Parvatibai Chowgule College of Arts and Science
Autonomous

Master of Arts in Applied Economics

PROGRAMME STRUCTURE

1. Objective of the M.A. Programme in Applied Economics

The M.A. Programme in Applied Economics of the Department of Economics of Parvatibai Chowgule College of Arts and Science (Autonomous) is driven by its core objective to equip the students with the expertise, in some specific areas of applications, that would enable them to analyse and evaluate prevailing situations from an economic perspective and to recommend strategies and policies for improvement and sustenance. The areas of concentration where the expertise will be channelized to flow from encompass: Banking and Finance, Travel and Tourism, Demography and Human Resources, Globalization and International Business, and Environment and Sustainability.

2. Eligibility of Candidates:

Admission to the two year, four semesters, full time programme leading to the degree of Master of Arts in Applied Economics is based on merit. It is open to any candidate passing the Bachelor's Degree Examination and qualifying in the Entrance Test. Proficiency in the English language is a basic requirement for the programme.

3. Structure of the programme of M.A. in Applied Economics

The M.A. Programme in Applied Economics follows the Choice Based Credit System. To complete the M.A. programme in Applied Economics, a student has to accumulate a total of hundred credits. Twenty credits out of hundred is to be obtained through supervised internship which will be for a minimum of two months. Internship is intended to give a student work experience.

The course structure has four components. These are: (a) Core Courses, (b) Allied Skill Courses, (c) Applied Concentrations and (d) Internship.

The spread of total credits is shown in Table 1. The Core Courses are compulsory and carry forty credits. Students have to obtain eight credits under the component of Allied Skill Courses which offers course options. Students are required choose any two of the five Applied Concentrations. Each Applied Concentrations consist of four courses each carrying four credits.

Table 1. Credit Requirements for Completing the M.A. Programme in Applied Economics:

Sr. No.	Nature of Courses	Credits Required
1	Core Courses (Ten Compulsory Courses)	40
2	Allied Skill Courses (Optional Courses)	08
3	Any Two Applied Concentrations (Eight Courses)	32
4	Internship (Compulsory)	20
	Total Credits	100

Table 2: Course Structure, Courses, Concentrations and Credits

Sr. No.	COURSES	Number of Credits	Code No.
Eco I	**Core Compulsory Courses (Forty Credits)**		
1	Microeconomics I	4	Eco I.1
2	Microeconomics II	4	Eco I.2
3	Macroeconomics I	4	Eco I.3
4	Macroeconomics II	4	Eco I.4
5	Statistics for Economics	4	Eco I.5
6	Mathematical Economics	4	Eco I.6
7	Public Economics	4	Eco I.7
8	Development Economics	4	Eco I.8
9	Fundamentals of Econometrics	4	Eco. I.9
10	Research Methods in Economics	4	Eco. I.10
Eco II	**Allied Skill Elective Courses (Eight Credits)**		
1	Risk Analysis and Management	4	Eco II.1
2	Accounting for Decision-Making	4	Eco II.2
3	Linear Programming and Optimization	4	Eco II.3
4	Dissertation	8	Eco II.4
Eco III	**Applied Elective Concentrations (Thirty Two Credits)**		
1	Banking and Finance Concentration (Four Courses)	16	Eco III.1
2	Travel and Tourism Concentration (Four Courses)	16	Eco III.2
3	Demography and Human Resources Concentration (Four Courses)	16	Eco III.3
4	Globalization and International Business Concentration (Four Courses)	16	Eco III.4
5	Environment and Sustainability Concentration (Four Courses)	16	Eco III.5
Eco IV	**Internship (Compulsory) (Twenty Credits)**		
1	Pre-Internship Work	12	Eco IV.1
2	Internship Work	6	Eco IV.2
3	Post-Internship Work	2	Eco IV.3

Code No.	APPLIED CONCENTRATIONS	No. of Credits
Eco III.1	**Banking and Finance Concentration**	**16**
Eco III.1.1	Financial Economics	4
Eco III.1.2	Economics of Banking: Theory, Policy, Practices	4
Eco III.1.3	Financial Derivatives	4
Eco III.1.4	Financial Projects Appraisal	4
Eco III.2	**Travel and Tourism Concentration**	**16**
Eco III.2.1	Tourism Economics: Concepts and Practices	4
Eco III.2.2	Managerial Economics for Tourism	4
Eco III.2.3	Travel and Tourism Infrastructure	4
Eco III.2.4	Tourism in Goa	4
Eco III.3	**Demography and Human Resources Concentration**	**16**
Eco III.3.1	Demography: Concepts, Techniques, Applications	4
Eco III.3.2	Health Economics	4
Eco III.3.3	Strategic Human Resources Management	4
Eco III.3.4	Industrial Relations and Labour Welfare	4
Eco III.4	**Globalization and International Business Concentration**	**16**
Eco III.4.1	International Trade and Globalization	4
Eco III.4.2	International Finance	4
Eco III.4.3	Global Marketing	4
Eco III.4.4	International Trade Practices, Documentation and Procedures	4
Eco III.5	**Environment and Sustainability Concentration**	**16**
Eco III.5.1	Environmental Economics	4
Eco III.5.2	Environment and Sustainable Development Strategies	4
Eco III.5.3	Environmental Issues and Solutions	4
Eco III.5.4	Environmental Policy and Governance	4

Project work / dissertation work under allied skill courses should be pursued in one of the two applied concentrations flows chosen by the student. Project work / dissertation work will culminate in the preparation and submission of the Project Report / Dissertation at end of semester four. Although project work / dissertation is optional, students are advised to opt for it in order to enhance their application skills. Project work /dissertation will require a lot of independent work by the student. The project work / dissertation work will be guided by a faculty supervisor and will involve one hour of contact period per week.

4. Student Assessment in the Course

The students' assessment will follow the internal evaluation pattern with grading system adopting letter-denoted grades. Students will be evaluated through continuous assessment and semester-end assessment for determining the grade obtained in the course. Continuous assessment carries 40 percent weight and semester-end examination carries 60 percent weight. Grades in individual courses and internship will be used to calculate the cumulative grade-point average (CGPA) score for the M.A. degree.

COURSE SYLLABI

Course Title: Microeconomics I
Course Code: Eco I.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. The objective is to strengthen the theoretical foundations of modern microeconomics under the assumption of complete markets, nonstrategic, utility- maximizing individuals, as well as profit-maximising firms in a competitive market setup with symmetric, perfect and complete information.

Learning Outcomes:
On completing the course the students will be able to:
1. Appreciate, evaluate and use the tools of traditional microeconomics whenever required.

SYLLABUS

Unit 1: Utility Analysis: (15 Hours)
Choice, Preference, rational choice and revealed preference, existence of the utility function-consumer's problem and the demand function, expenditure and indirect utility functions.

Unit 2: Demand Analysis: (13 Hours)
Demand function, income-compensated demand functions, Slutsky matrix, and their properties, measurement of efficiency, duality, measuring of welfare effects of a price change

Unit 3: Production Analysis: (12 Hours)
Production: returns to scale and varying proportions, production functions (Cobb Douglas, CES) and input demand functions and their properties, costs, derivation of SR and LR supply curve, classical model of the equilibrium of the firm, optimal size of the firm, duality in production, profit function and its properties.

Unit 4: Factor Markets (5 Hours)
Factor pricing; Theories of factor pricing; value and distribution.

Unit 5: Market Structure and Equilibrium (15 Hours)
Perfect and imperfect competition; Pareto optimality; Excess demand function and its properties, tatonnement process and the proof of existence of general equilibrium, core and equiliberia, the first and the second fundamental theorem of welfare economics.

References:
Mandatory:

1. Gravelle, H and Rees,R. (2004),*Microeconomics*, Pearson Edition.
2. Jehle, G.A. and Reny, P.J. (2005), *Advanced Microeconomic Analysis*, Oxford University Press.
3. Mas – Colell, A., Whinston, M.D. andGreen, J. (2005), *Microeconomic Analysis*, Oxford University Press.
4. Rubinfeld, D. and Pindyck, R. (2013), *Microeconomics*, Pearson.
5. Varian, H.R. (1992), *Microeconomic Analysis*, WW Norton & Co.

Online Reading:

1. Australian Government, Department of Finance and Deregulation 'Influencing Consumer Behaviour: Improving Regulatory Design', 2013 Source: *https://www.dpmc.gov.au/sites/.../Influencing_**consumer**_behaviour.doc*

Course Title: Microeconomics II
Course Code: Eco I.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. The objective is to acquaint students and direct them to methods of analyzing strategic microeconomic behavior in the context of asymmetric and incomplete information.

Learning Outcomes:
1. On completing the course the students will be able to appreciate, evaluate and use the tools of modern microeconomics to analyze strategic microeconomic behavior in the context of asymmetric and incomplete information.

SYLLABUS

Unit 1: Introduction to Game Theory (15 Hours)
Normal and extensive form games, pure and mixed strategy Nash equilibria, sequential games, backward induction and sub-game perfect Nash equilibria, Cournot model, Bertrand model stackleberg model.

Unit 2: Economics of Information (15 Hours)
Optimal contracts under symmetric and complete information, moral hazar and optimal contract and optimal contract design, Bayesian games and Bayesian Nash equilibria, Adverse Selection, Signalling and Pooling equilibria.

Unit 3: Industrial Organisation – I: (15 Hours)
Market power and dominant firms, non-linear pricing and price discrimination, product quality, welfare implications of monopoly.

Unit 4: Industrial Organisation – II: (15 Hours)
Dynamic models of oligopoly, Product Differentiation, Address Models and Strategic Behaviour, Product Differentiation in vertically integrated firms.

References:
1. Binomre, K.(2010), *Game Theory: A very Short Introduction*, Oxford University Press.
2. Church, J.R. and Ware R. (2000), *Industrial Organisation: A Strategic Approach*, McGraw Hill.
3. Gibbons R.(1992), *A Primer in Game Theory*, Princeton University Press.
4. Maco-staedler, I. and Perez- Castrillo,D.(2001*), Economics of Information and contracts*, Oxford University Press.
5. Rubinfeld D. and Pindyck R.(2013),*Microeconomics*, Pearson.

Course Title: Macroeconomics - I
Course Code: Eco I.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
Familiarize students with theoretical macroeconomic analysis.
1. To introduce quantitative application of macroeconomic analysis.
2. To illustrate theoretical analysis with respect to India.

Learning Outcome:
1. Students will understand theoretical aspects thoroughly and clearly.
2. The quantitative application will equip them to understand macroeconomics from policy perspectives.

SYLLABUS

Unit 1: Short-rum Macroeconomics (20 Hours)
Investment and the Rate of interest: The IS schedule; money demand and money supply and the LM curve; equilibrium in the IS-LM model; multiplier effect and crowding out effect; comparative static analysis: impact of fiscal and monetary policies; Aggregate Demand and Aggregate suppy; inflation, unemployment and Phillips curve.

Unit 2: Micro foundation of Macroeconomics (15 Hours)
Adaptive expectation model of Long-run Phillips curve; rational expectation model and Lucas critique; test of rational expectation; real business cycle theory.

Unit 3: Theory of consumption and investment (15Hours)
Permanent income hypothesis: absolute and relative income; life cycle hypothesis. Acceleration principle; Tobin's 'q'; monetary and fiscal policy and investment.

Unit 4: Open economy Macroeconomics (10 Hours)
BOP: monetary approach; effectiveness of fiscal and monetary policy under fixed exchange rate system; Flexible exchange rate system: the Mundell-Fleming model.

References:
Mandatory:
1. Froyen, Richard T. (2003),*Macroeconomics: Theories and Policies*; Pearson Education, India.

Supplementary:
1. Blanchard Olivier (2007), *Macroeconomics*, Fourth edition, Pearson Education, India.

Course Title: Macroeconomics II
Course Code: Eco I.4
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To study the relationship between crucial macroeconomic variables.
2. To assess the impact of macroeconomic policies.

Learning Outcomes:
On completing the course, the students will be able to:
1. Understanding the nitty-gritty of the working of the economy.
2. Participate in macroeconomic policy analysis.

SYLLABUS

Unit 1. Demand and Supply of Money (15 Hours)
Money and near money; Fisher's, Cambridge and Keynesian theories of demand for money; Contributions by Baumol, Tobin and Friedman, Patinkin; Empirical evidence on demand for money. Models of money supply determination; Money supply in India.

Unit 2. Interest Rate Theories and Monetary Transmission Mechanism (15 Hours)
Theories of interest rates: Classical, neoclassical, Keynesian and modern approaches; Recent developments; Term structure of interest rates: Yield curve; Theories of term structure of interest rates; Expectation, Market segmentation, and Preferred habitat theories; Empirical evidence. Transmission mechanism of money and credit.

Unit 3. New Classical and New Keynesian Economics (15 Hours)
Rational expectations; Natural rate hypothesis; Continuous market clearing; Imperfect information; Frictions; DSGE (Dynamic stochastic general equilibrium) models; NK (New Keynesian) model of inflation.

Unit 4. Macroeconomic Policy (15Hours)
Goals and targets; Strategies for monetary policy; Targeting monetary aggregates; Interest rate targeting; Intermediate targeting; Money stock versus interest rates. Impact of fiscal and monetary operations on determination of equilibrium output, prices and rates of interest.

References:
1. Bain, K. and Howells, P.G.A. (2003), *Monetary Economics: Policy and its Theoretical basis*, Palgrave Macmillan, London.
2. Baye Michel, R. and Jansen Dennis, W. (1996), *Money banking and financial markets: An economic approach*, Houghton Mifflin, USA.
3. Bofinzer, P. (2001*), Monetary Policy*, Oxford University Press, Oxford.
4. Froyen Richard, T. (1999*), Macroeconomics*, Addison Welsey, Delhi.
5. GuptaSuraj, B. (1997), *Monetary Planning for India*, Oxford University Press, New Delhi.
6. Handa, J. (2000), *Monetary Economics*, Routledge, London.
7. Harris, Laurence (1985*), Monetary Theory*, McGraw Hill, New York.
8. Heijdra, B.J. and Ploeg, F. (2002), *Foundations of Modern Macroeconomics*, Oxford University Press, Oxford.
9. Lewis, M. and Paul Misen (2000), *Monetary Economics*, Oxford University Press, Oxford.
10. Patnaik, Prabhat (2008), *The Value of Money*, Tulika Publishers, New Delhi.
11. Romer, David (2012), *Advance Macroeconomics*, McGraw- Hill, New York.
12. Snowdon Brain and Vane H.R. (1997), *Macroeconomic Reader*, Routledge, New York.

13. Walsh Carl, E. (1998*), Monetary Theory and Policy*, MIT Press, Cambridge.
14. Wickens, M. (2011), *Macroeconomic Theory and the Dynamic General Equilibrium Approach*, Princeton University Press, Princeton.

Course Title: Statistics for Economics
Course Code: Eco I.5
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide self-contained introduction to *statistics* with *economic* applications.
2. To provide basic knowledge required for elementary econometrics

Learning Outcomes:
1. On completion of the course students will be able to analyze statistical data.

SYLLABUS

Unit 1: Measures of Central Tendency and Dispersion (05 Hours)
Meaning and Importance; Mean, Median, Mode; Proportions; Variance and Standard Deviation of the Mean; Skewness and Kurtosis.

Unit 2: Probability and Probability Distributions (15 Hours)
Mathematical, Statistical and Subjective Probabilities; Probability Rules; Probabilities under Conditions of Statistical Independence and Statistical Dependence; Bayes' Theorem; Binomial, Poisson, Normal, Standard Normal.

Unit 3: Sampling and Estimation (10 Hours)
Probability and Non-probability Sampling; Sampling Distributions; Sample Size and Standard Error; Sampling from Normal and Non-normal Populations.Point and Interval Estimates; Small and Large Sample Tests.

Unit 4: Hypothesis Testing (10 Hours)
Null and Alternative Hypothesis; Level of Significance; Type I & II Errors; Testing for Means and Proportions – for single and two populations; Z and t tests; Testing for Variances – F and χ^2 tests.

Unit 5: Correlation and Regression (10 Hours)
Covariance, Correlation: Pearson's r and Spearman's ρ; Introduction to Two-variable Regression.

Unit 6: Time Series Analysis (10 Hours)
Variations in Time Series: Trend, Cyclical, Seasonal and Random variations, Analysis of Trend, Method of Moving Averages, De-seasonalisation of Data.

References:
1. Levin, Richard I., Rubin, David S. (2011),*Statistics for Management*, Pearson Education, Delhi.

Mathematical Economics
Course Code: Eco I.6
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. The objective of this course is to equip students with clear understanding of the 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 basic/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 apply mathematical techniques in their own research work if requires.

SYLLABUS

Unit 1: Elementary logic and set theory (15 Hours)
Elementary set operation; Necessary and sufficient conditions; Tautology theorems and proofs; The real number system; Euclidian space; Relations and Functions; Interval; Limit point; Closed and open sets; bounded and compact sets; Convex sets and their properties.

Unit 2: Differential and integral calculus (15 Hours)
Limit, Continuity; sequences; convergent and bounded sequences; Partial and Total Differentiation; Intermediate value theorem; Mean Value theorem; L-Hospital rule; Eulers theorem; Homogenous and Homothetic functions; Definite and indefinite integrals; integration by parts.

Unit 3: Matrix Algebra (15 Hours)
Vectors and matrices; matrix operations; Determinants

Unit 4: Static and Dynamic Optimization (15 Hours)
Unconstrained optimization: First and Second order condition for local interior optima and global optima; conditions, existence and uniqueness of equilibrium; Constrained optimization and Lagrange Multipliers; Optimization with Inequality constraints; Kuhn Tucker conditions.

References:
1. Alton.H.Smith, Walter A Albrecht (1966), *Fundamental Concepts of Analysis*, Prentice Hall.
2. Chiang Alpha C. (1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New Delhi.
3. KnutSydsæter, Peter Hammond (2008), *Essential mathematics for Economic Analysis,* FT Prentice Hall.
4. Simon, Karl. P, Blume, Lawrence (1994), *Mathematics for Economists,* W.W. Norton and Company, United States.

Course Title: Public Economics
Course Code: Eco I.7
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objective:
1. To provide analytical tools for studying and evaluating the public sector.
2. To apply these tools to evaluate key issues relating to the public finance.

Learning Outcomes:
Upon completion of this course students will be able to:
1. Understand basic concepts and models of modern public economics.
2. Get acquainted with current issues and policy debates in public economics.
3. Understand key concepts characterizing types, properties, and effects of taxes.

SYLLABUS

Unit 1: Rationale of Mixed Economy (15 Hours)
Government and the economy: Efficiency and Equity: Market failure and the rationale of Government intervention – Natural monopolies, Asymmetric information, problems of externality and their internalization. State versus Market.

Unit 2: Theory of Public goods (15 Hours)
Types and characteristics of public goods, Efficient provision of 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: Analysis of Taxes (15 Hours)
Impact of direct tax on labour supply, savings and risk taking, Tax incidence: Partial and general equilibrium analysis; Keynesian short run model of tax incidence, Dynamic tax incidence, Excess burden of tax: Direct vs. indirect tax.

Unit 4: Expenditure Evaluation Principle: (15 Hours)
Fundamentals of project evaluation, Types of Benefits and Costs, Measurement of Benefits and costs, Assigning Weights in project selection; Discounting and the cost of capital, Case studies in expenditure policy: National defence, Highways, Education, Low income support programmes.

References:
1. Atkinson, A.B. and Stiglitz J.E. (1980), *Lectures on Public Economics*, McGraw–Hill.
2. Houghton R.W. (1970), *Public Finance: Selected readings*, Penguin Books.
3. Musgrave, R. A. (1959), *The Theory of Public Finance*, Mcgraw Hill, New York.
4. Musgrave, R. and Musgrave P. (2004), *Public Finance in Theory and Practice*, McGraw–Hill.

Web sources and databases:
1. http://econ.worldbank.org/ — World Bank Research.
2. http://www.nber.org/ — National Bureau of Economic Research (USA).
3. http://www.nber.org/papers/ — working papers.

Course Title: Development Economics
Course Code: Eco I.8
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To study the development economics with focus on relevant concepts and theories.
2. To use tool to measure economic growth and development.

Learning Outcome:
Upon completion of this course students will learn:
1. Theories and techniques of development

SYLLABUS

Unit 1: Concept and Paradigms of Development   (15 Hours)
Nature of economic growth and development – Historical, and Dependence theories (Rostow, Harrod-Domar, Dualistic Theories) – Role of institutions – Endogenous growth and technological change – determinants of development – Limits to growth.

Unit 2: Human Development   (15 Hours)
Concepts of Human Capital and Development – Approaches to Human Development – Freedoms – HDI and HPI – manpower planning, R&D – Quantitative and qualitative perspectives – demographic dividend, migration and development.

Unit 3: Inter-sectoral Linkages in Development   (15 Hours)
Agriculture-Industry interrelationship – Foreign Capital and Development; Impact of trade and investments – tertiarization: trends and concerns.

Unit 4: Critique and Alternatives in Development   (15 Hours)
Emerging economies: conflicts of Development –– role of NGOs – environmental and feministic perspective of development – inclusive growth. Country/local issues in development.

References:
Mandatory:
1. Todaro M, Smith S. (2013), *Economic development*, Pearson, Noida, India.

Supplementary:
1. Black J. (1991), *Development in theory and practice: paradigms and paradoxes*, Boulder, West view, Colarado.
2. Gangadharan, K. (Ed.) (2012), *Financial Inclusion and Inclusive Growth – Scope and Dimension*, Reference Press, New Delhi.
3. Gowda, M.V. Srinivasa & Reddy, B.M. Ramachandra (Eds.) (2016), *Leading Issues in Agribusiness*, Excel Publishers, New Delhi.
4. Gupta, K.R. (2010), *Economic Growth Models*, Atlantic Publishers & Distributors (P) Ltd, New Delhi.
5. Hayami, Y. (2005), *Development economics: from the poverty to the wealth of nation*, Oxford India, Paperback, India.
6. Institute for Human Development, New Delhi: *Indian Journal of Human Development*
7. Jayasheela, Basil HansV., Ravindra Kumar & Kadrolkar, Vilas M. (Eds.)(2012),*Service Sector in India: A Sectoral Analysis*, Global Research Publications, New Delhi.

8. Kabra, Kamal Nayan (2008),*High Growth, Rising Inequalities, Worsening Poverty: India's 'Development' Experience*, Books for Change, Bangalore.
9. Meir Gerald, Raich James,*Leading issues in economic development*, (8th edition), Oxford University Press, U.K.
10. Murty, S. (Ed.) (2016),*Meeting Some Macro Economic Objectives in India*, RBSA Publishers, Jaipur.
11. Ravindra Kumar B., Jayasheela and Kadrolkar, Vilas M. (Eds.) (2012), *Demographic Dividend for India: A Step Forward*, Global Research Publications, New Delhi.
12. Ray Debraj (2007), *Development economics*, Oxford India paperback,Noida,India.
13. Sabanna, T. (Ed.) (2009),*Service Sector and Globalisation*, Serials Publications, New Delhi.
14. Suprabha and Sequeira, A. H. (Eds.)*Emerging Issues and Challenges in Banking*, McGraw Hill Education (India) Private Limited, New Delhi.
15. The University of Chicago Press: *Journal of Human Capital*
16. Thirlwall A. (2005), *Growth and development: with special reference to developing economies*, Palgrave, Macmilan, USA.

Course Title: Fundamentals of Econometrics
Course Code: Eco I.9
Total Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To enable the students to understand and evaluate econometric models
2. To enable the students to write simple econometric models.

Learning Outcomes:
On completion of the course students:
1. Will have obtained knowledge about the intricacies of econometric models.
2. Will be able to write econometric models to study and evaluate economic phenomena.

SYLLABUS

Unit 1: Linear Regression Model   **(12 Hours)**
Two variable regression and multiple regression models – estimation of parameters, properties of estimators, hypothesis testing and model validation.
Unit 2: Problems in Multiple Regression   **(12 Hours)**
Multicollinearity, Autocorrelation and heteroskedasticity; detection and implications.
Unit 3: Systems of equations   **(12 Hours)**
Endogeneity and specification issues; structural form and reduced form models; identification; instrumental variables; two-stage least squares regression analysis.
Unit 4: Models with dummy variables   **(12 Hours)**
Use of Dummy Variables; Regression with Quantitative and Qualitative Dummy Variables; Introduction to Logit, Probit and Tobit model, Models of Qualitative Choice
Unit 5: Introduction to time-series econometrics   **(12 Hours)**
Stationary and non-stationary time series; spurious regression; tests of stationarity; optimal forcasts and methods of forecast evaluation; introduction to ARIMA models.

References: Revised editions
1. Gujarati, Damodar N. (2003),*Basic Econometrics*, McGraw Hill, Singapore.
2. Gujarati, Damodar N. (1999),*Essentials of Econometrics*, Irwin/McGraw Hill, Singapore.
3. Johnston, J. &Dinardo, J.D. (1997),*Econometric Methods*, McGraw Hill, New York.
4. Pindyck, Robert S. &Rubinfeld, D.L. (1991),*Econometric Models & Economic Forecasts*, McGraw Hill, Singapore.
5. Ramanathan, Ramu (2002), *Introductory Econometrics with Applications*, Thomson Asia Pte Ltd., Singapore.
6. Studenmund, A. H. (1997),*Using Econometrics: A Practical Guide*, Addison-Wesley, Reading, Mass.

Course Title: Research Methods in Economics
Course Code: Eco. I.10
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide an orientation to student to the process for conducting research.
2. To acquaint students with the methods of processing data and compiling research work.

Learning Outcomes:
1. On completing the course students will be confident about conducting research work, searching for data and compiling research findings.

SYLLABUS

Unit 1. Introduction to Research in Economics   `   **(15Hours)**
    Definition of Research; Objectives of Research; Research in Social Sciences; Research in Economics; Ethical Issues in Research.
Unit 2.Research Formulation, Design and Methods   **(15 Hours)**
    Defining and formulating the research problem; Review of Literature; Identifying gap areas from literature review. Formulation of Hypothesis; Research Design: Basic principles and Significance; Developing an Appropriate Research Design.
Unit 3. Data Collection and Processing   **(15Hours)**
    Primary and Secondary Data; Methods and Tools of Primary Data Collection: Survey, Case-study, Pilot Experiments; Questionnaire, Interviews, Observation; Secondary Data Sources: International, National, Local; Handling of Data; Processing of data using Statistical Methods and Testing of Hypothesis. Use of Data-Processing Software (Exposure to at least one such software)
Unit 4. Writing a Dissertation   **(15 Hours)**
    Reports and Dissertation; Report-writing-Types of report- Different steps in report-writing; Structure of Dissertation; Writing of Review of Literature, Research Methods and Results, Analysis and Discussion, Conclusions and Direction for Future Work. Citations, References and Bibliography, Appendices.

References:
1. Berg Bruce Lawrence & Lune Howard (2012), Qualitative Research Methods, Pearson Education.
2. Baronov, David (2004), Conceptual Foundations of Research Methods, Paradigm Publishers, Boulder, US.
3. Coley, S.M.andScheinberg, C.A (1990),Proposal Writing, Sage Publication, New Delhi
4. Cooper, R. Donald and Pamela S. Schindler (2003), Business Research Methods, Tata McGraw- Hill.
5. Fink, A (2009), Conducting Research Literature Reviews: From the Internet to Paper, Sage Publications, New Delhi.
6. Flick, U (2011), Introducing Research Methodology: A Beginner's Guide to doing a Research Project, Sage Publications India, New Delhi.
7. Gerard ,Gutherie (2010), Basic Research Methods An Entry into to Social Science Research, Sage Publications India, New Delhi.
8. Goode, W.J and Hatte, P.K (1981 ed), Methods in Social Research,McGraw- Hill, Singapore.
9. Kothari C.R (2013), Research Methodology: Methods and Techniques, New Age International Publishers. New Delhi.
10. Shipman, Keith F, (1996), Introduction to Social Research, Sage , London.
11. Young Pauline V. (1996), Scientific Social Surveys and Research, Prentice-Hall of India New Delhi.

Course Title: Risk Analysis and Management
Course Code: Eco II.1
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:
1. To provide the students with strong grounding in management of risk in different situations.
2. To develop an understanding the risk management theory and enable its use in practice.
3. To use Experiential Learning Method when dealing with Risk Theory.

Learning Outcomes:
On completing the course the students will have:
1. Inculcated a habit to intuitively look for risk in all situations.
2. Acquired the tools to identify and evaluate risk.
3. Acquired skills to develop customized solutions to risk management problems.

SYLLABUS

Unit 1: Risk Management Models and Risk Exposures (12 Hours)
Meaning of risk; Types and sources of risk – exposure and management: The Enterprise Risk Management Model – The 4 step process - Identification of Risk. Exposures – Asset Listing – Flow Charting – Loss Experience History – Fault Tree Analysis.

Unit 2: Evaluation & Treatment of Risk Exposures (6 Hours)
Why evaluate Risk Exposures ? – Loss Frequency – Loss Severity - Maximum Possible Lossv/s Maximum Probable Loss - Probabilistic Loss Assessment - Event Tree Analysis - Catastrophic Loss - Criticality Analysis.

Unit 3: Risk Assessment Models (6 Hours)
Probability Tables - Probability Curves - Z-score – The counter argument – Predictiveweakness of Loss Experience History – The concept of Alternative Histories – Unknownunknowns - Retrospective causality - Opacity of history – Complex Domains, Fat Tails andfailure of Central Limit Theorem – Ludic Fallacy – Taleb Map – Asymmetry of information -Fragility - Robustness – Anti-fragility.

Unit 4.1: Comprehensive Case Study No. 1 (15 Hours)

Unit 4.2: Comprehensive Case Study No. 2 (15 Hours)

Cases: (6 Hours)

Comprehensive Case Studies will be in relation to the two Concentration chosen by a student as given below:
1: Risk Management for Banking and Finance (15 Hours)
Bank Risk Management – Nonfinancial Risk : A Growing Challenge For The Banks – Example: De-risking Demonetization - Management of Operational Risk - Case Study : Terrorist Financing.
2: Risk Management for Travel and Tourism (15 Hours)
Understanding the Travel & Tourism Markets – Risk in Service Encounters – RiskManagement in the Hotel and Tourism Sector – Risk Management in Global Travel –Managing the Risk in Tourism in Goa - Example: Aviation Risk Managemnt - Disaster Risk Management for Coastal Tourism Destinations.

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3 : Risk Management for Demography and Human Resources **(15 Hours)**
      Personal Risk Management : Identification & Evaluation - Managing Hiring Risk -
      Example: Hospital Risk Management.
4 : Risk Management for Globalization and International Business **(15 Hours)**
      Global Business Risk Management - International Political Risk Management - Cross-
      Border Exposures and Country Risk – Economics of Security.
5 : Risk Management for Environment and Sustainability **(15 Hours)**
      Environmental Risk Analysis - Resources Concepts - Negentropy& Entropy -
      Technology and Resources - Environmental Accounting - Toxicity Pathway Based
      Risk Assessment - Example: Chennai Floods - Flood Risk Exposure Identification for
      Goa – Environmental Scenario Analysis.

 # A note on Unit 4.1 and 4.2: Comprehensive Case Study
      This case will be chosen and constructed by the students by consensus. Depending
upon the number of students, a maximum of two cases will be constructed. As far as
possible, the case/cases will be chosen from the Applied Concentrations opted for by
the students. The case will be chosen by the students based on the skills acquired by
them during the theory units.

      The work on the case will begin after the theory units (Units 1.1 to 2.2) are
completed, that is after 24 class hours or little less than half the semester is over.
During the remaining half of the semester, that is the remaining 36 hours, one hour
per 6 hours will be used for discussion of the case; the first 1 hour of these 6 hours
will be for the choice of the case and necessary instructions; the last 1 hour will be
used for the final presentation of the case.

      Contrary to the normal practice, the working on the case is not scheduled close to the
end ofthe course, but rather early during the semester, as it has been observed that
when the workon the case is placed close to the end, the students do not spend
sufficient time on it and donot apply proper mind to the case. Scheduling it
sufficiently early gives ample time fordiscussion of the case.

      In the final evaluation, questions shall be set on the case having appropriate
weightage.Such questions shall be entirely on extempore problems, that is on
problems which have notbeen discussed earlier. The students shall apply their mind
to the problems posed in thecontext of their understanding of the case. The answers
shall be brief enough to becompleted in the allotted time. The objective of the
questions shall be to assess alertness andoriginality.

References:
1. Ayres, John Wiley (1978), *Resources, Environment & Economics,*
2. Caroll, Jossey Bass-Wiley (2001), *Risk Management Handbook For Health Care Organizations*,
3. Lovelock, Witz&Chatterjee(2007),*Services Marketing*, Pearson.
4. Nixon & Kerr(2008),*Managing Hiring Risk From the HR and Security Perspectives*, Elsevier.
5. Rejda(2004), *Principles of Risk Management and Insurance*, Pearson.
6. Sodersten& Geoffrey (1994), *International Economics*, Macmillan, London.
7. Vaughan & Vaughan,(2003), *Fundamentals of Risk and Insurance,*John Wiley.

Course Title: Accounting for Decision-Making
Course Code: Eco II.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide the students with an exposure to the accounting processes and information
2. To enable students to uses accounting information for decision-making

Learning Outcomes:
1. On completing the course the student will be able to use accounting statements to generate useful additional information about the health of the firm.
2. Students will be able to use the information for objective decision-making.

SYLLABUS

Unit 1: The Financial Accounting Framework   (15Hours)
Introduction to financial accounting; Accounting Principles and Conventions; Fundamental Accounting Equation; Accounting Identity; Recording of Financial Transactions: Preparation of Accounting Statements.
Unit 2: Understanding and Analyzing Financial Statements   (15 Hours)
Reading and Understanding Financial Statements: Balance Sheet, Income Statement and Cash Flow Statement; Ratio analysis; Understanding Relationship between Profitability Drivers; Assessing Financial Health through Credit Scoring Model.
Unit 3: Costing and Cost Analysis for Decision Making   (15 Hours)
Cost Sheet in Manufacturing and Service Industries (Preparation), Job and Process Costing; Activity-based Costing; Behaviour of Costs; Break-even Analysis; Costing Approaches for Different Decision-making Scenarios.
Unit 4: Budgeting and Variance Analysis   (15 Hours)
Preparation of operational and financial budgets; Comparing actual performance with budget estimates. Variance Analysis: Price and Quantity; Controllable and Non-controllable; Revenue and Contribution variances.

References:
1. Gibson, Charles H. (2013), *Financial Statement Analysis*, Cengage Learning, Delhi.
2. Horngren, Charles Y (2017), *CostAccounting a Managerial Emphasis*, Pearson
3. Khan M. Y. ; Jain P. K. (2014), *Financial Management*, Tata McGraw-Hill Publishing, New Delhi
4. Singal, Santosh (2012), *Accounting and Financial Analysis*, International Book House, New Delhi.

Course Title: Linear Programming and Optimization
Course Code: Eco II.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide exposure to the methodology of linear programming.
2. To initiate students towards using linear programming as an optimizing tool.

Learning Outcome:
1. The students will be able to use linear programming methodology to solve optimization problems.

SYLLABUS

Unit 1: Linear Programming Problem (5 Hours)
Definition of standard form, formulation of LPP, convex set and their properties, extreme points theorem. Graphical solution of LPP.

Unit 2: Simplex Method (20 Hours)
Theorems related to simplex method .and problems. Cases pertaining to existence of multiple solutions, unbounded and no feasible solution. Simplex method.Dual.Big M method.

Unit 3: Transportation Problems (12 Hours)
Mathematical formulation, condition for existence of feasible solution, rank of transportation matrix, Initial basic feasible solution by (i) NWC method (ii) Matrix-minima and (iii) VAM, MODI method to find an optimal solution, balanced and unbalanced transportation problems.

Unit 4: Assignment Problems (8 Hours)
Mathematical formulation, Hungarian methods to solve assignment problems, balanced & unbalanced assignments problems.

Unit 5: Game Theory (15 Hours)
Optimal Solution of Two-Person Zero-Sum Games, Solution of Mixed Strategy Games, Converting Game theory into LPP.

References:
1. Loomba, N. Paul (1980), *Linear Programming: An Introductory Analysis*, McGraw-Hill Education
2. Osborn, Martin J (2012), *An Introduction to Game Theory*, Oxford University Press
3. Swarup, Kanti, Gupta, P. K., Mohan, Man (2005), *Introduction to Operations Research*, Sultan Chand & Sons, New Delhi.
4. Swarup, Kanti, Gupta P.K., Mohan, Man (1978),*Operations research*, S Chand & Sons, New Delhi
5. Taha, Hamdy A., *Operation Research: An Introduction*, (10th Edition) Pearson Edition
6. Vajda, *Game Theory*

Course Title: Dissertation
Course Code: Eco II.4
Marks: 200
Credits: 8
Duration: 60 Hours

Course Objectives:
1. To develop research skills of the student
2. To provide an opportunity for independent but supervised research
3. To develop application expertise in one of the two areas of "Applied Concentrations"

Learning Outcomes:
1. The student will be able to pursue independent inquiry
2. The student will have developed additional expertise in one of the two areas of Applied Concentration.

STRUCTURE OF DISSERTATION

1. Dissertation will spread over two semesters, Semester III and Semester IV.
2. The Conduct and evaluation of the Dissertation work will be in accordance to section AO-5.4 and AO-5.7 of the "Autonomy Ordinance (AO-5) for Masters Degree Programmes in Arts and Sciences in the subjects of Languages, Social Sciences and Sciences under Choice Based Credit System of Parvatibai Chowgule College of Arts and Science (Autonomous)"

Course Title: Financial Economics
Course Code: Eco III.1.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To familiarize students with the different types of financial instruments and valuation techniques of different assets such as money market securities, bonds and common stocks.
2. To introduce techniques of measuring risk involved in financial assets and calculating returns from assets.
3. To provide understanding about different aspects of corporate finance which includes capital budgeting, efficiency Hypothesis.
4. To introduce different aspects of portfolio management.

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 distinguish between different forms of securities,
3. Gain detail knowledge on Valuation techniques for different assets and risk measurement techniques.
4. Be able to understand the standard models to benchmark valuation of assets.
5. To learn about how corporate finance work.

SYLLABUS

Unit 1: Valuation (15 Hours)
Present value (PV) and net present value (NPV);Discount rates and the time value of money; 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. Mutual funds.

Unit 2: Risk Analysis and Portfolio Theory (17 Hours)
Measures of risk; Risk and investment horizon 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; Mean-variance portfolio analysis: The Markowitz model and the two-fund theorem; Risk-free assets and the one-fund theorem.

Unit 3: Capital Market Theory (15Hours)
The CAPM and linear risk/return trade-offs; Applications of the CAPM: Empirical evidence and extensions of the CAPM; Market Efficiency: Origins of the efficient markets hypothesis (EMH); Weak form, Semi strong form and strong form efficiency; Implications and empirical tests of the EMH and Recent developments.

Unit 4: Corporate Finance (13Hours)
Valuation of common stocks; Discounted cash flow model; Earning approach to stock valuation; Patterns of corporate financing: common stock, debt, preferences, convertibles; Capital structure and the cost of capital; Corporate debt and dividend policy; The Modigliani-Miller theorem.

References:

1. David G.Luenberger (1997), *Investment Science*, Oxford University Press, USA.
2. Francis, J. C.& Taylor, R.W. (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*,7th edition McGraw Hill.
5. Thomas E. Copeland, J. Fred Weston and KuldeepShastri(2003), *Financial Theory andCorporate Policy*, 4th edition, Prentice Hall.

Course Title: Economics of Banking: Theory, Policy and Practices
Course Code: Eco III.1.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To familiarize students with the evolution of banking system and its importance in the modern monetary economy.
2. To understand the role of central bank-effective policy designing, maintaining financial stability.
3. To examine the existing banking regulatory norms and their impacts.
4. To provide students a detail picture of evolution of performance and changing practices in the post liberalization period.
5. To introduce to students the recent developments in Indian the banking system.

Learning Outcome:
Upon completion of the course, students are expected to:
1. Gain an in-depth idea of how the banking system functions overall.
2. Understand the risks associated with the banking system, changing pattern of risks over time and critically evaluate the existing regulatory norms.
3. Evaluate the banking policies undertaken and their outcomes from both microeconomic and macroeconomic perspectives.
4. Be able to explore the areas of application and scope of future research in the relevant area.

SYLLABUS

Unit 1: Evolution of Banking System (15 Hours)
Emergence of Banks as a major financial institution, a modern loanable fund theory, Bank's portfolio problem equilibrium, Sources and uses of funds, Banking network: unitary and Branch banking, Competition, risk taking and financial stability, structure of abnks
Unit 2: Central Banking system (15 Hours)
Open market operations: incentive compatible contracts, the lender of last resort function, RBI's Monetary policy, Monetary-fiscal coordination, Managing aggregate risk: Systemic fragility and policy.
Unit 3: Banking Regulations (15 Hours)
Bank crisis and panics,need and scope for a prudential regulation, Prudential indicators, Risk based regulatory capital, Basel norms, Deposit insurance, Universal Banking.
Unit 4: Recent trends in Indian Banking (15 Hours)
Structure of the banking sector in India, Banking policies in the pre and post liberalization period, changes in priority sector lending, Performance of banks: development banks and new age banks, Recent developments: Electronic banking, relationship banking, collateral lending, Micro-finance institutions.

References:
1. Berger, A, P Molyneux and J. Wilson (2010),*The Oxford Handbook of Banking,* Oxford University Press, New York.
2. Demirguc-Kunt, H. Huizinga (2009),*Bank activity and funding strategies The impact on risk and returns*, Journal of Financial Economics,Vol. 98, No.3. Pp 626-650.

3. Freixas, X and J. Rochet (1999),*Microeconomics of Banking*, The MIT press, Cambridge, Massachusetts.
4. Hardy D.C. and Pazarbasioglu, C. (1998), *Leading Indicators of Banking Crisis: Was Asia Different?*, IMF Working Paper.
5. Pathak, Bharati V (2010),*The Indian Financial System: Market, Institutions and Services*, Pearson Publication, India.
6. Reserve Bank of India: Reports on Currency and Finances (various issues).

Course Title: Financial Derivatives
Course Code: Eco III.1.3
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:
1. To equip the students with detailed knowledge of derivatives such as forwards futures and options.
2. To educate the students on their use for various hedging and speculating objectives.
3. To introduce the students to the frameworks and techniques for pricing derivatives.

Learning Outcomes:
On completing of the course, students will:
1. Understand the characteristics of various derivatives.
2. Understand the pros and cons of various models that are widely used.
3. Gain some experience in applying these instruments and models for valuation.

SYLLABUS

Unit I: Introduction to Derivatives (10 Hours)
Derivatives: Definition, types of derivatives, derivatives markets, reasons for Trading derivatives: Hedging and arbitraging.

Unit II: Forwards and Futures (20 Hours)
The market for forwards and futures, marking to market and margins, Valuing forward contracts and the forward price, Types of futures contracts: Interest rate futures, Stock Index futures, Commodity futures, currency futures; The futures price.

Unit III: Options (20 Hours)
The market for options. Option payoffs, Factors affecting option prices, No-arbitrage restrictions: The put-call parity, Trading strategies involving options; Option Valuation: The binomial model, The Black Scholes model.

Unit IV: Financial Engineering (10 Hours)
Portfolio insurance and other advanced derivative strategies, Market risk management, Financial Engineering, Exotic options, Employee stock option.

References:
Mandatory:
1. Don M. Chance, Brooks, Robert, (2014),*An introduction to Derivatives and Risk Management*, 10th edition, South-Western Cengage Learning.
2. John C. Hull, *Fundamentals of Futures and Options Markets*, 8th Edition, Prentice Hall.
3. John C. Hull, *Options, Futures and Other Derivatives*, 8th Edition, Prentice Hall. (PDF)

Supplementary:
1. David G. Luenberger (1997), *Investment Science*, Oxford University Press, USA.
2. Richard A. Brealey and Stewart C. Myers (2002), *Principles of Corporate Finance*, 7th editionMcGrawHill.
3. Thomas E. Copeland, J. Fred Weston and KuldeepShastri(2003), *Financial Theory and Corporate Policy*, Prentice Hall, 4th edition.

Course Title: Financial Project Appraisal
Course Code: Eco III.1.4
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:
The objective of this course is to equip students with:
1. Detailed understanding of economic aspects of investment projects.
2. Various project impact measurement and assessment tools and techniques.

Learning Outcome:
On completing of the course, students will:
1. Gain an overview of different aspect of investment projects.
2. Gain entrepreneurship skills on how to formulate and implement project idea
3. Know and apply techniques of cost benefit analysis for projects.
4. Learn the measurement techniques of impact of the projects.
5. Understand the political economy and welfare aspect of investment projects.

SYLLABUS

Unit I: Overview of project appraisal   (10 Hours)
Project and programme evaluation: the project cycle, planning, project selection and appraisal, project quality factors and basic needs, project formulation and feasibility study.
Unit II: Technical Analysis   (15 Hours)
Formulation of project idea, market analysis, managing technology, strategic technology leveraging. Risk analysis: Taxonomy of risks, techniques of risk analysis, risk and large projects, uncertainty mitigation strategies.
Unit III: Financial Appraisal   (10 Hours)
Investment and operational costs; project finance, appraisal techniques, mutually exclusive projects and other issues. Cost of capital.
Unit IV: Impact Assessment   (20 Hours)
Economic impact analysis, cost-benefit analysis, Cost-effectiveness analysis: UNIDO analysis, Little Mirrlees analysis, World Bank approach, Planning Commission approach; Environment impact assessment;An integrated approach to project impact assessment.
Unit V: Project implementation and Management   (5 Hours)
Implementation, review and audit (case study example: Social Cost-benefit Analysis of Delhi Metro-2006 study)

References:
1. Anthony Boardman, David Greenberg, Aidan Vining, David Weimer (2010), *Cost-Benefit Analysis,*Pearson Series in Economics.
2. Harry F. Campbel, Brown, Richard P C(2003), *Benefit CostAnalysis: Financial and Economic Appraisal Using Spreadsheets*, Cambridge University Press.
3. Murty M. N. et al 'Social Cost-benefit Analysis of Delhi Metro-2006 study'
4. Prasanna Chandra (2009), *Projects, Planning, Analysis, Selection, Financing, Implementation, and Review,* Tata McGraw-Hill Education.

Course Title: Tourism Economics: Concepts and Practices
Course Code: Eco III.2.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To understand types and characteristics of tourism and various concepts associated with it.
2. To know the evolution of tourism in perspective.
3. To realize the importance of tourism by various institutions including the government as means for promoting growth regionally and internationally.

Learning Outcome:
1. It will enable the students to have an insight into type of tourism that needs to develop in a destination.
2. Assess the requirements and provide for tourism products in destination.
3. Be a professional to manage a destination in the interest of all the stakeholders.

SYLLABUS

Unit 1: Introduction to Tourism (15 Hours)
 Introduction to Tourism; definition; perspectives on tourism; tourism past; tourism present; scope of travel and tourism; motivation; tourism as an industry.
Unit 2: Tourism Marketing (15 Hours)
Importance of tourism marketing; role of market situations analysis for strategic planning; identifying steps in market segmentation process; importance of Ps price, place and promotion in tourism marketing.
Unit 3: Evaluation of tourism (15 Hours)
Tourism demand and supply; cost and benefits of tourism; tourism taxes as tangible benefits; quality of life; opportunity cost and tourism; import propensity; cost of public services; assessing the economic impact of tourism.
Unit 4: Project (15 Hours)
Prepare a strategic tourism project blueprint based on the knowledge learnt for Goa.

References:
1. Dwyer Larry et.al. (2010), *Tourism Economics & Policy (Aspects of tourism texts)*, Channel View Publication.
2. Mukhopadhyay Sipra (2010 reprint), *Tourism Economics*, Ave Books Pvt. Ltd.
3. Stabler M.J. et.al. (2010*), Economics of Tourism* (2nd edition), Routledge London.

Course Title: Managerial Economics for Tourism
Course Code: Eco III.2.2
Marks: 100
Credits: 04
Duration: 60 Hours

Course Objectives:
1. To help students in understanding application of microeconomic concepts like demand, supply, pricing of tourism products.
2. To understand risks and uncertainty associated with tourism.
3. To apply simulation and decision theory in analysis.

Learning Outcome:
On completion of the course the students will be:
1. Equipped to apply the microeconomic tools for practical application.
2. Able to quantify the elements of risks and uncertainty in the profession.
3. Able to formulate good business decision for tourism promotion.

SYLLABUS

Unit 1: Introduction to Managerial Economics in Tourism: **(10 Hours)**
   Nature and Complexities of Tourism Industries; Economics and Decision Making; Cost and Revenue of Tourism; Tourism and Economic Development.
Unit 2: Demand for and Supply of tourism: **(15 Hours)**
   Consumer behavior and tourism demand; Determinants of Tourism demand, Measurement of Tourism demand: Elasticity of Demand - meaning, types; Tourism Demand Forecasting. Supply of tourism: Patterns and characteristics, Elasticity of Supply, pricing of Tourism product.
Unit 3: Production   **(17 Hours)**
   The Production Function; Production with One Variable Inputs; Economies of Scales and Scope; Cost-Benefit analysis in tourism, concept of beak-even analysis and Project Feasibility Study.
Unit 4: The economic impacts of tourism   **(18 Hours)**
   Direct, indirect, induced and negative: the measurement of economic impact: Multiplier – meaning and types (Investment, Employment and Tourism Multipliers), Linkages and leakages.

References:
Mandatory:
   1. Lundburg Donald E., Krishnamoorthy M., Stavenga Mink H. (1995), *Tourism Economics*, John Wiley & Sons, New York.

Supplementary:
1. Bull, Adrian (2000), *The Economics of Travel of Tourism,* Longman, Cheshire, Melbourne.
2. Cooper, Chris, Fletcher, John, Gilbert, David and Wanhil Stephen (2001),*Tourism Principles and practice*, Pitman Publishing, London.
3. Witt. Stephen F. and LuizMountinho (eds) (1989), *Tourism Marketing and Management Handbook*, Prentice Hall, New York.

Course Title: Travel and Tourism Infrastructure
Course Code: ECO III.2.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To assess the infrastructure in the tourism sector
2. To evaluate the transportation and accommodation infrastructure.
3. To evaluate the growth and development of other infrastructure important for tourism.

Learning Outcome:
On successful completion of the course, the students will be able to:
1. Assess the role of infrastructure in promoting tourism
2. Ascertain the importance of transportation and connectivity in tourism
3. Understand the role of other infrastructure in growth and development of tourism.

SYLLABUS

Unit 1. Infrastructure Related to Travel and Tourism (15 Hours)
Tourism Infrastructure: Connectivity, Accommodation, Civic Amenities and other Infrastructure; Assessment of availability: Gap between Expected and Actual availability; Gap Analysis; Initiatives by State Government: Policy Measures, Innovative Practices, Up-coming Projects.
Unit 2. Transportation Infrastructure (15 Hours)
Internal and External Connectivity; Importance of Transportation Infrastructure; Dynamically Changing Needs and Means of Transportation; Tourism Transport System: Roads, Railways, Airways and Waterways; Comparative Analysis; Limitations. Problems of Transportation Infrastructure; Public Sector and Private Sector Involvement in Providing and Maintaining Transportation Infrastructure.
Unit 3. Accommodation Infrastructure (15 Hours)
Concept, Types and Typologies of Accommodation; Importance of Accommodation Infrastructure and Linkage with Tourism; Emerging Dimensions of Accommodation Industry – Heritage Hotels, Motels and Resort Properties.Time-Share Establishments. Human Resource Development with respect to Accommodation: Human Resource Requirements, Training Facilities, Constraints. Fiscal and Non-fiscal Incentive Available to Hotel Industry in India.Ethical, Legal and Regulatory Aspects of Accommodation Infrastructure.
Unit 4. Other Types of Infrastructure (15 Hours)
Travel Agency and Tour Operations Business: Growth and Development; Linkages; On-line Infrastructure: Booking Apps. Amusement and Recreation Infrastructure.

References: -
1. RoadySunetra; BivalArchana; Joshi Vandana (2009) *Tourism Operations and Management,* Oxford Higher Education
2. Ali, Barkat Abu (2015) *Travel and Tourism Management,* PHI Learning, Delhi.
3. FICCI Report (2014) *Tourism Infrastructure: the Role States Play*
4. Government of Goa, *Goa Economic Survey*

Course Title: Tourism in Goa
Course Code: ECO III.2.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
4. To acquaint the students with unique tourist-centric resources.
5. To understand policy formulations for tourism development in the State and its implications.
6. To highlight the major tourist-related issues.

Learning Outcome:
On successful completion of the course, the students will be able to learn the tourism related issues in Goa for future development.

SYLLABUS

Unit1. Factors Influencing Tourism in Goa: (15Hours)
Westernization of Culture; Geographical Location and Connectivity; Religious and Pilgrimage Centers in Goa; Food and Entertainment, Natural Attraction, Customs and Receptive Attitude of Locals, Major Festivals in Goa.

Unit2. Planning and Policies: (15Hours)
Importance of Tourism in Goan Economy; Tourism in Budget Planning; Role of Ministry of Tourism; GTDC; Other Government and Private Agencies; Broad Tourism Policy in terms of Tourism Master Plan for Sustainable Development.

Unit3. Tourism and Tourist Trends: (15 Hours)
Types of Tourism – Pilgrimage, Adventure and Sports, Beach, Eco-Tourism, Health, Village/Rural, Spiritual Tourism; Heritage Tourism, Places of Tourist Attraction; Tourist Trends –Domestic and Foreign; Duration of Stay; Steps to Improve Return of Tourist and Recommend Goa for Tourism. Steps to Brand Goa.

Unit4. Major Challenges in Tourism Development in Goa: (15 Hours)
Issues related to garbage, traffic and transport, infrastructure, tourist taxi operators, Drugs and Trafficking, Law and Order

References: -
1. Department of Tourism (2011), *Tourism Master Plan*, Government of Goa, Panjim.
2. Department of Tourism (2003), *Tourism Policy*, Government of Goa, Panjim.
3. Directorate of Statistics, Planning and Evaluation, *Economic survey*, Government of Goa.
4. Gupta**,** Om**;** Seth**,** Rabindra (2005), '*Tourism In India: An Overview*', Kalpaz Publications.
5. Sarngadharan**,** M. (2009), '*Health Tourism in India',* New Century Publication
6. Solomon, Ranjan (ed.) (2009), The Challenge and Prospects of Tourism in Goa Today, Council for Social Justice and Peace, Panjim
7. Centre for Responsible Tourism in Goa http://responsibletourismgoa.com/

Course Title: Demography: Concepts, Techniques and Applications
Course Code: Eco III.3.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide the students with an understanding of demographic concepts and techniques.
2. To give exposure to students on the application of demographic techniques.
3. To give an understanding about demographic changes and its implications in economics.

Learning Outcome:
Upon completion of this course students will gain:
1. Knowledge about demographic concepts and techniques.
2. Understanding about demographic changes and its implications in economics.

SYLLABUS

Unit 1: Demography and Linkages   **(10 Hours)**
   Demography & Linkages: Population, Environment, Economic Development; Theory of demographic transition and demographic dividend.
Unit 2: Population Composition   **(10 Hours)**
   Age and Sex composition: trends; Age Pyramid: Concept, construction and application; Changing shapes of population Pyramid; Ageing of population and its consequences on labour force.
Unit 3: Fertility: **(10 Hours)**
   Fertility: Concepts and measurement; Changing fertility patterns and its economic implications.
Unit 4: Morbidity and Mortality   **(10 Hours)**
   Morbidity: Concepts, Measurement and trends, Epidemiological transition and its economic implications. Mortality: Concepts, Measurement; Mortality trends and economic consequences; Life table: Concept and construction.
Unit 5: Migration   **(10 Hours)**
   Migration: Concepts, Types, Measurement, Patterns; Diaspora changes; Globalization and Migration.
Unit 6: Population Projection   **(10 Hours)**
   Population projection: Meaning, Methods, Applications, Projection and economic planning.

References:
1. Bhende A.A. and Kanitkar T (2000),*Principles of Population Studies*, Himalaya Publishers, Mumbai.
2. Bogue D J, Arrigas E E, Anderson Douglas L. (1993),*Reading in Population Studies and Methodology*, Published for United Nations Population Fund By social development Center, Chicago, Illinois.
3. David Y, Douglas A, Jennifer L.(2007), *Demography, the Study of Human Population*, Waveland Press, Illinois.
4. Srinivasan K, (1998), *Basic Demographic Techniques and Applications*, Sage publications, New Delhi.

Course Title: Health Economics
Course Code: Eco III.3.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide a framework for application of economic principle to health.
2. To evaluate delivery of health care using empirical evidence.

Learning Outcome:
Upon completion of this course students will:
1. Gain an understanding of application of microeconomic tools to health economics.
2. Be able to evaluate health care policy and its functioning.

SYLLABUS

Unit 1: Introductory health Economics   (12 Hours)
The demand for health and health services; production , health and health care; cost of delivering health services; basic market models; supplier induced demand and agency; market failure and government.

Unit 2: Economic Evaluation   (10 Hours)
Theoretical bases of economic evaluation, economic evaluation of health care, Economic evaluation as a framework for utility and choice.

Unit 3: Economics of health-care market   (10 Hours)
Investment and institutions in health-care; market structures; Hospital and health service provider behavior: motivation, regulation and incentives.

Unit 4: Analysis of Health system   (14 Hours)
Health system: framework of analysis; tax and social health insurance mechanism; Private financing mechanism; Health systems around the world: variation and performance; health and allied services; health sector reforms and strategies.

Unit 5: Health approaches in India: (14 Hours)
Principles and practices of health care in India; Equity and health; Risks and returns in health care: Public sector versus private sector; Health financing and insurance: Universal health coverage; Out-of-pocket expenditure on health; Morbidity patterns; Health policy and outcomes.

References:
1. Ghuield S. and Smith P.C.(Eds) (2011), *The oxford Handbook of Health economics*, New York (Module 1A, 3, 4)
2. Henderson J.W.(2001), *Health economics and policy*, South Western, Thomson Learning
3. Mcpake B. and Normand C, (2013), *Health Economics: An international perspective*, Routledge, New York.
4. National Health Accounts India (2004-05), http://www.whoindia.org/linkFiles/Health Finance_National_Health_accounts_2004-05.pdf

Course Title: Strategic Human Resources Management
Course Code: ECO III.3.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To study as how to think systematically and strategically about the aspects of managing the organization's human assets.
2. To study the conceptual framework and practices of strategic human resource management.
3. To explore the emerging developments in Human Resource Management.

Learning Outcomes:
1. Students will be able to think systematically and strategically about human resources.
2. Students will understand the conceptual framework of strategic human resources management.
3. Students will develop a critical perspective of changing needs and emerging developments in strategic human resource management.

SYLLABUS

Unit 1: Frameworks of Strategic Human Resources Management: **(15 Hours)**
Strategic Human Resources Management:Concepts, perspectives, frameworks. HRM and SHRM. HRM and SHRM Models: (HRM models: Caldwell's change matrix, Ulrich's Human Resource Champion model; SHRM Models: 5 P-model, environment model, matching model, resource based view model); Integrating human resource strategy in the organization's objective set.

Unit2: Recruitment of Human Resource: **(15 Hours)**
Practices in Human Resources Recruitment; Sourcing of Talent; Selection and Hiring Process; Training and Development; Universalist approaches to SHRM (best practices approach, configurational approach): Developing global workforce and intercultural competence.

Unit 3: Performance Management: **(15 Hours)**
Strategic appraisal; Motivation, Compensation, Rewards System; Workplace flexibility: employers, employees and HRM perspectives; Attrition and Employee Retention.

Unit 4: Managing Human Resources for Organizational development: **(15Hours)**
Communication during Change; Knowledge Sharing and Management; Managing personal Transitions; Resistance to Change; Managing the Employee involvement, engagement and participation; Impact of SHRM practices on the performance of employees – global evidences. Consequences of investment in HRD on retention of employees.Changes in Strategic Human Resources management practices.

References:
1. Amstrong Michael (2016) *Strategic Human Resource Management ,*Kogan Page, London.
2. DharRajibLochan (2012), Strategic Human Resource Management, Excel Books, New Delhi
3. Greer Charles (2001) *Strategic Human Resource Managaement,* Pearson Custom Publishing, Boston.
4. Jeffrey A. Melo, (2015), *Strategic Human Resource Management* cengage learning*,* fourth editionAustralia.
5. Rees Gary (2017), *Strategic Human Resource Management: An international perspective*, 2nd revised edition,edited by Paul E Smith Sage publications.
6. Truss, Catherine; Mankin David; Kelliher, Clare (2012), *Strategic Human Resource Management,* Oxford university press, London

Course Title: Industrial Relations and Labour Welfare
Course Code: Eco III.3.4
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. The objective is to provide students a broad understanding of Industrial relations and labor welfare in India with due focus on legislative aspects.

Learning Outcomes:
1. On completing the course the students will understand the processes and mechanism to resolve industrial conflicts and promote welfare of labour.

SYLLABUS

Unit 1: Industrial Relations (12 hours)
Industrial Relations: Concept, Approaches to industrial relations: Workers participation in Management, Code of conduct, Tripartite bodies, Changing face of Industrial Relations in India.

Unit 2: Trade Unionism (12 hours)
Trade Unions: Concept, Evolution, Importance & functions; Trade Union Movement in India: Leadership & Governance, Relevance of Trade Unions.

Unit 3: Industrial Disputes (12 hours)
Industrial Disputes: Overview; Grievance procedures & disputes resolution: Government Machinery to resolve industrial disputes, mediation, conciliation, Arbitration, Adjudication, Industrial tribunals.

Unit 4: Labor Welfare (12 hours)
Labor Security & Welfare- Issues & Importance, Measures-Voluntary, Statutory and Non statutory; Agencies of Labor Welfare.

Unit 5: Labor legislation (12 hours)
Labor legislation: Evolution of labor' legislation in India and Indian Constitution; Acts & rules related to Industrial safety and health, Child and woman labor, Social security ,Wages; Amendments: Need & Action

References:
1. Sharma R.C.(2016*), Industrial relation and labour legislation*,PHI learning private limited, New Delhi.
2. Punekar S.D.(2011),*Labour welfare, Trade unionism and industrial relations*, Himalaya Publishing house, revised edition

Course Title: International Trade and Globalization
Course Code: Eco III.4.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide the students with strong grounding in international trade theories, empirics, and related policy especially in the context of globalization.
2. To analyses trade and the movement of factors of production, specially capital and labour, in the context of regionalism and globalism.

Learning Outcomes:
On completing the course the students will be able understand:
1. The reasons for countries' trade in specific goods and services and the outcomes of such trade.
2. Contribution of various elements and policies in promoting or hindering trade.
3. Impacts of regionalism and globalism on international trade and international movement of factors of production.

SYLLABUS

Unit 1: Trade Theories **(12 Hours)**
Trade in Goods and Services; Trade and Globalization, Issues in Globalization; Comparative Advantage; Reciprocal Demand and Gains from Trade; Revealed Comparative Advantage; Heckscher-Ohlin Model, Empirical Results: Leontief Paradox; Factor price Equalization Theorem; Specific Factors model. Components of Trade in Services.

Unit 2: Alternative Trade Theories **(12 Hours)**
Intra-industry Trade; Economies of Scale, Imperfect Competition and Trade; Trade based on Dynamic Technological Differences; Product Cycles Model; Cost of Transportation; Environmental Standards; Industry Location and International Trade; Reciprocal Dumping Model. Gravity Equation. Empirical Results of Intra-industry Trade: Balassa Index, Grubel-Lloyd Index, Aquino Index.

Unit 3: Trade and Economic Growth **(12 Hours)**
Growth of Factors of Production: Rybczynski Theorem; Growth and Trade: Small-Country and Large-Country Cases; Comparative Analysis of Closed-economy and Open-economy Dynamic Growth Models. Effects of Economic Growth on Terms of Trade – Welfare, Technical Progress; Immiserizing Growth; Trade and Development.

Unit 4: Trade Policy **(12 Hours)**
Instruments of Trade Policy; Trade Restrictions: Tariffs – Effects, Partial and General Equilibrium Analysis; Theory of Tariff Structure;, Optimum Tariff, Tariff and Real Rewards to Factors of Production: The Stolper-Samuelson Theorem, Metzler's Paradox; Non-tariff Barriers: Quotas and Export Subsidies. Technical and Other Regulations, Voluntary Export Restraints, Dumping. WTO and Trade Liberalisation.

Unit 5: Globalization and Factor Movements **(12 Hours)**
Globalism v/s Regionalism. Regional Economic Integration – Theory of Customs Union – Trade Creation and Trade Diversion; Cases: European Union; North American Free Trade Area; South Asian Free Trade Area – Economic Analysis of Strengths and Weaknesses. Gravity Model as an Analytical Tool. Resource Movements: Welfare Effects of International

Labour and Capital Movements – FDI, FII. Financial Globalization.Pattern of Capital Movements and Labour Migration in Recent Times.

References:
1. Carbaugh, Robert J. (2007), *International Economics*, South Western Publishers, New Delhi.
2. Feenstra R.C.(2004),*Advanced International Trade- Theory and Evidence*, Princeton University Press, Princeton.
3. Grimwade Nigel(2001), *International Trade*, Routledge, London.
4. Kenen, P.B. (2000), *The International Economy*, Cambridge University Press, London.
5. Krugman P.R. and Obstfeld, M. (2009), *International Economics: Theory and Policy*, Pearson, New Delhi.
6. Salvatore D. (2014*), International Economics*, Wiley, New Delhi.
7. Sodersten Bo and Geoffrey, R. (1994), *International Economics*, Macmillan, London,

Course Title: International Finance
Course Code: ECO III.4.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To strengthen the student's theoretical foundations of international finance.
2. To develop expertise that will help students to participate in international financial dealings.

Learning Outcomes:
On completing the course, the students will be able to:
1. Analyze and evaluate the conditions relating to international finance.
2. Participate in international financial dealings.

SYLLABUS

Unit 1: International Financial Environment (3 Hours)
Components, Trends, Globalization
Unit 2: Balance of Payments (15 Hours)
Balance of payments: Current and capital accounts and balances; balance of payments and national income accounts;Foreign trade multiplier; Balance of payments adjustments: Elasticity, Absorption, Monetary and Portfolio-balance approaches.
Unit 3: Foreign Exchange Rates (15 Hours)
Foreign exchange rates: Fixed and Flexible: Comparisons; Nominal, Real and Effective Exchange Rates; Purchasing Power Parity and Exchange Rates; Foreign exchange markets: Spot, forward, futures and options currency markets. Foreign exchange risk and exposure: Exposure risk and parity relationship; accounting exposure versus real exposure, operating exposure, hedging risk and exposure. Interest arbitrage and efficiency of foreign exchange markets.
Unit 4: International Financial Markets (15 Hours)
International Money Markets: Eurocurrency market and Asian currency market. International Capital Markets: International bond market, Equity market, GDRs, ADRs. International Derivative Markets: Futures market; Options market; Currency Swaps
Unit 5: International Financial Institutions (12 Hours)
International Monetary Fund; international reserves: special drawing rights. Managed Floating. Theory of Optimum currency areas: international policy coordination. currency board, European Monetary System, Models of international financial and currency crisis. International monetary reform; International debt: measures of indebtedness, international debt crisis.

References:
1. Carbaugh, Robert J. (2007), *International Economics*, South Western Publishers, New Delhi.
2. De Rosa David F. (1998), *Currency Derivatives*, John Wiley, New York.
3. Gandolfo Giancarlo (2006), *International Finance and Open – Economy Macroeconomics*, Springer, New York.
4. Kenen, P.B. (2000), *The International Economy*, Cambridge University Press, London.
5. Krugman P.R. and Obstfeld, M.(2009), *International Economics: Theory and Policy*, Pearson, New Delhi.
6. Pilbeam. K. (2004), *International Finance*, Macmillan, London.
7. Salvatore D. (2014), *International Economics*, Wiley, New Delhi.
8. Sodersten Bo and Geoffrey, R. (1994), *International Economics*, Macmillan, London.

Course Title: Global Marketing
Course Code: Eco III.4.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To familiarize the students with the concept and issues of international marketing in cases of consumer and industrial goods.

Learning Outcomes:
On completing the course the students will be able to:
1. Analyse domestic and international market environment.
2. Develop professional competency in international marketing of consumer and industrial goods.

SYLLABUS

Unit 1: International and Global Marketing: An Overview (10 Hours)
Introduction to International Business - an overview; International Marketing Environment: Influence of physical, economic, socio - cultural, political and legal environments on international marketing decisions; International marketing information system.

Unit 2: Market Entry Strategies (10 Hours)
Country scanning – opportunities and assessment; International Market Segmentation, Selection and Positioning; International market entry strategies – Exporting, licensing, contract manufacturing, green-field investment; joint venture, setting -up of wholly owned subsidiaries aboard.

Unit 3: International Product Planning and Pricing decisions (15 Hours)
Major Product decisions – product design, labeling, packaging, branding and product support services; Product standardization vs. adaptation; Managing product line; International trade product life cycle; New product development. Pricing decisions for International Markets: Factors affecting international price determination; International pricing process and policies; Delivery terms and currency for export price quotations; Transfer pricing; Counter trade as a pricing tool – types and problems of counter trading.

Unit 4: Global Distribution Decisions (10 Hours)
Distribution channel – from traditional to modern channel structures, Intermediaries for international markets – their roles and functions; Alternative middlemen choices, Factors affecting choice of channels; Locating, selecting and motivating channel members; International distribution logistics – Issues and Planning.

Unit 5: Global Promotion Strategies: (15 Hours)
Communications across countries – complexities and issues; Country-of-origin effect; Sales promotions in international markets, trade fairs and exhibitions; International public relations, International Advertising decisions, Personal selling and sales management; Developing international promotion campaign.

References:
1. Cateora, Phillip R. ;Grahm, John L. and PrashantSalwan, (2010), *International Marketing*,Tata McGraw Hill.
2. Czinkota, Michael R. and Illka A. Ronkainon, *International Marketing*, Cengage Learning.
3. Jain, Subash C.(2012), *International Marketing*, South-Western.

4. Keegan, Warran J. and Mark C. Green (2015), *Global Marketing*, Pearson.
5. Kotabe, Masaaki and KristiaanHelsen,(2016),*Global Marketing Management*, John Wiley and Sons.
6. Onkvist, Sak and John J.Shaw, (2004), *International Marketing; Analysis and Strategy*, Psychology Press.
7. Rajagopal, (2006), *International Marketing*, Vikas Publishing House.
8. Terpstra, Vern; Foley, James and Ravi Sarathy, *International Marketing*, Naper Press.

Course Title: International Trade Practices, Documentation and Procedures
Course Code: Eco III.4.4
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To orient students in international trade practices, documentation and procedures.
2. To expose the students on latest developments in Foreign Trade policy

Learning Outcomes:
1. On completing the course the students will have gained sufficient expertise in handling exports and imports.

SYLLABUS

Unit 1: Foreign Trade Policy and Practices (15 Hours)
Foreign Trade Policy of the Government of India (2015-2020 and latest) – Objectives, Main Provisions; Foreign Trade (Development & Regulation) Act, 1992 – Objectives, Main Provisions; Foreign Exchange Management Act – Objectives, Main Provisions; Excise Law, Customs Law; GST and Foreign Trade.Trade Negotiations and Contract; Standardization and INCO Terms; Trade Finance and Credit; Consignment Sale.

Unit 2: Export-Import Documentation (15 Hours)
Importance of Export-Import Documentation; Types of Export-Import Documents; Features; Mandatory Documents Listed by World Bank and India; Variations in the List of Documents required by Different Countries (Example India, USA, EU, etc.).

Unit 3: Export-Import Procedures (15 Hours)
Foreign Trade Procedures of the Government of India (2015-2020; Export-Import Risks and Risk Management: Cargo Risk, Credit Risk, Commercial and Political Risk; Insurance; Customs Clearance Procedures; Valuation and Harmonized System of Nomenclature. Physical Examination of Goods.

Unit 4: Export Incentives and PromotionalSchemes (15 Hours)
Export from India Schemes, Duty Exemption/Remission Schemes, Duty-free Import Authorization Schemes, Export Promotion Schemes for Specific Industries; Export Oriented Units, Technology Parks; SEZs, Deemed Exports.

References:
1. ApedaAgri Exchange, *Export Documentation and Procedures*, http://agriexchange.apeda.gov.in/Ready%20Reckoner/EXPORT_DOCUMENTATION.aspx
2. Bade, Donna L. (2015) "Export Import Procedures and Documentation", AMACOM, New York
3. Government of India, Directorate of Valuation "Procedures for Clearances of Imported and Export Goods", www.dov.gov.in/newsite.3/clearance_procedure.asp
4. Government of India (2015) "FOREIGN TRADE POLICY [1st April, 2015 – 31st March, 2020]", Available at: http://dgft.gov.in/exim/2000/ftp2015-20E.pdf
5. Government of India (2015) "Handbook of Procedures [1st April, 2015 – 31st March, 2020]", Available at: http://dgft.gov.in/exim/2000/FTPproc2015-20E.pdf
6. Government of India (2015) "(Appendices and AayatNiryat Forms) of FTP 2015-2020", Available at http://dgft.gov.in/exim/2000/APPANFS2015.pdf
7. Government of India (2015): Mandatory Documents Required For Export And Import Reduced To Three Each, Available at http://pib.nic.in/newsite/PrintRelease.aspx?relid=116935
8. International Chamber of Commerce, "Incoterms Rules 2010", Available at http: https://iccwbo.org/resources-for-business/incoterms-rules/incoterms-rules-2010/
9. Nelson, Carl A. (2009) "Import/Export: How to Get Started in International Trade", Tata McGraw- Hill, New Delhi,

10. Nelson, Carl A. (2009) "Import/Export: How to Take Your Business Across Borders", McGraw Hill, New York. E-book Available at; http://citd.org/wp-content/uploads/2014/01/ImportExportbyNelson.pdf
11. O'Meara Arthur (2017) "Making Money with Incoterms(R) 2010: Strategic Use of Incoterms(R) Rules in Purchases and Sales" e-book, Available at http://store.iccwbo.org/making-money-with-incoterms-2010
12. Government of India, Indian Trade Portal, "How to Export", Available at: http://www.indiantradeportal.in/vs.jsp?lang=0&id=0,25,44

Course Title: Environmental Economics
Course Code: Eco III.5.1
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To introduce students to the issues pertaining to the interconnection between economic growth and the environment.
2. To familiarize the students with the methodological frameworks and analytical tools of environmental economics.

Learning Outcomes:
On completion of the course students will have:
1. A good understanding of the environmental implications of economic growth.
2. A good understanding of the methodological framework and analytical tools to environmental economics

SYLLABUS

Unit 1: Economic Growth and the Environment: (15 Hours)
Economic Growth and Environment, Limits to Growth and Sustainable Development, Environmental Kuznets Curve – Environment as an Economic and Social Good/Asset, Natural Resources (Renewable and Non-renewable) – Accounting and Natural Resources Management- Green Accounting.

Unit 2: Methodological Framework of Environmental Economics: (15 Hours)
Types of Goods and Services – Public, Private and Common-pool Resources; Externalities and Market Failure, Social Cost-Benefit Analysis; Pollution as a Public Bad; the Equi-marginal Principal – Economic Efficiency vs. Equity; Damage Functions and Abatement Costs, Role of Institutions in Environmental Protection; Coase Theorem.

Unit 3: Analytical Tools and Environmental Issues: (15 Hours)
Valuation of Natural Resources: Direct and Indirect Methods - Environmental Impact Assessment, Life Cycle Analysis, Pollution – Air, Water and Noise; Economics of Waste Management and Recycling. Regional, National and Supranational Dimensions of Environmental Degradation, Ozone Layer Depletion, Green House Gas Emissions, Global Warming, and Climate Change

Unit 4: Instruments and Mechanisms: (15 Hours)
Command and Control – Environmental Standards, Technology Mandates; Market-based Instruments – Taxes, Subsidies, Liability Instruments, Tradable Permits; Rehabilitation and Resettlement Policy – Kyoto Protocol; Rio Debate – Paris Agreements.

References:
1. Field, B.C.(1997), *Environmental Economics - An Introduction*, McGraw-Hill International Edition, Singapore.
2. Hanley, N., Shogren J.F., While B.(1997),*Environmental Economics in Theory & Practice*, Macmillan, London.
3. Hodge, I.(1995), *Environmental Economics*, MacMillan Press Ltd., London.
4. Jeroen C. J.M. van den Bergh, (2002), *Handbook of Environmental and Resource Economics*, Edward Elgar Publishing, Northampton, M.A.
5. Kolstad, C.(2010), *Environmental Economics*, Oxford University Press, New York.

6. Shankar, U.(2001), *Environmental Economics*, Oxford University Press, Delhi.
7. Tietenberg, T. (1994), *Environmental Economics & Policy*, Harper Collins, New York.
8. United Nations Statistical Division: System of Environmental-Economic Accounts (SEEA) http://unstats.un.org/unsd/envaccounting/seearev

Course Title: Environment and Sustainable Development Strategies
Course Code: ECO III.5.2
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To provide the students with an understanding of environmental challenges and the tools to address these challenges.
2. To direct the students towards the entire process of evolving sustainable development strategies.

Learning Outcomes:
On completing the course the students will be able to:
1. Evaluate the various environmental challenges.
2. Establish the process for evolving sustainable development strategies.

SYLLABUS

Unit 1: Environmental Challenges and Sustainable Development **(6 Hours)**
Major Environmental Challenges; Sustainable Development as a Common Vision; Strategic Approach to Sustainable Development.

Unit 2: Nature of Sustainable Development Strategies **(12 Hours)**
Nature and Frameworks of Sustainable Development strategies: Principles for Developing Sustainable Development Strategies; National Level Strategies, Sub-national Strategies: Decentralized Development Planning. Village and Micro-level Strategies. Convergence and Links between National, Sub-national and Local Strategies.

Unit 3: Strategic Management for Sustainable Development **(15 Hours)**
Effective Strategic Mechanisms; Process and Stakeholders in evolving Sustainable Development Strategies; Coordination and scheduling; Procedures and promotion of sustainable development.

Unit 4: Analytical Tools and Participatory Requirements for Sustainable Development Strategies
(15 Hours)
Tools of Analysis: Stakeholder Analysis; Sustainability Analysis; Strategy Process/Mechanism Analysis; Scenario Analysis. Analysis and Ranking Options; Reviewing Strategy Achievements. Participation: Horizontal and Vertical Channels; Importance of Participation; Costs and Benefits of Participation; Methods for Participation in Strategies.

Unit 5: Mechanisms for executing and evaluating Sustainable Development strategies
(12 Hours)
Scope, Challenges, Principles and frameworks for decision-making; Institutions and Instruments for implementing strategy decisions. Finance and market for sustainable development; Elements of monitoring and evaluation systems: Dimensions and Limitations. Findings and feedback of monitoring exercises.

References:
1. Dalal-Clayton, Barry and Bass, Stephen (2002), *Sustainable Development Strategies – A Resource Book*, OECD-UNDP, Earthscan, London.
2. Dutta, Abhijit; Dutta, Sunita; Pandey P.N. (2005), *Environmental Issues and Challenges,* A.P.H. Publishing Corporation, New Delhi.

3. Furtado, Jose I. dos R.; Belt, Tamara and Jammi, Ramachandra(2000), *Economic development and environmental sustainability: Policies and principles for a durable equilibrium*, World Bank, Washington.
4. Hanley, Nick and Roberts, Colin J. (ed.) (2002), *Issues in Environmental Economics*, Blackwell Publishers, Oxford.
5. Harvard Business Review (2000), *Business and the Environment*, Harvard Business School Publishing, Boston.
6. Sonak, Sangeeta M. (2014), *Environment and Development – Goa at Crossroads*, Broadway Publishing, Panjim-Goa.

Course Title: Environmental Issues and Solutions
Course Code: Eco III.5.3
Marks: 100
Credits: 4
Duration: 60 Hours

Course Objectives:
1. To identify the key environmental issues affecting the community.
2. To expose students to the debate on issues related to environment.
3. To differentiate between economic and non-economic solution to these issues
4. To analyse economic methodologies to tackle these environmental issues.

Learning Outcomes:
On completing the course the students will:
1. Get sensitized to contemporary environmental issues.
2. Appreciate the economic and non-economic solutions.
3. Develop frameworks to generate solutions to these issues.

SYLLABUS

Unit 1: Introduction to pressing environmental Issues (8 Hours)
Human relationship with the Environment: environment as an asset. Issues: Climate change, pollution, deforestation, water scarcity, loss of biodiversity, soil erosion and degradation. Regional pollutants: acid rains; global pollutants: ozone depletion.

Unit 2: Analysis of Environmental Issues (15 Hours)
Risks of inaction; Impact reducing strategies; Mitigation strategies.Cost effective analysis; impact analysis. Approaches to cost estimation: survey, engineering, combined approach. Treatment of risk; Applying the concepts: pollution control, preservation v/s development. Critical appraisal.

Unit 3: Non-economic Solutions to Environmental issues (10 Hours)
Technological, political, sociological and psychological solutions

Unit 4: Economic Solutions to Environmental Issues (12 Hours)
Market instruments – pollution charges: charge per unit, single polluter case. Environmental standards and their economic implications; Challenges to implementing environmental policy.

Unit 5: Modelling Holistic Solutions to Environmental Issues (15 Hours)
Modelling emission charge: Multiple-Polluter case, pollution charges in practice. Modelling an abatement equipment subsidy; Environmental taxes and subsidies in practice; Market based solutions. Examples: Deposit/refund system, Pollution Permit Trading System.

References:
Mandatory:
1. Callan, Scott J. and Thomas Janet M. (2013), *Environmental Economics and Management theory, Policy, and Applications, 5th* edition, Bentley University, Cengage Learning.
2. Kolstad, C. D. (2003), *Environmental Economics*, Oxford University Press
3. Titenberg, Tom (2003),*Environmental and Natural Resource Economics,* 9th edition,U.S.A., Pearson Education, Inc

Supplementary:

1. Agardy F., Nemerow N.(2005), *Environmental solutions,* Academic Press Theobald's Road London, UK.
2. Dwivedi, D.N(1980),*Managerial Economics,* 8th edition,Vikas Publishing House.
3. Lovei M., Weiss C.,(1998), *Environmental Management and Institutions in OECD Countries,* World Bank Washington, DC, USA.
4. Murthy, D.B.N. (2005), *Environmental Planning and Management,* New Delhi, published by Deep and Deep.
5. Robert, C. J.,*Environmental Challenges and Solutions,*I K International Publishing House Pvt. Ltd
6. Shah Ghanshyam, *REVIEWOF LITERATUREPDF* Social Movements in India

Course Title: Environmental Policy and Governance
Course Code: Eco III.5.4
Credits: 4
Marks: 100
Duration: 60 Hours

Course Objectives:
1. To expose students to more recent international environmental agreements.
2. To enlighten the students on India's environmental policies.
3. To expose the students to the framework of policy implementation in India.
4. To analyse the environmental governance issues in India.

Learning Outcomes:
On completing the course the students will:
1. Get educated on the various international environmental agreements
2. Get familiar with the environmental policies in India
3. Get exposure to implementation framework and governance issues in India.

SYLLABUS

Unit 1. International Environmental Agreements (15 Hours)
Nature and Importance of International Environmental Agreements; Global and Regional IEA; Multilateral and Bilateral Environmental Agreements; Important Recent Multilateral Agreements; UN Framework Convention On Climate Change, Montreal Protocol on Ozone Protection, Convention On Biological Diversity, Convention On Long-Range Trans-boundary Air Pollution.Global Dialogue on Climate Change.

Unit 2. India's Environmental Policies – Objectives and Strategies (15 Hours)
Policies to Protect the Environment: Environment Protection Act, 1986; National Environment Policy, 2006; Vision Statement on Environment and Health. Legislations and Rules for the Protection: Water Pollution; Air Pollution; Environment Protection; Wildlife; Forest Conservation; Biodiversity; National Green Tribunal; Animal Welfare

Unit 3. Framework for Implementation of Environmental Policy in India (15 Hours)
Institutional Framework: Legislation enforcing Environmental Policy. Structure for the implementation: Ministry of Environment and Forests, Mobilization of Resources, Coordination between Ministries; National Green Tribunal and the Judiciary, State Level Implementation of Environmental Policy and Law (Case Study on Goa); Role of Activists and Non-state Actors in Implementation.

Unit 4. Environmental Governance (15 Hours)
The System of Global Environmental Governance (GEG); Key Challenges to Effective GEG; Reforming GEG.Environmental Governance in India: Phase 1: Hesitant Beginning; Phase II: Strengthening of Environmental Governance in India; the Environmental Impact Assessment Notification, 2006, Transparency, Public Participation in Environmental Decision-making; Phase III: Dilution Phase: Weakening of Environmental Governance; Influence of Powerful Lobbies; Making Environmental Laws Subservient to Industrial Growth; Attempt to Curtail the Power of the NGT; Efforts to Curtail the Activities of Environmental Activist Groups; Dilution of Environmental Law; Dilution of the Existing Legal and Policy Architecture Established to Protect our Environment.

References:

1. Ahluwalia,V.K., Sunita M. (2009) '*Environmental Science*', AneBooks, New Delhi.
2. Government of India, Ministry of Environment and Forests, "*Strategic Plan 2012-13 To 2016-17*", http://www.moef.nic.in/downloads/public-information/Strategic_Plan_MoEF.pdf
3. Indian Institute of Ecology and Environment**, "***Environmental Governance in India***",** http://www.ecology.edu/environmental-governance.html
4. Krishnamoorthy, Bala (2017)*Environmental Management : Text And Cases,* PHI Learning, Delhi

5. OECD (2006) "*Environmental Compliance and Enforcement in India: Rapid Assessment*" https://www.oecd.org/env/outreach/37838061.pdf

6. Quitzow, Rainer; Jacob, Klaus; Bär, Holger. (2013) *Environmental Governance in India, China, Vietnam and Indonesia: A Tale of Two Paces,*FFU-Report 01-2013, FreieUniversität Berlin, http://edocs.fu-berlin.de/docs/servlets/MCRFileNodeServlet/FUDOCS_derivate_000000002313/Environmental_governance_Aisa_20130204.pdf

7. Razzaque, Jona (2013), *Environmental Governance in Europe and Asia:* A Comparative Study of Institutional and Legislative Frameworks,Routledge

8. Sandåker, Anne-Line (2009) "*Implementing Environmental Policies in India: A Case Study of Scandinavian TNCs*", University of Oslo, https://www.duo.uio.no/bitstream/handle/10852/24388/Anne-LinexSandaker_final.pdf?sequence=1

9. Sandhu,Vikram; Sidhu A.S.(2015), "*Environmental Governance in India: A Systematic Review of the Initiatives*", Pacific Business Review International, Volume 8, Issue 4, October 2015, pp. 49-57, http://www.pbr.co.in/October2015/7.pdf

10. Titenberg, Tom (2003) '*Environmental and Natural Resource Economics*', Pearson Education,

Course Title: Internship
Course Code: Eco IV.1
Marks: 500
Credits: 20
Duration: 390 Hours

Course Objectives:
1. To provide skills that will improve employability.
2. To enable students to use their domain knowledge to situations encountered at workplaces.

Learning Outcome:
1. On completion of the course the students will be employment ready.

STRUCTURE OF INTERNSHIP STUDY:

Internship component of the course structure of the M.A. programme in Applied Economics is fully faculty monitored component of the curriculum. The component carries 20 credits, 390 hours of learning and is evaluated for 500 marks. Internship study is to be undertaken in the area of any one of the two applied concentration chosen by the student from the five available Applied Concentrations. Internship component may be learnt with reference to a business firm, public sector enterprise, non-governmental organization or a non-profit.

The structure of internship study and work, the allocation of credits and the distribution of marks are as follows:

Parts	Structure	Credits	Marks	Hours
Part I	Pre-internship Study	12	300	180
Part II	Internship Work	6	150	180
Part III	Post Internship Report	2	50	30

Mode of pre-internship study and evaluation: Every two credits of pre-internship study involve thirty hours of self-study by students in groups and monitored by faculty of the Post-graduate Department of Economics, on topics assigned to students. At the end of the monitored self-study of thirty hours, each group will present a seminar on the topic of self-study. This seminar will be evaluated for fifty marks and carry two credits.

Students will have to hand over a copy of the seminar discussion paper for the purpose of evaluation. Marks will be awarded both, for the content of the seminar and the student's response to questions asked, taken together. Pre-internship work will be evaluated group-wise.

1. Pre-Internship Study (Self-study monitored by the Department)

Sr. No.	Components	Credits	Marks	Hours
1	Applied Marketing	2	50	30
2	Applied Accounting	2	50	30
3	Laws and Policies (Relevant)	2	50	30
4	Computer Applications (Analytics)	2	50	30

5	Case Studies on Entrepreneurship Ventures	2	50	30
6	Office Dynamics, Management and Procedures	2	50	30

2. Internship Work (Monitored)

Internship work will be done at internship providing organizations. Internship involves at least 180 hours of work, carrying six credits and 150 marks. The internship is monitored both by the post-graduate department and the internship-providing organizations through periodic reports from the student. Internship work is evaluated for each individual student separately.

3. Post-internship Report

The post-internship report carries two credits and is scheduled to be completed in 30 hours. The post-internship report is a comprehensive report of the overall learning and takes into consideration both pre-internship study and on-job experience. The report is prepared individually by a student and submitted to the post-graduate department as the proof of having completed the internship component of the M.A. programme in Applied Economics. Post-internship report is evaluated individually for 50 marks.

4. Guidelines for Pre-internship Study

The group of students is required to study each component of the pre-internship part through a combination of desk-research and field survey. It is important that students devote some time to research for the material required for their study under this component. The group may seek faculty help for identifying the necessary study material including electronic data bases. It is also important that there is peer collaboration in doing the study. Participation in seminars is a collaborative activity.

Certain guidelines by way of minimum coverage of scope under each component of the pre-internship study are given below. Students may go beyond the minimum coverage.

1. "Applied Marketing" should cover: Decision Making, Key Accounts, Marketing Management, Marketing Models, Marketing Planning, and Marketing Strategy.
2. "Applied Accounting" should cover: Cash flow, VAT and other Tax, Managing Payroll, Managing Expenses, Reconciling Books with Bank Accounts, and Budgeting Projects (each Project).
3. "Laws and Policies" should cover: Laws and Policies influencing the firm or the organization selected and relevant to the student's area of "applied concentration".
4. "Computer Applications for Analytics" should cover: Descriptive Analytics, Diagnostic Analytics, Predictive Analytics, and Prescriptive Analytics.
5. "Case Studies on Entrepreneurship Ventures" should cover: Risk Analysis, Innovation and Imitation, Venture Capital, Organizing ability.
6. "Office Dynamics, Management and Procedures" should include:Uniform Procedures, Setting Task Limit, Treating Staff Fairly and With Respect, Understanding Unique Work Styles, Preparing Priority List, Regular Communication, Time Management, Sticking to Time Schedules, Planning Ahead.

5. Guidelines for Internship Work

Internship work at the internship providing organization may be done at one stretch covering a total of 180 hours or in small parts totally covering 180 hours. Post internship report must bear this fact.

There will be no semester-end examination for the Internship Component of the M.A. programme in Applied Economics.