

Syllabus for B.A.

Core and Discipline Specific Elective (DSE) Courses in Economics

Semester I	Semester II
Core Economics I: Principles of Microeconomics–I	Core Economics II: Principles of Microeconomics–II
Semester III	Semester IV
Core Economics III: Principles of Macroeconomics–I	Core Economics IV: Principles of Macroeconomics–II
Semester V	Semester VI
Discipline Specific Elective I One of the following: i. DSE 1: Economic Development and Policy in India–I ii. DSE 2: Money and Banking iii. DSE 3: Environmental Economics	Discipline Specific Elective II One of the following: iv. DSE 3: Economic Development and Policy in India–II v. DSE 4: Economic History of India 1857-1947 vi. Public Finance

Core Economics I: Principles of Microeconomics–I

Course Description

This course intends to expose the student to the basic principles in Microeconomic Theory and illustrate with applications.

Course Outline

1. Introduction

- a. Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.
- b. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.
- c. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.
- d. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

2. Consumer Theory

Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

3. Production and Costs

- a. Production: behaviour of profit maximising firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.
- b. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

4. Perfect Competition

- a. Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries.
- b. Welfare: allocative efficiency under perfect competition.

Readings:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.

Core Economics II: Principles of Microeconomics–II

Course Description

This is a sequel to Principles of Microeconomics–I covered in the first semester. The objective of the course is the same as in Principles of Microeconomics I.

Course Outline

1. Market Structures

a. Theory of a Monopoly Firm

Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.

b. Imperfect Competition

Monopolistic competition: Assumptions, SR & LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.

2. Consumer and Producer Theory

a. Consumer and Producer Theory in Action

Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency.

b. Markets and Market Failure

Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.

3. Income Distribution and Factor pricing

Input markets: demand for inputs; labour markets, land markets, profit maximisation condition in input markets, input demand curves, distribution of Income.

4. International Trade

Absolute advantage, comparative advantage, terms of trade, sources of comparative advantage, trade barriers, free trade/ protectionism.

Readings:

Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.

Core Economics III: Principles of Macroeconomics–I

Course Description

This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments. The course also discusses various theories of determining GDP in the short run.

Course Outline

1. Introduction

What is macroeconomics? Macroeconomic issues in an economy.

2. National Income Accounting

Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept.

3. Determination of GDP

Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

4. National Income Determination in an Open Economy with Government

Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.

5. Money in a Modern Economy

Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy.

Readings:

1. Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.
2. Sikdar, Shoumyen, *Principles of Macroeconomics*, 2nd Edition, Oxford University Press, India

Core Economics IV: Principles of Macroeconomics–II

Course Description

This is a sequel to Principles of Macroeconomics–I. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

Course Outline

1. IS-LM Analysis

Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.

2. GDP and Price Level in Short Run and Long Run

Aggregate demand and aggregate supply; multiplier Analysis with AD curve and changes in price levels; aggregate supply in the SR and LR.

3. Inflation and Unemployment

Concept of inflation; determinants of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.

4. Balance of Payments and Exchange Rate

Balance of payments: current account and capital account; market for foreign exchange; determination of exchange rate.

Readings:

1. Case, Karl E. & Ray C. Fair, *Principles of Economics*, Pearson Education, Inc., 8th edition, 2007.
2. Sikdar, Shoumyen, *Principles of Macroeconomics*, 2nd Edition, Oxford University Press, India

Discipline Specific Elective I

One of the following:

i. DSE 1: Economic Development and Policy in India-I

Course Description

This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post- Independence period.

Course Outline

1. Issues in Growth, Development and Sustainability

2. Factors in Development

Capital formation (Physical and Human); technology; institutions.

3. Population and Economic Development

Demographic trends; urbanisation.

4. Employment

Occupational structure in the organised and the unorganised sectors; open-, under- and disguised unemployment (rural and urban); employment schemes and their impact.

5. Indian Development Experience

Critical evaluation of growth, inequality, poverty and competitiveness, pre and post reforms era; savings and investment; mobilisation of internal and external finance; monetary and fiscal policies; centre-state financial relations.

Readings:

1. Michael P Todaro and Stephen Smith. *Economic Development*, Pearson, 11th edition (2011).
2. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19th edition (2009).
3. United Nations Development Programme, *Human Development Report*

2010, Palgrave Macmillan (2010).

4. Government of India, *Economic Survey*
(latest)
5. Government of India, *Five Year Plan*
(latest)
6. Government of India, *Finance Commission Report*
(latest)

ii. DSE 2: Money and Banking:

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: organization, structure and reforms in India; role of financial derivatives and other innovations.

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, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; 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. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
4. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group, IMF Staff Papers.

iii. **DSE 3: Environmental Economics:**

Course Description

This course introduces students to concepts, methods and policy options in managing the environment using tools of economic analysis. This course should be accessible to anyone with an analytical mind and familiarity with basic concepts of economics. Since several environmental problems are caused by economic activity (for instance, carbon emissions, over-harvesting of renewable resources and air and water pollution as a by-product of industrial activity), this course examines different approaches to adjusting behaviour through economic institutions such as markets and incentives as well as through regulation, etc. It also addresses the economic implications of environmental policies through practical applications of methods for valuation of environmental goods and services and quantification of environmental damages. Conversely, the impact of economic growth on the environment is also addressed under the rubric of sustainable development. Environmental problems and issues from the Indian and international context (especially global warming) are used to illustrate the concepts and methods presented in the course. The course will be useful for students aiming towards careers in the government sector, policy analysis, business, journalism and international organisations.

Course Outline

1. Introduction

Key environmental issues and problems, economic way of thinking about these problems, basic concepts from economics; Pareto optimality and market failure in the presence of externalities; property rights and other approaches.

2. The Design and Implementation of Environmental Policy

Overview, Pigouvian taxes and effluent fees, tradable permits, implementation of environmental policies in India and international experience; transboundary environmental problems; economics of climate change.

3. Environmental Valuation Methods and Applications

Valuation of non-market goods and services--theory and practice; measurement methods; cost-benefit analysis of environmental policies and regulations.

4. Sustainable Development

Concepts; measurement; perspectives from Indian experience

Readings

1. Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, "*Natural Resource and Environmental Economics*", Pearson Education/Addison

- Wesley, 4th edition, 2011.
2. Charles Kolstad, “*Intermediate Environmental Economics*”, Oxford University Press, 2nd edition, 2010.
 3. Robert N. Stavins (ed.), “*Economics of the Environment: Selected Readings*”, W.W. Norton, 6th edition, 2012.
 4. Robert Solow , “An Almost Practical Step toward Sustainability,” Resources for the Future 40th anniversary lecture,1992.
 5. Kenneth Arrow et al. , “Are We Consuming Too Much?” *Journal of Economic Perspectives*, 18(3): 147-172, 2004.
 6. IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report (forthcoming 2014).

Discipline Specific Elective II

One of the following:

iv. DSE 4: Economic Development and Policy in India–II

Course Description

Building on the more aggregative analysis of trends in the Indian Economy offered in Economic Development and Policy–I, this course examines sector-specific trends in key indicators and their implications in the post-Independence period.

Course Outline

1. Agriculture: Policies and Performance

Production and productivity; credit; labour; markets and pricing; land reforms; regional variations.

2. Industry: Policies and Performance

Production trends; small scale industries; public sector; foreign investment.

3. Foreign Trade: Trends and Policies

Balance of trade and balance of payments; India and the World Trade Organisation.

Readings:

1. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19th edition (2009).
2. Government of India, *Economic Survey* (latest)
3. Government of India, *Five Year Plan* (latest)

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

Epilogue. Background reading for students:

Irfan Habib, *Indian Economy 1858-1914* (A People's History of India), Vol.28, Tulika 2006.

Daniel Thorner, *Agrarian Prospect in India*, 1977.

L. Visaria and P. Visaria, *Population*. CEHI, Chapter 5.

vi. DSE 6: Public Finance

Course Description

This course is a non-technical overview of government finances with special reference to India. The course does not require any prior knowledge of economics. It will look into the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralisation in India. The course will be useful for students aiming towards careers in the government sector, policy analysis, business and journalism.

Course Outline

Part 1: Theory

1. Overview of Fiscal Functions, Tools of Normative Analysis, Pareto Efficiency, Equity and the Social Welfare.
2. Market Failure, Public Good and Externalities.
3. Elementary Theories of Product and Factor Taxation (Excess Burden and Incidence).

Part 2: Issues from Indian Public Finance

4. Working of Monetary and Fiscal Policies.
5. Current Issues of India's Tax System.
6. Analysis of Budget and Deficits
7. Fiscal Federalism in India
8. State and Local Finances

Readings

1. Musgrave, R.A. and P.B. Musgrave, *Public Finance in Theory and Practice*, Mc-Graw Hill, 1989.
2. Mahesh Purohit, "*Value Added Tax: Experience of India and Other Countries*", Gayatri Publications, 2007.
3. Kaushik Basu, and A. Maertens (ed.), *The Oxford Companion to Economics in India*, Oxford University Press, 2007.
4. M.M Sury, *Government Budgeting in India*, Commonwealth Publishers, 1990.
5. Shankar Acharya, "Thirty years of tax reform" in India, *Economic and Political Weekly*, May 2005.
6. Government of India, *Report of the 13th Finance Commission*.
7. *Economic Survey*, Government of India (latest).
8. State Finances: A Study of Budgets, *Reserve Bank of India* (latest).

Skill Enhancement Courses (SEC) offered by Economics Department

Skill Enhancement Course (SEC) I: FINANCIAL ECONOMICS

Course Description

This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business journalism.

Course Outline

1. 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.

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: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

3. Capital Asset Pricing Model (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.

Readings

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7th edition, 2002.
3. Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
4. Simon Benninga, *Financial Modeling*, MIT Press, USA, 1997.

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 frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis.
3. Bivariate frequency distribution. Correlation and regression. Rank correlation.
4. 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.
5. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance.
6. Basics of index numbers: price and quantity index numbers.

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).