MA, ARMA, ARIMA processes, Stationary stochastic process- Random walk and white noise, Tests for Stationarity- ACF and Sample Correlogram, Barlett’s test, Box-pierce Q-test, Ljung-Box test, Unit Root Tests, Trend Stationary and Difference Stationary process, ARIMA models- identification, estimation, diagnostic testing, forecasting- MA(1), ARMA(1,1) and ARIMA(1,1,0) processes, Seasonality

Unit II Regressions to model Volatility

Linear time series model and its limitations, testing for nonlinear models; types of non-linear time series models: the ARCH model- testing for ARCH effects, estimation of ARCH model by iteration

Unit III Estimation of Panel data

Structuring the panel data set up, Simple panel data methods-Policy analysis with Pooled Cross Sections, Two period panel data analysis, policy analysis with two period panel data analysis, Differencing with more than two time periods; advanced panel data methods- Fixed effects estimation, Random effects model.

Reading list

Brooks Chris (2nd edition), (2008), Introductory Econometrics for Finance, Cambridge University press

Walter Enders (2004), Applied Econometric Time Series, Wiley India (P) Ltd, New Delhi

ECO 672 INTERNATIONAL BUSINESS

Objective

This course offers an overview of theoretical approaches to understand the phenomenon of international business. It presents a view of environment for international business and pays attention to the strategies and structure of international businesses and implications of international business for firm's various functions.

UNIT I Globalization of Production and Markets

Declining Trade and Investment Barriers; Role of Technological Change; Changing Nature of Global Output, FDI, and Multinational Corporations; Global Value Chains and Global Production Networks; How international business is different from domestic business?

National Environmental Context of International Business: Country Factors National Differences in Political Systems, Economic Systems, Legal System, and Level of Economic Development; Differences in Culture: Values and Norms, Social Structure, Religion, Language, Education and Workplace Culture; Implications for Business

UNIT II Global Trade and Investment Environmental Context of International Business

Trade Theories and Implications for Business: Comparative Advantage; Heckscher-Ohlin Theory, Product Life-cycle Theory, New Trade Theory; Porter's Diamond; Development of World Trading System: GATT, Uruguay Round and WTO; Global FDI Flows and Theories of Horizontal and Vertical FDI; FDI Effects on Host Countries; Regional Economic Integration and Implications for Business; Global Monetary System: Foreign Exchange and International Monetary System, Global Capital Market.

UNIT III Strategy and Structure of International Business

Strategy and Firm: Firm as a Value Chain, Role of Strategy; Global Expansion: Transferring Core Competencies, Exploiting Location Economies, Experience Economies; Cost Reductions and Local Responsiveness; Strategic Choice: International, Multi-domestic, Global, and Transnational Strategies; Modes of Entry and Strategic Alliances

Business Operations: Exporting, Importing, Countertrade, Global Manufacturing and Materials Management; Global Marketing and R&D; Global Human Resource Management; Accounting and Financial Management in International Business.

Reading List

Hill, C. W. L. and G. T. M. Hult (2018), International Business: Competing in the Global Marketplace, 12th edition, McGraw-Hill Education.

Varma, S. (2012), International Business, New Delhi: Dorling Kindersley (India) Pvt. Ltd.

Wild, J. J. and K. L. Wild (2015), International Business: The Challenges of Globalization, 8th Edition, Pearson

ECO 673 HEALTH ECONOMICS

Objective

The purpose of this course is to provide substantial exposure to the state of the evidence and the major theoretical and empirical approaches used to study salient issues in health economics.

Unit I

Health capital

- Grossman, Michael, "On the Concept of Health Capital and the Demand for Health," *Journal of Political Economy*, 1972, 80(2), 223-255.
- Becker, Gary S., Tomas J. Philipson, and Rodrigo R. Soares, "The Quantity and Quality of Life and the Evolution of World Inequality," *American Economic Review*, 2005, 95(1), 277-291.
- Almond, Douglas, Kenneth Y. Chay and David S. Lee. "The Costs Of Low Birth Weight," *Quarterly Journal of Economics*, 2005, v120(3,Aug), 1031-1083.

Information asymmetries and public reporting of health care quality

- Arrow, Kenneth. "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review*, 1963, 53(5), 941-973.
- Dranove, David, Daniel Kessler, Mark McClellan, and Mark Satterthwaite. 2003. Is More Information Better? The Effects of 'Report Cards' on Health Care. *Journal of Political Economy* 111(3):555-588.

- Jin GZ, Sorensen AT. Information and consumer choice: the value of publicized health plan ratings. *J Health Econ.* 2006 Mar;25(2):248-75.

Health insurance

- Akerlof, George A., "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 1970, 84(3), 488-500.
- Rothschild, Michael and Joseph E. Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information", *Quarterly Journal of Economics*, 1976, 90(4), 629-650.
- Finkelstein, Amy , "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," *Quarterly Journal of Economics*, 2007,122(1), 1-37.
- Joseph P. Newhouse & Mary Price & John Hsu & J. Michael McWilliams & Thomas G. McGuire, 2015. "How Much Favorable Selection Is Left in Medicare Advantage?," *American Journal of Health Economics*, MIT Press, vol. 1(1), pages 1-26, Winter.

Aging and Long-Term Care Insurance

- Philipson, Tomas J. and Gary S. Becker, "Old-Age Longevity and Mortality-Contingent Claims," *Journal of Political Economy*, Vol. 106, No. 3, June 1998, pp. 551–573.
- Finkelstein, Amy and Kathleen McGarry. 2006. Multiple dimensions of private information: Evidence from the long-term care insurance market. *American Economic Review* 96(4):938–958.
- Van Houtven, Courtney Harold and Edward C. Norton. 2004. Informal care and health care use of older adults. *Journal of Health Economics* 23(6):1159–1180.

Unit II

Mental health

- Richard G. Frank & Martin Gaynor, 1995. "Incentives, Optimality, and Publicly Provided Goods: the Case of Mental Health Services," *Public Finance Review*, , vol. 23(2), pages 167-192, April.
- Ludwig, Jens & Marcotte, Dave E. & Norberg, Karen, 2009. "Anti-depressants and suicide," *Journal of Health Economics*, Elsevier, vol. 28(3), pages 659-676, May.
- Hanming Fang & Michael P. Keane & Dan Silverman, 2008. "Sources of Advantageous Selection: Evidence from the Medigap Insurance Market," *Journal of Political Economy*, University of Chicago Press, vol. 116(2), pages 303-350, 04.

Behavioural economics and health

- Behavioural Hazard in Health Insurance* Katherine Baicker Harvard University Sendhil Mullainathan Harvard University Joshua Schwartzstein *The Quarterly Journal of Economics* (2015) doi: 10.1093/qje/qjv029

- Einav, Liran, Amy Finkelstein, Stephen P. Ryan, Paul Schrimpf, and Mark R. Cullen. 2013. "Selection on Moral Hazard in Health Insurance." *American Economic Review*, 103(1): 178-219.
- Dave, Dhaval, Robert Kaestner, "Health Insurance and Ex Ante Moral Hazard: Evidence from Medicare," *International Journal of Health Care Finance and Economics*, Volume: 9 Issue: 4, Pages: 367-390 (December 2009).

Drug Markets

- CP Adams, VV Brantner. Estimating the cost of new drug development: is it really 802 million dollars? *Health Aff (Millwood)*. 2006 Mar-Apr;25(2):420-8.
- Howard D, PB Bach, ER Berndt, RM Conti. "Pricing in the Market for Anticancer Drugs," *Journal of Economic Perspectives*. 2015;29(1,Winter):139-162.
- Conti RM, ER Berndt. "Specialty drug prices and utilization after loss of U.S. patent exclusivity, 2001-2007," NBER Working Paper No. 20016 Issued in March 2014

Unit III

Health care market structure and competition

- Gaynor M, Ho K, Town RJ. The Industrial Organization of Health-Care Markets. *Journal of Economic Literature* 2015, 53(2), 235-284.
- Kessler D, McClellan M. Is hospital competition socially wasteful? *QJE*, 2000.
- Dunn A, Shapiro AH. Physician Market Power and Medical-Care Expenditures. Bureau of Economic Analysis working paper 2012.

Payment incentives and quality of care

- Cutler, DM. The incidence of adverse medical outcomes under prospective payment. *Econometrica*, 1995.
- D Grabowski, "Medicaid reimbursement and the quality of nursing home care," *JHE*, 2001
- Glazer, Jacob and Thomas G. McGuire. 2002. Multiple payers, commonality and free-riding in health care: Medicare and private payers. *Journal of Health Economics* 21(6):1049-1069.

Physician agency and incentives

- McGuire, Thomas G. and Mark V. Pauly. 1991. Physician Response to Fee Changes with Multiple Payers. *Journal of Health Economics* 10(4):386-410.
- Sloan and Shadle, "Is there empirical evidence of "Defensive Medicine"? A reassessment, *Journal of Health Economics*, 2009.
- Jacobson M, Earle CC, Price M, Newhouse JP. How Medicare's payment cuts for cancer chemotherapy drugs changed patterns of treatment. *Health Aff (Millwood)* 2010 Jul;29(7):1391-9.

- Jacobson M, O'Malley AJ, Earle CC, Pakes J, Gaccione P, Newhouse JP. Does reimbursement influence chemotherapy treatment for cancer patients? Health Aff (Millwood). 2006 Mar-Apr;25(2):437-43.

ECO 674 GLOBAL ECONOMIC ISSUES

Objective

The main aim of this paper is to give a historical background of globalization. It deals with global governance and challenges before the developing economies. It also encompasses foreign direct investment, multinational corporation, technological transfer and out sourcing.

Unit I

Major Phases of Globalization: Colonial-Phase, Bretton Woods-Phase, and WTO Phase. Globalization, Development Alternatives, and Policy Choices.

Unit II

Global Governance and Institutions: IMF, World Bank, WTO, World Trading System, Regional Trading Blocs. International Migration. Challenges before Developing Economies: Growth, Unemployment, Poverty, Inequality, Rural-Urban Divide, and Human Development.

Unit III

Global Capital Movement: Foreign Portfolio Investment, Foreign Direct Investment, Foreign Aid, and Finance Capital Perspective. Multinational Corporations, Technology Transfer, and Out-Sourcing. International Debt.

Reading list

D. J. Encarnation, and Borris Velic, (eds.)(1983), Competing for Foreign Direct Investment: Government Policy and Corporate Strategy in Asia, New York, Oxford University Press.

George Mavrotas and Anthony Shorrocks (Eds.)(2007), Advancing Development: Core Themes in Global Economics, Palgrave, New York.

Gerald M. Meier and James E. Rauch(2000), Leading Issues in Economic Development, Seventh Edition, New York, Oxford University Press.

Ian Golden and Kenneth Reinert(2006), Globalization for Development, World Bank and Palgrave Macmillan.

Jagdish Bhagwati(2004), In Defence of Globalization, Oxford University Press.

Joseph E. Stiglitz (2002), Globalization and Its Discontents, W. W. Norton, New York

Joseph E. Stiglitz(2006), Making Globalization Work, W. W. Norton and Company, New York.

Mitsuo Matsushita, T.J. Schoenbaum, and P. C. Mavroidis(2006), The World Trade Organisation: Law, Practice and Policy, Second Edition, Oxford University Press, New York.

Oatley, Thomas (2004), International Political Economy, Pearson Education, New Delhi.

ECO 675 ECONOMICS OF AGRICULTURE

Objective

The objective of this course is to introduce students to the importance of some major issues associated with agricultural production, agricultural finance, agricultural markets, food security and international trade in agricultural commodities, and also to expose students to the recent developments in Indian agriculture. The objective is to equip students to analyse and critically assess issues, policies that programmes in these areas.

Unit I

Agricultural Production: Primal Estimate [Cobb-Douglas Culture], Sources of Agricultural Growth (role of natural endowments, traditional input, technology, TFPG, Institutions and infrastructure), Analysis of Allocative, Technical and Economic Efficiencies Using Frontier Production Function and Data Envelop Analysis Approaches.

Unit II

Agricultural Finance: Financial Characteristics of Agriculture, Imperfect Information and Enforcement Problems in Credit Markets; Segmented Rural Credit Markets, Resolving Information and Incentive Problems; Managing borrowers' Credit Risks; Agribusiness and Trade Financing; and Rationale for Government Intervention in Rural Credit Markets. Structure and Functioning of Rural Credit Market in India.

Agricultural Markets: Nature, Types and Problems of Agricultural and agricultural Commodity Markets.

UNIT III

International Trade: Main Features of International Trade in Agricultural Commodities, Domestic Agricultural and Trade Policies of Developed Countries and Their Impact on World Trade, Agriculture in GATT Negotiations and WTO.

Food Security: Concept, Threat, Indicators and Mechanism to Food Security; Food Assistance Programmes

Recent Developments in Indian Agriculture: Opportunities and Challenges [Expectations, Performance, and Emerging Constraints and Potentials] for Indian Agriculture in the Post Reform Period

Readings list

Bhalla G.S and G Singh (2009): 'Economic Liberalisation and Indian Agriculture: A State wise. Analysis', Economic and Political Weekly 44(52): 34-44;

Bruce L. Gardener and Gordon C. Rausser(Eds); Handbook of Agricultural Economics Vol.1A Agricultural Production, Amsterdam, Elsevier Science B.V.

Bruce L. Gardener and Gordon C. Rausser (Eds); Handbook of Agricultural Economics Vol.1B Marketing, Distribution and Consumption, Amsterdam, Elsevier Science B.V.

Bruce L. Gardener and Gordon C. Rausser(Eds); Handbook of Agricultural Economics Vol.2A Agricultural and Its External Linkages, Amsterdam, Elsevier Science B.V.

Bruce L. Gardener and Gordon C. Rausser(Eds); Handbook of Agricultural Economics Vol.2B Agricultural and Policy, Amsterdam, Elsevier Science B.V.

Ghatak Subrata and Ken Ingersent ; Agriculture and Economic Development, Harvester Press Ltd. London

Government of India(2007), Eleventh Five Year Plan, Planning Commission, Government on India, New Delhi.

World Bank (2006), Rejuvenating Indian Agriculture, Washington, World Bank.