Parvatibai Chowgule College of Arts and Science

(Autonomous)

Margao – Goa

Department of Economics

B.A. Economics Course Structure

SEMESTER – I		SEMESTER - II	
Core Course Title	**Course Code**	**Core Course Title**	**Course Code**
Evolution of Methods in Economic Analysis	ECO-I.C-1	Economics of Growth and Development	ECO-II.C-3
Mathematical Techniques for Economic Analysis	ECO-I.C-2	Empirical Techniques for Economic Analysis	ECO-II.C-4

SEMESTER - III				SEMESTER - IV			
Core Course Title	**Course Code**	**Elective Course Title**	**Course Code**	**Core Course Title**	**Course Code**	**Elective Course Title**	**Course Code**
Micro-economics	ECO-III.C-5	Economics of Foreign Exchange	ECO-E-2	Macro-economics	ECO-IV.C- 6	Indian Economy	ECO-E-1
		Regional Economics	ECO-E-4			Emerging Market Economies	ECO-E-3
		Economics and Governance	ECO-E-5			Entrepreneurship	ECO-E-6
		Economics and Law	ECO-E-8			Accounting for Non-accountants	ECO-E-7

SEMESTER – V				SEMESTER - VI			
Core Course Title	**Course Code**	**Elective Course Title**	**Course Code**	**Core Course Title**	**Course Code**	**Elective Course Title**	**Course Code**
Public Economics	ECO-V.C-7	Introduction to Econometrics	ECO-E-9	International Trade and Policy	ECO-VI.C-8	Introduction to Operations Research for Economists	ECO-E-10
Project	ECO-V/VI.C-9	Labour Economics	ECO-E-13	Project	ECO-V/VI.C-9	Environmental Economics	ECO-E-14
		Actuarial Economics	ECO-.E-11			Introduction to Industrial Economics	ECO- E-15
		Microeconomic Analysis	ECO-.E-12			Financial Economics	ECO- E-16
						Macroeconomic Analysis	ECO-E-17

INTERDISCIPLINARY COURSES (FOUNDATION GROUP) FOR SEMESTER V AND VI

Course Title	**Course Code**	**Course Title**	**Course Code**
Entrepreneurship	ECO-INT-1	Financial Investments for All	ECO-INT-3
Gandhian Economic Thought	ECO-INT-2	Taxation for All	ECO-INT-4

SYLLABI OF ECONOMICS COURSES
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CORE COURSES

Course Title: Evolution of Methods in Economic Analysis
Course Code: ECO-I.C-1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. The key objective of this course is to familiarize the students with the various methods, the social and the historical that transformed political economy to the present discipline of economics.

Learning Outcomes:

1. On completing the course, the students will be able to appreciate the different strands of economic analysis and discourse.
2. They will also appreciate the evolutionary nature of the analytical methods, the foundations and the structure of analysis.

SYLLABUS

Unit 1: Philosophical Orientation of Economics **(12 Hours)**
Smith, Ricardo, Malthus, Mill, Marx: Beginnings of Classical Political Economy

Unit 2: Historical Analysis in Political Economy **(12 Hours)**
Classical school, German school: Schmoller, Knapp, Weber etc.

Unit 3: Marginalist Methods of Analysis **(12 Hours)**
Emergence of Economics as a Science – Acritical view

Unit 4: Positivism and the Emergence of Economics as a Discipline **(12 Hours)**
Menger to Hayek: the Austrian School.

Unit 5: General Theory to General Equilibrium **(12 Hours)**
Keynes and beyond

References:
Mandatory:

1. Milonakis, Dimitris and Fine, Ben (2009),*From Political Economy to Economics Method, the Social and the Historical in the Evolution of Economic Theory*,Routledge, London.

Supplementary:

1. Backhouse, Roger E. (1985), *A History of Modern Economic Analysis*, Basil Blackwell, Oxford
2. Blaug, Mark (1997),*Economic Theory in Retrospect*,Blaug, Cambridge University Press, Cambridege, U.K.
3. Blaug, Mark (1992): " *The Methodology of Economics: Or How Economists Explain*", Cambridge University Press, Cambridege, U.K.

Course Title: Mathematical Techniques for Economic Analysis
Course code: ECO-I.C-2
Marks: 100
Credit: 4
Duration: 60 Hours

Course Objectives:

1. To raise the level and approach to teaching and learning economics by adequately emphasizing on concepts. This will help the students to understand economic reality in a structured manner. Further students who would like to specialize in applied branches will be better equipped. It will provide them with international dimension to academic studies by developing analytical and evaluative skill.

Learning Outcome:

2. On completing this course, the students will be able to improve their academic & professional competency. They will get equipped with mathematical techniques. Further they will create logical and analytical reasoning. It will help them build up a profession of high caliber.

SYLLABUS

Unit1:Introduction to Basic Concepts (5 Hours)

Importance of Mathematical and Statistical Methods in Economic Analysis Review of some Concepts; Algebraic Expressions; Equations; Exponents; Graphs of Lines and Non-Linear Equations; System of Simultaneous Equations; properties of sets, number systems.

Unit 2: Concept of Function and Types (25 Hours)

Limit, Continuity and Derivatives; Rules of Differentiation; Marginal Concept; Marginal Cost; Revenue; Utility; ElasticitiesandTypes; Partial and Total Differentiation and Applications. Some Simple Rules of Integration and Applications to Consumer's Surplus and Producer's Surplus.

Unit 3: Optimization (20 Hours)

Problems of Maxima and Minima in Single and Multivariable Functions; Unconstrained and Constrained; Optimization in Simple Economic Problems.

Unit 4: Matrix Algebra (10 Hours)

Determinants & input-output analysis

References:

Mandatory:

1. Knut Sydsaeter and Peter J Hammond (2005),*Mathematics for Economic Analysis*; Pearson Educational Asia: 4th Indian reprint.

Supplementary:

1. Chiang, A.C. & Kevin Wainwright (2005), *Fundamental Methods of Mathematical Economics*; Fourth Edition, McGraw-Hill.
2. Dowling, Edward T. (1992), *Schaum's Outline of Theory and Problems of Introduction to Mathematics*; 3rd Edition, McGraw-Hill

Course Title: Economics of Growth and Development
Course Code: ECO-II.C-3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
The two basic objectives of this course are:

1. To give to students a global perspective of economic growth using traditional and contemporary theories on economic growth and development.
2. Further this course seeks to provide an insight into India's growth and development since the era of planned economic development.

Learning Outcome:

1. On completing this course student will have a working knowledge of the phenomena of growth and development.
2. They will also be able to understand and evaluate the relevant theories of economic growth and development.
3. Further, they will be in a position to analyze India's development experience with unified planning.

SYLLABUS

Unit 1: Growth and Development (15 Hours)

Growth and development,Components, Indicators, Approaches to development: Traditional, New,Sen's capabilities approach, Institutional freedom as ends and means of development.

Unit 2: Patterns of Growth and Development of Development (15 Hours)

Growth and development in different countries, Critique of classical theories of development: Rostow's model, Lewis model; international dependence revolution: neoclassical dependence model, fake paradigm model: dualistic development models.

Unit 3: New Growth Theories (15 Hours)

Exogenous growth theories: Solow model, Harrod-Domar model; Endogenous growth theories: Romer and Lucas endogenous model, Robinson model; Economic development as self discovery: Harrison, Rodrik, Velsacow model.

Unit 4: India's Development Experience (15 Hours)

India's development journey from planning commission to NITI Aayog. India on the eve of planning, Nehru Mahalnobis growth and development model, Liberalization, Privatization and Globalization; Inclusive growth; Interstate variations in development, Case studies:Kerala and Gujarat Model;Economic development of Goa.

References:
Mandatory:

1. Alternative survey group, (2010), *Indian Political Economy Association*two decades of Neolibralism, Daanish Books, Delhi, India.
2. Black J.,(1991), *Development in theory and practice: paradigms and paradoxes*, Boulder,Westview, Colarado.
3. George K.K., Kerala economy: growth, structure, strength and weaknesses(working paper no. 25)http://csesindia.org/admin/modules/cms/docs/publication/25.pdf

4. Hayami Y, (2005), *Development economics: from the poverty to the wealth of nation*, Oxford India, Paperback, India
5. Hirway I., ShahaAmita, (2013),*Growth or Development which way Gujarat is Going?* Oxford India Press, Noida, India.
6. Jones Charles,*Introduction to economic growth*, second edition Viva book private limited,New York.
7. Meir Gerald, Raich James, *Leading issues in economic development,*eight edition Oxford university press, U.K.
8. Mishra &Puri, (2013),*Indian economy*, Himalaya publishing house, Mumbai
9. Ray Debraj,(2007),*Development economics*, Oxford India paperback,Noida,India.
10. Thirlwall A.,(2005),*Growth and development: with special reference to developing economies*, Palgrave, Macmilan, USA
11. Todaro M , Smith S.(2013), *Economic development*, Pearson, Noida, India

Course Title: Empirical Techniques for Economic Analysis.
Course Code: ECO-II.C-4
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To enable students to have a good understanding of the empirical methods and its application in economics.
2. To enable students to process the raw data by using soft techniques/tools to analyze economic phenomenon conclusively.
3. To provide them with competency not only in their professional arena but in academics also.

Learning Outcomes:

1. Upon completion of the course the students must be able to comfortably use quantitative techniques/skills for the purpose of analyzing economic issues pertaining to decision making.

SYLLABUS

Unit 1: Population and Sampling (10 Hours)

Meaning of population and sampling. Need for sampling, concept of 'Good Sample'; Methods of sampling – probability and non-probability sampling; sampling techniques; Optimum sampling; Nyman's sampling – problems to be solved based on sampling methods.

Unit 2: Correlation and Regression (20 Hours)

Karl Pearson's coefficient of correlation and Spearman's Rank coefficient of correlation; properties of Pearson's coefficient of correlation; Linear regression – meaning, regression equations and lines. Focus on problem solving using MS EXCEL/Other spreadsheet.

Unit 3: Time Series & Index Numbers (10 Hours)

Components of time series; fitting a trend; methods: semi-averages, moving averages and method of least squares; weighted aggregative index numbers.

Unit 4: Hypothesis Testing (20 Hours)

Why and How to make Hypothesis; level of significance, critical area; Type I and Type II errors, Z, t, F and χ^2 distribution; ANOVA (one way and two way).

References:

Mandatory:

1. Arora, P.N. et.al. 2007, *Comprehensive Statistical Methods,* 1st edition, S. Chand, New Delhi.

Supplementary:

1. Anderson, David R. et.al. *Statistics for Business and Economics,* Cengage Learning India Edition.

Course Title: Microeconomics
Course Code: ECO-III.C-5
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To familiarize students in pure theories.
2. To offer a strong base for studying applied economic theories and principles.
3. To familiarize students with market based decision making

Learning Outcome:

1. Upon successful completion of the course a student will be able to:
2. Develop solid grounding of basic principles in microeconomics.
3. Understand mathematical applications based on micro economic theory.
4. Apply the principles of Microeconomics to find solutions to societal problems arising from scarcity and choice.

SYLLABUS

Unit 1: Consumer Behaviour and Demand (15 Hours)

Distinction between Cardinal and Ordinal Utility.Indifference Curves, Budget Line, Substitution Effect and Income Effect; Hicksian and Slutsky's Analysis; Changes in demand and Engel's Curve, Revealed preference theory.

Unit 2: Production (10 Hours)

Production function – AP and MP, Non- linear production function,Production with one variable input, Production with two variable inputs, Isoquants – MRTS-elasticity of factor substitution,Iso-cost line - Ridge Line, Returns to Scale.

Unit 3: Cost and Revenue (10 Hours)

Cost of Production, Behavior of cost, Short run and Long run Costs, Derivation of Average and marginal cost curves, Least cost input Combination, , Introduction to Modern Cost Curves: L shaped and J shaped cost curves.Concepts of revenue: AR, MR, TR, Break-even analysis.

Unit 4: Perfect Market Structure (10 Hours)

Perfect markets, Behavior of profit maximizing firms and the production process; Price and output decisions; costs and output in short and long run, Pure competition, Role of time element in the determination of value.

Unit 5: Imperfect Market Structure (15 Hours)

Nature and types of imperfect market structures, Assumptions, Conditions of imperfections, Imperfect markets: Monopoly and monopolistic competition; Introduction to oligopoly.

References:

1. Hubbard, R. G. and O'Bren, A. P. (2012), *Microeconomics,* Pearson, Delhi.
2. O'Sullivan, A., Sheffrin S. M. and Perez S. J. (2012). *Microeconomics, Principal, Application and tools,* Pearson, Delhi
3. Pindyck, Robert S and Rubinfeld, Daniel L. (2012)*Microeconomics,* Pearson, Delhi

Course Title: Macroeconomics
Course Code: ECO-IV.C- 6
Marks: 100
Credit: 4
Duration: 60 Hours

Course Objectives:
The course gives the introduction to the macroeconomic fundamentals and to the main concepts and principles of macroeconomic theory and policy.

1. To familiarize students with the determinants of macroeconomic activities and policy.
2. To familiarize students with the main principals of macroeconomic analysis.

Learning Outcomes:
Having completed this course the student is expected to able to:

1. To identify the behavior of key macroeconomic variables.
2. To understand how economy works.
3. To understand the notion of long-run economic growth.

SYLLABUS

Unit 1: Introduction to Macroeconomics (10 Hours)
Major Macroeconomic Issues: Business Cycle, Unemployment, Inflation, Long-run Economic Growth; Principles and Tools of Macroeconomic Analysis; Macroeconomic Variables; Long run and Short run Analysis in Macroeconomics.

Unit 2: National Accounts: Measuring Output and Income (15 Hours)
National income: concept and measurement: GDP, GNP, NDP, NNP; Methods of measurement: Value Added and Expenditure Approach; Price Indices and Deflator.

Unit 3: Keynesian Macro-economic Framework (15 Hours)
Keynesian analysis: Aggregate Demand- concepts, components and determinant's, Consumption Demand and its Determinants, Consumption Function and Consumption Line, Autonomous Consumption Demand, Marginal and Average Propensity to Consume, Saving Function and Saving Line, Marginal and Average Propensity to Save, Consumption Puzzle, Theories of Consumption, Investment Demand and its Determinants, Investment Function and Investment Demand Curve, Theories of Investment,Aggregate Expenditures in the Closed Private Economy, Planned Expenditures and Actual Expenditures, The 45°line and Equilibrium Output in the Two-sector Model in the Short run ("Keynesian Cross Model"), Non-equilibrium Situations, Multiplier Effect of Autonomous Spending on Output.

Unit 4: Monetarists Framework (10 Hours)
Origin of monetarist views: Milton Freidman; Origin of quantity theory of money.

Unit 5: The IS-LM Model (10 Hours)
IS-LM equations, Dynamics in the IS-LM model, Fiscal policy-effectiveness and LM curve, Fiscal policy- effectiveness and IS curve, Monetary policy- effectiveness and IS curve, monetary policy- effectiveness of LM curve, paradox of thrift, Policy objectives.

References:
Mandatory:

1. Begg, D., Dornbusch, R., Fischer, S. (2005) *Economics,* McGraw-Hill Book Co., London.
2. Mankiw, N.G. (2010) *Macroeconomics,* Worth Publishers, New York.

Supplementary:

1. Lipsey, R.G.; Chrystal, K. A. (2007) *Economics*, Oxford University Press, Oxford.
2. Samuelson, P.; Nordhaus, William (2010) *Economics*, MacGraw Hill Education. Delhi

Course Title: Public Economics
Course Code: ECO-V.C-7
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objective:

1. To orient students towards investigating the role of the public sector.
2. To provide analytical tools and apply them to analyse key issues relating to public revenue and public spending.

Learning Outcomes:

Upon completion of this course the students will be able to:

1. Understand the central concepts and basic models of modern public economics.
2. Analyse and evaluate fiscal operations of the government.

SYLLABUS

Unit 1: Issues in Public Economics (15 Hours)

Nature of the Public Economy – Public economy and markets – Pareto optimality and Market failure – fundamental theorem of welfare – Cases of violation of Pareto optimality, Asymmetric information and market failure – the problem of externality and their internalization.

Unit 2: Theory of Public goods (15 Hours)

Public Choice theory – Public goods – Bowen model, Pigou model and Samuelson model, Empirical theories of public goods: Wagner hypothesis, Wiseman-peacock hypothesis, Preference revelation mechanism for public goods.

Unit 3: Public Revenue and Expenditure (15 Hours)

Principles of Taxation and classification of taxes – Impact and incidence of taxes - Partial and general equilibrium analysis – Excess burden of tax.Principles of expenditure and classification of expenditure.Welfare implications.

Unit 4: Public debt (15 Hours)

Alternative theories of public debt: classical, neo-classical, Keynesian, Debt sustainability analysis, Criterion of debt sustainability, Burden of public debt: Modigliani's burden thesis; debt trap. Internal and External debt.

References:

1. Atkinson, A.B and. Stiglitz J.E (2015), *Lectures on Public Economics*, McGraw–Hill, New York.
2. Musgrave, R. A. (1959), *The Theory of Public Finance*, McGraw Hill, New York.
3. Musgrave, R. and Musgrave P. (2004), *Public Finance in Theory and Practice*, McGraw–Hill.
4. Houghton, R.W. (1970), *Public Finance: Selected readings*, Penguin Books.

Course Title: International Trade and Policy
Course Code: ECO-VI.C-8
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To provide theoretical foundations for analysing international trade.
2. To sensitize students on trade related issues and mechanisms.

Learning Outcomes:

On completing the course, the students will be able to:

1. Understand the nature and pattern of international trade.
2. Recognize the complex issues surrounding international trade.
3. Predict the course of trade and trade outcomes.

SYLLABUS

Unit 1: Classical Trade Theories (15 Hours)

Absolute Advantage; Comparative Advantage Theory and its refinements; Reciprocal demand and the international equilibrium model; Gains from Trade and Terms of Trade.

Unit 2: Modern Trade Theories and Extensions (15 Hours)

Factor-Endowments (Heckscher-Ohlin) Theory; Factor-price Equalisation Theorem; Leontief Paradox; Factor Intensity Reversal; Intra-industry Trade: Trade based on Economies of Scale; Differentiated Products; Technological Gaps; Product Cycles; Differences in Tastes. Trade in Goods and Services.

Unit 3: Trade Barriers (15 Hours)

Tariffs – Types and Effects; Non-tariff Barriers: Quotas; Exchange Controls; Dual Exchange Rates; Discriminatory Procurement; Eco Labelling; Other Human-rights and Health and Hygiene Safeguards. Dumping; Voluntary Export Restraints; Export Subsidies; Counter trade; International Cartels.

Unit 4: Trade Issues of Developing Countries and Emerging Markets (15 Hours)

Trade as an engine of Growth; Factors influencing Terms of Trade of Developing Countries; Prebisch-Singer Thesis; Immisserising growth; Trade Disputes and WTO; Strategic trade policies; Regional Economic Integration and Globalization; Emerging Markets and Global Resource Movements; Multinational enterprises and world trade.

References:

Mandatory:

1. Carbaugh, Robert J. (2002), *International Economics*, South-Western (Thomson Publishing), Bangalore, 8th edition (Latest available 15th edition)

Supplementary:

1. Krugman, Paul R.; Obstfeld, Maurice (2011), *International Economics: Theory and Policy*, Pearson, New Delhi.
2. Salvatore, Dominic (2014), *International Economics: Trade and Finance*, John Wiley & Sons, Delhi

ELECTIVE COURSES

Department of Economics may reshuffle the Elective Courses between Semesters III to VI

Course Title: Indian Economy
Course Code: ECO- E-1
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To familiarize students with emerging issues and aspects of Indian economy.
2. To understand macroeconomic issues, policy framework, and challenges of the Indian economy.
3. To provide a post-liberalization perspective of the Indian Economy.

Learning Outcomes:

Upon successful completion of this course a student will be able to:

1. Gain an insight into the empirical foundations of the Indian economy.
2. To comprehend socio- economic concepts, issues and familiarize with program's implemented by the government and identify challenges faced by the economy.
3. Understand the economy of Goa and its sector wise development and further its contribution to Indian economy.
4. Know various macroeconomic issues and review the position of the economy in the globalised world.

SYLLABUS

Unit 1: Structural Changes in the Indian Economy (15 Hours)

Pre reform period: India on the eve of independence, Need for planning, Structural adjustment programme: need, impact, Liberalization, Privatization, Globalization; Primary -Secondary -Tertiary sector Linkages – trends

Unit 2: Key Issues and Challenges of Indian Economy (15 Hours)

Key issues:Population, poverty, inequality, unemployment; Challenges: Inclusive growth: social; Parallel Economy; Rural development, urbanization, migration; Environment & sustainable development.

Unit 3: Policy Perspectives (12 Hours)

Shift from Planning commission to NITI Ayog; Management decisions; Financial policies; Infrastructural development and investments; Swatch Bharat Abhiyan.

Unit 4: Economy of Goa (8 Hours)

Structural trends in GSDP; Occupational shifts and trends post liberalization; Major sectors Role of micro Finance (Self help groups).

Unit 5: India's Position in the World (10 Hours)

Foreign Trade: Features and trends; Capital movements: FDI, FII, MNC's; WTO, Global position; Make in India.

References:

Mandatory:

1. Government of Goa: *Economic Survey* (various years), Directorate of Planning, Statistics and Evaluation, Panaji-Goa.

2. Government of India: *Economic Survey* (various years), Government of India, New Delhi.
3. Kumar, Arun. (2013), *Indian Economy Since Independence - Persisting Colonial Disruption,* Vision Books, Delhi.
4. Mishra, S.K and Puri, V.K. (2014), *Indian Economy Its Development Experience,* Himalaya Publishing House, Mumbai.
5. Prakesh, B.A. (2011), *The Indian Economy Since 1991 Economic Reforms and Performance*, Pearson Publication, Delhi.
6. Supplementary
7. Chaudhary, C.M. (2012), *Dynamics of Indian Economy*, Oxford book company, New Delhi.
8. Datt, R.; Sundaram. K.P.M. (2015), *Indian Economy,* S. Chand & Company Ltd., New Delhi.
9. Kapila, Uma. (2007), *India's Economic development since 1947,* Academic Foundation, New Delhi.
10. Rajan, K. (2006), *Indian Economy Post Reform Scenario*, Serials Publication, New Delhi.

Course Title: Economics of Foreign Exchange
Course Code: ECO- E-2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To familiarize the students with the theories and empirical evidence relating to exchange rates and international resource movements.
2. To develop strong foundations to deal with foreign exchange and international movement of resources.

Learning Outcomes:

On completing the course, the students will be able to appreciate:

1. The nature and dynamics of foreign exchange rates and markets,
2. The impact of fiscal and monetary policies on exchange rates and international resource movements,
3. The role of international financial institutions and multinational enterprises on the movement of financial as well as non-financial resources such as labour and technology.

SYLLABUS

Unit 1: Foreign Exchange and Exchange Rate Determination (15 Hours)

Foreign exchange market: types of foreign exchange transactions; inter-bank trade; traders run markets; foreign exchange quotations. Derivative markets: Forward and futures markets; Options. Exchange rate determination: Demand and supply of foreign exchange – appreciation and depreciation of currency; effective exchange rates; arbitrage; forward markets; interest arbitrage; Role of speculation in foreign exchange markets.

Unit 2: Exchange Rate Adjustments and the Balance of Payments (15 Hours)

Effects of exchange-rate changes on costs, prices; Effects of currency appreciation, depreciation and balance of payments; Devaluation and Revaluation: Requirements for a successful devaluation; Elasticity approach to ex-change rate adjustment; Absorption approach to exchange-rate adjustment; Monetary approach to exchange-rate adjustment.

Unit 3: Exchange Rate Systems and International Banking. (15 Hours)

Exchange-rate practices; Fixed exchange rate systems; Floating exchange rates; Managed floating rates; Exchange controls. Nature of international reserves; International Monetary Fund and facilities for borrowing reserves; International Debt; World Bank; Euro-currency market.

Unit 4: Exchange rate and International Resource Movement (15 Hours)

Role of exchange rate and Movement of capital – International lending and borrowing; Foreign direct investment Foreign institutional investment. International movement of labour; Transfer of technology; Multinational enterprises.

References:

Mandatory:

1. Carbaugh, Robert J. (2002), *International Economics*, South-Western (Thomson Publishing), Bangalore. (Latest available edition internationally 15th edition)

Supplementary:

1. Krugman, Paul R.; Obstfeld, Maurice (2011), *International Economics: Theory and Policy*, Pearson, New Delhi.
2. Pilbeam, Keith (2013), *International Finance*, Palgrave Macmillan, London
3. Salvatore, Dominic (2014), *International Economics: Trade and Finance*, John Wiley & Sons, Delhi.

Course Title: Emerging Market Economics
Course Code: ECO-E-3
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:
This course is designed:

1. To understand the historical development of the emerging markets.
2. To understand the basis of their growth and its implications for the rest of the world.
3. To understand the role of the emerging markets in shaping the world economy.

Learning Outcomes:
Upon completion of the course, students are expected:

1. To identify the emerging market economies in the world economy.
2. To understand how the emerging markets have evolved over time.
3. To understand how different institutions function in these economies, and to identify the key factors behind their spectacular growth.
4. To explore how the emerging market economies interact with the rest of the world and their implications for the world economy as whole.
5. To enable students to understand and evaluate the overall growth process of the two major emerging markets India and China.

SYLLABUS

Unit 1: Emerging Market Economies: An overview (15 Hours)
Concept and definition of the emerging markets, the historical background, Emerging market indices; Developed vs Emerging markets: the political economy of development, globalization, competitiveness and emerging markets.

Unit 2: Understanding Emerging Markets (15 Hours)
Understanding BRICS: scope, purpose and importance; Emerging markets of Asia, Europe and Latin America: Importance, Growth and Evaluation.

Unit 3: Financialisation and Emerging Markets: (15 Hours)
The process of financial liberalization and innovation in emerging markets, Forms & functions of finance in emerging markets, Global financial crisis and the emerging markets: Involvement, impact and recovery.

Unit 4: The emerging markets of India and China: (15 Hours)
Neo-liberalism and emergence of India as a market economy, Analysis of India's post reform growth, performance of Indian economy post 1997; Rise of China as a market economy: Economic policies since 1978, Emergence of China as a world leader in export: Evaluating the impact of technological and institutional factors.

References:

1. Grzegorz, W. Kolodko. (2003), *Globalization and Development,* Ashgate Publications, Aldershot.
2. Hoen, Herman W. (2014), *Globalization and institutional change: are emerging market economies in Europe and Asia converging?* Academic Publishers, Adleton.
3. Kohli, Harinder S, (2008), *Growth and Development in Emerging Market Economies: International Private Capital Flows, Financial Markets and Globalization*, Sage Publication India Pvt Ltd, Los Angles.

4. Zhu, Xiaodong, (2012), *Understanding China's growth: Past, Present and Future*. Journal of Economic Perspectives Vol 7, No.4, Pp 103-124.

Journal Reference:

1. Li, Hongbin, Li, Lei, Wu, Binzhen and Xiong, Yanyan. (2012), *The journal of Economic Perspectives*Vol 26, No.4, Pp 57-74.

Course Title: Regional Economics
Course Code: ECO- E-4
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To familiarize students with distribution of economic activities across space.
2. To familiarize students with market structures and migration patterns.
3. To sensitize students with the problems involved in regional growth.
4. To understand the impact of migration on regional development.

Learning Outcomes:

Upon successful completion of the course a student will be able to:

1. Differentiate between the different types of regions.
2. State the relevance of regional economics and its relationship with other disciplines.
3. Explain industrial clustering and firm site selection decisions using microeconomic theory.
4. Trace the evolution of cities and urban areas, including the economic incentives for their development.
5. Explain the problems of land, Wage flexibility & interregional migration etc.

SYLLABUS

Unit 1: Introduction **(10 Hours)**

Regional economics: Meaning, Scope and Relevance; Types of regions: Homogeneous, heterogeneous; Regionalization: Development, planning & policies.

Unit 2: Clustering & Agglomeration **(10 Hours)**

Industrial clustering and returns to scale, Agglomeration economies: source, types, clustering &nature of transactions, Urban consumption, limited information, uncertainty and evolution of clusters.

Unit 3: Location Theory and Economic Activity **(15 Hours)**

Webster's theory of industrial location, Moses' location production model, Thunen's theory of location of agricultural activities, Christaller and Losch's central place theory, General equilibrium & Hotelling principle.

Unit 4: Problems of Regional Economic Growth **(13 Hours)**

Land competition (bid rent model), mono centricity, land supply and landownership, labor markets, wage flexibility &interregional labor migration, Balance of payments and regional growth.

Unit 5: Regional flows and economic growth **(12 Hours)**

Commodity and Service v/s Monetary & Capital flows; Migration: Types, Causes, Ramifications, Measures; Regional Growth theory; Migration and Regional policy in India.

References:

Mandatory:

1. McCann, Philip. (2013), *Modern Urban and Regional Economics*, Oxford University press.
2. Shrivastava, O.S. (2009), *Regional Economics and Regional Planning*,Anmol Publications Pvt Ltd.

Supplementary:

1. Hoover, Edgar M. and Giarratani. *An introduction to Regional Economics*, West Virginia University.
2. Hoover, Edgar M. (1968), *Spatial Economics: Partial Equilibrium Approach*, in Encyclopedia of the Social Sciences, Macmillan, New York.
3. Isard, Walter. (1956), *Location and Space-Economy,*The MIT Press, Cambridge.
4. Krugmen, Paul. *Geography and trade*, MIT press.
5. Martin, Beckmann. (1968), *Location Theory*, Random House, New York.
6. Moses, Leon. (1968), *Spatial Economics: General Equilibrium Approach*, in Encyclopedia of the Social Sciences, Macmillan, New York.
7. Nijkamp, Peter, Mill, S Edwin. (2007), *Handbook of Regional and Urban Economics: Regional economics,* North- Holland publishers.
8. Nourse, Hugh O. (1968), *Regional Economics,* McGraw-Hill, New York.
9. Richardson, W Harry. (1978), *The State of Regional Economics*, International Regional Science Review, Fall.
10. Webber, J Michael. (1972), *Impact of Uncertainty on Location*, MIT Press, Cambridge.
11. Woglom, W. H. (1954), *The Economics of Location*, Yale University Press, New Haven.

Course Title: Economics and Governance
Course Code: ECO- E-5
Marks: 100
Credit: 4
Duration: 60 Hours

Course Objectives:

1. To provide an understanding of the role and interplay of democratic institutions in economic development.
2. To provide useful insight into the governance challenges and strategies.
3. To develop critical mindset in assessing the role of non-economic factors contributing to economic development.

Learning Outcomes:

1. Students will acquire sensitivity to issues of governance.
2. Students will get acquainted with the regulatory and review mechanism of governance.

SYLLABUS

Unit 1: Governance and Growth Interface (15 Hours)

The concept of governance and growth: Policies that make up economic environment for development of good governance; Role of social infrastructure to facilitate action-oriented and participatory development; state failure versus market failure.

Unit 2: The Issues of Governance (15 Hours)

The issues of governance: Role of the State and other institutions; Strategies to address governance issues: provisions, effectiveness, challenges.

Unit 3: Experiences of Developed and Developing Countries (10 Hours)

Experiences of developed and developing countries based on broad governance criteria, Lessons for broad-based growth.

Unit 4: Governance in Contemporary India (20 Hours)

Need for good governance in India; Issues and challenges related to growth and governance.

References:

Mandatory:

1. Dixit, Avinash K. *Lawlessness and Economics: Alternative Modes of Governance*, Princeton University Press.
2. William K. Tabb, *Economic Governance in the Age of Globalization,* University Press, Columbia.

Supplementary:

1. Sen, Amartya 2000, *Development as Freedom,* Oxford University Press, Oxford.
2. Acemoglu, Daron. Robinson, James. 2006, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press.

Course Title: Entrepreneurship
Course Code: ECO-E-6
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objective:

1. The key objective of this course is to provide the required skills to the students interested in pursuing entrepreneurship.

Learning Outcomes:

On completing the course, the students will be able to:

1. Identify and evaluate business opportunities,
2. Evaluate risks
3. Pursue innovations,
4. Understand the economics of entrepreneurship,
5. Prepare a business plan.

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SYLLABUS

Unit 1: Identifying and Evaluating Business Opportunities (15 Hours)

Analysis of Business Environment; Government Policies – Fiscal, Financial, Commercial, Environmental, Technological, and Labour Policies. Infrastructure and Local Environment; Generating alternative ideas; Market size and growth rates; market share; location and competition; Use of SWOT and Porter's Four Forces Analysis; Techno-economic feasibility, Technology and resources/materials.

Unit 2: Risk and Innovation (10 Hours)

Importance and management of risk; market/commercial risk, technological risk, financial risk, social risk, political risk, personal risk; Differences between Risk and Uncertainty; Schumpeter's, Drucker's and other's views; Types and forms of innovations; innovative imitation; Imitation; Patents and Copyrights.

Unit 3: Sources, Uses and Management of Resources (10 Hours)

Financial Resources - Sources of funds; Uses of funds; Fixed and Working Capital; Material Resources: Supply and distribution chains; Government and local resources; Human Resources.

Unit 4: Costing, Pricing and Marketing (10 Hours)

Costing Strategies – Absorption and marginal costing; Costing for inventories; Pricing and pricing strategies(skimming price, penetration price, mark-up, marginal-cost price); Break- even analysis and break- even chart. Marketing techniques and strategies.

Unit 5: Preparing the Business Plan (15 Hours)

Components and Uses of the Business Plan; Creating a Business Plan; Sources of funds; Marketing Plan Expenditures and Revenues; Profitability; Growth Rate of the business and the Rate of Return.

References:

Mandatory:

1. Charantimath, Poornima M. (2014), *Entrepreneurship Development and Small Business Enterprises,* Pearson, Chennai.
2. Colombo Plan Staff College for Technical Education, Manila (1999), *Entrepreneurship Development*, Tata McGraw Hill, New Delhi.

Supplementary:

1. Chandra, Prasana (1995), *Projects: Planning, Analysis, Selection, Implementation & Review*, Tata McGraw Hill, New Delhi.
2. Kuriloff, Arthur H; Hemphill, John M. (1988), *Starting and Managing the Small Business*, McGraw-Hill, New York.

Course Title: Accounting for Non-accountants
Course Code: ECO- E-7
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. The key objective of this course is to provide the students an exposure to the accounting discipline and help them to understand the language of accounting.

Learning Outcomes:

On completing the course, the students will be able to:

1. Understand the accounting process, appreciate various issues in accounting,
2. Understand the nature of final accounts, and
3. Resolve the differences between financial accounting, cost accounting and management accounting.

SYLLABUS

Unit 1: The Accounting Process (15 Hours)

Theoretical Framework of Accounting; Generally Accepted Accounting Principles, Concepts and Conventions; Capital and Revenue transactions: capital and revenue expenditures, capital and revenue receipts; Measurement, Valuation and Accounting estimates; Double entry system, Books of prime entry, Subsidiary Books; Recording of Cash and Bank transactions; Preparation of Ledger Accounts; Preparation of Trial Balance- interpretation and usefulness; Rectification of Errors; Opening entries, Transfer entries, Adjustment entries, Closing entries.

Unit 2: Issues in Accounting (10 Hours)

Reconciliation Statements and Accounting for Depreciation: Bank Reconciliation Statement; Receivables / Payables Reconciliation Statement; Stock Reconciliation Statement. Depreciation Policy; Methods, Computation and Accounting treatment.

Unit 3: Preparation of Final Accounts (15 Hours)

Profit making concern: (for sole proprietorship concern and partnership firm only): Preparation of Trading Account, Profit & Loss Account and Balance Sheet; Accounting treatment of bad debts, reserve for bad and doubtful debts, provision for discount on debtors and provision for discount on creditors.Not-for- Profit making concern: Preparation of Receipts and Payments Account; Preparation of Income and Expenditure Account; Preparation of Balance Sheet.

Unit 4: Fundamentals of Cost Accounting (12 Hours)

Cost and Management Accounting – Generally Accepted Cost Accounting Principles; Accounting for Material cost (including Accounting of Inventory – LIFO, FIFO, Weighted, Average Cost Methods); Accounting for Labour costs, Direct Expenses and Overheads. Preparation of Cost Statements: Cost Data collection, Cost Sheet formats; Preparation of Cost Sheets (historical cost sheets and estimated cost sheets).

Unit 5: Fundamentals of Management Accounting (8 Hours)

Marginal Costing and Break- even analysis – basic knowledge; Application of Marginal Costing for decision-making.

References:

1. Gibson, Charles H. (2013), *Financial Statement Analysis*, Cengage Learning, Delhi.
2. Singal, Santosh (2012), *Accounting and Financial Analysis*, International Book House, New Delhi.

Course Title: Economics and Law
Course Code: ECO-E-8
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. The discipline of law and economics uses economic ideas to understand behavioral consequences of introduction of or changes in legal rules.
2. To understand how legal arrangements enable or impede functioning of market.
3. To facilitate students to understand the inter-relationship between the two disciplines law and economics.
4. To critically evaluate the implications of the existing legal provision on the overall economic performance.

Learning Outcomes:

Upon successful completion of this course a student will:

1. Gain extensive knowledge of present economic laws that regulates different aspects of Indian economy.
2. Be able to evaluate the interplay between law and economics.

SYLLABUS

Unit 1: An Introduction to Law and Economics (20 Hours)

Economic analysis of law: Interrelationship between economics and law; The civil law and the common law tradition, Legal structure in India; Disputes and settlements; A brief introduction to different types of law: Property law, Contract law, Criminal law and Law of Torts.

Unit 2: Economic Theory of Property Rights (15 Hours)

Origin of the institution of property; Legal concept of property, Bargaining theory; Economic theory of property; Establishment and verification of property rights, Conflicting property rights, Public and private property, the public use of private property. The tragedy of the common property resources, Taking Property: Eminent domain.

Unit 3: Evaluation of the Existing Property Laws (15 Hours)

Intellectual Property Rights: Importance; Intellectual Property Rights and World Trade Organization. Copyrights Act, 1957: Purpose; Ownership of Copyrights; Rights of Owners and Rights of Others; Registration of Copyrights and its Infringement; Remedies under Copyrights Act.Patents Act, 1970: background; Concept of Patent; Procedural aspects of filing of patents; Procedure after filing of Patents; Other provisions of the Act.

Unit 4: Economic Laws in India (10 Hours)

Consumer Protection Act, 1986: Purpose, Salient Features, Organisational set-up; Grievance Redressal Mechanism. Competition Act, 2002 Purpose; Salient Features; Complaint; Procedures for redressal, Essential Commodities Act, 1955: Purpose; Scope; Penalties and Prosecution; Repeals and Savings; FEMA, Geographical indications of Goods Act.

References:

1. Cooter, Robert and Ulen, Thomas. (2011), *An Introduction to Law and Economics, 6th*edPearson Series in Economics

2. Gopalakrishnan, K.C. (2002), *Legal Economics (Interactional Dimensions- Economics and Law)*, Eastern Book Company, Lucknow.
3. Granstrand, Ove. (2003), *Law and Intellectual Property: Seeking Strategies for Research and Teaching in a Developing Field*, Kluwer Academic Publishers, Boston.
4. Medema, Steven G., Mercuro, Nicholas. (1998), *Economics and the Law: From Posner to Post-Modernism*, Princeton University Press, Princeton, New Jersey.
5. Reddy, G. B. (2002), *Law of Consumer Protection in India,*Gogia Law Agency, Hyderabad.
6. Wadehra, B. L. (2003), *Intellectual Property Law Handbook: Law Relating to Patents, Trade Marks, Copyrights, Design & Geographical Indications,* Universal Law Publishing Co, Delhi.

Course Title: Introduction to Econometrics
Course Code: ECO- E-9
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
The key objectives of this course are:

1. To acquaint the students with the tools of econometrics.
2. To help students to make estimates about the dependent variable, to test the hypothesis about the dependent variables and to forecast changes in the dependent variables.

Learning Outcomes:
On completing the course, the students will be able:

1. To understand the methodology of econometrics.
2. Use econometric tools to make estimates, forecasts and test the hypothesis relating to the dependent variable.

SYLLABUS

Unit 1: Nature and Scope of Econometrics (3 Hours)
Theoretical and Empirical Econometrics; Methodology of Econometrics; Econometrics and Samples; Small and Large Samples; Scope: Estimating, Testing, Forecasting.

Unit 2: Basic Ideas of Linear Regression: The Two-Variable Model (15 Hours)
Population Regression Function;Classical Linear Regression Mode. Linear Regression Method: Sample Regression Function, Meaning of "Linear" Regression. Method of Ordinary Least Squares for Two-variable regression; Least Squares Residuals, Variances and Standard Errors of Ordinary Least Squares [OLS] Estimators; BLUE Properties of OLS Estimators: The Gauss-Markov Theorem.

Unit 3: The Two-Variable Model: Hypothesis Testing. (12 Hours)
Hypothesis Testing: Test of Significance Approach; Confidence Interval Approach; Analysis of Variance and Correlation: Sum of Squares; Use of ANOVA and F-ratio to Test the Regression Equation; Use of r^2 to obtain the Goodness of Fit.

Unit 4: Multiple Regression: Estimation and Hypothesis Testing (15 Hours)
Three-variable Regression Model; Meaning of Partial Regression Coefficients; Assumptions of the Classical Linear (Multiple) Regression Model.Multiple Regression Equation; Estimation of Parameters of Multiple Regression, (OLS Estimators); Variances and Standard errors of OLS Estimators. Properties of OLS Estimators of Multiple Regression. Testing the slope of an individual estimator;Testing the Regression Equation.F test, R Square, Adjusted R Square, Comparing two R^2 Values.Partial Correlation.

Unit 5: Multiple Regression Problems and Forecasting (15 Hours)
Multicollinearity: Perfect and Imperfect Multicollinearity; Consequences of Multicollinearity, Detection of Multicollinearity, Corrections for Multicollinearity. Heteroscedasticity; Nature of Heteroscedasticity, Consequences of Heteroscedasticity, Detection of Heteroscedasticity, Corrections for Heteroscedasticity.Serial Correlation; Nature of Serial Correlation, Consequences of Serial Correlation, Detection of Serial Correlation, Corrections for Serial

Correlation.Regression on Dummy Explanatory Variables.Forecasting with a Single-Equation Regression Model.

Important Note: The course entails the use of software to run regressions.

References:

Mandatory:

1. Gujarati, Damodar N. (1995), *Basic Econometrics*, McGraw Hill, Singapore.
2. Gujarati, Damodar N. (1999), *Essentials of Econometrics*, Irwin/McGraw Hill, Singapore.
3. Pindyck, Robert S. and Rubinfeld, D.L. (1991), *Econometric Models & Economic Forecasts,* McGraw Hill, Singapore.

Supplementary:

1. Hebden, J. (1983), *Applications of Econometrics*, Heritage Publishers, New Delhi.
2. Johnston, J. & J.D. Nardo (1997), *Econometric Methods*, McGraw Hill, New York.
3. Kennedy, P. (1998), A *Guide to Econometrics*, MIT Press, Cambridge, MA.
4. Kmenta, J. (1997), *Elements of Econometrics*, University of Michigan Press, New York.
5. Kuotsoyiannis A. (1977), *Theory of Econometrics*, Macmillan, London.
6. Levin, Richard I. (1984), *Statistics for Management*, Prentice-Hall of India, New Delhi.
7. Maddala, G.S. (1997), *Econometrics*, McGraw Hill, New York
8. Ramanathan, Ramu (2002), *Introductory Econometrics with Applications*, Thomson Asia Pte Ltd., Singapore.
9. Studenmund, A. H. (1997), *Using Econometrics: A Practical Guide*, Adisson-Wesley, Reading, Mass.

Course Title: Introduction to Operations Research for Economists
Course Code: ECO-E-10
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To equip students with mathematical tools and techniques frequently applied in different branches of economics.

Learning Outcome:

Upon completion of the course, students are expected to:

1. Grasp the essence of relatively advanced economic theories done through quantitative analysis.
2. Be able to present economic proposition in the language of mathematics whenever require and possible.
3. Be able to develop mathematical models in their own research work if requires.

SYLLABUS

Unit 1: Linear Algebra **(15 Hours)**

Systems of equations; Matrices and determinants; Matrix inversion method and its uses.

Unit 2: Linear Programming **(15 Hours)**

Elements of Linear Programming; Solution to LPP: Graphical, Simplex and the Big M methods.

Unit 3: Transportation and Assignment Problems **(15 Hours)**

Initial allocation methods; Optimization methods.

Unit 4: Statistical Decision-Making **(15 Hours)**

Probability analysis; Decision Trees; Expected Value; Economic and commercial applications.

References:

1. Kantisawrup et al, (2005),*Operations Research* , S Chand & sons, New Delhi
2. Tulsian P.C.,Pandey V., (2006), *Quantitative Techniques*, Pearson India.
3. Taha H., (2006), Operation Research: An Introduction, Pearson , 7th Edition

Course Title: Actuarial Economics
Course Code: ECO-E-11
Marks: 100
Credit: 4
Duration: 60 Hours

Course Objectives:
The objectives of the course include the following:

1. To provide tools for analysing insurance and insurance risks.
2. To develop expertise in students that is relevant for research and training in insurance companies.
3. To acquaint students to a wide range of decision making processes used for financial planning and management.

Learning Outcome:
On completing this course, the students will:

1. Gain expertise in actuarial field for critically analyzing financial consequences of risks.
2. Be able to analyze decision-making process in insurance, investment and financial planning.
3. Be able to find employment in actuarial and insurance businesses.

SYLLABUS

Unit 1: Introduction to Actuarial Economics (5 Hours)
Origin, nature and scope of Actuarial Economics – Its importance; Link between financial planning and risk management; Utility and risk preference.

Unit 2: Annuity and its Calculations (12 Hours)
Annuity: ordinary annuity, annuity due, deferred annuity; Perpetuity: present value of immediate perpetuity, present value of perpetuity due, differed perpetuity; annuity with frequency different from that with which interest is convertible; varying rates of interest; redemption of loan; average interest yield on the life fund.

Unit 3: Pricing (15 Hours)
Basic elements in computation of life insurance premium; premium calculation; formulae for calculation of net premium.

Unit 4: Mortality Tables (14 Hours)
Probability theory in insurance; mortality table; types: select and ultimate tables; stages involved in construction of mortality table.

Unit 5: Product Design and Actuarial Profession (14 Hours)
Basic methodology and setting assumptions; product design; actuarial standards and regulations, role of IRDA.

References:
Mandatory:

1. Mishra K.C. & Kumar C.S., (2009),*Elements of Actuarial Science*, Cengage Learning, Delhi.
2. Punit and Parik , (2014) Bailout Economics

Supplementary:

1. Booth, P.M. et al., (1999),*Modern Actuarial Theory and Practice*, Chapmen and Hall, London.

2. Newton bowers et al., (1997), *Actuarial Mathematics*, Society of Actuaries, (second edition), Illinois.

Course Title: Microeconomics Analysis
Course Code: ECO-E-12
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objective:

1. To study economic theories of distribution, general equilibrium, welfare and market failure.

Learning Outcome:

Upon completion of this course students will be able to:

1. Understand the theories of distribution, general equilibrium, welfare and market failures.

SYLLABUS

Unit 1:Theory of Distribution Neo-classical approach (15 Hours)

Marginal productivity theory; Product exhaustion theorem; Elasticity of technical substitution, technical progress and factor shares; Theory of distribution in imperfect product and factor markets.

Unit 2: General Equilibrium (15 Hours)

Walrasian excess demand and input-output approaches to general equilibrium, existence, stability and uniqueness of equilibrium and general equilibrium, coalitions and monopolies; Production without consumption – one sector model, homogeneous functions, income distribution.

Unit 3: Welfare Economics (15 Hours)

Pigouvian welfare economics; Pareto optimal conditions; Value judgment; Social welfare function; Compensation principle; Inability to obtain optimum welfare – Imperfections, market failure, decreasing costs, uncertainty and non-existent and incomplete markets.

Unit 4: Market failure (15 Hours)

Causes of Market Failure, Instances of Market failure: Externalities, Asymmetric information, moral hazard, Market imperfections, Non existence of markets; Theory of Second Best – Arrow's impossibility theorem; Rawl's theory of justice, equity-efficiency trade off; Good Governance.

References:

Mandatory:

1. Rubinfeld D. and Pindyck R. (2013), *Microeconomics*, Pearson,

Supplementary:

1. Gravelle, H and Ray Rees, (2004), *Microeconomics*, Pearson Education Limited, England.
2. Hal R Varian, (2010), *Microeconomic Analysis*, W W Norton & Company, New York.
3. Mas-colell, A, Michael D. Wiston and Jerry G. Green (1995), *Microeconomics*, 3rd edition, Prentice Hall Longman, London.
4. Sen, A.,(1999*), Microeconomic Theory*, OUP, New York.
5. Stigler, G., (1996), *Microeconomics: Theory and Applications*, Oxford University Press, New Delhi.
6. Varian, H., (2004),*Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi.

Course Title: Labour Economics
Course Code: ECO-E-13
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To understand the importance of labour economics in enhancing labour productivity.
2. To understand the functioning of labour markets.
3. To understand the dynamics of labour markets in the context of globalization.

Learning Outcomes:

On completion of the course students will:

1. Use economic tools to suggest measures for enhancing labour productivity.
2. Analyse functioning of labour markets and wage determination.
3. Understand the policies and dynamics of labour markets in context of the globalized world.

SYLLABUS

Unit 1: An Introduction to Labour Economics (10 Hours)

Labour - Concept, significance and peculiarities. Nature, scope and importance of Labour Economics.Labour Markets: positive and normative aspects – Characteristics of Indian labour markets.

Unit 2: Efficiency of Labour (16 Hours)

Determinants of Labour efficiency: Wages, education and training, other factors; Determination of wages – minimum wage and fair wage, alternative pay schemes, incentives; Investing in Education and Human Capital Formation; school inputs, school quality, student and teacher incentives, Human capital policy; training program; Competition and regulation.

Unit 3: Labour Welfare (12 Hours)

Social security; need, statutory and non-statutory welfare measures, un-employment insurance, labour welfare funds – Health and insurance schemes.

Unit 4: Labour Market Policies in India (12 Hours)

Exit Policy; Child Labour Policy in India; Problems and Policy of Female Workers in India, Contract Labour.

Unit 5: Trade, globalization and labour markets (10 Hours)

Global dimension of human resource.Perspectives and emerging issues in employer-employee relations in India consequent to economic liberalization and globalization. Brain drain and brain gain.

Reference:

1. Datt, G (1996), *Bargaining Power, Wages and Employment : An Analysis of Agricultural, Labour : Markets in India*, Sage Publications, New Delhi
2. Hajela, P.D. (1998), *LabourRestrucing in India: A Critique of the New Economic Policies*, Commonwealth Publishers, New Delhi.
3. Jhabvala, R.and R.K. Subrahmanya (Eds) (2000), *TheUnorganised Sector: Work Security and Social Protection,* Sage Publications, New Delhi.
4. McConnell, C.R. And S.L. Brue (2009), *Contemporary Labour Economics*, McGraw-Hill, New York.

5. Papola, T.S.P.P. Ghosh and A.N.Sharma(Eds) (1993), *Labour, Employment and Industrial Relations in India*, B.R.Publishing Corporation, New Delhi.
6. Ronald G. Ehrenberg and Robert S. Smith (2012), *Modern Labor Economics: Theory and Public Policy*, Pearson Publication, Prentice Hall Boston.
7. T.N.Srinivasan (Eds) *The Handbook of Development Economics North Holland*, New York.
8. VenkataRatnam, C.S. (2001), *Globalization and Labour- Management Relations Dynamics of Changes*, Sage Publications/Response Books, New Delhi.

Course Title: Environmental Economics
Course Code: ECO- E-14
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To use economic approach to study environmental issues.
2. To assess environmental policy instruments.

Learning Outcomes:

Upon completion of this course students will be able to:

1. Understand the concepts related to environmental economics.
2. Apply economic tools to environmental management.

SYLLABUS

Unit 1: Economics and the Environment (15 Hours)

Economic Perspectives on the Environment; National Income and Environmental Accounting; Economic activity and problem of residuals, Issues of Environmental economics; Externality and Market Failure.

Unit 2: Economics of Environmental Quality (15 Hours)

Pollution Damage and Abatement Costs; damage and ambient functions; Efficient Level of Emissions; Application of Equi-marginal Principle to Emission Reductions; Enforcement Cost; Pollution control models.

Unit 3: Environmental Evaluation (15 Hours)

Use and non-use value of environmental resources; Market and non-market evaluation techniques; Impact analysis, Cost-effectiveness analysis, Benefits and Costs analysis.

Unit 4: Environmental Policy (15 Hours)

Criteria for Evaluating Environmental Policies, Decentralized Policies: Liability Laws, Property Rights, Moral Suasion, Command-and-Control Strategies: The Case of Standards; Incentive-Based Strategies: Emission Charges and Subsidies, Transferable Discharge Permits.

References:

1. Field, Berry and Field, Martha (2001), *Environmental Economics,* McGraw-Hill/Irwin
2. Hanely, Nick, Shorgen, Jason F. and White, Ben (1999), *Environmental Economics: In Theory and Practise*, MacMillian.
3. Kolstad, C, D. (2003), *Environmental Economics*, Oxford University Press.
4. Matthew Kahn, *Fundamentals of Environmental Economics: Solving Urban Pollution Problems*,(Kindle Edition).
5. Titenberg Tom and Lynne, Lewis (2012), *Environmental and Natural resource economics*, 9th edition, Pearson
6. Wallace Oates (Editor) (2006), *The RFF Reader in Environmental and Resource Policy,* 2nd edition, RFF Press

Course Title: Introduction to Industrial Economics
Course Code: ECO- E-15
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To introduce students to the concept of industrial economics and its significance.
2. To highlight the role of globalization in industrial development.
3. To understand the impact of industrial reforms and competition.

Learning Outcomes:

1. Students will gain an understanding of industrial economics and its significance
2. Students will understand the issues confronting the industrial economy.
3. Student will be familiar with industrial structure and labour issues.

SYLLABUS

Unit 1: Introduction to Industrial economics and Theory of the Firm (15 Hours)
Meaning, scope, need and significance of industrial economics; Size and Structure of firms: technological view of the firm; investment size; vertical integration; transaction cost. Separation of ownership and control – implications.

Unit 2: Structure, Conduct and Performance (15 Hours)
Determinants of market structure; Price and non-price competition; product differentiation.

Unit 3: Industrial Policy and Reforms (15 Hours)
Industrial policy in a global economy; industrial policy for inclusive growth. India's industrial policy pre and post globalization.

Unit 4: Regulatory Mechanism and Competition Framework (15 Hours)
Need for reforms in regulatory mechanisms; Competition Law and Policy; role of Competition Commission in India. Introduction to labour reforms.

References:

1. Addison J.T Schnabei C., (2003), *International Handbook Of Trade Unions*, Edward Edgar.
2. Bhatia S.K, (2006)*Industrial relations and collective bargaining, Theory and practice*, deep and Deep Publications, New Delhi,
3. Mamoria C.B &Mamoria S, (2005),*Dynamics of Industrial Relation*,Himalaya Publishing House, Mumbai.
4. SenRatna,(2003), *Industrial Relations In India*, Macdonald and Evans, G. Britain.
5. VenkataRatnam, C.S., (2001), *Globalization and Labour- Management Relations: Dynamics of Changes*, Sage Publications/Response Books, New Delhi.

Course Title: Financial Economics
Course Code: ECO- E-16
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:

1. To familiarize students with the different types of financial instruments and techniques of asset management.
2. To provide understanding about different aspects of corporate finance.

Learning Outcomes:

On completion of the course the students will:

1. Gain a thorough understanding of how the financial market functions.
2. Be able to understand the standard models to benchmark valuation of assets.

SYLLABUS

Unit 1: Types of Financial Securities (10 Hours)

Types of money market securities; Capital market securities: common and preferred stock; Rights and Warrants; Bonds: corporate, government and public sector bonds; Mutual funds.

Unit 2: Valuation of Financial Securities (20 Hours)

Discount rates and the time value of money: Present value (PV) and net present value (NPV); Mechanics of NPV calculations; Compound interest, annuity and perpetuity formulas; Real vs. nominal cash flows, Fixed-income markets, Bond Valuation; Discount bond and Coupon bond.

Unit 3: Return and Risk Analysis (20 Hours)

Investment and returns: Interest rates, dividends, capital gains; Time value of money; Inflation and returns; Measuring investment returns; Risk and Risk factors; Measuring investment risks; Diversification; Systematic and idiosyncratic risk; Portfolio mean and variance; Covariance and correlation of returns; Feasible combinations of mean and variance; Portfolio optimization; Efficient risk/return trade-offs.

Unit 4: Financial Statement Analysis (10 Hours)

Introduction to Financial Statements; Importance of Financial ratios; Calculations and Interpretation of Liquidity ratios, Leverage ratios, Turnover ratios, Profitability ratios, Capital Gearing ratios – Limitations.

References:

1. Bodie, Zvi Kane, Alex Marcus Alan (2012), *Essentials of Investments, 9th Edition,* McGraw Hill Higher Eduction.
2. Francis J C & R.W Taylor (1992), *Theory and Problems of* Investments, McGraw Hill, Schaum's Outline Series, Singapore.
3. Kohn, Meir (1994), *Financial Institutions and Markets*, McGraw Hill, New York.
4. Richard A. Brealey and Stewart C. Myers (2002), *Principles of Corporate Finance*, McGrawHill, 7th edition.
5. Thomas E. Copeland, J. Fred Weston and KuldeepShastri (2003), *Financial Theory and Corporate Policy*, Prentice Hall, 4th edition.

Course Title: Macroeconomic Analysis
Course Code: ECO- E-17
Marks: 100
Credit: 4
Duration: 60 Hours

Course Objectives:

1. To understand macroeconomic performance and aggregate economic activity.
2. To evaluate determinants of economic progress and economic decisions made by policymakers and to use the intuitive analysis of economic process.
3. To introduce to the principles of solving macroeconomic problems, interpretation and analysis of the economic facts.

Learning Outcome:

Having completed this course the student is expected to have understood:

1. The notion, structure, key macroeconomic variables, determinants and the Keynesian framework.
2. Role of government, consequences of fiscal policy, role of central bank and monetary policy.
3. The sources of the long-run economic growth.

SYLLABUS

Unit 1: Theories of Consumption and Investment (15 Hours)

General theories of spending behavior, Absolute, Relative Permanent Income Hypotheses, Life cycle hypothesis; Motivation for Investment: Marginal Efficiency of capital, supply price; expected income streams; MEC and rate of interest; Principle of Acceleration

Unit 2: Frameworks for Interest Rate Determination (15 Hours)

Keynesian theory of interest; determination of rate of interest; Changes in levels of income, speculative demand and money supply and their effect on equilibrium rate of interest; liquidity trap and policy implications; IS-LM approach to the determination of equilibrium rate of interest; elasticity of LM schedule and shift in LM curve; interest elasticity of IS schedule and equilibrium.

Unit 3: Theory of Inflation and Business Cycle (15 Hours)

Theories of Inflation: demand pull, cost push, wage push, profit push; the Phillips curve, trade-off between inflation and unemployment, stagnation; concept and phases of trade cycle; Innovation theory; Hicks' theory.

Unit 4: Banking System (15 Hours)

Role of Central Bank – functions, credit control methods; monetary policy; Commercial banking – functions, credit creation, social banking; banking sector reforms in India.

References:

Mandatory:

1. Begg D., Dornbusch R., Fischer S. *Economics*, McGraw-Hill, 9th edition.
2. Mankiw N. G. (2010), *Macroeconomics*, 7th edition, Worth Publishers, NY.

Supplementary:

1. Bhole L.M. (1999), *Financial Institutions and Markets*, Tata Mcgraw Hill
2. Lipsey R.G., Chrystal K. *An Introduction to Positive Economics*, Oxford University Press.

3. Reddy Y.V. (2000), *Monetary and Financial Sector Reforms in India*, UBSPD, New Delhi
4. Samuelson, Paul A and Nordhaus, William d. (2010). *Economics*, Tata McGraw – Hill, New Delhi.

INTERDISCIPLINARY COURSES

Course Title: Entrepreneurship
Course Code: ECO-INT -1
Marks: 100
Credits: 4
Duration: 60 Hours

Rationale for the Course:

The employment seen is changing throughout the world and employment security is declining. With constraints to job expansion created by changes in the technological, economic and social conditions, job opportunities are declining. Young men and women passing out of colleges and universities are left to fend for themselves. In such a situation it is important to provide the youth with an opportunity to set up their own enterprises by providing them training in entrepreneurship.

Course Objective:

1. The key objective of this course is to provide the required skills to the students interested in pursuing entrepreneurship.

Learning Outcomes:

On completing the course, the students will be able to:

1. Identify and evaluate business opportunities,
2. Evaluate risks
3. Pursue innovations,
4. Understand the economics of entrepreneurship,
5. Prepare a business plan.

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SYLLABUS

Unit 1: Identifying and Evaluating Business Opportunities (15 Hours)

Analysis of Business Environment; Government Policies – Fiscal, Financial, Commercial, Environmental, Technological, and Labour Policies. Infrastructure and Local Environment; Generating alternative ideas; Market size and growth rates; market share; location and competition; Use of SWOT and Porter's Four Forces Analysis; Techno-economic feasibility, Technology and resources/materials.

Unit 2: Risk and Innovation (10 Hours)

Importance and management of risk; market/commercial risk, technological risk, financial risk, social risk, political risk, personal risk; Differences between Risk and Uncertainty; Schumpeter's, Drucker's and other's views; Types and forms of innovations; innovative imitation; Imitation; Patents and Copyrights.

Unit 3: Sources, Uses and Management of Resources (10 Hours)

Financial Resources - Sources of funds; Uses of funds; Fixed and Working Capital; Material Resources: Supply and distribution chains; Government and local resources; Human Resources.

Unit 4: Costing, Pricing and Marketing (10 Hours)

Costing Strategies – Absorption and marginal costing; Costing for inventories; Pricing and pricing strategies (skimming price, penetration price, mark-up, marginal-cost price); Break- even analysis and break- even chart.Marketing techniques and strategies.

Unit 5: Preparing the Business Plan **(15 Hours)**

Components and Uses of the Business Plan; Creating a Business Plan; Sources of funds; Marketing Plan Expenditures and Revenues; Profitability; Growth Rate of the business and the Rate of Return.

References:

Mandatory:

1. Charantimath, Poornima M. (2014), *Entrepreneurship Development and Small Business Enterprises,* Pearson, Chennai.
2. Colombo Plan Staff College for Technical Education, Manila (1999), *Entrepreneurship Development*, Tata McGraw Hill, New Delhi.

Supplementary:

1. Chandra, Prasana (1995), *Projects: Planning, Analysis, Selection, Implementation & Review*, Tata McGraw Hill, New Delhi.
2. Kuriloff, Arthur H; Hemphill, John M. (1988), *Starting and Managing the Small Business*, McGraw-Hill, New York.

Course Title: Gandhian Economic Thought
Course Code: ECO-INT -2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To familiarize the student of Arts & Science with Gandhian Economic thought.
2. To familiarize the students with Gandhian methodology in the light of sustainable development.
3. To acquaint the students with the relevance of Gandhian economic thought to present day India.

Learning Outcome:

Upon completion of this course students will able to:

1. Understand the Basic principles of Gandhian economic thought.
2. Understand its relevance to present India.

SYLLABUS

Unit 1: Basic Principles of Gandhian Economy (10 Hours)

Motives, Mother economy, Natural resources, product, Methods of production, exchange and trade, cooperation, standard of living ;Trusteeship; Swadeshi and its present relevance to India. Trusteeship; Principle of Sustainability – economic, environmental and social.

Unit 2: Agriculture Economy (10 Hours)

Agriculture as occupation, Manures, agricultural prices, ownership, labour, social effects, distribution of produce, self-sufficient village economy, Solutions to issues of poverty and unemployment in India.

Unit 3: Industrial Economy (20 Hours)

Industrial economy: Efficiency, power, tractors, electricity, diffusion, work, development of personality. Agro and Village industries: Introduction, Purpose, Public Utilities; Importance of Village and Cottage Industries in National Economy, Comparative study of large and small scale industries, Economics of Khadi, Charkha, and its relevance to Indian economy.

Unit 4: Human Resource Development (5 Hours)

Gandhian perspective on the policy of education, vocational training and status of women.

Unit 5: Principle of Sarvodaya (15 Hours)

Sarvodaya Economics: Bhoodan, Gramdan, Contribution of VinobaBhave to Sarvodaya movement; Sarvodaya and Globalization: Relevance.

References:

Mandatory:

1. Kumarappa, J.C.(1987), *Gandhian economic thought,* SarvaSevaSanghPrakasham, RajghatVaransi.

Supplementary:

1. Bose, N.K. (1966), *Gandhi the man and his mission*, BhartiyaVidyaBhawan, Bombay.
2. Datta, Amlan. (1986), *The Gandhian Way*, N.E. Hill University publications, Shillong.
3. Diwarkar, R.R. (1963), *Gandhiji's basic Ideas and some modern problems*, BharatiyaVidyaBhawan.

4. Iyer, Raghavan. (1963), *Moral and Political Thought of Gandhi,* Oxford Univ. Press, New York.

Online Source:

1. *The Official Mahatma Gandhi e Archive & Reference Library, Mahatma GandhiFoundation - India*. Available from:<www.mahatma.org.in/books >(for exhaustive list)

Course Title: Financial Investments for All
Course Code: ECO-INT-3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To expose the students to the financial markets
2. To understand the need for investments
3. To provide the students the initial path to get into financial investments.

Learning Outcome:

On completing the course the students will get an understanding of investing in the financial markets and also develop an understanding of how to start investing in the financial instruments.

SYLLABUS

Unit 1: Introduction to the financial system (15 Hours)

Meaning; financial system: an overview, flow of funds, financial institutions, financial markets, financial instruments, financial services, regulators. Primary markets: types of issues: public issues: IPO-FPO, right issues, bonus issue: private placement: preferential allotment, qualified institutions placement. Documents, prospectus, letter of offer, placement document. Types of financial markets: *security markets, money markets, foreign exchange markets, commodity markets, insurance market.* Differences between investing in low risk vs. high risk instruments.

Unit 2: The Banking system: (10 Hours)

Time value of money- present and future value, calculation.Importance of a banking system; bank deposits as low risk asset class.Types of bank deposits. Bank Loans, types of loan instruments; interest rate spread, EMI calculations; other facilities provided by the banks. Effects of interest rates on the banking system.Role of central bank as a regulator of the banking system.

Unit 3: Security markets: (15 Hours)

Definition of securities; functions of security markets; Market segments in security markets: primary and secondary markets. Participants in security markets: *investors, issuers, intermediaries, regulators*. Offer document; SEBI regulations, issue requirements; Corporate actions: *dividends, stock split, buy back, mergers and acquisitions, rights issues, bonus issues. Demat account*

Unit 4: Stock market indicators, trends and behavior (8 Hours)

Meaning of a stock market Index: Sensex, Nifty, Stock market indicators: fundamental and technical analysis market capitalization, turnover, turnover ratio, market capitalization ratio trade value ratio, types of financial derivatives.

Unit 5: Mutual Funds: (12Hours)

Meaning and types of mutual funds, Systematic Investment Plans, benefits of investing in mutual funds, tax benefits on selected mutual fund investments, types of MF/schemes. Calculation of NAV. Steps in creation of an initial investment Portfolio.

References:

1. Chandra. P. (2014), *Investment Analysis and Portfolio Management*, Tata McGraw-Hill, New Delhi
2. Graham, B. (2008), *The Intelligent Investor*, Harper
3. Khan M. Y. ; Jain P. K. (2015), *Financial Management*, Tata McGraw-Hill Publishing, New Delhi
4. Siegel, Jeremy J. (1998) *Stocks for the Long Run*, McGraw-Hill. New York
5. Van Horne J., Wachowicz, John M., Van Horne JR (2008), *Fundamentals of Financial Management*, Prentice Hall
6. *Practical checks www.moneycontrol.com*

Course Title: Taxation for All
Course Code: ECO-INT-4
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:

1. To sensitise students on the various issues related to Taxation
2. To provide an overview of direct and indirect taxes in India
3. To help student with the calculation of tax liabilities.

Learning Outcomes:

On completing the course the students will:

1. Get familiar with the issues related to taxation
2. Get familiar with direct and indirect taxes in India
3. Be able to calculate tax liabilities

SYLLABUS

Unit 1. Introduction to Taxation (15 Hours)

Importance of taxation; Principles of taxation; Impact and incidence of a tax; equity and ability-to-pay; tax rates and structure of tax rates; direct and indirect taxes, advantages and disadvantages; efficient and inefficient taxes; Shifting and Evasion.Legal basis for the introduction of a Tax.

Unit 2. Income Tax (15 Hours)

Importance of Income Tax; Legislation supporting the Imposition of Income Tax: Features and Important Provisions; Income tax Rate structure; Taxable Incomes; Avoidance and Evasion of Taxes; Calculation of Income Tax and Corporate Tax and Filing Tax Returns.

Unit 3. Goods and Service Tax (15 Hours)

Evolution of Indirect Taxation in India; Types of Indirect Taxes in India; Importance of Goods and Service Tax; Legislation supporting the Imposition of Goods and Service Tax: Features and Important Provisions; GST Tax Structure; Calculations of Taxes under GST and Filing of TaxReturns.

Unit 4. Customs Duties (15 Hours)

Importance of Customs Duties; Legislation supporting the Imposition of Custom Duties: Features and Important Provisions; Treatment of Exports and Imports; Custom Valuation Procedures; Structure of Customs Duties; Calculations and Clearance of Custom Duties. Auctions and Customs.

References:

1. JainR K (2017) *Customs Tariff of India 2017-18,* Vol. 1 and Vol. 2, CENTAX
2. Rosen S.H., *'Public Finance'*, Irwin /McGraw- Hill.
3. Saraogi CA Vishal (2017) *Goods and Services Tax Laws Practice & Procedure with Commentary*, Lawpoint Publications
4. Singhania, Monica; SinghaniaVinod K (2017) *Student's Guide to Income Tax* (University Edition), Taxman
5. Sreekantaradhya B.S., *'STRUCTURE AND REFORMS OF TAXATION IN INDIA'*, Deep & Deep, New Delhi.

Some Websites: GST India http://www.gstindia.com/about/
Taxmann Goods and Service tax https://gst.taxmann.com/
Cleartax on GST https://cleartax.in/s/gst-law-goods-and-services-tax