

Syllabus for B.A. (Hons.) Economics

Course Structure for B.A. (Hons.) Economics:

There are a total of fourteen economics core courses that students are required to take across six semesters. All the core courses are compulsory. In addition to core courses in economics, a student of B.A. (Hons.) Economics will choose four Discipline Specific Elective (DSE) Courses. The Discipline Specific Elective (DSE) Courses are offered in the fifth and sixth semesters and two such courses will be selected by a student from a set of courses specified for each of these semesters (Groups I and II in the attached table). It is recommended that each college should offer at least three Discipline Specific Elective (DSE) Courses in the fifth and sixth semesters to allow the students some minimal element of choice.

Contact Hours: Each course has 5 lectures and 1 tutorial (per group) per week. The size of a tutorial group is 8-10 students.

Note on Course Readings: The nature of several of the courses is such that only selected readings can be specified in advance. Reading lists should be updated and topic-wise readings should be specified at regular intervals, ideally on an annual basis.

Course Structure for B.A. (Hons.) Economics

Semester-I	Semester-II
Economics Core Course 1 : Introductory Microeconomics	Economics Core Course 3 : Introductory Macroeconomics
Economics Core Course 2 : Mathematical Methods for Economics-I	Economics Core Course 4 : Mathematical Methods for Economics-II
Ability Enhancement Compulsory Course (AECC)-I	Ability Enhancement Compulsory Course (AECC)-II
Generic Elective (GE) Course-I	Generic Elective (GE) Course-II
Semester-III	Semester-IV
Economics Core Course 5 : Intermediate Microeconomics-I	Economics Core Course 8 : Intermediate Microeconomics-II
Economics Core Course 6 : Intermediate Macroeconomics-I	Economics Core Course 9 : Intermediate Macroeconomics-II
Economics Core Course 7 : Statistical Methods for Economics	Economics Core Course 10 : Introductory Econometrics
Skill Enhancement Course (SEC)-I	Skill Enhancement Course (SEC)-II
Generic Elective (GE) Course-III	Generic Elective (GE) Course-IV
Semester-V	Semester-VI
Economics Core Course 11 : Indian Economy-I	Economics Core Course 13 : Indian Economy-II
Economics Core Course 12 : Development Economics-I	Economics Core Course 14 : Development Economics-II
Discipline Specific Elective (DSE) Course-I (From List of Group-I)	Discipline Specific Elective (DSE) Course-III (From List of Group-II)
Discipline Specific Elective (DSE) Course-II (From List of Group-I)	Discipline Specific Elective (DSE) Course-IV (From List of Group-II)
Group-I (Discipline Specific Elective (DSE) Courses)	Group-II (Discipline Specific Elective (DSE) Courses)
(A) Economics of Health and Education	(viii) Political Economy-II
(B) Applied Econometrics	(ix) Comparative Economic Development (1850-1950)
(C) Economic History of India (1857-1947)	(x) Financial Economics
(D) Political Economy-I	(xii) Environmental Economics
(E) Money and Financial Markets	(xiii) International Economics
(F) Public Economics	(xiv) Dissertation/Project

Semester I

Core Economics Course 1: INTRODUCTORY MICROECONOMICS

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Outline

1. Exploring the subject matter of Economics

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; economic systems, reading and working with graphs, economics and well-being of people.

2. Supply and Demand: How Markets Work, Markets and Welfare

Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. Theory of Consumer Behaviour

The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects.

4. Theory of the Firm and Product Market Structure

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run. Monopoly and anti-trust policy; government policies towards competition; imperfect competition.

5. Input Markets

Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
4. Hal R. Varian, *Intermediate Micro Economics: A Modern Approach*, Affiliated East-West Press, WW Norton & company.

Core Economics Course 2: MATHEMATICAL METHODS IN ECONOMICS–I

Course Description

This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Course Outline

1. Preliminaries

Logic and proof techniques; sets and set operations; relations; functions and their properties; number systems, limit of a function, continuity.

2. Functions of one real variable

Graphs; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; sequences and series: convergence, algebraic properties and applications; continuous functions: characterizations, properties with respect to various operations and applications;

3. Derivatives

One and two variable cases, rules of differentiation, maxima and minima, differentiable functions: characterizations, properties with respect to various operations and applications; second and higher order derivatives: properties and applications.

4. Single-variable optimization

Geometric properties of functions: convex functions, their characterizations and applications; local and global optima: geometric characterizations, characterizations using calculus and applications.

5. Integration of functions

Basic rules of integration, their applications in economics, indefinite and definite integrals; First order difference equation

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

Semester II

Core Economics Course 3: INTRODUCTORY MACROECONOMICS

Course Description

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Course Outline

1. Introduction to Macroeconomics and National Income Accounting

Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy;

2. Money

Functions of money; quantity theory of money; determination of money supply; credit creation; tools of monetary policy; money demand – Keynesian liquidity preference theory.

3. Inflation

Meaning; cost push and demand pull inflation; impact of inflation on the economy; macroeconomic policies during inflation.

4. The Closed Economy in the Short Run

Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary policy effectiveness.

5. International Trade

Balance of Payments, Current and Capital Account, Autonomous and accommodating transactions, Disequilibrium Vs Deficit Balance of Payments, Correction of BOP deficit

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Core Economics Course 4: MATHEMATICAL METHODS IN ECONOMICS - II

Course Description

This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this Syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Course Outline

1. Differential equations

Basic principles of differential equations, their application in economics: First order linear differential equations; exact equations, homogeneous equations; differential equations of the second order.

2. Linear algebra

Vector spaces: algebraic and geometric properties, scalar products, norms, orthogonality; linear transformations: properties, matrix representations and elementary operations; systems of linear equations: properties of their solution sets; determinants: characterization, properties and applications.

3. Functions of several real variables

Geometric representations: graphs and level curves; differentiable functions: characterizations, properties with respect to various operations and applications; second order derivatives: properties and applications; the implicit function theorem, and application to comparative statics problems; homogeneous and homothetic functions: characterizations and applications.

4. Multi-variable optimization

Convex sets; geometric properties of functions: convex functions, their characterizations, properties and applications; further geometric properties of functions: quasiconvex functions, their characterizations, properties and applications; unconstrained optimization: geometric characterizations, characterizations using calculus and applications; constrained optimization with equality constraints: geometric characterizations, Lagrange characterization using calculus and applications.

5. Input Output Analysis

Closed and open input-output model, Hawkins-Simon conditions; limitations of input - output model

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

Semester III
Core Economics Course 5: INTERMEDIATE MICROECONOMICS - I

Course Description

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

Course Outline

1. Consumer Theory

Utility and its relation to value of goods, indifference curve, budget constraint and consumer's equilibrium; derivation of the demand curve from indifference curve; revealed preference.

2. Analysis of consumer demand

Income consumption curve, price consumption curve, income and substitution effects of a price change, Giffen goods and inferior goods, ordinary versus compensated demand curve, application to labour supply, labour-leisure choice.

3. Theory of costs

Different Concepts of Costs, short run and long run cost curves; relationship between marginal cost and average cost, shift in cost curves, role of technological improvement and input supply change

4. Theory of Production function

Technology; production function; production with one and more variable inputs; returns to scale; isoquants, MRTS and elasticity of substitution, determination of optimum output.

5. Perfect Competition

Meaning of firm and industry, Perfect competition, equilibrium of a competitive industry: short run and long run; supply curve of a competitive firm- short run and long run

Readings:

1. G.S. Maddala and Ellen Miller, *Micro economics-theory and applications*, Tata macro hills.
2. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
3. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.
4. B. Douglas Bernheim and Michael D. Whinston, *Microeconomics*, Tata McGraw-Hill (India), 2009.

Core Economics Course 6: INTERMEDIATE MACROECONOMICS - I

Course Description

This course introduces the students to formal modeling of a macro-economy in terms of analytical tools. It discusses various alternative theories of output and employment determination in a closed economy in the short run as well as medium run, and the role of policy in this context. It also introduces the students to various theoretical issues related to an open economy.

Course Outline

1. Aggregate Demand and Aggregate Supply Curves

Derivation of aggregate demand and aggregate supply curves; interaction of aggregate demand and supply.

2. Inflation, Unemployment and Expectations

Phillips curve; adaptive and rational expectations; policy ineffectiveness debate.

3. Open Economy Models

Short-run open economy models; exchange rate determination; purchasing power parity; monetary approach to balance of payments.

4. Monetary Policy

Active or passive; monetary policy objectives and targets, rules vs. discretion, time consistency

5. Fiscal Policy

The government budget constraint, government debt and Ricardian Equivalence.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Steven M. Sheffrin, *Rational Expectations*, Cambridge University Press, 2nd edition, 1996.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Core Economics Course 7: STATISTICAL METHODS FOR ECONOMICS

Course Description

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.

Course Outline

1. Measures of central tendency and dispersion

Measures of central tendency-mean, median, mode; measures of dispersion-skewness and kurtosis; the use of measures of location and variation

2. Elementary Probability Theory

Sample spaces and events; probability axioms and properties; counting techniques; conditional probability and Independence of events, Bayes' rule;

3. Random Variables and Probability Distributions

Defining random variables; probability distributions; expected values of random variables and of functions of random variables; properties of commonly used discrete and continuous distributions (uniform, binomial, normal, Poisson and exponential random variables).

4. Random Sampling and Jointly Distributed Random Variables

Density and distribution functions for jointly distributed random variables; computing expected values; covariance and correlation coefficients. Principal steps in a sample survey; methods of sampling; the role of sampling theory; properties of random samples.

5. Point and Interval Estimation

Distinction between populations and samples and between population parameters and sample statistics. Estimation of population parameters using methods of moments and maximum likelihood procedures; properties of estimators; confidence intervals for population parameters.

Readings:

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011.
4. William G. Cochran, *Sampling Techniques*, John Wiley, 2007.

Semester IV

Core Economics Course 8: INTERMEDIATE MICROECONOMICS - II

Course Description

This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers general equilibrium and welfare, imperfect markets and topics under information economics.

Course Outline

1. General Equilibrium, Efficiency and Welfare

Equilibrium and efficiency under pure exchange and production; overall efficiency and welfare economics; existence, stability and uniqueness of general equilibrium

2. Monopoly and monopolistic competition

Monopoly; pricing with market power; price discrimination; monopolistic competition

3. Introductory Game Theory

Meaning, types, concepts of minimax and maximin strategies, saddle point, Zero and non-zero sum games.

4. Collusive Oligopoly Models

Cournot, Bertrand and Stakelberg models

5. Market Failure

Externalities; public goods, asymmetric information- problems of adverse selection and moral hazard.

Readings:

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010.
The workbook by Varian and Bergstrom could be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.

Core Economics Course 9: INTERMEDIATE MACROECONOMICS - II

Course Description

This course is a sequel to Intermediate Macroeconomics I. In this course, the students are introduced to the long run dynamic issues like growth and technical progress. It also provides the micro-foundations to the various aggregative concepts used in the previous course.

Course Outline

1. Economic Growth

Harrod-Domar model, Solow model; golden rule; technological progress and elements of endogenous growth.

2. Consumption

Keynesian consumption function; Fisher's theory of optimal inter-temporal choice; life-cycle and permanent income hypotheses.

3. Investment

Determinants of business fixed investment; residential investment and inventory investment.

4. Demand for money

Liquidity Preference Theory, Baumol's Theory, Friedman's Theory

5. Schools of Macroeconomic Thought

Classical; Keynesian; New-Classical and New-Keynesian.

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Charles I. Jones, *Introduction to Economic Growth*, W.W. Norton & Company, 2nd edition, 2002.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011.

Core Economics Course 10: INTRODUCTORY ECONOMETRICS

Course Description

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models. The course also covers the consequences of and tests for misspecification of regression models.

Course Outline

1. Nature and Scope of Econometrics

Nature and scope, Distinction between mathematical economics and econometrics, Distinction between econometrics and statistics. Limitations of econometrics

2. Statistical Concepts

Normal distribution; chi-sq, t- and F-distributions; testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; power of a test; tests for comparing parameters from two samples.

3. Simple Linear Regression Model: Two Variable Case

Estimation of model by method of ordinary least squares; properties of OLS estimators; goodness of fit; tests of hypotheses; confidence intervals; Gauss-Markov theorem; forecasting.

4. Multiple Linear Regression Model

Estimation of parameters; goodness of fit - R^2 and adjusted R^2 ; partial regression coefficients; testing hypotheses – individual and joint; functional forms of regression models; qualitative (dummy) independent variables.

5. Violations of Classical Assumptions: Consequences, Detection and Remedies

Multicollinearity; heteroscedasticity; serial correlation.

Readings

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011.
4. D. N. Gujarati and D.C. Porter, *Essentials of Econometrics*, McGraw Hill, 4th edition, International Edition, 2009.
5. Christopher Dougherty, *Introduction to Econometrics*, Oxford University Press, 3rd edition, Indian edition, 2007.

Semester V

Core Economics Course 11: INDIAN ECONOMY-I

Course Description

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post -Independence period, with particular emphasis on paradigm shifts and turning points.

Course Outline

1. Economic Development since Independence

Major features of the economy at independence; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

2. Population and Human Development

Demographic trends and issues; education; health and malnutrition.

3. Labour and Employment

Nature of unemployment-Types of unemployment, Measurement problem of unemployment, Policies to tackle unemployment problem, Indian Trade Union movement, Women and child labour problem

4. Growth and Distribution

Trends and policies in poverty; inequality and unemployment.

4. Economic Reforms since 1991

BOP crises, Liberalisation, Privatisation and Globalisation

Readings:

1. Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development*.
5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and Political Weekly*, January.

6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, The Progress of School Education in India, *Oxford Review of Economic Policy*.
10. J.B.G. Tilak, 2007, Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development*.
11. T. Dyson, 2008, India's Demographic Transition and its Consequences for Development in Uma Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, China and India: Idiosyncratic Paths to High Growth, *Economic and Political Weekly*, September.
13. K. James, 2008, Glorifying Malthus: Current Debate on Demographic Dividend in India *Economic and Political Weekly*, June.
14. Reetika Khera, 2011, India's Public Distribution System: Utilisation and Impact *Journal of Development Studies*.
15. Aniruddha Krishna and Devendra Bajpai, 2011, Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
16. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics*, Oxford University Press.

Core Economics Course 12:DEVELOPMENT ECONOMICS-I

Course Description

This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.

Course Outline

1. Conceptions of Growth and Development

Meaning of growth and development, ways of measuring of development and development gap, alternative measures of development, documenting the international variation in these measures, comparing development trajectories across nations and within them.

2. Theories of Development

Rostow, Marx, low level equilibrium trap, balanced vs unbalanced growth-Big Push, Critical Minimum Effort thesis

3. Poverty and Inequality: Definitions, Measures and Mechanisms

Inequality axioms; a comparison of commonly used inequality measures; connections between inequality and development; poverty measurement; characteristics of the poor; mechanisms that generate poverty traps and path dependence of growth processes.

4. Political Institutions and the Functioning of the State

The determinants of democracy; alternative institutional trajectories and their relationship with economic performance; within-country differences in the functioning of state institutions; state ownership and regulation; government failures and corruption.

5. Human Development

Concept, Capability Approach, measurement of human development-Physical Quality of Life Index (PQLI). HDI

Readings

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. ParthaDasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and DilipMookerjee, *UnderstandingPoverty*, Oxford University Press, 2006.
4. KaushikBasu, *The Oxford Companion to Economics in India*, OUP, 2007.
5. AmartyaSen, *Development as Freedom*, OUP, 2000.
6. DaronAcemoglu and James Robinson, *Economic Origins of Dictatorship andDemocracy*, Cambridge University Press, 2006.
7. Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, 1994

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.

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

Composition and growth, Role of the Service sector

5. Policies and Performance in Social Sector

Education, Health and malnutrition

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 Golati and Pankaj Kumar, 2008, Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
6. Kunal Sen, 2010, Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
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.
 - 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.

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. 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.

4 Regional economic Policy:

Concept of a region-time and space as variable; formulating interregional objectives, consistency between national and regional objectives, channelization approach towards backward region revealing of interregional disparities,

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.

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.
2005.
10. Paul Samuelson, 1955, Diagrammatic Exposition of a theory of Public Expenditure, *Review of Economics and Statistics*, Volume 37.
11. Shankar Acharya, 2005, Thirty Years of Tax Reform in India, *Economic and Political Weekly*, May 14-20.
12. Rangarajan and D.K. Srivastava, 2005, Fiscal Deficit and Government Debt: Implications for Growth and Stabilization", *Economic and Political Weekly*, July 2-8.
13. M. Govinda Rao, 2011, Goods and Services Tax: A Gorilla, Chimpanzee or a Genius like Primates?, *Economic and Political Weekly*, February 12-18.
14. Report of the 13th Finance Commission, 2010-15.
15. *Economic Survey*, Government of India (Latest).
16. *State Finances: A Study of Budgets*, Reserve Bank of India (Latest).

Semester V**DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS****GROUP-I****(A) ECONOMICS OF HEALTH AND EDUCATION****Course Description**

The importance of education and health in improving well-being is reflected in their inclusion among the Millennium Development Goals adopted by the United Nations member states, which include among other goals, achieving universal primary education, reducing child mortality, improving maternal health and combating diseases. This course provides a microeconomic framework to analyze, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in India.

Course Outline**1. Role of Health and Education in Human Development**

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

2. Microeconomic Foundations of Health Economics

Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

3. Evaluation of Health Programs

Costing, cost effectiveness and cost-benefit analysis; burden of disease.

4. Education: Investment in Human Capital

Rate of return to education: private and social; quality of education; signaling or human capital; theories of discrimination; gender and caste discrimination in India.

5. Health and Education Sector in India: An Overview

Health outcomes; health systems; health financing.

Literacy rates, school participation, school quality measures.

Readings:

1. William, Jack, *Principles of Health Economics for Developing Countries*, World Bank Institute Development Studies, 1999.
2. World Development Report, *Investing in Health*, The World Bank, 1993.
3. Ronald G., Ehrenberg and Robert S., Smith, *Modern Labor Economics: Theory and Public Policy*, Addison Wesley, 2005.

Semester V**DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS****GROUP-I****(B) 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**

Mis-specification; functional forms; model selection.

3. Advanced Topics in Regression Analysis

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

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

Readings:

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.

Semester V
DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS
GROUP-I
(C) ECONOMIC HISTORY OF INDIA (1857-1947)

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India's economic development after independence in 1947.

Course Outline

1. Introduction: Colonial India: Background and Introduction

Overview of colonial economy.

2. Macro Trends

National Income; population; occupational structure.

3. Agriculture

Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

4. Railways and Industry

Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

5. Economy and State in the Imperial Context

The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

Readings:

1. Lakshmi Subramanian, *“History of India 1707-1857”*, Orient Blackswan, 2010, Chapter 4.
2. Sumit Guha, 1991, Mortality decline in early 20th century India, *Indian Economic and Social History Review (IESHR)*, pp 371-74 and 385-87.

3. Tirthankar Roy, *The Economic History of India 1857-1947*, Oxford University Press, 3rd edition, 2011.
4. J. Krishnamurty, *Occupational Structure*, Dharma Kumar (editor), The Cambridge
5. Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6.
6. IrfanHabib, *Indian Economy 1858-1914*, A People's History of India, Vol.28, Tulika, 2006.
7. Ira Klein, 1984, When Rains Fail: Famine relief and mortality in British India, *IESHR* 21.
8. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-35.
9. John Hurd, *Railways*, CEHI, Chapter 8, pp.737-761.
10. Rajat Ray (ed.), *Entrepreneurship and Industry in India*, 1994.
11. AK Bagchi, Deindustrialization in India in the nineteenth century: Some theoretical implications, *Journal of Development Studies*, 1976.
12. MD Morris, *Emergence of an Industrial Labour Force in India*, OUP 1965, Chapter 11, Summary and Conclusions.
13. K.N. Chaudhuri, *Foreign Trade and Balance of Payments*, CEHI, Chapter 10.
14. B.R. Tomlison, 1975, *India and the British Empire 1880-1935*, IESHR, Vol.XII.
15. Dharma Kumar, *The Fiscal System*, CEHI, Chapter 12.
16. BasudevChatterjee, *Trade, Tariffs and Empire*, OUP 1992, Epilogue.

Background reading for students:

1. IrfanHabib, *Indian Economy 1858-1914* (A People's History of India), Vol.28, Tulika 2006.
2. Daniel Thorner, *Agrarian Prospect in India*, 1977.
3. L. Visaria and P. Visaria, *Population*. CEHI, Chapter 5.

Semester VDISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICSGROUP-I(D) POLITICAL ECONOMY-I**Course Description**

This course explores changes in the organisation of production, labour market institutions and corporate structure. It goes on to study the consequences of globalization, especially of financial flows, for the role of the state, economic performance, gender issues, environment, human welfare and development.

Course Outline**1. Changing Dynamics of Capitalist Production, Organisational Form and Labour Process**

Fordist and post-fordist production; changing dynamics of organisation of production, markets and labour process; the changing nature of job security and labour rights.

2. The State in the Era of Globalisation: Welfare, Development and Autonomy

Globalisation and the limits of the welfare state, development and state autonomy.

3. The Changing Role of Finance

The changing role of finance in capital accumulation and corporate structure; finance and globalisation financialisation, financial liberalisation and financial crisis.

4. The Social Dimension

Globalisation and uneven development – growth, inequality and exclusion.

5. New Perspectives

Gender in work, accumulation and globalisation; issues in environment and sustainability; alternatives ahead.

Readings:

1. Michel Beaud, *A History of Capitalism, 1500-2000*, trans. by Tom Dickman and Anny Lefebvre, New York: Monthly Review Press, 2001.
2. Ash Amin (ed.), *Post-Fordism: A Reader*, Blackwell, 1994.
3. Fran Tonkiss, *Contemporary Economic Sociology: Globalisation, Production, Inequality*, Chapter 4 (Fordism and After), Routledge India 2008 reprint, 2006.

4. S. Hymer, "The Multinational Corporation and the Law of Uneven Development", in H. Radice (ed.) *International Firms and Modern Imperialism*, Penguin Books, 1975.
5. G. Gereffi, J. Humphrey and T. Sturgeon, 2005, The Governance of Global Value Chains , *Review of International Political Economy*, Volume 12: 78–104.
6. Narasimha Reddy, Economic Globalisation, Past and Present – The Challenges to Labour in Jomo K.S. & KhooKhay Jin (ed.) *Globalization and Its Discontents, Revisited*, Sepsis -Tulika Books, 2003.
7. David Harvey, *A Brief History of Neoliberalism*, OUP, 2005.
8. Andrew Glyn, Challenges to Capital , in *Capitalism Unleashed: Finance, Globalization and Welfare*, Oxford: Oxford University Press, (Ch. One, pp. 1-24), 2006.
9. G Dumenil and D Levy, *The Crisis of Neoliberalism*, Harvard University Press, 2011.
10. K.S. Jomo (ed.), *The Long Twentieth Century: The Great Divergence: Hegemony, Uneven Development and Global Inequality*, OUP, 2006.
11. Gary Dymksy, 2005, Financial Globalization, Social Exclusion and Financial Crisis , *International Review of Applied Economics*, Vol. 19: 439–457.
12. E. Stockhammer, Financialization and the Global Economy , in G. Epstein and M.H. Wolfson (ed.) *The Political Economy of Financial Crises*, Oxford University Press, 2010. [Also in Working Paper Series, No. 240, Political Economy Research Institute, University of Massachusetts Amherst]
13. J.P. Smith and M.P. Ward, 1989, Women in the Labour Market and in the Family , *Journal of Economic Perspectives*, Volume 3: 9-23.
14. Marilyn Power, 2004, Social Provisioning as a Starting Point for Feminist Economics , *Feminist Economics*, Volume 10: 3-19.
15. John Bellamy Foster, *Ecology against Capitalism*, Monthly Review Press, 2002

Semester VDISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICSGROUP-I(E) MONEY AND FINANCIAL MARKETS**Course Description**

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Outline**1. Money**

Concept, functions, measurement; theories of money supply determination.

2. Financial Institutions, Markets, Instruments and Financial Innovations

- a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.
- b. Money and capital markets: structure, features, derivatives, meaning and types

3. Interest Rates

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. Banking System

- a. Balance sheet and portfolio management.
- b. Indian banking system: Changing role and structure; banking sector reforms.

5. Central Banking and Monetary Policy

Functions of central bank, monetary policy- meaning, instruments and objectives, current monetary policy of India.

Readings

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets*, AITBS, 1996.

4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an EmergingMarket*, Oxford University Press, 2011.
5. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
6. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
7. N. Jadhav, *Monetary Policy, Financial Stability and Central Banking in India*,
8. Macmillan, 2006.
9. R.B.I. – *Report of the Working Group: Money Supply Analytics and Methodologyof Compilation*, 1998.
10. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).
11. Siraj B. Gupta, *Monetary Economics- institutions, theory and policy*, S.Chand, 10th Edition, 2002
12. Gordon and Nataraian, *Finantial Markets and Services*, Himalaya Publishing House, 7th Edition, 2011
13. ArunPattanaik, *Finantial Markets and Institutions*, Rittu Publications, First Edition, 2012.

Semester V**DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS****GROUP-I****(F) PUBLIC ECONOMICS****Course Description**

Public economics is the study of government policy from the points of view of economic efficiency and equity. The paper deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures.

Course Outline**1. Basic Concepts**

Nature, significance and scope of public finance- role of Public Finance in developing economy; Difference between public goods and private goods. Efficient allocation of public goods and private goods, Externalities.

2: Public Revenue and Expenditure

Different sources of Public Revenue- direct tax and indirect tax, incidence of taxation, , effects of taxation on production, consumption and distribution; Classification of Public Expenditure; significance of public expenditure in modern state; effects of public expenditure on production, distribution and unemployment.

3. Principles of taxation

Benefit Principle, Ability-to-pay principle, Tax systems, Progressive, regressive and proportional.

4. Public Debt

Sources of Public Debt--Internal and External Debt; Burden of Public Debt; Redemption of Public Debt; Debt Trap; Role of Public Debt with special reference to developing Countries.

5. Government Budget and Public Finance in India

Revenue account and capital account of a budget with an illustration from last Union Budget-Role of Finance Commission in India (Study of latest Finance Commission's Recommendations)

Readings:

1. J. Hindriks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.
2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector*, W.W. Norton & Company,

- 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5th edition, 1989.
 5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1st edition, 1998.
 6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
 7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries*, 2007.
 8. KaushikBasu and A. Maertens (ed.), *The N e w Oxford Companion toEconomics in India*, Oxford University Press, 2013.
 9. M.M. Sury, *Government Budgeting in India*, 1990.
 17. M. GovindaRao, *Changing Contours of Federal Fiscal Arrangements inIndia*, AmareshBagchi (ed.), *Readings in Public Finance*, Oxford UniversityPress,
 18. Dalton, H.: *Principles of Public Finance*. Routledge and Kegan Paul.
 19. Musgrave, R.A.: *Theory of Public Finance*, McGraw Hill 2 Agarwal, R.C.: *Public Finance—Theory And Practice*, Lakshmi Narayan Agarwal.
 20. Choudhury, R.K.: *Public Finance and Fiscal Policy*, Kalyani Publishers.
 21. Andley K.K &Sundharam, K.P.M.: *Public Economics and Public Finance*, Rattan PrakashanMandir.
 22. Mithani, D.M.: *Modern Public Finance*, Himalaya Publishing House.

Semester VI**DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS****GROUP-II****(A)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.

3. Monopoly Capitalism

The modern corporation; monopoly capitalism— alternative perspectives; crony capitalism

4. The State in Capitalism

The state and the economy – contestation and mutual interdependence;

5. The State as an Arena of Conflict

Contested sovereignty, 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. IrfanHabib, 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, 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. VamsiVakulabharanam, 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.
 13. Schwarz (eds.), *A Critique of Economic Theory*, Penguin Books, 1972.
 14. AmitBhaduri, 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)*].
 15. PrabhatPatnaik, "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.
 16. 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.

Semester VI

DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS

GROUP-II

(B) 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

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.

2. 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; risk-free assets and the one-fund theorem.

3. 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.

4. 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.

5. 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.

Readings:

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.
5. Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, *Fundamentals of Corporate Finance*. McGraw-Hill, 7th 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, 6th edition, 2003

Semester VI

DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS

GROUP-II

(C) 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. Pareto optimality and market failure in the presence of externalities; property rights and the Coase theorem.

2. 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.

3. International Environmental Problems

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

4. Measuring the Benefits of Environmental Improvements

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

5. Sustainable Development

Concepts; evolution and measurement.

Readings:

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 30:675-740.
5. P.R. Battachajee, A discourse on Environmental Economics, Srijan Graphics and Publishing House, Silchar, Assam.

Semester VI
DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS
GROUP-II
(D)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. Pure theories of international trade-Mill, Smith and Ricardo, Gains from trade, Decomposition of gains from terms of trade

2. Neo-classical Theories of International Trade

Heckscher-Ohlin models; Factor price equalization theorem, Leontief Paradox, Factor intensity Reversal

3. Recent Advances In Trade Theory

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 System

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), 9th edition, 2012.
2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011.

Semester VI
DISCIPLINE SPECIFIC ELECTIVE (DSE) PAPERS: ECONOMICS
GROUP-II

(E) Dissertation

This paper consist of two parts: (i) A project work: 70 marks

A project on a topic to be selected by the student in consultation with the concerned teacher who will guide the student during the semester in completion of the work. Range of issues both on theoretical and applied may be considered for the project. The concerned department shall allot one supervisor from the faculty members. The student will submit the dissertation duly certified by the supervisor.

(ii) Viva voce examination: 30 marks.

A viva-voce examination shall be conducted by a two member committee consisting of Head or his/her nominee and external expert to be appointed by the Controller of Examinations.

Marks will be awarded separately for Project and Viva-voce by both the viva-voce committee and the average of two examiners constitute final marks. The pass marks in project and viva-voce shall be 40% separately.

Semester I

Generic Elective in Economics I: INTRODUCTORY MICROECONOMICS

Course Description

This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Course Outline

1. Exploring the subject matter of Economics

Why study economics? Scope and method of economics; the economic problem: scarcity and choice; the question of what to produce, how to produce and how to distribute output; science of economics; economic systems, reading and working with graphs, economics and well-being of people.

2. Supply and Demand: How Markets Work, Markets and Welfare

Markets and competition; determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.

3. Theory of Consumer Behaviour

The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes; description of preferences (representing preferences with indifference curves); properties of indifference curves; consumer's optimum choice; income and substitution effects.

4. Theory of the Firm and Product Market Structure

Behaviour of profit maximizing firms and the production process; short run costs and output decisions; costs and output in the long run. Monopoly and anti-trust policy; government policies towards competition; imperfect competition.

5. Input Markets

Labour and land markets - basic concepts (derived demand, productivity of an input, marginal productivity of labour, marginal revenue product); demand for labour; input demand curves; shifts in input demand curves; competitive labour markets; and labour markets and public policy.

Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.

Semester II

Generic Elective in Economics II: INTRODUCTORY MACROECONOMICS

Course Description

This course aims to introduce the students to the basic concepts of Macroeconomics. Macroeconomics deals with the aggregate economy. This course discusses the preliminary concepts associated with the determination and measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments.

Course Outline

1. Introduction to Macroeconomics and National Income Accounting

Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices; national income accounting for an open economy;

2. Money

Functions of money; quantity theory of money; determination of money supply; credit creation; tools of monetary policy; money demand – Keynesian liquidity preference theory.

3. Inflation

Meaning; cost push and demand pull inflation; impact of inflation on the economy; macroeconomic policies during inflation.

4. The Closed Economy in the Short Run

Classical and Keynesian systems; simple Keynesian model of income determination; IS-LM model; fiscal and monetary policy effectiveness.

5. International Trade

Balance of Payments, Current and Capital Account, Autonomous and accommodating transactions, Disequilibrium Vs Deficit Balance of Payments, Correction of BOP deficit

Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

Semester III

Generic Elective in Economics III: INDIAN ECONOMY-I

Course Description Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points.

Course Outline

1. Economic Development since Independence

Major features of the economy at independence; growth and development under different policy regimes—goals, constraints.

2. Institutions and policy framework

An assessment of performance—sustainability and regional contrasts; structural change, savings and investment.

3. Population and Human Development

Demographic trends and issues; education, health and malnutrition.

4. Growth and Distribution

Trends and policies in poverty, inequality and unemployment.

5. International Comparisons

Economic Growth, FDI, Human Capital, growth performance in the context of South and South East Asia.

Readings:

1. Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, *The Recovery of India: Economic Growth in the Nehru Era*, Economic and Political Weekly, November.
3. Rakesh Mohan, 2008, *Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment*, Economic and Political Weekly, May.
4. S.L. Shetty, 2007, *India's Savings Performance since the Advent of Planning*, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development*.
5. Himanshu, 2010, *Towards New Poverty Lines for India*, Economic and Political Weekly, January.
6. Jean Dreze and Angus Deaton, 2009, *Food and Nutrition in India: Facts and Interpretations*, Economic and Political Weekly, February.
7. Himanshu, 2011, *Employment Trends in India: A Re-examination*, Economic and Political Weekly, September.
8. Rama Baru et al, 2010, *Inequities in Access to Health Services in India: Caste, Class and Region*, Economic and Political Weekly, September.
9. Geeta G. Kingdon, 2007, *The Progress of School Education in India*, Oxford Review of Economic Policy.
10. World Investment Report (Various Years), UNCTAD

Semester IV

Generic Elective in Economics IV: 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.

Course Outline

1. Macroeconomic Policies and Their Impact

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

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

4. Trends and Performance in Services

Composition and growth, Role of the Service sector

5. Policies and performance of Public Sector

Role, growth, problems and disinvestment policies

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. Kunal Sen, 2010, Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, The Rise of Asia, Routledge.
5. 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.
6. Dipak Mazumdar and Sandeep Sarkar, 2009, The Employment Problem in India and the Phenomenon of the Missing Middle, Indian Journal of Labour Economics.
7. J. Dennis Rajakumar, 2011, Size and Growth of Private Corporate Sector in Indian Manufacturing, Economic and Political Weekly, April.
8. Ramesh Chand, 2010, Understanding the Nature and Causes of Food Inflation, 5 Economic and Political Weekly, February.
9. Bishwanath Goldar, 2011, Organised Manufacturing Employment: Continuing the Debate, Economic and Political Weekly, April.
10. Kaushik Basu and A. Maertens, eds, 2013. The New Oxford Companion to Economics in India, Oxford University Press.

Semester III
Skill Enhancement Course (SEC) II: DATA ANALYSIS

Course Description:

This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data.

Course Outline

1. Sources of data

Population census versus sample surveys; random sampling.

2. Univariate and bivariate frequency distributions

Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean; measures of dispersion, skewness and kurtosis.; correlation and regression.; rank correlation.

3. Introduction to Probability Theory

Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and probability distributions. Binomial and normal distributions.

4. Estimation of Population Parameters from Sample Data.

Unbiased estimators for population mean and variance.

5. Basics of index numbers

Price and quantity index numbers- Laspeyre's, Paasche's and Fisher's Indices

Note: This paper is common for both Honours and Pass course. However, for Pass course emphasis should be given on basic/elementary level concepts.

Readings:

1. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman.
2. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).

Semester IV
Skill Enhancement Course (SEC)-II:
Understanding the Economic Survey and Union Budget

Course description

The course seeks to familiarize the students with basic concepts related to some contemporary economic issues. Its aim is to equip the students with sufficient knowledge and skills so as to understand media discussions, and to critically analyze contemporary issues that figure in high-profile government documents, in particular the Economic Survey and the Union Budget. Such capability is necessary to understand government policies and also to increase people's participation in economic decision-making. The emphasis in the course will be on conceptual understanding, not data.

Course outline

1. Fiscal Policy in India

Need for government spending, areas of government spending;

2. Government expenditure

Composition and trends-Capital expenditure, revenue expenditure, plan expenditure, non-plan expenditure.

3. Sources of Government Revenue

Capital receipts, revenue receipts, tax and non-tax revenue, direct and indirect taxes; trends therein; need to rationalize tax structure- Goods and Services Tax (GST)

4. Deficits

Understanding the concepts of fiscal deficit, primary deficit and revenue deficit, impact of fiscal deficit on economy, need to control fiscal deficits.

5. Economic Survey

Actual, Revised Estimates and Budget Estimates of receipts and expenditure (as per latest economic survey); Fiscal devolution and centre-state financial relations in India, important challenges/ objectives of fiscal policy as outlined in the latest economic survey.

5. The Union Budget

Need for the Budget, Understanding the process of budget making in India, The thrust areas of the budget; areas / sectors which have received higher or lower share of expenditure, reasons and consequences thereof; steps proposed to ensure effective spending.

Note: This paper is common for both Honours and Pass course. However, for Pass course emphasis should be given on basic/elementary level concepts.

Readings:

1. Economic Survey (latest), Government of India, Ministry of Finance. Full chapter (excluding boxed items) on 'Economic Outlook, Prospects, and Policy

- Challenges’ and ‘Fiscal Framework’. Other selections to be determined each year.
2. ‘Understanding the Budget Concepts and Terminologies’, Centre for Budget and Governance Accountability
 3. <http://www.cbgaindia.org/files/documents/Understanding%20the%20Budget%20Concepts%20and%20Terminologies.pdf>
 4. The Key to Budget Documents, Budget At A Glance, Macroeconomic Framework Statement, Medium Term Fiscal Policy Statement and Fiscal Policy Strategy Statement , all available at indiabudget.nic.in.
 5. Economic and Social Classification of the Budget, available at <http://finmin.nic.in/reports/FunClass201415.pdf>.
 6. <http://www.unionbudget.nic.in/ub2016-17/bh/bh1.pdf> (For Budget 2016-17 highlights)
 7. Pranab Mukherjee (2012), “Budget Making”, in K. Basu and A. Maertens (eds), *The New Oxford Companion to Economics in India*, OUP.
 8. Dipak Dasgupta and Supriyo De (2012), “Fiscal Deficit”, in Basu and Maertens.
 9. Uma Kapila (2016), “Fiscal and Budgetary Developments”, in *Indian Economy Since Independence*, Academic Foundation, latest edition.
 10. Y V Reddy (2015), “Continuity, Change and The Way Forward: Fourteenth Finance Commission”, *EPW* Vol. 50, Issue No. 21, 23 May, 2015
 11. 14th Finance Commission
Report. <http://finmin.nic.in/14fincomm/14thFinanceCommission.htm>
 12. Chakraborty, Pinaki (2015) “Intergovernmental Fiscal Transfers in India: Emerging Trends and Realities” in P. Patnaik (ed), *Economics Volume 3: Macroeconomics*, Oxford University Press India.
 13. Mukherjee, Sacchidananda (2015). “Present State of Goods and Services Tax (GST) Reform in India,” Working Paper No. 2015-154 (September 2015), National Institute of Public Finance and Policy, New Delhi.
 14. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics*, ch.19.