

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB**  
**Syllabus of B. Sc. In Economics**  
**(Effective for 2021-2022 Admission Session)**  
**Choice Based Credit System**  
**140 Credit (3-Year UG) MAKAUT Framework**  
**w.e.f 2021-22**

**Semester-VI**

**Core Economics Course 13: INDIAN ECONOMY-II**

**Course Description**

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

**Course Outline**

**1. Macroeconomic Policies and Their Impact**

Fiscal Policy; trade and investment policy; financial and monetary policies; labour regulation.

**2. Policies and Performance in Agriculture**

Growth; productivity; agrarian structure and technology; capital formation; trade; pricing and procurement.

**3. Policies and Performance in Industry**

Growth; productivity; diversification; small scale industries; public sector; competition policy; foreign investment.

**4. Trends and Performance in Services**

**Readings:**

1. Shankar Acharya, 2010, –Macroeconomic Performance and Policies 2000-8, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
2. Rakesh Mohan, 2010, –India's Financial Sector and Monetary Policy Reforms, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, –Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
4. B.N. Goldar and S.C. Aggarwal, 2005, –Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.
5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, –Trade Liberalisation and New Imported Inputs, *American Economic Review, Papers and Proceedings*, May.
6. Kunal Sen, 2010, –Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.

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7. A. Ahsan, C. Pages and T. Roy, 2008, –Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.
8. Dipak Mazumdar and Sandeep Sarkar, 2009, –The Employment Problem in India and the Phenomenon of the ‘Missing Middle’, *Indian Journal of Labour Economics*.
9. J. Dennis Rajakumar, 2011, –Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly*, April.
10. Ramesh Chand, 2010, –Understanding the Nature and Causes of Food Inflation, *Economic and Political Weekly*, February.
11. Bishwanath Goldar, 2011, –Organised Manufacturing Employment: Continuing the Debate, *Economic and Political Weekly*, April.
12. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics in India*, Oxford University Press.

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**Core Economics Course 14: DEVELOPMENT ECONOMICS-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.

**Readings**

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.

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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.

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**DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS**

**GROUP-II**

**(i) POLITICAL ECONOMY-II**

**Course Description**

Employing perspectives from alternative schools of thought, this course explores the development of the structure and institutions of capitalist economies and their relationship to social and political forces. Students are expected to read some classic texts as well as more recent commentaries.

**Course Outline**

**1. Analysing Social Change in Historical Perspective**

The method of historical materialism; the transition from feudalism to capitalism; capitalism as a historical process – alternative perspectives.

**2. Capitalism as an Evolving Economic System**

Basic features; accumulation and crisis; the modern corporation; monopoly capitalism— alternative perspectives.

**3. The State in Capitalism**

The state and the economy – contestation and mutual interdependence; the state as an arena of conflict; imperialism – the basic foundations.

**Readings:**

1. J. Gurley, "The Materialist Conception of History", Ch.2.1 in R. Edwards, M. Reich and T. Weisskopf (ed.), *The Capitalist System*, 2nd edition, 1978.
2. O. Lange, *Political Economy*, vol. 1, 1963, Chapters 1 and 2.
3. E.K. Hunt, *History of Economic Thought*, M.E. Sharpe, Indian edn, Shilpi Publications, 2004.
4. Irfan Habib, 1995, "Capitalism in History", *Social Scientist*, Vol. 23: 15-31.
5. R.L. Heilbroner, "Capitalism", in *The New Palgrave Dictionary of Modern Economics*, Macmillan, 1987. Also reprinted as Chapter 2 in *Behind the Veil of Economics* by R.L. Heilbroner, W.W. Norton, 1988.
6. P. Sweezy, *The Theory of Capitalist Development*, Monthly Review Press, 1942,

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- chapters 2, 4, 5, 6, 8 and 10.
7. Anwar Shaikh, Entries on "Economic Crises" and "Falling Rate of Profit" in T. Bottomore et al (eds.), *The Dictionary of Marxist Thought*, OUP, Indian edition, Maya Blackwell, 2000.
  8. Vamsi Vakulabharanam, 2009, -The Recent Crisis in Global Capitalism: Towards a Marxian Understanding, *Economic and Political Weekly*, March 28, Vol. 44: 144-150.
  9. J. Schumpeter, *Capitalism, Socialism and Democracy*, George Allen and Unwin 1976, Chapters 6, 7 and 8.
  10. P. Baran (1957), *The Political Economy of Growth*, Chapter 3, Pelican edition, 1973.
  11. R. Heilbroner, -The Role of the State, Ch.4 in *The Nature and Logic of Capitalism*, 1985.
  12. M. Kalecki, -Political Aspects of Full Employment, in E.K. Hunt and J.G. Schwarz (eds.), *A Critique of Economic Theory*, Penguin Books, 1972.
  13. Amit Bhaduri, -Nationalism and Economic Policy in the Era of Globalization, Ch. 2 in Deepak Nayyar (ed), *Governing Globalization: Issues and Institutions*, OUP, 2002 [also WIDER Working Paper no.188, WIDER website (2000)].
  14. Prabhat Patnaik, -"Lenin's Theory of Imperialism Today", in K.S. Jomo (ed.) *The Long Twentieth Century: The Great Divergence: Hegemony, Uneven Development and Global Inequality*, OUP.
  15. James O'Connor, "The Meaning of Economic Imperialism," in Robert Rhodes, ed., *Imperialism and Underdevelopment*, New York: Monthly Review Press, 1970, pages 101 to 111.

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**(ii) 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 20<sup>th</sup> 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, inter-sectoral 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**

**Readings:**

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*. 2<sup>nd</sup> 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*

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- 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, 3<sup>rd</sup> edition, 1986.
  11. Timothy W. Guinnane, 2002, -Delegated Monitors, Large and Small: Germany's banking System, 1800 –1914, *Journal of Economic Literature*, Volume XL: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, 4<sup>th</sup> 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*, XV 3:291-333.



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**(iii) 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.

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**Readings:**

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

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(iv) **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 signalling 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.

**Readings:**

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

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(v) **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.

**Readings:**

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

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(vi) **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.

**Readings:**

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

**DISSERTATION/Project**