Paper 23: INTERNATIONAL ECONOMICS

Course Description

This course develops a systematic exposition of models that try to explain the composition, direction, and consequences of international trade, and the determinants and effects of trade policy. It then builds on the models of open economy macroeconomics developed in courses 08 and 12, focusing on national policies as well as international monetary systems. It concludes with an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years. Although the course is based on abstract theoretical models, students will also be exposed to real-world examples and case studies.

Course Outline

1. Introduction

What is international economics about? An overview of world trade.

2. Theories of International Trade

The Ricardian, specific factors, and Heckscher-Ohlin models; new trade theories; the international location of production; firms in the global economy — outsourcing and multinational enterprises.

3. Trade Policy

Instruments of trade policy; political economy of trade policy; controversies in trade policy.

4. International Macroeconomic Policy

Fixed versus flexible exchange rates; international monetary systems; financial globalization and financial crises.

- 1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.
- 2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

Paper 24: DEVELOPMENT THEORY AND EXPERIENCE - II

Course Description

This is the second module of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Course Outline

1. Demography and Development

Demographic concepts; birth and death rates, age structure, fertility and mortality; demographic transitions during the process of development; gender bias in preferences and outcomes and evidence on unequal treatment within households; connections between income, mortality, fertility choices and human capital accumulation; migration.

2. Land, Labor and Credit Markets

The distribution of land ownership; land reform and its effects on productivity; contractual relationships between tenants and landlords; land acquisition; nutrition and labor productivity; informational problems and credit contracts; microfinance; inter-linkages between rural factor markets.

3. Individuals, Communities and Collective Outcomes

Individual behavior in social environments, multiple social equilibria; governance in organizations and in communities; individual responses to organizational inefficiency.

4. Environment and Sustainable Development

Defining sustainability for renewable resources; a brief history of environmental change; common-pool resources; environmental externalities and state regulation of the environment; economic activity and climate change.

5. Globalization

Globalization in historical perspective; the economics and politics of multilateral agreements; trade, production patterns and world inequality; financial instability in a globalized world.

- 1. Debraj Ray, Development Economics, Oxford University Press, 2009.
- 2. Partha Dasgupta, *Economics: A Very Short Introduction*, Oxford University Press, 2007.
- 3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty*, Oxford University Press, 2006.
- 4. Thomas Schelling, Micromotives and Macrobehavior, W. W. Norton, 1978.

- 5. Albert O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States,* Harvard University Press, 1970.
- 6. Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, 2010.
- 7. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, 1990.
- 8. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
- 9. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003.

PAPER 25(OPTIONAL)

GROUP -- II (ANY ONE FROM THE FOLLOWING)

25A COMPARATIVE ECONOMIC DEVELOPMENT: 1850-1950

Course Description

This course investigates selected issues in comparative historical perspective over the 19th century and the first few decades of the 20th century. The course focuses on a set of countries, which followed clearly diverse trajectories and patterns of growth to achieve their industrial transition and compares the outcomes of these diverse trajectories on sectoral change, intersectoral relations, labour processes and industrial relations and also compares the role of the state in facilitating the respective trajectories.

Course Outline

1. Introduction and Perspectives on Comparative Economic Development

2. An Overview of Economic Development of the countries selected for case studies

3. Agriculture

Agrarian surplus and the role of the peasantry in economic development.

4. Industry

The industrial revolution in Britain; Industrialisation in late industrialisers.

5. The Factory System and Making of the Industrial Working Class

Division of labour, structure of industrial authority, organisation of work and industrial production, relationship between workers and managers.

6. The Role of the State in Industrial and Developmental Transition

- 1. E.J. Hobsbawm, *World of Labour: Further Studies in the History of Labour*, London Weidenfeld & Nicholson, 1984.
- 2. E.J. Hobsbawm, *Industry and Empire: An Economic History of Britain since 1750*, Weidenfeld & Nicholson, 1968.
- 3. Peter Mathias, *The First Industrial Nation, An Economic History of Britain, 1700-1914*, 2nd edition Methuen, 1983.
- 4. T. Nakamura, *Economic Growth in Pre-War Japan*, Tr. by Robert A Feldman, Yale University Press, 1983.
- 5. Okochi, Karsh and Levine, *Workers and Employees in Japan, The Japanese Employment Relations System*, University of Tokyo, 1965.

- 6. Y. Hayami, A *Century of Agricultural Growth in Pre-War Japan: Its Relevance to Asian Development*, University of Minnesota Press, 1975.
- 7. Chalmers Johnson, *MITI and the Japanese Miracle: The Growth of Industrial Policy* 1925-1975, Stanford University Press, 1982.
- 8. W.W. Lockwood, *Economic Development of Japan*, Expanded edition, Princeton University Press, 1966.
- 9. Dobb M., *Soviet Economic Development since 1917*, Universal Book Stall, New Delhi, 1995.
- 10. Paul R. Gregory and Robert C. Stuart, *Soviet Economic Structure and Performance*, Harper & Row, 3rd edition, 1986.
- 11. Timothy W. Guinnane, 2002, "Delegated Monitors, Large and Small: Germany's banking System, 1800 –1914", *Journal of Economic Literature*, Volume XL, pp.73-124.
- 12. Richard A. Easterlin, Davis and Parker, *American Economic Growth: An economist's History of the United States*, Harper & Row, 1972.
- 13. Hughes and Cain, *American Economic History*, HarperCollins College Publishers, 4th edition, 1994.

Background readings for teachers:

Angus Maddison, Dynamic Forces in Capitalist Development, A Long-Run Comparative View, Oxford University Press, 1991.

P.K.O'Brien, 1986, "Do We Have a Typology for the Study of European Industrialization in the XIXth Century?" *Journal of European Economic History*, Volume XV, pp. 291-333.

25A APPLIED ECONOMETRICS

Course Description

The aim of this course is to provide a foundation in applied econometric analysis and develop skills required for empirical research in economics. Topics include specification and selection of regression models, dynamic econometric models, advanced methods in regression analysis and panel data models. Since the emphasis is on application of methods, this course requires understanding of econometric software and computing skills.

Course Outline

1. Stages in Empirical Econometric Research

2. Regression Diagnostics and Specification

Misspecification; functional forms; model selection.

3. Advanced Topics in Regression Analysis

Selected Topics:

Dynamic Econometric Models: distributed lag models; autoregressive models; instrumental variable estimation; simultaneous equation models.

4. Panel Data Models

Methods of estimation; fixed effects model; random effects model.

5. Introduction to Econometric Software Package

GRETL; E-VIEWS; STATA (any one).

- 1. Jeffrey M. Wooldridge, *Econometrics*, Cengage Learning, India Edition, 2009.
- 2. Dimitrios Asteriou and Stephen Hall, *Applied Econometrics: A Modern Approach*, Palgrave Macmillan, 2007.
- 3. Damodar Gujarati, *Econometrics by Example*, Palgrave Macmillan, 2011.

25C TOPICS IN MICROECONOMICS - II

Course Description

This course deals with repeated games and games with incomplete information. Ideas related to asymmetric information among the interacting economic agents would be the main focus of this course. Students learn the concept of Bayesian and Perfect Bayesian equilibrium. The course ends with the application of game theory to analyse moral hazard, adverse selection and signaling problems.

Course Outline

1. Repeated Games.

Finitely repeated games and backward induction; infinitely repeated games; history dependent strategies; one-step deviation property; the repeated prisoners' dilemma; idea of folk theorem.

2. Simultaneous move games with incomplete information (Bayesian games).

Strategies; Bayesian Nash equilibrium; auctions; other applications.

3. Extensive form games with imperfect information.

Strategies; beliefs and sequential equilibrium; applications.

4. Information economics.

Adverse selection; moral hazard; signalling games.

- 1. Martin J. Osborne, An Introduction to Game Theory, Oxford University Press, New Delhi, 2004.
- 2. Hugh Gravelle and Ray Rees, *Microeconomics*, Pearson Education, 2nd edition, 1992.

25D FINANCIAL ECONOMICS

Course Description

This course introduces students to the economics of finance. Some of the basic models used to benchmark valuation of assets and derivatives are studied in detail; these include the CAPM, and the Binomial Option Pricing models. The course ends with a brief introduction to corporate finance.

Course Outline

1. Investment Theory and Portfolio Analysis

a. Deterministic cash-flow streams

Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.

b. Single-period random cash flows

Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

c. CAPM

The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

2. Options and Derivatives

Introduction to derivatives and options; forward and futures contracts; options; other derivatives; forward and future prices; stock index futures; interest rate futures; the use of futures for hedging; duration-based hedging strategies; option markets; call and put options; factors affecting option prices; put-call parity; option trading strategies: spreads; straddles; strips and straps; strangles; the principle of arbitrage; discrete processes and the binomial tree model; risk-neutral valuation.

3. Corporate Finance

Patterns of corporate financing: common stock; debt; preferences; convertibles; capital structure and the cost of capital; corporate debt and dividend policy; the Modigliani-Miller theorem.

- 1. David G. Luenberger, Investment Science, Oxford University Press, USA, 1997.
- 2. Hull, John C., *Options, Futures and Other Derivatives*, Pearson Education, 6th edition, 2005.
- 3. Thomas E. Copeland, J. Fred Weston and Kuldeep Shastri, *Financial Theory and Corporate Policy*, Prentice Hall, 4th edition, 2003.
- 4. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7th edition, 2002.

- Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, *Fundamentals of Corporate Finance*. McGraw-Hill, 7th edition, 2005.
 Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
- 7. William Sharpe, Gordon Alexander and Jeffery Bailey, Investments, Prentice Hall of India, 6th edition, 2003.

25E ENVIRONMENTAL ECONOMICS

Course Description

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Outline

1. Introduction

What is environmental economics; review of microeconomics and welfare economics.

2. The Theory of Externalities

Pareto optimality and market failure in the presence of externalities; property rights and the coase theorem.

3. The Design and Implementation of Environmental Policy

Overview; pigouvian taxes and effluent fees; tradable permits; choice between taxes and quotas under uncertainty; implementation of environmental policy.

4. International Environmental Problems

Trans-boundary environmental problems; economics of climate change; trade and environment.

5. Measuring the Benefits of Environmental Improvements

Non-Market values and measurement methods; risk assessment and perception.

6. Sustainable Development

Concepts; measurement.

- 1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
- 2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
- 3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
- 4. Maureen L. Cropper and Wallace E. Oates, 1992, "Environmental Economics: A Survey", *Journal of Economic Literature*, Volume 30, pp. 675-740.