



Programme Structure & Syllabus

Pre-Ph.D. Course Work

**Department of Economics
Central University of Rajasthan**

New Proposed Framework for PhD Course Work Economics : Implementing NEP 2020				
S.No.	Type of Course	Course Code	Course Title	Credit
1	C	ECO701	Fundamental Of Economics	3
2	C	ECO702	Research Methodology	4
3	C	ECO703	Research and Publication Ethics (RPE)	2
4	C	EDU705	Pedagogy for Higher Education	3
5	AECC	ECO 704	Practice Based Teaching Skills	3
6	E	Elective		3
3	LIST OF ELECTIVE COURSES			
	(i)	ECO705	Agriculture And Rural Economics	3
	(ii)	ECO706	Economics Of Infrastructure And Development	3
	(iii)	ECO707	Environmental And Resource Economics	3
	(iv)	ECO708	Financial Economics	3
	(v)	ECO709	Gender Economics	3
	(vi)	ECO710	Health Economics	3
	(vii)	ECO711	International Economics And Policy	3
	(viii)	ECO712	Poverty, Inequalities And Unemployment	3
	(ix)	ECO713	Public Finance And Policy	3
	(x)	ECO714	Regional Economic Analysis	3

Programme Outcome:

1. To develop a sophisticated understanding of the theoretical, analytical, and methodological approaches used within the discipline of economics and related fields
2. To apply economic analysis to everyday problems in real world situations, to understand current events and evaluate specific policy proposals.
3. To understand how to use empirical evidence to evaluate the validity of an economic argument
4. To use econometric methodology, interpret results of econometric models and conduct appropriate statistical analysis of data to answer a research question.
5. To contribute to the intellectual community and be able to critically analyze and evaluate one's own, as well as others' findings and give effective and constructive feedback to others.
6. To communicate effectively in written, oral and graphical form about specific issues and to formulate well-organized written arguments that state assumptions and hypotheses supported by evidence.

Central University of Rajasthan

Implementing NEP 2020

New Proposed Framework for PhD Coursework

Extract from NEP 2020

https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

“15.9. All fresh PhD entrants, irrespective of discipline, will be required to take credit-based courses in teaching/education/pedagogy/writing related to their chosen PhD subject during their doctoral training period. Exposure to pedagogical practices, designing curriculum, credible evaluation systems, communication, and so on will be ensured since many research scholars will go on to become faculty or public representatives/communicators of their chosen disciplines. PhD students will also have a minimum number of hours of actual teaching experience gathered through teaching assistantships and other means. PhD programmes at universities around the country will be reoriented for this purpose.”

In order to implement the NEP2020 and the UGC circular to incorporate a two credits course Research and Publication Ethics (RPE) a framework for the compulsory courses for the PhD programmes of all disciplines is proposed as under:

S. No.	Compulsory Courses	Credits	Norms	Remarks
Knowledge Domain, Research Aptitude and Publication Ethics				
1.	Research Methodology (Compulsory Course to be offered through SWAYAM/NPTEL or by respective Schools) may be Common to All	4	Ordinance 09	Courses to be completed as per the provisions of the ordinance 9 clause 2.iii
2.	Discipline Specific Course(s) as may be recommended by the DRC and approved by the BoS/SB and AC	6-8	Ordinance 09	
3.	Research and Publication Ethics (RPE). (The detailed curriculum is given by the UGC vide circular in August 2019 and also accepted by the Univ)	2	Ordinance 09 and UGC directives	This course may be completed with the PhD coursework preferably in the first two semester but not later than the maximum of 4 semesters as per provisions of the ordinance 9 clause 2.iii
Teaching / Pedagogy Domain for Professional development*				
1.	Pedagogy for Higher Education (The School of Education will facilitate this course with the help of internal faculty and a few external	3	NEP2020 (15.9)	Scholar may take this course anytime during his/her PhD programme.

	experts. A similar course if available on SWAYAM could also be approved by the Dean SoE and offered to the scholars)			However, it is recommended that the RS registers for this course any time between second and third semester of the PhD programme.
2.	Practice Based Teaching Skills (Respective Department will facilitate this course. The Research Scholar will facilitate teaching / practical sessions for part of one or more courses course as may be approved by the HoD on recommendation of the DRC. The RS will prepare detailed lesson plans, design learning events, develop contents and facilitate the lecture / practical sessions under supervision of the guide / course instructor.)	3	NEP2020 (15.9)	This course can be taken after successful completion of the basic course 'Pedagogy for higher Education'. This course would be a non-graded course. There is no fixed time/ duration for completion of this course. It may be done anytime during the period of stay of the scholar preferably from the second to six semesters of the PhD programme in the extended period of time.

Course code: EDU 705

Pedagogy for Higher Education (*prepared by Dr Anjali Sharma*)

Credits:03 (About 45 hours of interactive learning events that will include lectures, discussions with practice sessions and additional off the class self-learning activities)

Aim and Outline of the course:

The course is designed for the research scholars (may call the prospective teacher of higher education or PhD Entrants) to join higher education institutes as professionals. A researcher generally engages in the teaching-learning process after completing their research and sometimes participates in teaching-learning during their research period as a teacher assistant. Therefore, it is required to give them exposure to the teaching-learning process for conceptual understanding and skill development.

This course will help them understand the teaching-learning process basics, curriculum and assessment, and classroom management. This course will also help scholars be more effective while presenting in seminars and conferences.

Besides developing conceptual knowledge of pedagogy skills this course covers contemporary higher education issues like choice-based credit system, online learning, open-book examination, web-based and research-based pedagogical tools and MOOCs etc.

The scholars would develop insight into the significance of pedagogical knowledge and its implication in their professional life on completing the course. Thus the scholars who complete this course will be fully equipped to teach well immediately as they join any educational institute.

Learning Outcomes

On successful completion of this course the participants will be able to:

- Describe teaching-learning processes especially in context of higher education
- Develop an instructional plan as per the teaching strategy needed.
- Design learning events using different teaching methods
- Use activities and exercises as per the required teaching approach
- Develop web based and research-based pedagogical tool
- Explore the ways to handle diverse group of learners in the classroom
- Use technology effectively to facilitate and support e-learning
- Prepare assessment rubric for achievement testing of students and portfolio
- Demonstrate enhanced competency in communication with students
- Use visual aids and technology in offline and online classes.
- Make effective presentations in seminars and conferences.
- Deliver lectures and facilitate discussions and other activities in the classroom situation.

Target Audiences

The course is designed as a compulsory course for the research scholars of all disciplines. However it may be useful for students of the masters programmes who may be taking this course as an elective to enhance their employability.

Prerequisite

The prerequisite for the course is a bachelor's degree in any discipline.

Course Content

- 1. Overview of Teaching and Learning (6 hours)**
 - a. Concept of Pedagogy, Andragogy and Heutagogy
 - b. Understanding Teaching and related terms, the relationship with learning
 - c. Understanding learner and learning cycle
 - d. Taxonomy of teaching objectives (Revised Bloom 's taxonomy),
 - e. Writing learning outcomes

- 2. Curriculum and Instruction (8 hours)**
 - a. Curriculum: Concept and Facets,
 - b. Credit Framework and Choice-based Credit System
 - c. Instruction: Concept, Design and instructional media
 - d. Developing Instructional Plans

- 3. Teaching Strategies and Approaches (9 hours)**
 - a. Expository vs Inquiry Strategy (shifting from behaviourism to constructivism)
 - b. Individualized to small group/ large group Approaches,
 - c. Scenario-Based, Online and Blended Approach, Introduction of MOOCs
 - d. Designing Learning Events and Activities for Student Engagement
 - e. Component of effective lectures delivery

- 4. Pedagogical skills and tools (8 hours)**
 - a. Concept of TPACK
 - b. Pedagogical Skills - Scanning the class, starting a session, skill of achieving closure skills, skills to lead session, Skill to secure attention (switch over), scaffolding skills, time management, skill to handle challenging situations.
 - c. Technological Skills- Using different apps and platforms for teaching, Use of Open Educational resources (OER), developing assignments and learning material using different apps and software
 - d. Communication skills - Presenting in Public, Participating in Discussions and Formal Meetings

- 5. Assessment and Evaluation (8 hours)**
 - a. Concept of Assessment, Assessment for learning, of learning, as learning,
 - b. Receiving and Giving Feedback
 - c. Assessment rubrics, Assessment Portfolio, Reflective journal

- d. Designing an Achievement test - Objective and Descriptive / Open book question paper
- e. Grading System (Absolute, Relative, CGPA, Conversion of grades to percentage etc)
- f. Conducting Examination, - Face to Face, Online Exams (Proctored and non-Proctored Exams)
- g. Project Reviews and Viva-Voce Examinations

6. Classroom Management (6 hours)

- a. Organizing the Physical environment
- b. Managing learner's behaviour through action research
- c. Counselling, Guidance and Mentoring
- d. Effective Academic leadership
- e. Resource Management

Mode of Transaction

The content will transact through interactive lectures, activities, web lectures, assignments, discussions and seminars and practice sessions (video recorded to provide feedback).

Assessment: CIA and EoSE as per provisions of the university ordinances

NEW COURSE on Pedagogy for Higher Education DESIGNED by Dr Anjali Sharma and reviewed by following five experts from Education Domain:

Prof Saroj Sharma
Professor, School of Education,
Chairperson National Institute of Open School, new Delhi
Guru Govind Singh Indraprasth University, New Delhi

Prof. Gopal Krishna Thakur
Professor & Head
Department of Education
Department of Psychology
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya
(A Central University), Wardha – 442001, Maharashtra

Prof Amruth G Kumar
School of Education
Central University of Kerala

Prof. B. N. Panda
Professor of Education and Dean of Research
Dept. of Education
Regional Institute of Education (NCERT)
(A Govt. of India Autonomous Organization)
Bhubaneswar-751022, Odisha, India

Course Title: Practice-Based Teaching (*original draft prepared by Dr Anjali Sharma*)

Course code: (to be confirmed as per the department)

Credits:03 (About 60 hours of practical teaching sessions and additional preparatory work to support the teaching)

Aim and Outline of the course:

The course is designed for the research scholars in the continuation of the foundation course of Pedagogy for higher education. As per the expectation of National Education Policy 2020, researchers need to be professionally equipped along with conceptual knowledge and understanding of Pedagogy. Developing teaching skills during the PhD will be a good value addition to a scholar's profile and will help them develop essential pedagogical /teaching skills required for their professional life.

This course is a practice-based course where a scholar is expected to be formally involved in various aspects of delivering a course and will include formal teaching sessions under the guidance of a supervisor.

Learning Outcomes: On completion of the course the participants will be able to:

- Prepare the Instructional plans for the given course
- Write Learning Outcomes for the planned learning event
- Design Learning Events as per the LO
- Deliver Lectures
- Formally speak in Public and make formal presentations
- Support the course instructors / teachers in various aspects of teaching, learning and assessment
- Give effective feedback and provide support to students

Pre-requisites: Successful completion of the course 'Pedagogy for Higher Education'

Contents:

The course contents will depend on the teaching requirement of subject specific discipline. The participant expected to be involved in the whole cycle of delivery of a course for which the following is suggested.

1. Developing Instructional Plans,
2. Writing Learning Outcomes for each session
3. Designing learning activities as per the Instructional Plan and LO
4. Design Cooperative and Collaborative Activities for the students.
5. Delivering Lectures and organizing Seminars,
6. Preparing Handouts / Learning Course Readers
7. Moderating Panel Discussions, Facilitating Group Discussions
8. Facilitating Practicals / Field Visits / Project work / Studio (as per the need)
9. Assessment - developing rubrics, preparing question papers of different types, and assessing answer scripts with written feedback, preparing results etc (for one formative and one summative Assessment)

DETAILED SYLLABUS OF PRE-PH.D.
COURSE WORK

Course Name: FUNDAMENTAL OF ECONOMICS (ECO701)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must possess knowledge of elementary Microeconomics and Macroeconomics	
Course Objective:		
	The objective of this course is to make the students aware of the fundamentals of economics and also the contemporary issues. This course will help the student in deciding their area of research interest. This course is of 4 credits. This course provides an introduction to a broad range of economic concepts, theories and analytical techniques on various economic contemporary issues including price mechanism, market mechanism and the social and global economic issues. Thus, the course will help and motivate the research scholars in deciding their area of research.	
Course Outcomes: The students will be able to		
1	Describe and explain how economic models can be used to consider fundamental economic issues including pricing system and the system of market mechanism	
2	Examine how the economy behaves at the aggregate level and how national income is measured and determined.	
3	Describe and explain how the monetary and fiscal policy measures influences microeconomic choices and macroeconomic outcomes.	
4	Understand the issues regarding poverty, unemployment and the income inequalities including measurement, costs and causes.	
5	<i>Acquire</i> skills in conducting research related to contemporary economic development issues including economic growth, productivity, and standards of living	
6	Interpret and use economic models, diagrams and tables and use them to analyze economic situations.	
Course Content:		
UNIT I	The Price System -Allocation mechanisms - Signals, speculation and prediction - Price ceilings and price floors, Price gouging - General Equilibrium Theory, Two Fundamental Theorems of Welfare Economics, Theory of Second Best	10 hrs
UNIT II	Market Mechanism Competition and entry, creating barriers to entry, the benefits of competition (consumer's surplus, creating destruction) Alternatives to the market (disagreement, cartels, collusion, monopolization eBay and Online markets	10 hrs

	<p>Asymmetric information, Market failure</p> <p>Market problems and Government (externalities, common ownership, public goods)</p>	
UNIT III	<p>Macroeconomic Issues</p> <p>GDP and the measurement of progress, nominal and real measures, flow of income and expenditure</p> <p>Business cycles, historical records and indicators, inflationary records, Transmission and amplification measures, Monetary policy and fiscal policy</p> <p>The Economy in the Long Run- economic growth, productivity and living standards, savings and capital formation, catching up vs cutting edge, money, prices and federal finance, financial markets and international capital flows</p>	10 hrs
UNIT IV	<p>Open Economy</p> <p>The foreign exchange market, balance of payment, current and capital account, exchange rate and open economy</p> <p>International Trade Theory – Classical, Heckshcher Ohlin, New Trade Theory</p>	10 hrs
UNIT V	<p>Social Issues</p> <p>Discrimination, the market, statistical discrimination, minimum wage, gender discrimination, exclusion</p> <p>Income inequality and poverty, causes of income inequality and poverty (inflation) income distribution over time, the official poverty rate</p> <p>Unemployment, measurement, types and cost of unemployment, interpreting the unemployment rate, social security</p> <p>Governance and Corruption</p> <p>Global warming – the market for natural resources, environmental problems, mitigation of global warming</p>	10 hrs
UNIT VI	<p>Game Theory</p> <p>Strategic form games and Nash equilibrium</p> <p>Rationalizability and inter related elimination of dominated actions</p> <p>Bayesian games and correlated equilibrium</p> <p>Extensive form games with perfect information</p> <p>Bargaining</p> <p>Repeated games</p> <p>Extensive form games and imperfect and incomplete information</p>	10 hrs
Text Books:		
1. Hall, R.E. and J.B. Taylor (1986), <i>Macro economics</i> , W.W. Norton, New Delhi		
2. Samuelson, P.A. and W.O. Nordhaus (1998), <i>Economics</i> , 16 th Edition, Tata McGraw Hill, New Delhi		
3. Verian H. (2000), <i>Micro Economic Analysis</i> , W.W. Norton, New York		
4. Dornbush, R and F. Stanley (1997), <i>Macroeconomics</i> , McGraw Hill, Inc. New York		
5. Barro, R J & X Sala-i-Martin, <i>Economic Growth</i> , McGraw-Hill, 1997.		

6. Romer, D., Advanced Macroeconomics, McGraw-Hill Advanced Series in Economics, New York, 1996.									
Reference Books:									
1. Thomas and Callan, Environmental Economics, Cengage Learning, 2009.									
2. Tietenberg, T. (1996), Environmental and Natural Resource Economics, Harper Collins, College Publishers, New York, Fourth Edition									
3. Bhattacharya, R. N. (Edited) (2001), Environmental Economics: An Indian Perspective, Oxford University Press, New Delhi.									
7. Mankiw, N Gregory (2009), Principles of Economics, 6 th edition, South Western Cengage Learning, USA									
8. Menger, Carl (1976), Principles of Economics, New York University Edition Marshall, Alfred (1890), Principles of Economics: An Introductory Volume									
9. Boyles, William J. And Michael Melvin, Fundamentals of Economics, Houghton Mifflin Company, USA									
10. Barrows, David and John Smithin, Fundamentals of Economics for Business (2 nd edition).									
11. Solow, R.M. (2000), Growth Theory: An Exposition, Oxford University Press, Oxford									
12. Sankar, U. (Ed.) (2001), Environmental Economics, Oxford University Press, Oxford									
13. Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics (2 nd ed.) MIT Press, Cambridge									
14. Pissarides, C A, Equilibrium Unemployment Theory, MIT Press 2000.									
15. Mas-Collel, Whinston & Green, Microeconomic Theory, OUP and D Fudenberg & J Tirole, Game Theory, MIT Press.									
16. Kreps, D M, A Course in Microeconomic Theory, Harvester Wheatsheaf; H R Varian, Microeconomic Analysis (3rd edn), Norton									
17. Osbourne, M J & A Rubinstein, A Course in Game Theory, MIT Press									
18. Jehle, G A & P J Reny, Advanced Microeconomic Theory, Longman.									
19. Acemoglu, D., Introduction to Modern Economic Growth, Princeton University Press, 2009									
20. Ljungqvist, L & T Sargent, Recursive Macroeconomic Theory, MIT Press, 2000									
21. Stokey, N & R E Lucas, Recursive Methods in Economic Dynamics, Harvard University Press, 1989.									
22. Obstfeld, M & K Rogoff, Foundations of International Macroeconomics, MIT Press, 2000									
23. Aghion, P & P Howitt, Endogenous Growth Theory, MIT Press 1998									
PO-CO Compliance Matrix									
	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	3		2						
CO2		3		3	2	2			
CO3	3		2						
CO 4	3		3						
CO 5		3	3	3	3	3			
CO 6		3	3	3	3	3			
*1: Low, 2: Medium, 3: High									

Course Name: RESEARCH METHODOLOGY (ECO702)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 4 hrs per week	End Semester Examination: 100 marks	Theory: 4
		Total: 4
Course Pre-requisites:		
1	Must Complete the knowledge of elementary Econometrics, Statistics and Mathematics.	
Course Objective:		
	The aim of this course is to give the thorough knowledge about the research methods and techniques which could be applied for conducting the research. The course would also enable the students to handle the time series and cross section data sets and the use of softwares and statistical packages to analyse the data.	
Course Outcomes: The students will be able to		
1	They can thoroughly understand what research in economics is and how to conduct research.	
2	They can be aware of various research tools, techniques, methodologies that are applicable in their PhD research.	
3	They can improve their skills to use various statistical and econometrics tools and techniques to be used in research.	
4	They can also learn some statistical software to be used to analyze the data.	
5	They can significantly improve to write research report.	
Course Content:		
UNIT I	BASIC RESEARCH Foundations- language, research philosophy, conceptualization and evaluation of research; Sampling-probability and non-probability sampling; Measurement- construct validity and reliability; Survey research- types of surveys and interviews; Scaling- Thurston, Likert and Guttman scaling; Quantitative and Qualitative Measures- data, approaches and validity, Design- Experimental and quasi-experimental, Analysis- data preparation, descriptive statistics, hypothesis testing, multivariate analysis (inferential statistics), Writing a Research Proposal, Report Writing, References and Bibliography.	10 hrs
UNIT II	STATISTICS I Measures of Inequality: Gini, Entropy and Theil's measures, Lorenz Curve. Curves: Concept and Types. Different Methods of Curve Fitting with applications; Regression and Correlation Analysis; Variance Analysis of One, Two and Three Factor Classification. Covariance Analysis;	10 hrs
UNIT III	STATISTICS II Methods of Data Reduction-Principal Components and Factor Analysis. Applications of SPSS, STATA, E-Views etc.	10 hrs
UNIT IV	ECONOMETRICS I Linear Regression Model-Violation of Assumptions; Multicollinearity, Auto-	10 hrs

	Correlation, Heteroscedasticity; Multiple regression analyses Model Specification; Dummy Variables, Panel Data Models.	
UNIT V	ECONOMETRICS II Data Base and Problems of estimation-Cross Section and Time Series Data Base, Two Stage and Indirect Least Squares methods of estimation. Simultaneous equation models, identification problem, Granger Causality test, Error Correction Model. Applications of SPSS, STATA, E-Views etc.,	10 hrs
UNIT VI	REVIEW STUDIES Study of the methodologies used by the Classical, Neo-Classical, Keynesians, New Classical Economists	10 hrs
Text Books:		
1. Kothari, CR (1995) Research Methodology: Methods and Techniques, Wishwa Prakashan (Wiley Eastern Ltd), New Delhi.		
2. Damodar N. Gujarati, Basic Econometrics; 4th Edition, McGraw Hill, 2008.		
3. Baltagi, B.H (2001) Econometric Analysis of Panel Data, John Wiley, London.		
4. Anderson, TW (1984) An Introduction to Multivariate Statistical Analysis, John Wiley, Wiley, New York.		
Reference Books:		
5. Enders, Walter (2004) Applied Econometric Time Series, John Wiley, London.		
6. Georgescu-Roegen, N (1971) The Entropy Law and the Economic Process, Harvard University Press.		
7. Good and Hattt, (1979) Methods in Social Research, Tata-McGraw Hill, New Delhi.		
8. Green, WH (2003) Econometric Analysis, Pearson Education Inc, Delhi.		
9. Hamilton, J.D (1994) Time Series Analysis, Princeton University Press, Princeton		
10. Hayek, Friedrich (1948) Individualism and Economic Order, University of Chicago Press, Chicago.		
11. Humphreys, P (2004) Extending Ourselves: Computational Science, Empiricism and Scientific Method, OUP, Oxford.		
12. Judd, L and Tesfastion, L (2006) Handbook of Computational Economics: Agent-Based Computational Economics, Elsevier/North-Holland, Amsterdam.		
13. Kagel, JH and Roth, AE (1995) The Handbook of Experimental Economics, Princeton University Press, Princeton.		
14. Kendall, MG and Stuart, A (1968) The Advanced Theory of Statistics, Charles Griffin & Co., London.		
15. Mitchell, WC (1967) Types of Economic Theory, John Hopkins Univ. Press, Baltimore		
16. Mosteller, F. and Turkey, J (1977) Data Analysis and Regression: A Second Course in Statistics, Addison-Wesley, London. Ph.D/M.Phil Coursework		
17. Moore, D.S. and McCabe, G.P (1989) Introduction to the Practice of Statistics, W.H. Freeman and Co., New York.		
18. Mukherjee, C., White, H. and Wuyts, M (1997) Econometrics and Data Analysis for Developing Countries, Brooks/Cole, Californi		
19. Krishnamurthy, EV and Sen, SK (1976) Computer-based Numerical Algorithms, Affiliated East-West Press, New Delhi.		

PO-CO Compliance Matrix									
	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	3		3						
CO2		3		2	2	3			
CO3				3		2			
CO 4				3					
CO 5				3					
CO 6		3		3		3			
*1: Low, 2: Medium, 3: High									

ELECTIVE COURSES

The students are required to select any one of the paper as per their interest area. In order to study this paper, the students are required to interact with their research supervisor. They have to finalize their topic of research from the paper they will choose. The students also have to review at least five research studies and give the presentation on the selected course. This paper will contain 3 credits. Examination Scheme: ESE Exam of 100 Marks for choosing any elective course.

Course Name: Agriculture and Rural Economics (ECO705)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Macroeconomics	
Course Objective:		
	The place of agriculture and rural economics in the overall economic literature is unique in the context of the Indian economy. The development programmes in India are centered around the rural area. The paper is intended to highlight the working and significance of the rural economy along with the institutional involvement in implementing the government programmes. Agriculture, allied sectors, the non-farm sector and Co-operative movement is the thrust area of the paper.	
Course Outcomes: The students will be able to		
1	Comprehend the importance of agriculture in the development process and its mechanism	

2	Analyse the status of Indian agricultural sector and regional variation in growth and productivity performance of the sector	
3	Analyse the factors affecting the performance of the sector such as cropping pattern, the supply of inputs and public investment	
4	Appreciate the issues on food security, public distribution system; the impact of issues on the globalization of Indian economy and WTO on Indian agriculture.	
5	Analyse the role of agriculture on the rural development	
6	Analyse issues in rural economies like the agricultural wage, non-agricultural employment and rural-urban migration and the model to analyse rural-urban migration.	
7	Analyse the development contribution of microfinance and issues related to it	
8	Analyse the need for and issues in agricultural diversification, rural industrialization	
9	Analyse issues and problem in rural social infrastructure and facilities like housing, sanitation, electrification, drinking water supply, rural transport and communication	
Course Content:		
UNIT I	<p>Agriculture and Economic Development</p> <p>Nature and scope of agricultural and rural economics; Traditional agriculture and its modernization; Role of agriculture in economic development; Interdependence between agriculture and industry — some empirical evidence; Agricultural development, poverty and environment. Land Reforms and Land Policy</p>	10 hrs
UNIT II	<p>Agricultural Growth in India I</p> <p>Recent trends in agricultural growth in India; Inter-regional variations in growth of output and productivity; Cropping pattern shifts; Supply of inputs — Irrigation, power, seed and fertilizers; Pricing of inputs and role of subsidies; Role of Public investment and capital formation in Indian agriculture; Agricultural and non agricultural pricing policies in India.</p>	10 hrs
UNIT III	<p>Agricultural Growth in India II</p> <p>Food security issue and Public distribution system, Recent initiative for second green revaluation, Globalization of Indian economy and problems and prospects of Indian agriculture; Impact of World Trade Organization on Indian agriculture.</p>	10 hrs
UNIT IV	<p>Agricultural Transformation and Rural Economy I</p> <p>Role of agriculture in rural economic development, rural credit markets, Micro Finance in India: Microfinance and rural development, SHGs-Bank Linkage Programmes and emerging scenario of Microfinance regulation in India,</p>	10 hrs

UNIT V	<p style="text-align: center;">Agricultural Transformation and Rural Economy II</p> <p style="text-align: center;">Causes and effects of rural urbanization Migration, Harris-Todaro model of rural-urban migration, Agricultural wages in India; Non-agricultural rural employment- Trends and determinants;.</p>	10 hrs
UNIT VI	<p style="text-align: center;">Diversification of Rural Economy</p> <p style="text-align: center;">Diversification of Agriculture-Dairy Farming, Horticulture, Floriculture, Fishery, and Farm Forestry; Rural Industrialization- Importance, Programmes, Progress and Problems of Small- Scale and Cottage Industries and Remedial Measures. Rural social infrastructure: issues and problems in Educational and Health infrastructure; Housing and Sanitation; Drinking Water Supply; Rural Transport and Communication; Rural Electrification.</p>	10 hrs
Text Books:		
1. Biradar, R.R.(2008): Rural Non-Agricultural Employment in India: An Analysis of Its Determinants and Impact on Poverty and Inequality, Concept Publishing Company, New Delhi		
2. Chadha, G. K. and A. N. Sharma (Eds) (1997): Growth, Employment and Poverty: Change and Continuity in Rural India, D K Publishers, New Delhi.		
3. Dandekar, V.M. and N. Rath (1971): Poverty in India, GIPE, Pune.		
4. Dantwala, M. L. and Others (Ed) (1986): Indian Agricultural Development since Independence: A Collection of Essays, Oxford and IBH Publishing Co.Pvt. LTd. New Delhi.		
Reference Books:		
5. Dantwala, M. L. (1973): Poverty in India: Then and Now, 1870-1970, Macmillan, Bombay.		
6. Tyagi, B. P. (1998): Agricultural Economics and Rural Development, Jai Prakash Math and Co., Meerut.		
7. Visaria, P. and R. Basant Ed) (1994): Non-Agricultural Employment in India: Trends and Prospects, Sage Publications, New Delhi		
8. Gupta. K .R. (Ed) (2003): Rural Development in India, Atlantic Publishers and Distributors, New Delhi.		
9. Jain, GopalLal (1997): Rural Development, Mangal Deep Publications, Jaipur,.		
10. Singh, Katar (1986): Rural Development: Principles, Policies and Management, Sage Publications, New Delhi, (Second Edition).		
11. Karalay, G. N. (2005): Integrated Approach to Rural Development: Policies, Programmes and Strategies, Concept Publishing Company, New Delhi		
12. Maheshwari, S. R. (1985): Rural Development in India, Sage, Publications New Delhi.		
13. SatyaSundaram, I. (1997): Rural Development, Himalaya Publishing House, Delhi		
14. Mehta, Shiv R. (1984): Rural Development Policies and Programmes, Sage Publications, New Delhi.		
15. Srinivasan, T. N. and P. K. Bardhan (Eds) (1974): Poverty and Income Distribution in India, Statistical Publishing Society, Calcutta.		
16. Chambers, R. (1983): Rural Development: Putting the Last First, Longman, Harlow.		
17. Moore, D.S. and McCabe, G.P (1989) Introduction to the Practice of Statistics, W.H. Freeman and Co.,		

New York.									
18. Mukherjee, C., White, H. and Wuyts, M (1997) Econometrics and Data Analysis for Developing Countries, Brooks/Cole, Californi									
19. Krishnamurthy, EV and Sen, SK (1976) Computer-based Numerical Algorithms, Affiliated East-West Press, New Delhi.									
PO-CO Compliance Matrix									
	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	2		2						
CO2		3		2					
CO3		3		3		2			
CO 4	2		2						
CO 5		3		2					
CO 6		3		2					
CO 7	2	3	1	2	2	2			
CO 8	2	3	2	2	2	2			
CO 9	2	3	2	2	2	2			
*1: Low, 2: Medium, 3: High									

Course Name: Economics of Infrastructure and Development (ECO706)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Macroeconomics and Development Economics	
Course Objective:		
	<p>The important role infrastructure plays in a country's development need not be reiterated. In case of developing countries, lack of adequate infrastructure has been held as a major obstacle to growth. Of the various categories of infrastructure, the category of social overhead capital has gained particular prominence. The contents of the paper 'Economics of Infrastructure' exposes the student wholly to issues involved in development of infrastructure in developing countries like India.</p>	
Course Outcomes: The students will be able to		
1	An ability to analyze and propose solutions to infrastructure problems	
2	An ability to describe and analyze the physical infrastructure for an effective policy decisions	
3	An ability to analyze and utilize the available resources of natural gas, nuclear and solar energy in Indian context	
4	The ability to evaluate the condition of existing infrastructure and recommend Improvements	
5	An ability to analyze the Education, Health, Housing and Banking & Insurance infrastructure and its impact on human and economic development	
Course Content:		

UNIT I	<p>Infrastructure and Economic Development – Concepts</p> <p>Definition, Meaning, Classification of infrastructure (Social and Economic Infrastructure); Infrastructure and economic development — Infrastructure as a public good; Special characteristics of public utilities. The peak-load, Off-Load Problem, Dual Principle Controversy; Economies of scale of Joint supply; Marginal Cost Pricing vs. other methods of pricing in public utilities; Cross-subsidization — free prices, equity and efficiency. Urban and Rural Infrastructure schemes in India – PURA; Spatial aspects of development and linkages with infrastructure.</p>	10 hrs
UNIT II	<p>Physical Infrastructure – I (Energy, Electricity, Gas and water Supply)</p> <p>Primacy of Energy in the Process of Economic Development. Factors Determining Demand for Energy; Effects of Energy Shortages. Energy Conservation Renewable and Non-conventional Sources of Energy. Energy Modelling. The Search for an Optimal Energy Policy in the Indian Context. Electricity, Gas and Water Supply: Bulk Supply and Pricing of Electricity. The Relative Economics of Thermal, Hydel and Nuclear Power Plants. The Case for a National Power Grid. Financing Water Utilities. Urban and Rural Water Supply. The Exploitation of Natural Gas. Pricing Problem.</p>	10 hrs
UNIT III	<p>Physical Infrastructure – II (Transport)</p> <p>Significance of Transport Infrastructure; Factors affecting Transport Network – Growth and Present status of Transport System in India; Impact of Transport Development on location of economic activities; Transport Sector Reforms in India</p>	10 hrs
UNIT IV	<p>IV. Physical Infrastructure – III (Communication)</p> <p>Postal and Telegraph. Telecommunication and Information Technology; Major issues in IT – Growth and present status of IT industry in India; Implications for Regional Development</p>	10 hrs
UNIT V	<p>Social and Tourism Infrastructure</p> <p>Growth and present status of Social Infrastructure – Education, Health, Housing and Banking & Insurance; Impact of Social Infrastructure on Human and Economic Development, and development of social services in Indian plans-tourism and economic development - role of state in promoting tourism - tourism planning - infrastructural requirements for marketing tourism</p>	10 hrs
UNIT VI	<p>Infrastructure Demand & Financing</p> <p>Demand Simulation for Infrastructure; Financing Needs; Infrastructure Financing in Plan Period; Infrastructure Financing in Recent Times; Privatisation</p>	10 hrs

of Infrastructure and PPP Models; Implications for Infrastructural Development

Text Books:

1. Baru, R.V. (1998), Private Health Care in India : Social Characteristics and Trends, Sage Publications, New Delhi.
2. McMohan, W.W. (1999), Education and Development : Measuring the Social Benefits, Oxford University Press, Oxford
3. Parikh, K.S. (Ed.) (1997), India Development Report 1997, Oxford, New Delhi
4. Parikh, K.S. (Ed.) (1999), India Development Report — 1999-2000, Oxford, New Delhi
5. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report : Policy Implications for Growth and Welfare, NCAER, New Delhi.

Reference Books:

6. Becker, G.S. (1974), Human Capital (2nd Edition), National Bureau of Economic Research, New York.
7. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
8. Centre for Monitoring Indian Economy (1996), India : Energy Sector, CMIE, Mumbai.
9. Crew, M.A. and P.R. Kleindorfer (1979), Public Utility Economics, Macmillan, London.
10. Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure Vol. VI, New Delhi.
11. Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	2	3	2	2					
CO2	2	3	2						
CO3	2	3	3						
CO 4									
CO 5		3		3	3	3			
CO 6		3	2	3	3	2			

*1: Low, 2: Medium, 3: High

Course Name: Environmental and Resource Economics (ECO707)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of elementary Environmental Economics	
Course Objective:		
	<p>Due to the speedy growth of industries and population there is an increasing demand for the environmental resources. The free goods in the nature have now become the priced goods in the economy. The various types of pollutions have created the problems to the human beings as well as the biosphere. The quality of environmental resources is being fastly deteriorated.</p> <p>This course targets to familiarize the various economic regulatory tools in handling environmental problems and disseminate the techniques of valuing the worth of non-market commodities especially environmental goods and service. It also deals with the theoretical framework of the optimal use of renewable and non-renewable natural resources. In nutshell this course would enable the students to know about the relationship between environment and economy, global Issues relating to environmental problems, policies and protection.</p>	
Course Outcomes: The students will be able to		
1	Appreciate how markets allocate goods and why they sometimes fail allocate environmental goods optimally.	
2	To plan regulatory framework for correcting market failures.	
3	Knowledge of a range of approaches for non-market valuation of environmental goods and services, and of their strengths, weaknesses and methods of application	
4	Understand the concept of steady state harvests and the biological growth function of renewable resources.	
5	Learn the process of arriving at bio-economic equilibrium outcome in an open access fishery and static private property fishery.	
6	Construct the model for efficient and optimal use of non-renewable resources.	
7	Understand various trans-national environmental issues and identify how trade is affecting environment globally	
Course Content:		
UNIT I	Introduction to Environmental Economics Basic concepts of Environmental Economics, Economy-Environment interaction, Market failure, Property rights, Open access resources, Collective action, Environment and development trade-off, Environmental Kuznet's curve	10 hrs
UNIT II	Economics of Exhaustible and Renewable Resources Basic concepts - Hotelling's rule, Solow-Harwick's rule, Market structure and	10 hrs

	optimal extraction policy, Uncertainty and the rate of resource extraction, Resource scarcity; Economic models of forestry and fisheries, Economics of biodiversity.	
UNIT III	Environmental Valuation Market and non-market valuation; Physical linkage methods; Revealed and stated preference methods, Hicksian equivalence, Exposure to the type of models.	10 hrs
UNIT IV	Environmental Policy Command and control versus market mechanisms; Uncertainty and instrument choice, Regulatory compliance and enforcement, Eco-taxes and other fiscal measures.	10 hrs
UNIT V	Global Environmental Issues I Trans-boundary pollution, economics of global warming, Climate change negotiations, Kyoto protocol,	10 hrs
UNIT VI	Global Environmental Issues II Impact of trade on environment and environment on trade, Porter's hypothesis, Pollution havens hypothesis	10 hrs

Text Books:

1. Kolstad, C., Environmental Economics, Oxford University Press, 2000.

Reference Books:

2. Baumol, W.J, and W.E. Oates, The Theory of Environmental Policy, Cambridge University Press, 1988.
3. Freeman, A. M., The Measurement of Environmental and Resource Values, 2nd Edition, Resources for the Future, 2003.
4. Hanley, N., J.F. Shogren, and B. White, Environmental Economics: In Theory and Practice, Macmillan India Ltd., 1997.

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	2		3						
CO2	2				3				
CO3	2	3	3	3					
CO 4					3	3			
CO 5	2		3	3	3	3			
CO 6	2		2						
CO 7				3	3	3			

*1: Low, 2: Medium, 3: High

Course Name: Financial Economics (ECO708)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of elementary Financial Economics	
Course Objective:		
	<p>The positive and significant role of finance in the process of growth and development has been very well recognized in the literature and indeed has become more important during the last two decades as the financial systems of different countries have become integrated in the process of globalization. India is no exception and has taken far reaching measures since 1991 in this direction.</p> <p>This course focuses on the financial system and its relationship with the financial markets both at the national and international levels. While discussing the financial markets it also brings out the brief idea about equity shares, bond and derivatives. The course aims to provide an understanding of various theories of finance.</p>	
Course Outcomes: The students will be able to		
1	Thoroughly understand how financial system work and how the financial markets behave.	
2	Improve the skills to value stocks and bonds.	
3	Understand the various factors responsible for financial market volatility and stability.	
4	Understand the financial decision making under uncertainty.	
Course Content:		
UNIT I	Introduction Nature and Scope of Financial Economics; Basic financial concepts, Economics of capital Budgeting; Investment Criteria, Estimation of project Cash Flows, Risk Analysis	10 hrs
UNIT II	Financial System I Financial System-Meaning, constituents, functions and importance of financial system; Indian Banking System: Banking structure in India, Structure and functions of commercial banks; Functions of Central bank, Monetary policy and Central bank; Money market: Introduction, Treasury bills, Commercial paper, Certificates of deposit; Call money market, Money market mutual funds;	10 hrs
UNIT III	Financial System II Capital market: Primary market-shares and debentures-Types and their issuance; Secondary market- Stock exchange - Stock market indices, Methods of trading; Reforms in the Indian stock market; Role of SEBI, Debt market: Introduction; Private corporate debt market, Government securities market; Capital asset pricing model; Arbitrage pricing theory; Stock	10 hrs

	market efficiency.	
UNIT IV	Security Analysis- I Price-value interaction model- Buy-sell decision rules, information traders and liquidity traders, Samuelson's continuous equilibrium, Passive and Aggressive trading.	10 hrs
UNIT V	Security Analysis- II Risk and Return: Expected return and variances-portfolios systematic and unsystematic risk-diversification and portfolio risk Mean- Variance Criterion -systematic risk and beta-efficient frontier characteristic lines- optimum portfolio -capital asset pricing model, arbitrage pricing theory, Valuation: Bond valuation-equity valuation.	10 hrs
UNIT VI	Analysis of Financial markets Fundamental analysis, Technical analysis.	10 hrs

Text Books:

1. Bhole, L M, *Financial Institutions and Markets: Structure, Growth and Innovations*, Fourth Edition, Tata McGraw-Hill Publishing Co., New Delhi, 2004
2. Brealey, R. and S. Myers, *Principles of Corporate Finance*, Fifth edition, New York, McGraw Hill, 1997.

Reference Books:

3. Copeland, T. E. and J. F. Weston, *Financial Theory and Corporate Policy*, Addison Wesley, 1992.
4. Elton, E.J and M.J. Gruber, *Modern Portfolio Theory & Investment Analysis*, Fourth edition, John Wiley & Sons 1991
5. Houthakker, H.S. and P.J. Williamson, *Economics of Financial Markets*, Oxford University Press, 1996.
6. Khan, M Y, *Indian Financial System*, Seventh edition, Tata McGraw-Hill Publishing Co., New Delhi, 2009.

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO1	2		3						
CO2	2		2		3				
CO3	2	2	2	2					
CO 4	2		3						

*1: Low, 2: Medium, 3: High

Course Name: Gender Economics (ECO709)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Development Economics	
Course Objective:		
	Gender biases in societal practices and development policies have resulted in persistent gender inequalities. It is increasingly being realized that mitigating such inequalities and enhancing women's capabilities and entitlements are crucial to the overall development of the country. This course "Economics of Gender and Development" would provide students an understanding of the nature of the economic role of women and their contribution to the national economy on the basis of a scientific and non-sexist analysis. The modules incorporated in this course provide an analysis of issues at the theoretical level and also with regard to specificity of issues prevailing in the Indian context.	
Course Outcomes: The students will be able to		
1	Demonstrate a general understanding of the concept of women studies	
2	Appreciate gender bias in the economic theory and economic history	
3	Appreciate the demography of the female population in developing countries and India.	
4	Appreciate the level of access to nutrition, health, education and other resources along with their economic status and work participation rate	
5	Appreciate the determinants of power of decision making of women	
6	Appreciate and analyse the factors affecting female entry in the labour market	
7	Analyse the female work participation in the different sector the economy	
8	Appreciate labour market biases and gender discrimination wage differentials in female activities and determinants of wage differentials	
9	Analyse the different issues in social security and social protection for women	
10	Understand and analyse the concept of gender planning, development policies and governance for mainstreaming the issues on gender in order to address them	
Course Content:		
UNIT I	Introduction and Review Families and households, Importance and concepts of women studies — Women in patriarchal and matriarchal societies and structures, patrilineal and matrilineal systems and relevance to present day society in India, Gender bias in the theories of value, distribution, and population, Women in the economic history , Race, class, and the economics of gender , The economics of gay identity D'Emilio	10 hrs

UNIT II	<p>Demography</p> <p>Demography of female population: Age structure, mortality rates, and sex ratio — Causes of declining sex ratios and fertility rates in LDCs and particularly India — Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and in work participation rate.</p>	10 hrs
UNIT III	<p>Women in Decision Making (5)</p> <p>Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.</p>	10 hrs
UNIT IV	<p>Gender and the Economics of the Labor Market</p> <p>Labour force participation patterns, Labour force participation and family structure Factors affecting female entry in labour market; Supply and demand for female labour in developed and developing countries, particularly India; Studies of female work participation in agriculture, non-agricultural rural activities, informal sector, cottage and small-scale industries, organized industry, and services sector; Discrimination : Labour market biases and gender discrimination Compensating Differentials : Wage differentials in female activities; Determinants of wage differentials; gender, education, skill, productivity, efficiency, opportunity; Structures of wages across regions and economic sectors. Feminization of the economic sector, Human Capital,</p>	10 hrs
UNIT V	<p>Social Security and Social Protection for Women</p> <p>Social security of women: entitlements, ensuring economic independence and risk coverage, access to credit and insurance markets; Role of voluntary organizations, self-help groups in providing social security; effectiveness of collective bargaining; Review of legislation for women's entitlements, protection of property rights, social security — Schemes for safety net for women; Need for female labour unions; affirmative action for women and improvement in their economic and social status.</p>	10 hrs
UNIT VI	<p>Gender Planning, Development Policies and Governance</p> <p>Gender and development indices; Mainstreaming gender into development policies; Gender planning techniques; Gender sensitive governance; Paradigm shifts from women's wellbeing to women's empowerment; Democratic decentralization (panchayats) and women's empowerment in India, Gender Budgeting</p>	10 hrs

Text Books:
1. Blau, Francine, Marianne Ferber and Anne Winkler 1998. <i>The Economics of Men, Women and Work</i> (Englewood Cliffs, NJ: Prentice Hall, Third Edition). (BFW)
2. Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), <i>Gender, Population and Development</i> , Oxford University Press, New Delhi.
3. Boserup E. (1970), <i>Women's Role in Economic Development</i> , George Allen and Unwin, London.
Reference Books:
4. Desai, N. and M.K. Raj. (Eds.) (1979), <i>Women and Society in India</i> , Research Centre for Women Studies, SNDT University, Bombay.
5. Government of India (1974), <i>Towards Equality — Report of the Committee on the Status of Women in India</i> , Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
6. Hoffman, Saul D. and Susan L. Averett 2004. <i>Women and the Economy: Family, Work and Pay</i> (Addison-Wesley-Longman). (HA)
7. Jacobsen, Joyce P.. 1998. <i>The Economics of Gender</i> , 2 nd edition, New York: Blackwell.
8. Jacobsen, Joyce. 1998. <i>The Economics of Gender</i> (Cambridge: Blackwell, 2nd Edition). (On reserve at Odegaard).
9. Stack, Carol B. 1974. <i>All Our Kin: Strategies For Survival in a Black Community</i> . New York, NY: Harper & Row.
10. Seth, M. (2000), <i>Women and Development : The Indian Experience</i> , Sage Publications, New Delhi. Economics 179
11. Srinivasan K. and A. Shroff (1998), <i>India : Towards Population and Development Goals</i> , Oxford University Press, New Delhi.
12. Venkateswaran, S. (1995), <i>Environment, Development and the Gender Gap</i> , Sage Publications, New Delhi.
13. Wazir, R. (2000), <i>The Gender Gap in Basic Education : NGOs as Change Agents</i> , Sage Publications, New Delhi.
14. D'Emilio, John. 1993. "Capitalism and Gay Identity," reprinted in <i>The Lesbian and Gay Studies Reader</i> , Henry Abelove, et. al., eds., New York: Routledge.
15. Ehrenreich, Barbara and Deirdre English. 1973. "Women and the Rise of the American Medical Profession," reprinted in Wendy McElroy, ed., <i>Freedom, Feminism, and the State</i> , 2 nd edition, New York: Holmes and Meier, 1991.
16. Hochschild, Arlie Russel. 1989. <i>The Second Shift</i> , New York: Avon, chapter 4.
17. McKenzie, Richard and Gordon Tullock. 1975. <i>The New World of Economics</i> , Homewood, IL: Richard Irwin, chapter 9.

18. Rhoads, Steven E.1993. <i>Incomparable Worth: Pay Equity Meets the Market</i> , Cambridge: Cambridge University Press, chapter 2.									
19. Robinson, John P. and Melissa A. Milkie. 1998. "Back to Basics: Trends in and Role Determinants of Women's Attitudes Toward Housework," <i>Journal of Marriage and the Family</i> 60, February: 205-18.									
20. Segalen, Martine. 1996. "The Industrial Revolution: From Proletariat to Bourgeoisie," in Andre Barguiere, et. al., eds, Sarah Hamburg Tenison, trans., <i>A History of the Family</i> vol. 2, Cambridge, MA: MIT Press.									
21. Walker, Deborah. 1995. "Feminism and Economics: Legislation or Markets?" in Rita J. Simon, ed., <i>Neither Victim nor Enemy</i> , Lanham, MD: Women's Freedom Network and University Press of America									
Videos: <i>1900 House</i> (selected episodes). Shown on the campus network									
PO-CO Compliance Matrix									
	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3		3						
CO 2	2		2						
CO 3	2		2						
CO 4	2		3						
CO 5	2		2						
CO 6	2	3	2	3					
CO 7		3	3	3	3				
CO 8	2		2						
CO 9		3	3	3	3	3			
CO 10	3	3	3	3	3	3			
*1: Low, 2: Medium, 3: High									

Course Name: HEALTH ECONOMICS (ECO710)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Development Economics, Macroeconomics and Microeconomics.	
Course Objective:		
	Health status of the population forms a major variable in measuring the Human Development Index. Health infrastructure provisions both public and private sector assumes significance in the overall health policy of a country. The present paper analyses the national health scene, correlation of health output and input indicators with level of economic development. Resource allocation in the health sector both public and private sector, evaluation of benefits and costs of health services, financing of health services and role of	

	government and institutions also is examined.	
Course Outcomes: The students will be able to		
1	Interpret and appropriately apply the key concepts of economics within the context of the health system	
2	The key analytical reasoning and tools of health economics and their normative foundations and ethical implications	
3	Use economic models to understand behaviors of actors in the health care sector	
4	Undertake economic evaluation in healthcare, with an emphasis on identifying, measuring, valuing and analyzing health outcomes and costs	
5	Understand approaches to identify and value costs and outcomes to include in economic evaluation	
6	Make analyses of efficiency and quality of health care organizations	
7	competence to apply economic concepts and models to the fields of demand for health, demand for health services, demand for health insurance, provision of health insurance and provision of health care.	
Course Content:		
UNIT I	<p>Introduction to Health Economics</p> <p>Defining Health Economics. Importance of Health Economics – Essential Features.</p> <p>Basic concepts of health economics: Health, Health Care, Birth rate, Fertility rate, Death rate, IMR, CMR, MMR, Morbidity rate (Acute and Chronic), Disability Adjusted Life Year (DALY), Quality Adjusted Life Year (QUALY), Sex Ratio.</p>	10 hrs
UNIT II	<p>Demand for Health and Health Care</p> <p>Welfare economics of medical care, production of health, demand for health and health care, equity, efficiency and the need, link between development and health, investing in health for economic development</p>	10 hrs
UNIT III	<p>Health Production Function</p> <p>Nature of production function, different types of production function and their applications, national and international perspective, distributional inequities in opportunity and commercialization of medical and para-medical education, cost escalation in the health care system, easy access and availability to appropriate technology, need for regulation and control</p>	10 hrs
UNIT IV	<p>Health Care Incentives, Costing and Financing(10)</p> <p>Goals of health care provision and financing, competitive health insurance and risk adjustment, Demand and supply of health insurance, asymmetric information and agency, costing of health care market insurance, self-insurance and protection, employment based insurance, health insurance in India, , public-private partnership and the role of state</p>	10 hrs
UNIT V	Measuring and Valuing Health Outcomes	10 hrs

	Measurement of health state utilities, QALYs and its alternatives- different approaches of valuing health, multi-attribute utility instruments and their development								
UNIT VI	<p>Health Care in India</p> <p>Various health indicators and its recent trend, health care expenditures, target of health care and achievements, different options for financing healthcare, taxation, user fees, health insurance, role of urban and rural local bodies, role of WHO, economic impact of HIV/AIDS in India and gender issues</p>	10 hrs							
Text Books:									
1. CII-Mckinsey Report, <i>Healthcare in India: The Road Ahead</i> , 2004.									
2. Culyer, A. J. and J.P. Newhouse (eds.), <i>Handbook of Health Economics, Volume 1 A & 1 B</i> , North-Holland, 2000.									
3. Folland, S., A.C. Goodman and M. Stano, <i>Economics of Health and Health Care</i> , Fifth edition, Pearson Prentice Hall, 2006.									
Reference Books:									
4. Pradhan, B.K. and R Sundar, <i>Gender Impact of HIV and AIDS in India</i> , United Nations Development Programme, 2006.									
5. Pradhan, B.K. and R Sundar, <i>Socio-economic impact of HIV AIDS in India</i> , United Nations Development Programme, 2006.									
6. Reports of WHO.									
PO-CO Compliance Matrix									
	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3		2						
CO 2	2	2	2						
CO 3	2		2						
CO 4	2	2	3	3					
CO 5	2		2						
CO 6	2	3		3	3				
CO 7		3	2	2					
*1: Low, 2: Medium, 3: High									

Course Name: International Economics and Policy (ECO711)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of elementary International Economics and Trade.	

Course Objective:		
	International Economics and Economic Policy focuses on contributions that are relevant to economic policy, emphasizing both theoretical and empirical papers. In particular, the course focuses on comparative economic policy; international political economy, including international organizations and policy cooperation; monetary and real/technological dynamics in open economies; globalization and regional integration; trade; migration; international investment; internet commerce; and regulation.	
Course Outcomes: The students will be able to		
1	Compare at the level of formal analysis, the major models of international trade and be able to distinguish between them in terms of their assumptions and economic implications.	
2	Apply partial equilibrium and general equilibrium models in analyzing the economic effects of (a) trade policy instruments such as tariffs, quotas, export subsidies, (b) retaliatory measures such as anti-dumping duties and countervailing duties	
3	An ability to analyze the prices and fiscal and monetary policy coordination in an open economy and under fixed and flexible exchange rate system	
4	Identify major recent developments in the world trading system, and be able to critically analyze key issues raised both by the current round of WTO negotiations and by the spread of regional trading arrangements.	
5	Develop the understanding of Dollarization and optimum currency area and its impact on open economy policy analysis	
Course Content:		
UNIT I	Theory of International Trade -I Mercantilist theory, Classical and Neo-classical (Adam Smith, Ricardo, J.S.Mill,H-O Model, Haberler), Theory of Opportunity Cost, New construction of Ricardian Theory, New Trade Theories (Vernon, Posner, Cannon) Technological dynamics, Factor intensity Reversal, Leontief Paradox,	10 hrs
UNIT II	Theory of International Trade -II Stolper Samuelson theorem, Theory of Change in Factor Endowment, Factor Equalization Theorem, Specific Factor Model, Immiserizing Growth, Theory of Custom Union, Gains From Trade, Inter and Intra Industry Trade Model, Free trade better than no trade, Restricted trade better than no trade and free trade	10 hrs
UNIT III	External Trade Policy. Exim policy, ECGC, Export Promotion Councils, DGFT, Inco-term, Tariff and Non-Tariff Barriers, Terms of trade, Protection, New Economic Policy	10 hrs
UNIT IV	The Theory of International Finance Prices in the open economy: purchasing power parity, Financial markets in the open economy, Open economy macroeconomics, exchange rate determination: Flexible prices: the monetary Model, Fixed prices: the Mundell-Fleming model, Coordination of Fiscal and Monetary policy under fixed and flexible exchange rate, Asset Market Model, Exchange rate dynamics, Expectations, Balance of Payment and adjustment Mechanisms, Foreign Trade Multiplier and repercussion effect	10 hrs
UNIT V	Open Economy Policy Analysis. International Monetary system, Euro currency, Euro dollar, Dollarization, SDR, China	10 hrs

	and reserve currency issues. Optimum currency areas and monetary union, Recent Financial crisis. Regional Trade Agreement, Economic Integration in North America, The European Union: Many Markets into One, ASEAN, Trade and Policy Reform in Latin America, Emerging Economies, BRICS and the world economy,	
UNIT VI	International Financial Architecture (5) IMF, World Bank, WTO, GATT, UNCTAD, Reforming the international institutional architecture	10 hrs
Text Books:		
1. Pugel, T.A. (2008), <i>International Economics</i> , 13th Edition, Tata Mcgraw hill publishing Co, New Delhi.		
2. Bhagwati, J. N., A. Panagariya and T.N.Srinivasan(1998), <i>Lectures on International Trade</i> , OUP, NewDelhi, Second Edition.		
3. Krugman, P.A. and M Obstfeld (2003), <i>International Economics: Theory and Policy, Sixth Ed.</i>		
4. Salvatore Dominick (2010), <i>International economics, 8th edition, Wiley Publication, New Delhi, ISBN: 978-81-265-1413-7</i>		
Reference Books:		
5. Laurence Copeland(May, 2008), <i>Exchange Rates and International Finance</i> 5th Edition Paperback, ISBN13: 9780273710271		
6. Leamer, E.E. (1980). "The Leontief Paradox Reconsidered". <i>Journal of Political Economy</i> 88: 495–503.		
7. Haberler, Gottfried (1936) <i>The Theory of International Trade</i> , New York: Macmillan, ch. 12.		
8. Balassa, B. (1963) "An Empirical Demonstration of Classical Comparative Cost Theory," <i>Review of Economics and Statistics</i> 45: 231–8		
9. Chipman, J. (1965) "A Survey of the Theory of International Trade, Part I: The Classical Theory," <i>Econometrica</i> 33: 477–519.		
10. Shiozawa, Y. 2007 A New Construction of Ricardian Trade Theory—A Many-country, Many-commodity Case with Intermediate Goods and Choice of Production Techniques—, <i>Evolutionary and Institutional Economics Review</i> 3(2): 141-187.		
11. Leontief, W. W. (1953). "Domestic Production and Foreign Trade: The American Capital Position Re-examined". <i>Proceedings American Philosophical Society</i> 97: 332–349.		
12. Shiozawa, Y. 2007 A New Construction of Ricardian Trade Theory—A Many-country, Many-commodity Case with Intermediate Goods and Choice of Production Techniques—, <i>Evolutionary and Institutional Economics Review</i> 3(2): 141-187.		
13. R. Dornbusch; S. Fischer; P. A. Samuelson 1977 Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods, <i>The American Economic Review</i> , 67(5): 823-839.		
14. Jones, Ronald W. 1961 Comparative Advantage and the theory of Tariffs; A Multi-Country, Multi-commodity Model, <i>Review of Economic Studies</i> , 28(3): 161-175.		
15. Y. Shiozawa (2007) A New Construction of Ricardian Trade Theory: A Many-country, Many-commodity with Intermediate Goods and Choice of Techniques, <i>Evolutionary and Institutional Economics</i>		

Review,3(2): 141-187.

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18. Samuelson, P.A. (1949) "International Factor-Price Equalization Once Again," *Economic Journal* 59: 181–97.

19. Stolper, W. and Samuelson, P.A. (1941) "Protection and Real Wages," *Review of Economic Studies* 9: 58–73.

20. Vernon, R. (1966) "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics* 80:190–207.

21. Balassa, B. (1975) "Trade Creation and Diversion in the European Common Market," *European Economic Integration*. Amsterdam: North-

22. Holland. Brown, A., Deardorff, A., and Stern, R. (1992) "North American Integration," *Economic Journal* 102: 1507–1518.

23. Frankel, J.(1997) *Regional Trading Blocs in the World Economic System*, Washington, DC: Institute for International Economics.

24. Hufbauer, G. and Schott, J. (1993) *NAFTA: An Assessment*, Washington, DC: Institute for International Economics.

25. Staiger, Robert (1995) "International Rules and Institutions for Trade Policy," in G. Grossman and K. Rogoff

26. Jackson, John (1997) *The World Trading System, Law and Policy of International Economic Relations*, 2nd edn, Cambridge, MA: MIT Press.

27. Amiti, M. and Freund, C. (2007) "An Anatomy of China's Export Growth," Paper prepared for Global Implications of China's Trade, Investment and Growth Conference, IMF Research Department.

28. Havrylyshyn, O. (1990) "Trade Policy and Productivity Gains in Developing Countries," *World Bank Research Observer*, 1–24.

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3	2	2		2	2			
CO 2		3							
CO 3	2	3	2	3	3	3			
CO 4	2		2						
CO 5	2	2	2		2				

*1: Low, 2: Medium, 3: High

Course Name: Poverty, Inequalities and Unemployment (ECO712)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Development Economics.	
Course Objective:		
	This course examines the economic dimensions of income inequality, poverty, unemployment and discrimination. The course begins with a review of some tools of economic analysis that are most useful in these areas of economics. The economic functions of government are discussed. Variations in economic analysis of markets and government across the political economic spectrum are examined. The main body of the course then focuses on economic facts, theories and public policies concerning income inequality, poverty and unemployment. This course explores how the discipline of economics can explain and analyse the causes and effects of poverty and discrimination on various parts of the population.	
Course Outcomes: The students will be able to		
1	Understand the different concept ways to measure poverty and indices of poverty	
2	Understand and analyse the concept, trends and measurement of inequality in terms of theory and empirical studies	
3	Analyse the theoretical determinants of the personal and functional distribution of income and government policies concerning income inequality global inequality	
4	Analyse the theories of unemployment - efficiency wage theory and collusive theory	
5	Understand and analyse the different kinds of unemployment India	
6	Appreciate the concept of the economics of discrimination, analyse the data of discrimination, theoretical causes and government policies concerning discrimination	
7	Analyse the issues on equitable and inclusive growth with a focus on the weaker section of the society	
Course Content:		
UNIT I	Introduction and Overview Overview of the Economics of Income Inequality, Poverty and Discrimination, and Unemployment	10 hrs
UNIT II	Concepts and Measures of Poverty Introduction to the Economics of Poverty; Poverty Facts and Data; Theoretical Causes of Poverty; Government Policies concerning Poverty, Poverty Measurement and Issues in measuring poverty, FGT index, Head count ratio, international poverty measure,	10 hrs

	Human poverty index, Indian poverty measure Short-Run Poverty, Long-Run Poverty, and Intergenerational Poverty, Global Poverty, evolution of poverty policy, consequences of poverty and mobility	
UNIT III	<p>Inequality: Trends and Measurement</p> <p>Introduction to the Economics of Income Inequality, Income inequality: theories, empirical Studies: Tendulkar, Minhas, Sundaram, Sen, Income Distribution, Poverty & Discrimination: Facts, measurement of inequality (Lorenz curves and Gini coefficients, Inverted U Curve hypothesis), Theoretical Determinants of Personal Income; Theoretical Determinants of the Functional Distribution of (Capital and Labour) Income; Government Policies concerning Income Inequality Global Inequality</p>	10 hrs
UNIT IV	<p>Trends in Employment and Wages</p> <p>Unemployment- efficiency wage theory as an explanation for wage rigidity and involuntary unemployment, Collusive theory of unemployment. Employment and Training Programs, Labour Market Policies, Unemployment in India, Frictional, Structural, and cyclical unemployment</p>	10 hrs
UNIT V	<p>Discrimination and Welfare Reform</p> <p>Introduction to the Economics of Discrimination; Discrimination Facts and Data; Theoretical Causes of Discrimination; Government Policies concerning Discrimination, Measuring labour market discriminations, Anti-Discrimination Government Legislation and Policies, Welfare policies, Social Security</p>	10 hrs
UNIT VI	<p>Inclusive Growth</p> <p>Meaning, rural-urban gap, what can be done? Challenges of equitable and inclusive growth, specific focus on weaker section of the society</p>	10 hrs

Text Books:

1. Lawrence Mishel, Jared Bernstein and Sylvia Allegretto, State of Working America, 2008/2009, Cornell University Press, 2009 (M) Benerjee and Rufloo, "Poor Economics"
2. Edward N. Wolff, Economics of Poverty, Inequality and Discrimination, South- Western, 1997(W)
3. Bradley R. Schiller, Economics of Poverty and Discrimination, 9th ed., Prentice Hall, 2004 (S)
4. Randy Albelda, Robert Drago, and Steven Shulman, *Unlevel Playing Fields: Understanding Inequality and Discrimination*, 2nd edition, Economic Affairs Bureau, Inc., 2005. (Denoted 'UPF' below.)

Reference Books:

1. Randy Albelda et al, The War on the Poor: A Defense Manual, New Press, 1996 (A)
2. Frank Ackerman et al, The Political Economy of Inequality, Island Press, 2000 (P)
3. J. Teller-Ellsberg et al, Field Guide to the U.S. Economy – Revised and Updated, New Press, 2006 (T)
4. Changing Poverty, Changing Policies. Ch. 14, R. Haveman. —What Does it Mean to be Poor in a Rich Society?
5. U.S. Census Bureau. 2009. *Income, Poverty, and Health Insurance Coverage*, Current Population Reports

(Washington, DC), available from: <http://www.census.gov/prod/2009pubs/p60-233.pdf> M. Orshansky. "Counting the Poor," *Social Security Bulletin*, 1965.

6. Bradley R. Schiller, *The Economics of Poverty and Discrimination*, 10th edition, Prentice Hall, 2007. (Denoted 'EPD' below.)

7. There will also be several readings found on e-reserve. More information will be handed out separately about how to access these readings. R. Blank, *It Takes a Nation*, 13-30.

8. *M. Corcoran, 2008. —Childhood Poverty, Race and Equal Opportunity. In S.B. Newman. *Educating the Other America*, pp 35-51. (Ctools)

9. S.H. Danziger. (2007). —Fighting Poverty Revisited: What Did Researchers Know 40 Years Ago? What Do We Know Today?, *Focus*, vol. 25(1): 3-11, <http://www.irp.wisc.edu/publications/focus/pdfs/foc251a.pdf>

10. *Changing Poverty, Changing Policies*. Ch. 2, Meyer and Wallace, —Poverty Levels and Trends in Comparative Perspective|Ch 3. Blank. —Economic Change and the Structure of Opportunity for Low-Skilled Workers. pp 35-91.

11. Emmanuel Saez, 2008. —Striking it Richer: The Evolution of Top Incomes in the United States (Update Using 2006 Preliminary Estimates. <http://elsa.berkeley.edu/~saez/saez-UStopincomes-2006prel.pdf>

12. C. Goldin and L.F. Katz. 2009. —The Future of Inequality; The Other Reason Education Matters So Much. | *Milken Institute Review*, Third Quarter, 2009. pp 27-33. http://www.economics.harvard.edu/faculty/goldin/files/GoldinKatz_Milken.pdf

13. *Changing Poverty Changing Policies*. Ch 3. R. Blank —Economic Change and the structure of opportunity for less-skilled workers. Pradhan and Roy, “Well -being of Indian households” Tata McGraw Hill, New Delhi

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3		2						
CO 2	3	3	3	2	2				
CO 3		3	2	2	2				
CO 4	2	3	2		3				
CO 5	2	2	2		2				
CO 6		3	3	3	3	3			
CO 7		3	2	2	2				

*1: Low, 2: Medium, 3: High

Course Name: Public Finance and Policy (ECO713)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of macroeconomics.	
Course Objective:		
	Role and functions of the Government in an economy have been changing with the passage of time. The term 'Public Finance' has traditionally been applied to the package of those policies and operations which involve the use of tax and expenditure measures. This course covers the rationale for government provision of	

<p>goods in a market economy and the effects of taxes on economic efficiency. We will also contrast the traditional public finance view of the role of government with the public choice school of thought. The primary emphasis is on expenditures and taxes at the federal level. As a part of the broader fiscal restructuring plan of the central and state governments in India, reforms have been initiated with particular emphasis on radical reforms in indirect taxes both in terms of tax policy reforms like base broadening, elimination of tax concessions and reduction in the number of tax rates and rationalization of tax structures, as well as tax administrative reforms like modernization of tax administration and extensive use of IT.</p>		
<p>Course Outcomes: The students will be able to</p>		
1	Demonstrate knowledge and understanding of public policy analytical tools.	
2	Evaluate applied theoretical and empirical work in policy-relevant research.	
3	Apply skills and knowledge acquired in the curriculum to analyze policy issues and make policy recommendations.	
4	Communicate complex ideas clearly and persuasively in written and oral forms.	
5	Develop knowledge and skills in public policy and to prepare students for a professional career or doctoral studies.	
6	Demonstrate substantial scholarship and the ability to conduct independent research and analysis in public policy.	
7	Through completion of advanced course work and rigorous skills training, the pre-Ph.D. coursework prepares students to make original contributions to the knowledge of public policy and to interpret and present the results of such research.	
<p>Course Content:</p>		
UNIT I	<p>Introduction</p> <p>Public Finance – Definition and Scope; Public and Private finance. The Role of the Government in a changing perspective, Fiscal Functions of the Government, Co-ordination among these functions.</p>	10 hrs
UNIT II	<p>Welfare Foundations of Public Economics</p> <p>Distinction between Private and Public Goods, Pareto Optimality, Theory of Second</p>	10 hrs

	best, Market Failure, Optimal provision of Public Goods, Free Rider Problem. The Pure Theory of Public Goods by Samuelson.	
UNIT III	Public Expenditure Growth and Structural changes in public expenditure, Wagner's Law, Peacock and Wiseman's hypothesis, Public Choice in Determining the Level of Public expenditure, Public expenditure on health, education and subsidies in India, Criteria for Expenditure Evaluation - Valuation of Benefit and Cost, Choice of Discount rate.	10 hrs
UNIT IV	Principles of Taxation Principle of Fiscal Neutrality, Excess Burden, Principle of Equity, Benefit Principle, Bowen and Lindhal Models, Ability to pay Principle.	10 hrs
UNIT V	Tax policy and administration Reform in indirect tax structure of India: MODVAT, CENVAT, Value Added Tax (VAT), Issue of taxation of services in India, Goods and Service Tax (GST), Problem of Tax Evasion and Parallel Economy.	10 hrs
UNIT VI	Issues on Federal Finance in India Devolution Criteria, Division of fiscal powers between the centre and states and local bodies, problems of inter-jurisdictional spillovers and issues of tax harmonization, Report of latest Finance Commission.	10 hrs

Text Books:

1. Richard A. Musgrave (1989), Public Finance in Theory and Practice McGraw Hill Book Company, New York.
2. M. GovindaRao and Tapas Sen (1998) : Financial Federalism in India, McMillan, Delhi
3. Arun Kumar (1998) : Black Economy in India, Penguin Books, New Delhi.
4. Buchaman J.M. (1970), The Public Finances, Richard D.Irwin, Homewood

Reference Books:

5. Hemlata Rao (2006) Fiscal Federalism –Issues and Policies, New Country Publications, New Delhi.
6. Atkinson A.B. and J.E. Siglitz (1980). Lectures on Public Economics, Tata McGraw Hill, New Delhi.
7. Alan, A. Tait, (1972): The Value Added Tax, McGraw- Hill Publications.
8. Comes R. and T.Sandler (1986) The theory of Externalities, Public Goods and Club Goods, Cambridge University Press, Cambridge.
9. National Institute of Public Finance and Policy, (1989): The Operation of MODVAT, NIPFP, New Delhi

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3		2						
CO 2	3	3	3	2	2				
CO 3					3	3			
CO 4						3			
CO 5			3			3			
CO 6	2		3						
CO 7		3	2	3	3	3			

*1: Low, 2: Medium, 3: High

Course Name: REGIONAL ECONOMIC ANALYSIS (ECO714)		
TEACHING SCHEME	EXAMINATION SCHEME	CREDITS ALLOTTED
Theory: 3 hrs per week	End Semester Examination: 100 marks	Theory: 3
		Total: 3
Course Pre-requisites:		
1	Must Complete the Post-Graduation and Knowledge of Development Economics.	
Course Objective:		
	It is being increasingly recognized that market forces do not result automatically in regionally balanced development of economics. For effective and meaningful intervention to pull up economically and socially the less developed regions, it is necessary to understand the dynamics of regional development. This paper attempts to teach to the students the dynamics of regional development right from the meaning and concepts related to regional development to a broad overview of the techniques of regional analysis.	
Course Outcomes: The students will be able to		
1	Understand the basic concepts of regional economics and identify theoretical justifications for the role of socio, economic and political factors in regional development	
2	Equipped with the basic knowledge on different models of regional development and be able to apply those strategies to the analysis of programs adopted to develop various regions in the economy	
3	Understand the importance of interregional trade and be able to identify major issues and challenges involves in interregional trade	
4	Describe the role of various developmental committees and commissions in regional development in India.	
5	Identify the importance of location and transportation with regards to the development of various regions in the economy	
6	Identify the major issues and concerns regarding the development of various regions in Rajasthan	
7	Analyze the Income and Employment Pattern across regions in India	
Course Content:		
UNIT I	Basics of Regional Economics Need for study of Regional Economics, Definition of a region, Different types of regions, Differences between region and a nation; Regional income, Problems of estimation, Indicators of regional development, Social, Economic and Political factors in regional growth.	10 hrs
UNIT II	Regional Allocation of resources I Balanced regional development; Cumulative Causation Models, Regional linkage-	10 hrs

	spread and backwash effects; Regional Convergence and divergence theories, Regional Polarisation, regional Economic Multiplier.	
UNIT III	Regional Allocation of resources II The basis of interregional trade, Regional trade and factor price equalization, Regional trade and factor migration, issues and challenges in regional trade	10 hrs
UNIT IV	Transport costs Location and regional growth, Transportation and regional growth, the role of cities in regional development, Thunen's, Weber's theory of location; Locational and weight triangles; Locational interdependence.	10 hrs
UNIT V	Location Locational – Views of Christaller, Losch, Perroux, Florance, Hoover, Polander and Isard – Dynamic theory of regions. Hotelling Principle	10 hrs
UNIT VI	Regional Development in India: Socio-Economic Regional imbalance in India; Regional planning; Rural urban inequality; Role of Planning commission and finance commission in regional development, Trends in Regional Disparities in Income & Consumption, Sectoral Income and Employment Pattern across regions, Spatial Concentration of Industries in Liberalised Regime, Trends in regional agro production and productivity, Regional Distribution of Infrastructure, Trends in regional disparities in Infrastructure. Key issues in regional development of Rajasthan.	10 hrs
Text Books:		
1. Adelman, I. and C.T. Morris (1973) – Economic Growth and Social Equity in Developing Countries, Stanford, USA		
2. Ahluwalia, M. (1976) – “Inequality, Poverty, and Development”, Journal of Development Economics, Vol. 6		
3. Anand, S. and R. Kanbur (1993) – “The Kuznets Process and the Inequality-Development Relationship”, Journal of Development Economics, Vol. 40		
4. Isard, Welter, (1976), Methods of Regional Analysis, The M.I.T. Press Massachusetts and London, England, Chaps, 4,6,7,9 & 11.		
Reference Books:		
5. Anand, S. and R. Kanbur (1993a) – “Inequality and Development: A Critique”, Journal of Development Economics, Vol. 41		
6. Hoover, Edgar M., An Introduction to Regional Economics. New York. Alfred A. Knopf, 2nd edition.		

7. Kuznets, S. (1955) – “Economic Growth and Economic Inequality, *American Economic Review*, Vol. 45,

8. Kuznets, S. (1963) – “Quantitative Aspects of Economic Growth of Nations: VIII, Distribution of Income by Size”, *Economic Development and Cultural Change*, Vol. 12.

9. Mathur, Ashok (2000), National and Regional Growth Performance in the Indian Economy, in Reform and Employment, New Delhi, IAMR and Concept Publishers.

10. Needleman, L., (ed.), 1968), *Regional Economics*, Penguin Books Ltd., Part-II, Cha. 4.

11. Parloff, Harvey et. al., *Regions, Resources and Economic Growth*. University of Nebraska Press, Lincoln USA. Part II, pp.55-104.

12. Richardson, Harry W., (1976): *Regional Economics*, Weidenfold and Nicoloson, London, Chaps. 1 to 5,7,9& 13.

13. Shand, Ric and S. Bhide (2000), “Sources of Economic Growth: Regional Dimensions of Reforms,” *Economic and Political Weekly*, Vol. 35, No. 42, October 14.

14. Smith, David, (1971), *Industrial Location: An Economic Geography Analysis*, Hohn Wiley, New York.

PO-CO Compliance Matrix

	PO1	PO2	PO3	PO4	PO5	PO6			
CO 1	3		3			CO 1			
CO 2	3		3			CO 2			
CO 3	3		3			CO 3			
CO 4	2		2			CO 4			
CO 5	2		2			CO 5			
CO 6	2		2			CO 6			
CO 7		3	2	3	3	CO 7			

*1: Low, 2: Medium, 3: High