

2009

Tribhuvan University  
Central Library, Kirtipur

Syllabus

Master level

"ECONOMICS"

## Courses of Study for M.A. in Economics

Tribhuvan University  
2009  
Central Library, Kirtipur

Faculty of Economics  
Dean  
N. K. K. /  
Faculty of Economics

The objective of this course is to provide advanced and specialized study in Economics for further learning and research. The contents cover Microeconomic Analysis, Quantitative Techniques, Economics of Development and Planning, Research Methodology, History of Economic Thought or Basic Econometrics, Macroeconomic Analysis, Monetary Economics, Public Economics, and Nepalese Economics as compulsory papers and many others as optional papers.

### Admission and Eligibility

Students holding a B.A. degree of Tribhuvan University with Economics as one of their major subjects or a degree equivalent to this degree from any university recognized by Tribhuvan University (T.U.) shall be considered eligible to apply for admission to M.A. Economics degree course.

An applicant seeking admission to M.A. Economics must appear in an entrance examination of ninety-minute duration conducted by Central Department of Economics or the concerned Campus. Applicants who fail either to appear in the entrance examination or to obtain a minimum qualifying score will not be given admission. Admission of the students will be based strictly on the merit list and on the enrolment capacity of the Central Department of Economics or the concerned Campus.

### Duration

The duration of the course is of two years and there will be a University examination at the end of each year. At least seventy-percent attendance in the class as per the University rule is compulsory.

### Examination

The examination for the degree of Master of Arts in Economics may be taken either by papers or partly by papers and partly by thesis as prescribed by the concerned regulation of Tribhuvan University.

The University examination for each paper carries 100 marks and is of four hours' duration and the pass marks is 40 percent. Paper IV is divided into two sections: Research Methodology (50 marks) and History of Economic Thought or Basic Econometrics (50 marks). The examination on each of these sections is of two hours' duration and students have to pass each section independently by securing at least 40 percent in each section.

Each student has to study four compulsory papers and one optional paper in each year from a wide range of optional papers (including thesis writing in the second year). Each paper carries 100 marks and make the total full marks 1000. Thesis writing also carries 100 marks of which the written part carries 60 marks and the viva-voce examination carries the rest 40 marks. The student has to pass separately in the written and the viva-voce examination. Thesis writing will be permitted only to those students who have passed Microeconomic Analysis (Eco. 511), Quantitative Techniques (Eco. 512), and Research Methodology (Eco. 514A).

A student who has passed his/her two years of study (ten papers) will be graded on the basis of the average marks as follows:

Distinction	: 75 percent and above
First Division	: 60 percent and above
Second Division	: 50 percent and above
Third Division	: 40 percent and above

## Course Structure

For the M.A. in Economics, there will be ten papers of which eight papers will be compulsory and two papers will be from among the optional papers. The student has to take one optional paper in the first year and another optional paper in the second year. The listing of the papers is as follows.

### First Year Papers:

Paper	Code Number	Paper	Full Marks
<b>Compulsory Papers</b>			
I	Eco. 531	Microeconomic Analysis	100
II	Eco. 532	Quantitative Techniques	100
III	Eco. 533	Economics of Development and Planning	100
IV	Eco. 534*	A. Research Methodology 50	100
		B. History of Economic Thought 50	
		OR	
		C. Basic Econometrics 50	
<b>Optional Papers (any one)</b>			
V	Eco. 535-1	Economics of Agricultural Development	100
	Eco. 535-2	Mathematical Economics	100
	Eco. 535-3	Population Economics	100
	Eco. 535-4	Industrial Economics	100
	Eco. 535-5	International Economics	100
	Eco. 535-6	Environmental and Natural Resource Economics	100
	Eco. 535-7	Economics of Tourism	100

\* Regarding the Fourth Paper (Eco. 514), Research Methodology is compulsory to all students and a student can choose one between History of Economic Thought and Basic Econometrics.

### Second Year Papers:

Paper	Code Number	Paper	Full Marks
<b>Compulsory Papers</b>			
VI	Eco. 536	Macroeconomic Analysis	100
VII	Eco. 537	Monetary Economics	100
VIII	Eco. 538	Public Economics	100
IX	Eco. 539	Economy of Nepal	100
<b>Optional Papers (any one)</b>			
X	Eco. 540-1	Economics of Energy	100
	Eco. 540-2	Economics of Human Development	100
	Eco. 540-3	Health Economics	100
	Eco. 540-4	International Finance and Economic Cooperation	100
	Eco. 540-5	Transport Economics	100
	Eco. 540-6	Thesis Writing	100

Note: Optional papers and thesis writing to be offered during any academic session shall be fixed by the concerned Economics Department.

## Microeconomic Analysis

Eco. 531

Paper: I

Full Marks: 100

Teaching Hours: 150

**Course Objective:** This course intends to equip the students with the methods and tools of economic analysis with an advanced knowledge of economic theory and enable them to define, explain and analyze the economic terms, concepts and postulates, to explain different methods and tools of economic analysis and to apply them in formulating and analyzing economic models and theories.

Teaching Hours  
15

### Unit I: Methodological Issues in Economics

#### a) Some Methodological Concepts and Categories

1. Importance of models in economics
2. Model building; economic and econometric models
3. Choice between models
4. Analysis of equilibrium: static, dynamic, and stationary state

#### b) The Methodology of Economics

1. Applications of various methods (deductive, inductive, and logical positivism)
2. Hypothesis in economics
3. Assumptions in economics
4. Falsifiability in classical economics
5. Falsifiability in neo-classical economics
6. Limitation of the falsifiability criterion in economics
7. The role of value judgment

#### c) The Objective Method of Economics

1. Views of Friedman and Lange
2. Empiricism in economics
3. Scientific paradigm of economics
4. Marxian method of economic analysis

### Unit II: The Theory of Consumer Behavior

30

#### a) An Introspective Ordinalist Approach

1. Review of Indifference curve theory--consumer's equilibrium
2. Changes in prices and consumer's demand curve
3. Income and substitution effects (Hicks and Slutsky)
4. Derivation of demand curves: ordinary and compensated
5. Some unusual indifference curves and their equilibrium solutions
6. Critical evaluation of indifference curve analysis

#### b) The Behavioristic Approach and Other Demand Models

1. Revealed preference theory and its critique
2. The behavioristic cardinal approach: Consumer behavior under uncertainty--the N-M theory
3. The Friedman-Savage hypothesis
4. Lancasterian demand theory
5. Empirical demand curves
6. The pragmatic approach to demand analysis
7. Linear expenditure system

### Unit III: Intertemporal Choice

5

1. The budget constraint
2. Preferences for consumption
3. Comparative statics
4. Analysis of present value
5. Use of present value

- Unit IV: Theory of Production and Technological Change** 15
1. Production function for a single product; decision period related to production analysis; elasticity of substitution
  2. Production with one and two variable inputs
  3. Producer's equilibrium; optimal choice of inputs; constrained output maximization; constrained cost minimization; profit maximization; effect of changes in outlay on equilibrium position
  4. Some standard production functions: linearly homogeneous, Cobb-Douglas, CES, and fixed coefficient type of production functions; introduction to input-output model
  5. Technological change; shift in production function
  6. Elasticity of factor substitution; technological progress and income distribution
- Unit V: Theory of Cost** 10
1. The traditional theory of cost: short run costs and long run costs
  2. Modern theory of costs: short run costs and long run costs
  3. Derivation of cost curve from production function
  4. Analysis of economies of scale
  5. Empirical evidence on the shape of costs
- Unit VI: Perfect Competition, Monopoly, and Monopolistic Competition** 20
- a) Perfect Competition**
1. Short-run equilibrium; supply curves of firm and industry; long-run equilibrium of firm and industry; dynamic changes in industry equilibrium; constant, increasing and decreasing cost industry; predictions of the perfect competition model when costs change; effect of imposition of tax
- b) Monopoly**
1. Predictions of the monopoly model in dynamic situations; shift in the market demand; increase in the cost of the monopolist; imposition of tax
  2. Comparison between perfect competition and monopoly
  3. Monopoly under multi-plant firm
  4. Bilateral monopoly
- c) Monopolistic Competition**
1. Equilibrium of the firm: equilibrium with new firms entering the industry, equilibrium with price competition, and equilibrium by both price competition and free entry; comparison with perfect competition
  2. Inter-linkages between monopolistic and imperfect competition
- Unit VII: Classical Oligopoly** 10
- a) Non-collusive Oligopoly**
1. Cournot's duopoly model
  2. Bertrand's duopoly model
  3. Stackelberg's duopoly model
  4. Chamberlin's oligopoly model
  5. The kinked demand curve
- b) Collusive Oligopoly**
1. Cartels: cartels aiming at joint profit maximization and market sharing cartels
  2. Price leadership models
- Unit VIII: Other Theories of the Firm** 10
- a) Average Cost Pricing**
1. Critique of the neo-classical theory of the firm
  2. The Hall and Hitch Report and the "full-cost" pricing principle
  3. The mark-up rule of price determination
  4. Critique of average cost pricing

## b) Managerial Theories of the Firm

1. Bain's limit pricing theory
2. Baumol's theory of sales revenue maximization
3. Marris's model of the managerial enterprise
4. Williamson's model of managerial discretion

## Unit IX: Factor Pricing

10

1. Factor pricing in imperfectly competitive markets
2. Price of fixed factors: rents and quasi-rents; rent seeking behavior
3. Non-homogeneous factors and wage differentials

## Unit X: General Equilibrium and Welfare Economics

25

1. Interdependence in the economy
2. Existence, uniqueness, and stability of equilibrium
3. Pigovian welfare economics
4. Criteria of social welfare: GNP growth; Bentham's criterion; Kaldor-Hicks compensation principle; Scitovsky paradox, Scitovsky's double criterion; Bergson criterion; Pareto optimality
5. Maximization of social welfare
6. Graphical treatment of the two-factor, two-commodity and two-consumer (2x2x2) general equilibrium model
7. Determination of welfare-maximizing output-mix, commodity distribution and resource allocation
8. Welfare maximization and perfect competition
9. Social justice and social optimum
10. Capitalism, market failure and alternative economic systems; theory of the second best

## Basic References

- Baumol, William J. (1999). *Economic Theory and Operations Analysis*, Fourth Edition. New Delhi: Prentice-Hall of India Private Limited.
- Blaug, Mark (1997). *Economic Theory in Retrospect*, Fifth Edition. London: Cambridge University Press.
- Koutsoyiannis, A. (1979). *Modern Microeconomics*. London: Macmillan Education Limited.
- Varian, Hal R. (1992). *Microeconomic Analysis*, Third Edition. New York: W.W. Norton & Company.

## Supplementary Readings

- Ahuja, H.L. (2004). *Advanced Economic Theory: Microeconomic Analysis*, Fourteenth Revised Edition. New Delhi: S. Chand & Company Ltd.
- Barla, C.S. (1998). *Advanced Microeconomics*. Jaipur: National Pub.
- Barthwal, R.R. (1992). *Micro-Economic Analysis*. New Delhi: Wiley Eastern Ltd.
- Bilas, R.A. (1971). *Micro-Economic Theory*. Kogakusha, Japan: McGraw-Hill.
- Chamberlin, E. H. (1962). *The Theory of Monopolistic Competition*. Cambridge, Mass.: Harvard University Press.
- Davis, Otto A. and Winston A.B. (1965). "Welfare Economics and Theory of Second Best," *Review of Economic Studies*, Vol. 82, pp. 1-15.
- Ekelund, Robert B. and Robert F. Hebert (1997). *A History of Economic Theory and Method*, Fourteenth Edition. New York: McGraw-Hill Ltd.
- Friedman, Milton (1953). "The Methodology of Positive Economics," in *Essays in Positive Economics*, 3-43. Chicago: University of Chicago Press.
- Friedman, Milton and Leonard J. Savage (1948). "The Utility Analysis of Choices Involving Risk," *Journal of Political Economy*, Vol. 56 (August 1948).
- Ghosh, B.N. (1983). *Principles of Economic Science*. New Delhi: Vikash Publishing House Pvt.
- Graaff, J. de V. (1957). *Theoretical Welfare Economics*. London: Cambridge University Press.
- Gravelle, Hugh and Ray Rees (1992). *Microeconomics*, Second Edition. Delhi: Pearson Education (Singapore) Pte. Ltd., Indian Branch (First Indian Reprint 2004).

- Green, H.A.J. (1976). *Consumer Theory*. New Delhi: The Macmillan Company Ltd.
- Henderson, James M. and Richard E. Quandt (2003). *Microeconomic Theory: A Mathematical Approach*, Third Edition. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Hicks, J.R. (1941). *Value and Capital*. London: Oxford University Press.
- Joshi, J.M. (1979). *Theory of Value, Distribution and Welfare Economics*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Joshi, J.M. and Rajendra Joshi (1994). *Microeconomic Theory*. New Delhi: Wishwa Prakashan.
- Krueger, Anne (1974). "The Political Economy of the Rent-Seeking Society," *American Economic Review* 64 (June 1974): 291-294, 301-302. (Also in Meier and Rauch, 2004: 437-441)
- Lange, Oskar (1963). *Political Economy* (Vol. 2), London.
- Lancaster, K. (1966). "A New Approach to Consumer Theory," *Journal of Political Economy*, April 1966.
- Layard, P.R.G. and A.A. Walters (1978). *Microeconomic Theory*. New York: McGraw-Hill Book Company.
- Lipsey, Richard G. (1975). *An Introduction to Positive Economics*, Fourth Edition. London: Weidenfeld & Nicolson.
- Little, I.M.D. (1957). *A Critique of Welfare Economics*, Second Edition. London: Oxford University Press.
- Mandel, Ernest (1968). *Marxist Economic Theory*. London: Low and Brydon Printers.
- Marshall, A. (1920). *Principles of Economics*. London: Macmillan.
- Nagpal, C.S. and C.S. Mittal (eds.) (1993). *Price Theory*. New Delhi: Anmol Publication.
- Nicholson, Walter (1992). *Microeconomic Theory*. USA: The Dryden Press.
- Pigou, A.C. (1932). *The Economics of Welfare*, Fourth Edition. London: Macmillan & Co., Ltd.
- Robbins, Lionel (1932). *An Essay on the Nature and Significance of Economic Science*. London: Macmillan.
- Salvatore, Dominick (2003). *Microeconomics: Theory and Applications*, Fourth Edition. New Delhi: Oxford University Press.
- Scitovsky, Tibor (1941). "A Note on Welfare Propositions in Economics," *Review of Economic Studies*, Vol. 9 (November 1941).
- Scitovsky, Tibor (1951). *Welfare of Competition*. Homewood: Richard D. Irwin, Inc.

## Quantitative Techniques

Eco. 532  
Paper: II

Full Marks: 100  
Teaching Hours: 150

**Course Objective:** This course intends to acquaint the students with some of the mathematical and statistical tools used in economics.

	Teaching Hours
<b>Unit I: Linear Difference Equations</b> First order and second order difference equations with constant coefficient, constant term, and variable term	12
<b>Unit II: Linear Differential Equations</b> First order and second order differential equations with constant coefficient, constant term, and variable term	12
<b>Unit III: Game Theory, Linear Programming, and Input-output Analysis</b> Theory of Games: Concepts, Strategy; Two-person zero sum game; uncertainty model; non-zero sum game; prisoner's dilemma Linear Programming: simplex methods; duality Input-output Analysis: Two sector model	20
<b>Unit IV: Measurement of Inequality</b> Application of Lorenz curve, Gini coefficient, and Pareto distribution	8
<b>Unit V: Probability Distribution</b> Overview of probability; Bayes' Theorem; Random variable (discrete and continuous); Mathematical expectations; variance and covariance of random variables; hypergeometric, binomial, multinomial, Poisson, and normal distributions; relationship between binomial and normal distributions; log-normal distribution	30
<b>Unit VI: Sampling Theory</b> Meaning, importance and objectives of sampling; population versus sample; sampling and non-sampling errors; types of sampling; determination of sample size according to the type of sample; central limit theorem (without proof); sampling distributions of means and proportions, standard error	20
<b>Unit VII: Estimation</b> Point and interval estimation; properties of estimators; estimation methods (ordinary least squares, maximum likelihood, and moments)	8
<b>Unit VIII: Correlation Analysis</b> Simple, rank, partial, multiple, and auto correlations	8
<b>Unit IX: Regression Analysis</b> Review of simple regression; Multiple regression analysis by least squares method; properties of estimators of regression coefficients (mean, variance and standard errors); analysis of variance (ANOVA) and regression analysis; dummy variable as regressor	20
<b>Unit X: Hypothesis Testing</b> z-test; t-test; F-test, $\chi^2$ (chi square) test, and Durbin-Watson test	12

### Basic References

- Chiang, Alpha C. (1984). *Fundamental Methods of Mathematical Economics*, Third Edition. Singapore: McGraw-Hill.
- Croxton, F.E., D.J. Cowden, and S. Klein (1975). *Applied General Statistics*, Third Edition. New Delhi: Prentice-Hall of India Private Limited.
- Dorfman, Robert, Paul A. Samuelson, and Robert M. Solow (1958). *Linear Programming and Economic Analysis*. New York: McGraw-Hill Book Company.
- Spiegel, Murray R. (2002). *Statistics*, Third Edition. New York: McGraw-Hill, Schaum's Outline Series.
- Yamane, T. (1967). *Statistics: An Introductory Analysis*. New York: Harper & Row.

### Supplementary Readings

- Anand, S. (2000). "The Measurement of Income Inequality," in *Measurement of Inequality and Poverty* by S. Subramaniam. New Delhi: Oxford University Press.
- Baumol, William J. (1959). *Economic Dynamics*, Second Edition. New York: The Macmillan Company.
- Chiang, Alpha C. (1967). *Fundamental Methods of Mathematical Economics*. New York: McGraw-Hill Book Company. [Second Edition in 1974]
- Chou, Ya-lun (1969). *Statistical Analysis*. New York: Holt, Rinehart and Winston, Inc.
- Dowling, E.T. (1980). *Mathematics for Economists*. McGraw-Hill: Schaum's Outline Series.
- Freund, John E. and Frank J. Williams (1959). *Modern Business Statistics*. Englewood Cliff, NJ: Prentice Hall Inc.
- Goon, A.M., M.K. Gupta, and B. Das Gupta (1968). *Fundamentals of Statistics*, Volumes One and Two. Calcutta: The World Press Private Limited.
- Kanel, Nav R. (1993). "Lorenz Curve and Gini Coefficient: Conceptual Considerations," *The Economic Journal of Nepal*, Vol. 16 No. 4 (October--December 1993), pp. 221-230. [Issue No. 64]
- Kanel, Nav R. (1995). "Gini Coefficient and Kanel's Reduction," *The Economic Journal of Nepal*, Vol. 18 No. 4 (October--December 1995), pp. 173-185. [Issue No. 72]
- Lipschutz, Seymour (1981). *Theory and Problems of Probability*, SI (Metric) Edition. Singapore: McGraw-Hill, Schaum's Outline Series.
- Monga, G.S. (1987). *Mathematics and Statistics for Economics*. New Delhi: Vikash Publishing House Pvt. Ltd.
- Sen, Amartya (1973). *On Economic Inequality*. London: Oxford University Press.
- Shrestha, K.N. and D.R. Kansakar (2060 BS). *Quantitative Techniques for Economics*, Third Edition. Kathmandu: Sewa Publishers.
- Som, R.K. (1973). *Manual of Sampling Techniques*. London: Heinemann Educational Books Ltd.
- Spiegel, Murray R., John Schiller, and R. Alu Srinivasan (2004). *Probability and Statistics*, Second Edition. New Delhi: Tata McGraw-Hill.

## Economics of Development and Planning

Eco. 533  
Paper: III

Full Marks: 100  
Teaching Hours: 150

**Course Objective:** This course intends to lead students to advanced learning. The skill imparted will help students to apply development theory into practice. Emerging policy issues in development, selected tools for their analysis are additional skills to be given to graduate students.

### A. Economics of Development

Teaching Hours  
15

#### Unit I: Development in Perspective

1. Paradigms of economic development
2. Issues and trends in development economics
3. Modern approaches to growth and development: macro, micro, and endogenous approaches with Growth rate estimates
4. Human development indices
5. Constraints and prospects of economic development in SAARC and ASEAN countries

#### Unit II: Factors Affecting Development

20

1. Capital formation and financing of economic development
2. Dimensions of human resource development
3. Natural resources, technology and development
4. Values, institutions, and civil society

#### Unit III: Theories and Strategies of Development

30

1. Assessing accelerated economic growth and their importance
2. Classical growth theory
3. Theory of economic development with unlimited supplies of labor
4. Schultz's theory of transformation of traditional agriculture
5. Rostow's stages of growth
6. Structural theories: Marxian interpretations and dependency theory
7. Strategies of development: Balanced/unbalanced and critical minimum effort theses
8. People's participatory approach

#### Unit IV: Policy Issues in Development

20

1. Poverty analysis and measurement
2. Inequality: dimensions and measurement tools
3. Unemployment (types, measurement, and consequences)
4. Impacts of economic liberalization, privatization, globalization, and constraints in post liberalization regime

### B. Economics of Planning

#### Unit V: Concept and Importance of Planning

5

Concept and importance of planning with reference to interventionist, institutionalist and neo-liberalist approaches

#### Unit VI: Types of Planning

25

1. Perspective and periodic plans
2. Macro and micro planning
3. Local/regional development planning

**Unit VII: Tools and Techniques of Planning**

25

1. Capital-output Ratio
2. Cost Benefit Analysis
3. Project Appraisal (Stage and components)
4. Benefit Monitoring and Evaluation

**Unit VIII: Development Planning in SAARC Countries with Special Reference to Nepal** 10

1. Brief review of Development Plans of SAARC Member Countries
2. Priorities of current plan in respective countries
3. Policy and Strategies
4. constraints and achievements

**Basic References**

- Dale, Raider (2004). *Development Planning*. London: Zed Books.
- Mathema, Kanhaiya R. B. (2004). *Economics of Development*. Kathmandu: Mrs. Sita Devi Mathema.
- Meier, Gerald M. and James E. Rauch (2004). *Leading Issues in Economic Development*, Seventh Edition. New York: Oxford University Press.
- Thirlwall, A.P. (1999). *Growth and Development with Special Reference to Developing Economies*, Sixth Edition. Hong Kong: Macmillan Press Ltd.
- Todaro, Michael P. and Stephen C. Smith (2004). *Economic Development*, Eighth Edition. New Delhi: Pearson Education.
- Singh, Bright D. (1984) *Tools and Technique & Planning, An Introduction*, New Delhi: Allied Publishers Private Limited.

**Supplementary Readings**

- Agarwala, A.N. and S.P. Singh (eds.) (1958). *The Economics of Underdevelopment*. New York: Oxford University Press.
- Barro, Robert J. and Xavier-i-Martin (2004). *Economic Growth*, Second Edition. New Delhi: Prentice-Hall of India Pvt. Ltd.
- Basu, Kaushik (2002). *Analytical Development Economics*. New York and New Delhi: Oxford University Press.
- Berberoglu, Berch (1992). *The Political Economy of Development*. New York: Berch State University.
- Bello, Walden (2004) *Deglobalization*, London, Zed Books
- Blakely, Edward J. and Ted K. Bradshaw (2003). *Planning Local Economic Development: Theory and Practice*, Third Edition. New Delhi: Vistaar Publications.
- Bissio, Roberto (2004) *Social Watch Report*, Monte video, Uruguay, Instituto Del Tercer Mundo, item@item.org.uy
- Bourbignon, Francois and Boris Pleskovic (2004) (ed.) *Annual World bank Conference on Development Economics 2004: Accelerating Development*, Washington, World Bank and OUP.
- Cairncross, A.K. (1962). *Factors in Economic Development*. London: George Allen & Unwin Ltd.
- Chaubey, P.K. (1995). *Poverty Measurement: Issues, Approaches and Indices*. New Delhi: New Age International (P) Limited Publishers.
- Chew, S. and R. Deusmark (eds.) (1998). *Underdevelopment and Development*. London: Sage Publications.
- Das Gupta, Ajit K. and D.W. Pearce (1978). *Cost-Benefit Analysis: Theory and Practice*. London: ELBS/Macmillan.
- Dale, Raider (2004) *Evaluating Development Programmes and Projects, 2nd ed.*, New Delhi, Sage Publication.
- Gallagher, Kevin P. (2005) *Putting Development First*, London, Zed Books
- Haq, Mahbub Ul (1999). *Reflections on Human Development*. Delhi: Oxford University Press.
- Haq, Mahbub Ul (1997). *Human Development in South Asia*. Karachi: Oxford University Press.

- Haq, Mahbub Ul and Khadija Haq ( ). *Human Development in South Asia: The Education Challenge*. Karachi: Oxford University Press.
- Hattne, B. (1998). *Development Theory and the Three Worlds*, Second Edition. London: Longman.
- Higgins, Benjamin (1968). *Economic Development: Problems, Principles, and Policies*, Revised Edition. New York: W.W. Norton & Company, Inc.
- Khadka, Keshab Raj (2002). "Underdevelopment and Dependency Theory: An Appraisal," *Economic Journal of Development Issues*, Vol. 3 No. 2 , Dept. of Economics, Patan Multiple Campus (July—Dec. 2002): 65–77.
- Killock, Tony ( ). *Policy Economics*. London: ELBS.
- Kindleberger, Charles C. and Herrick Bruce (1977). *Economic Development*, Third Edition. Tokyo: McGraw-Hill Koga Kusha Ltd.
- Korten, David C. and Rudi Klaus (eds.)(1984). *People Centred Development*. West Hartford, Connecticut: Kumarian Press.
- Korten, David C. (1992). *Getting to the Twenty-first Century Voluntary Action and Global Agenda*. New Delhi: Oxford and IBLT Publishing Company.
- Krishnaswamy, K.S. (1990) (ed.) *Poverty and Income Distribution*, Delhi, Sameeksha Trust, OUP
- Kusek, Jody Z. and Ray C. Rist (2004) *Ten Steps to result Based Monitoring and Evaluation System: A Handbook for Development Practitioners*, Washington, World Bank and OUP
- Leibenstein, Harvey (1957). *Economic Backwardness and Economic Growth*. New York: John Wiley & Sons.
- Lewis, W. A. (1954). *Economic Development with Unlimited Supply of Labor*. Manchester: Manchester School Intermediate Technology Publications.
- Lewis, W. A. (1955). *The Theory of Economic Growth*. London: George Allen & Unwin Ltd.
- Little, I.M.D. and J.A. Mirrlees (1974). *Project Appraisal and Planning for Developing Countries*. London: Heinemann.
- Meier, Gerald M. and Joseph E. Stiglitz (eds.) (2002). *Frontiers of Development Economics: The Future in Perspective*. Washington, DC: The World Bank and Oxford University Press.
- NESAC (1998). *Nepal Human Development Report*. Kathmandu: NESAC. NHDR: 2002-2004
- NPC/UNDP (2002) *Nepal Human Development Report*. Kathmandu, National Planning Commission, HMG/N and United Nations Development Programme
- NPC/UNDP (2004) *Nepal Human Development Report*. Kathmandu, National Planning Commission, HMG/N and United Nations Development Programme
- Nurkse, Ragnar (1953). *Problems of Capital Formation in Underdeveloped Countries*. Oxford: Basil Blackwell & Mott Ltd.
- Nepal, Govinda (2008) *Development Planning in the Era of Globalization* Kathmandu: Himalaya Book Stall 2nd Ed.
- Pokharel, Bharat (2003). *Dependency Theory: Center and Periphery* The Economic Journal of Nepal, Vol. 26 No. 1 (January–March 2003): 23–45.
- Pyakuryal, Bishwambher 'Unemployment in South Asia: A Case of Nepal; SAARC Journal, Human Resource Development, Volume 2, Number 1, July 2006, SAARC Human Resource Development under, Islamabad, Pakistan (Website: WWW.bishwambher.com.np)
- Ray, Devraj (2003). *Development Economics*. New Delhi: Oxford University Press.
- Rostow, W.W. (1960). *Stages of Economic Growth*. London: Cambridge University Press.
- Sen, Amartya (1975). *Employment, Technology and Development*. London: Oxford University Press.
- Sen, Amartya (1981). *Poverty and Famines*. Oxford: Oxford University Press.
- Sen, Amartya (1973). *On Economic Inequality*. London: Oxford University Press.
- Sharma, Sharad (1997). *Strategies of Economic Development: Issues Facing Nepal*. Kathmandu: Annapurna Printing.
- Sharma, Sharad (1999) *Public Investment: Some Measuring Instruments in Tribhuvan University Journal* Volume XXI, No 2. Dec 1998., Kathmandu: Tribhuvan University
- Sharma, Sharad (1998), *Decentralization and Local Participation: Policies and Realities in Nepal*, Kathmandu: Annapurna Printing Press.
- Sharma, Sharad (2005) *Monitoring and Evaluation (M&E) of Development Projects: Issues Facing Nepal in the Economic Journal of Nepal*, Central Department of Economics, Tribhuvan University.

- Singh, D. Bright (1966). *Economics of Development*. Bombay: Asia Publishing House.
- Stern, Nicholas (2003). *Strategy for Development*. Washington, DC: The World Bank.
- Stiglitz, Joseph (2002). *Globalization and Its Discontent*. Washington, DC: The World Bank.
- Subramaniam, S. (2000). *Measurement of Inequality and Poverty*. Delhi: Oxford University Press.
- Sweezy, Paul M. (1991). *The Theory of Capitalist Development*. New Delhi: K P Bagchi & Company.
- UNIDO (1972). *Guidelines for Project Evaluation*. Project Formulation and Evaluation Series, No. 2. Vienna: United Nations Industrial Development Organisation (UNIDO).
- Wilber, Charles K. and Kenneth P. Jameson ( ). *The Political Economy of Development and Underdevelopment*. New York: McGraw-Hill.
- World Bank (2002). *Globalization, Growth and Poverty: Building an Inclusive World Economy*. New York: The World Bank and the Oxford University Press.
- World Bank. *World Development Report*. Various Issues.
- World Bank (2004) *Responsible growth for the New Millenium: Integrating Society, Ecology, and the Economy*, Washington World Bank, OUP

## Research Methodology

Eco. 534A

Paper: IV

Full Marks: 50

Teaching Hours: 75

**Course Objective:** The objective of this course is to acquaint the students with the techniques of conducting research in economics and to develop their skills in writing research reports.

	Teaching Hours
<b>Unit I: Introduction</b>	10
1. Meaning, objectives, and types of research: pure and applied; quantitative and qualitative	
2. Scope of and need for research in economics	
3. Correlation and Causality	
4. Reliability and validity	
<b>Unit II: Research Design and Types</b>	15
1. Conceptual frameworks	
2. Research design	
3. Types of social research designs: historical, experimental, exploratory, explanatory, descriptive, ex post facto, action, survey, field study, case study, time-series versus cross-sectional, qualitative versus quantitative	
<b>Unit III: Writing a Research Proposal</b>	10
1. Selection of topic	
2. Problem identification	
3. Objectives of the study	
4. Literature review	
5. Methodology: Type of data; data collection method; and tools for analysis	
6. References	
<b>Unit IV: Method of Data Collection</b>	15
1. Sources of information	
2. Census and sample	
3. Techniques of sampling	
4. Field survey, qualitative studies	
5. Probability and non-probability sampling; types of sampling; their importance and limitations	
6. Participatory Rural Appraisal (PRA): sources, methods, techniques, and tools	
7. Focus group discussions (FGDs)	
8. Uses and limitations of specific data collection techniques	
<b>Unit V: Data Processing and Analysis</b>	15
1. Data Processing: Editing, coding, and organization of data	
2. Tools of analysis: qualitative and quantitative	
3. Importance of statistical tools	
4. Measurement scale of variables (nominal, ordinal, interval, and ratio) and corresponding modes of data analysis	
5. Use of statistics and statistical tests in research	
<b>Unit VI: Preparation of Research Report</b>	10
1. Need of a research report	
2. Procedure for preparing research report	
3. Format of the report (including footnotes, quotations, References, etc.)	
5. Subject matter and organization of the report	
6. Presentation of research report	

### Basic References

- Bailey, Kenneth D. (1978). *Methods of Social Research*. New York: The Free Press.
- Baker, Therese L. (1994). *Doing Social Research*. Singapore: McGraw-Hill, Inc.
- Kanel, Nav R. (2003). *Guidelines to Format Theses and Dissertations: A Quick Reference*. Kathmandu: New Hira Books Enterprises.
- Kerlinger, Fred N. (2000). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
- Pokharel, Bharat (2003). *Research Methodology in Economics*. Kathmandu: New Hira Books Enterprises.

### Supplementary Readings

- Babbie, Earl R. (1998). *The Practice of Social Research*. New York: Wadsworth.
- Bell, Judith (1999). *How to Complete Your Research Project Successfully*. New Delhi: UBS Publishers and Distributors Ltd.
- Black, T.R. (2002). *Understanding Social Science Research*. London: Sage Publications.
- Blalock, Hubert M. (1980). *Sociological Theory and Research: A Critical Appraisal*. New York: Collier Macmillan Publishing Co. Inc.
- Burns, Robert B. (2000). *Introduction to Research Methods*, Fourth Edition. London: Sage Publications Ltd.
- Kanel, Nav R. (2002). "Treatment of Variables in Social Research," *Economic Journal of Development Issues*, Vol. 3 No. 1 (Jan– June 2002). pp. 77-84.
- Kothari, C.R. (2004). *Research Methodology: Methods & Techniques*, Second Edition. New Delhi: New Age International Publishers.
- Pokharel, Bharat (2005). "Styles of Composing References from Different Sources" *The Economic Journal of Nepal*. Vol. 28 No. 1, Issues No. 109 (Jan-March), pp.19-36
- Pokharel, Bharat (2005). *Social Research Methods*. Kathmandu: Dikshant Pustak Bhandar.
- Selltiz, Claire, Lawrence S. Wrightsman, and Stuart W. Cook (1976). *Research Methods in Social Relations*. New York: Holt, Rinehart and Winston.
- Simon, Julian I. and Paul Burstein (1985). *Basic Research Methods in Social Science*. New York: McGraw-Hill, Inc.
- Singleton, R.A. and B.C. Straits (1998). *Approaches to Social Research*. New York: Oxford University Press.
- Wilkinson, T.S. and P.L. Bhandarkar (1979). *Methodology and Techniques of Social Research*. Bombay: Himalaya Publishing House.
- Young, Pauline V. (1982). *Scientific Social Survey and Research*. New Delhi: Prentice Hall of India Pvt. Ltd.

## History of Economic Thought

Eco. 534B

Paper: IV

Full Marks: 50  
Teaching Hours: 75

**Course Objective:** This course intends to provide knowledge in the development of economic thought, to link the development of economic theories, and to identify factors influencing the development of economic theories and policies.

	Teaching Hours
<b>Unit I: General Background</b>	<b>15</b>
1. History of economic thought and economic history	
2. Scope and importance of history of economic thought	
3. Factors influencing economic thought	
4. Development of economic ideas Oriental: Hebrews, Hindus, and Buddhists Occidental: Greeks and Romans	
<b>Unit II: Foundation of Classical Economic Ideas</b>	<b>12</b>
1. Mercantilism	
2. Physiocracy	
3. Forerunners of Classicists: William Petty and Richard Cantillon	
<b>Unit III: Classical Contributions to Economics</b>	<b>15</b>
1. Adam Smith	
2. David Ricardo	
3. Thomas Malthus	
4. J.S. Mill	
<b>Unit IV: Socialistic Economic Thought</b>	<b>15</b>
1. Utopian socialism: Saint Simon, Charles Fourier, Robert Owen	
2. Scientific socialism: Marxian economic analysis, labor theory of value, theory of surplus value, Marxian and Neo-Marxian economy	
<b>Unit V: Post Classical Economic Thought</b>	<b>8</b>
1. Historical schools	
2. English historical school	
3. German historical school	
3.1 Older German historical school	
3.2 Younger German historical school	
<b>Unit VI: Subjectivists and Marginalists</b>	<b>10</b>
1. William Jevons	
2. Carl Menger	
3. Leon Walras	
4. Alfred Marshall	

### Basic References

- Blaug, Mark (1997). *Economic Theory in Retrospect*, Fifth Edition. London: Cambridge University Press.
- Gide, Charles and Charles Rist (1978). *A History of Economic Doctrines*, Second Edition. Calcutta: Oxford University Press.
- Haney, Lewis H. (2000). *A History of Economic Thought*, Fourth Edition. Delhi: Surjeet Publications.
- Mandel, Ernest (1974). *Marxist Economic Theory*. London: Merlin Press.
- Pokharel, Bharat (2004). *History of Economic Thought*. Kathmandu: New Hira Books Enterprises
- Roll, Eric (1988). *A History of Economic Thought*. Calcutta: Oxford University Press.

### Supplementary Readings

- Blaug, Mark (ed.) (1991). *The History of Economic Thought*. Hants: Edward Elgar.
- Desai, Meghnad (1974). *Marxian Economic Theory*. London: Gray-Mills Publishing Ltd.
- Dobb, Maurice (1973). *Theories of Value and Distribution since Adam Smith: Ideology and Economic Theory*. London: Cambridge University Press.
- Ekelund, Robert B. and Robert F. Hebert (1997). *A History of Economic Theory and Method*, Fourteenth Edition. New York: McGraw-Hill Ltd.
- Gray, Alexander (1933). *The Development of Economic Doctrine: An Introductory Survey*.
- Gray, Alexander (1963). *The Socialist Tradition: Moses to Lenin*. London: Longman.
- Schumpeter, Joseph A. (1956). *Ten Great Economists: From Marx to Keynes*. London: George Allen & Unwin Ltd.
- Schumpeter, Joseph A. (1957). *Economic Doctrine and Method*. London: George Allen & Unwin Ltd.
- Sweezy, Paul M. (1991). *The Theory of Capitalist Development*. New Delhi: K P Bagchi & Company.

Faculty of Economics, University of Calicut  
Dudhikulam  
Kerala

## Basic Econometrics

Eco. 534C  
Paper: IV

Full Marks: 50  
Teaching Hours: 75

**Course Objective:** This course intends to acquaint the students with basic econometrics and enable them to use some econometric tools in research and economic analyses.

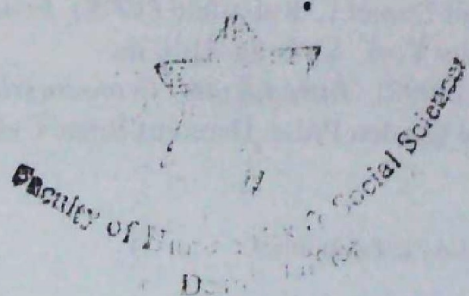
	Teaching Hours
<b>Unit I: Introduction</b>	5
1. Definition of econometrics	
2. Method: verification/goals	
3. Use of econometrics	
<b>Unit II: Statistical Inference</b>	10
1. Estimators – estimations	
2. Properties of estimators (small and large Samples)	
3. Methods of estimation: Method of moments, least squares method, and maximum likelihood method	
4. Confidence interval and hypothesis testing	
<b>Unit III: Linear Regression Model: Simple and Multiple</b>	10
1. Assumptions	
2. Methods of ordinary least squares (OLS) and maximum likelihood	
3. Dummy variable as regressor	
4. Hypothesis testing	
<b>Unit IV: Violation of OLS Assumptions</b>	25
1. Nature of the problem, consequences, detection, and remedial measures of Autocorrelation Heteroscedasticity Multicollinearity	
2. Normality test (the Jarque-Bera (JB) test)	
<b>Unit V: Regression on Dummy Variables</b>	10
Linear probability model, Logit, and Probit	
<b>Unit VI: Models with Lag Distributions</b>	10
1. Koyck model	
2. Almon polynomial lag	
3. Stock adjustment model	
4. Adaptive expectation model	
<b>Unit VII: Forecasting and Simulation</b>	5
1. Ex-post and Ex-ante forecasts	
2. Conditional and unconditional forecasts	
3. Introduction to simulation	

### Basic References

- Gujarati, Damodar N. (2003). *Basic Econometrics*, Fourth Edition. New York: McGraw-Hill, Inc.  
[Note: Third Edition of this book is also equally important and relevant.]
- Pindyck, Robert S. and Daniel L. Rubinfeld (1998). *Econometric Models and Economic Forecasts*, Fourth Edition. New York: McGraw-Hill, Inc.
- Ramanathan, Ramu (1995). *Introductory Econometrics With Applications*, Third Edition. Fort Worth, Texas: The Dryden Press, Harcourt Brace College Publishers.

### Supplementary Readings

- Cramer, J.S. (1969). *Empirical Econometrics*. Amsterdam: North-Holland Publishing Co.
- Greene, William H. (2003). *Econometric Analysis*, Fifth Edition. Singapore: Pearson Education.
- Gujarati, Damodar N. (1992). *Essentials of Econometrics*. New York: McGraw-Hill International Editions, Economic Series.
- Intriligator, Michael D. (1971). *Mathematical Optimization and Economic Theory*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Intriligator, Michael D. (1978). *Econometric Models, Techniques and Applications*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Johnston, Jack and John DiNardo (1997). *Econometric Methods*, Fourth Edition. New York: The McGraw-Hill Companies, Inc.
- Judge, George G., William E. Griffiths, Carter R. Hill, Helmut Lütkepohl, and Tsoung-Chao Lee (1985). *The Theory and Practice of Econometrics*, Second Edition. New York: John Wiley & Sons.
- Judge, George G., Carter R. Hill, William E. Griffiths, Helmut Lütkepohl, and Tsoung-Chao Lee (1988). *Introduction to the Theory and Practice of Econometrics*, Second Edition. New York: John Wiley & Sons.
- Kelejian, Harry A. and Wallace E. Oates (1981). *Introduction to Econometrics: Principles and Applications*, Second Edition. New York: Harper & Row Publishers.
- Koutsoyiannis, A. (1977). *Theory of Econometrics*, Second Edition. London: The Macmillan Press Ltd.
- Maddala, G.S. (2002). *Introduction to Econometrics*, Second Edition. Singapore: John Wiley & Sons.
- Madnani, G.M.K. (1994). *Introduction to Econometrics: Principles and Applications*, Revised Sixth Edition. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- Rao, Potluri and R.L. Miller (1971). *Applied Econometrics*. Belmont, California: Wadsworth Publishers.
- Theil, Henri (1971). *Principles of Econometrics*. New York: John Wiley & Sons, Inc.
- Wonnacott, Ronald J. and Thomas H. Wonnacott (1979). *Econometrics*, Second Edition. New York: John Wiley & Sons, Inc.



## Economics of Agricultural Development

Eco. 535-1

Full Marks: 100

Paper: V

Teaching Hours: 150

**Course Objective:** This course intends to enable the students to have sound theoretical knowledge of economics of agricultural development in developing countries and to introduce them to the systematic analysis of agricultural policy choices, to the planning techniques used in policy formulation and implementation, and to research methods in agricultural economics

	Teaching Hours
<b>Unit I: Introduction</b>	<b>10</b>
Structure and characteristics of agriculture in developing countries	
<b>Unit II: Role of Agriculture in Economic Development</b>	<b>10</b>
1. Analysis of the role of agriculture in economic development	
2. Factors that accelerate or inhibit the growth of agriculture	
3. Role of biotechnology in agricultural development	
<b>Unit III: Theories of Agriculture Development</b>	<b>10</b>
1. Innovation theory of agriculture development	
2. Labor surplus economic models	
3. Concept of economic dualism	
4. John Mellor's theory of agriculture development	
5. Transforming traditional agriculture: Schultz and Jorgenson models	
<b>Unit IV: WTO and Agriculture</b>	<b>15</b>
1. International agreements on agriculture (AoA)	
2. TRIPs and biodiversity	
3. Market access for agro-products, SPS measures	
<b>Unit V: Land Systems</b>	<b>10</b>
1. Management of land and land-based resources	
2. Physical, economic, and institutional factors affecting land resources	
<b>Unit VI: Agricultural Marketing</b>	<b>20</b>
1. Theories of agricultural marketing	
2. Factors affecting marketing costs and prices of agricultural products and of factor inputs	
3. Agricultural marketing in Nepal—structure, conduct performance, and policy analysis	
<b>Unit VII: Agricultural Pricing</b>	<b>10</b>
1. Supply response to price in agriculture	
2. Price variation and instability	
3. Price policy and price stabilization measures	
4. Price support and input subsidization	
<b>Unit VIII: Economic Analysis and Planning of Agricultural Development</b>	<b>10</b>
1. Economic analysis of agricultural development	
2. Agricultural Perspective Plan (APP)	
3. Analysis of different aspects of agricultural policies and programs	
4. Issues in agricultural development in Nepal	
<b>Unit IX: Agricultural Finance</b>	<b>15</b>
1. Conceptual bases of agricultural finance	
2. Risks and uncertainties in farm-related intermediation	
3. History, development and mechanism of agricultural financing in Nepal	
4. Agricultural financing institutions and financing issues	
5. Microcredit institutions	

**Unit X: Food and Nutrition** 20

1. World food problems and economic consequences of malnutrition
2. Importance of nutrition and its current levels in developing countries
3. Review of food and nutrition policies and programs in Nepal
4. Agricultural trade liberalization and food security
5. Food Sovereignty

**Unit XI: Production Relationship in Agricultural Economics** 10

1. Production function
2. Factor-product relationship
3. Factor-factor and product-product relationship

**Unit XII: Research in Agricultural Economics** 10

Methods and techniques in agricultural economic research

**Basic References**

Agricultural Development Bank, Nepal (ADB/N) Publications.

George, Axian H. and Sudhakar Thorat (1972). *Modernizing World Agriculture*. New Delhi: Oxford and IBH.

Mellor, John W. (1966). *The Economics of Agricultural Development*. Ithaca: Cornell University Press (also published by Vora & Co. Publishers Pvt. Ltd., Bombay, India).

Ministry of Agriculture and Cooperatives (HMG, Nepal) Publications.

Nepal Rastra Bank (NRB) Publications including *Agricultural Credit Survey*.

**Supplementary Readings**

Agricultural Development Council (ADC) Publications.

APROSC (1995). Agricultural Perspective Plan (APP).

Asian Development Bank (ADB) Publications.

Ghatak, Subrata and Ken Ingersent (1984). *Agriculture and Economic Development*. New Delhi: Select Book Service Syndicate.

Gittinger, J. Price (1982). *Economic Analysis of Agricultural Projects*, Second Edition. Baltimore: Johns Hopkins University Press.

Hayami, Yujiro and Vernon W. Ruttan (1985). *Agricultural Development: An International Perspective*. Baltimore: Johns Hopkins University Press.

His Majesty's Government of Nepal (HMG/N) Publications.

Jha, Kumar K. (1978). *Agricultural Finance in Nepal: An Analytical Study*. India: Heritage Publishers.

Lewis, W. A. (1954). *Economic Development with Unlimited Supply of Labor*. Manchester: Manchester School Intermediate Technology Publications.

Mellor, John (2000). "Faster More Equitable Growth: The Relation between Growth in Agriculture and Poverty Reduction." Harvard University Consulting Assistance on Economic Reform II Discussion Paper 70, Cambridge, Mass. Available online at <http://www.cid.harvard.edu/caer2>.

Mollett, J.A (1984). *Planning for Agricultural Development*. London and Canberra: Groom Helen.

Pant, Y.P. and S.C. Jain (1979). *Agricultural Development in Nepal*. Bombay: Vora and Co. Publishers Pvt. Ltd.

Pyakuryal, Bishwambhar, Y.B. Thapa, and D. Roy (2005). "Trade Liberalization and Food Security in Nepal." Washington, DC: International Food Policy Research Institute (Discussion Paper No. 88)

Sadhu, A.N. and Amarjit Singh (1989). *Fundamentals of Agricultural Economics*, Third Revised Edition. Bombay: Himalaya Publishing House.

Schultz, Theodore W. (1964). *Transforming Traditional Agriculture*. New Haven: Yale University Press.

Windfuhr, Michael and Jennie Jonsen (2005). *Food Sovereignty*. Warwickshire, London: Schumacher Centre for Technology and Development (ITDG).

World Bank Publications (Sector Policy Papers).

## Mathematical Economics

Eco. 535-2  
Paper: V

Full Marks: 100  
Teaching Hours: 150

**Course Objective:** The objective of this course is to educate the students with the use of mathematical tools in economic analysis and to make them understand and interpret the results

	Teaching Hours
<b>Unit I: Introduction</b>	<b>2</b>
Introduction to mathematical economics and its applications	
<b>Unit II: Vector Spaces, Convex Sets, and Concave Functions</b>	<b>6</b>
1. Vector spaces, linear independence and basis	
2. Convex set, convex combination, convex hull and properties of convex sets	
3. Convex, concave, and quasi-concave functions	
<b>Unit III: Theory of Optimization</b>	<b>5</b>
Unconstrained and constrained optimization of multivariable function: review of theory and applications	
<b>Unit IV: Price and Output Determination</b>	<b>10</b>
Price and output determination in all markets	
<b>Unit V: Theory of Consumer Behavior</b>	<b>15</b>
1. Utility maximization and consumer demand functions (ordinary and compensated)	
2. Choice of utility index	
3. Relationship between compensated and ordinary demand demands: the Slutsky equation	
4. Duality and the envelope theorem: The primal problem; the dual problem, Roy's identity; Shephard's lemma	
<b>Unit VI: Theory of Production</b>	<b>5</b>
1. Cobb-Douglas production function	
2. CES (constant elasticity of substitution) production function	
3. Relationships between Cobb-Douglas and CES production functions	
<b>Unit VII: General Equilibrium</b>	<b>10</b>
1. Equilibrium in a market economy	
2. Walrasian general equilibrium in a pure exchange economy: aggregate demand and existence of competitive equilibrium	
3. Welfare properties of competitive equilibrium	
4. General equilibrium: production and exchange	
<b>Unit VIII: Simultaneous Difference and Differential Equation System</b>	<b>10</b>
Linear simultaneous difference and differential equation systems	
<b>Unit IX: Economic Applications of Simultaneous Difference and Differential Equation Systems</b>	<b>25</b>
1. The Cobweb model	
2. The dynamics of multiplier	
3. Growth models: Harrod, Domar, Solow	
4. Samuelson's multiplier-accelerator interaction model	
5. Hicks model (linear and non-linear)	
6. Adaptive expectations and market stability (Mark Nerlove's) models	
7. Capital-stock adjustment model	
8. Inflation and unemployment models	
9. Kalecki's model (earlier and later versions)	

**Unit X: Linear Programming** 12

1. Introduction to optimization with inequality constraints
2. The simplex method
3. Duality and duality theorem
4. The dual problem and economic interpretation of dual variables
5. Activity analysis of production

**Unit XI: Input-Output and Related Models** 20

1. Input-output models
2. The closed model
3. The Leontief open model
4. Direct and indirect input requirements
5. Factor intensity and the Leontief model
6. The substitution theorem
7. Matrix multiplier
8. Dynamic input-output model

**Unit XII: Game Theory** 20

Basic concepts; strategies and the pay-off matrix; value of a game; the saddle point; mixed strategy; dominance, determination of the value of the game using probabilities; the graphical method, linear programming method, solution to zero sum game; Nash equilibrium

**Unit XIII: Optimal Control Theory** 10

1. Nature of optimal control
2. Alternative terminal conditions
3. Economic applications

**Basic References**

- Allen, R.G.D. (1964). *Mathematical Economics*, Second Edition. London: Macmillan & Co., Ltd.
- Chiang, Alpha C. (1984). *Fundamental Methods of Mathematical Economics*, Third Edition. Singapore: McGraw-Hill.
- Dorfman, Robert, Paul A. Samuelson, and Robert M. Solow (1958). *Linear Programming and Economic Analysis*. New York: McGraw-Hill Book Company.
- Henderson, James M. and Richard E. Quandt (2003). *Microeconomic Theory: A Mathematical Approach*, Third Edition. New Delhi: Tata McGraw-Hill Publishing Company Limited.

**Supplementary Readings**

- Allen, R.G.D. (1967). *Macroeconomic Theory*. New York: St. Martin's.
- Baldani, Jeffrey, James Bradfield, and Robert Turner (1996). *Mathematical Economics*. Philadelphia: Harcourt Brace College.
- Chiang, Alpha C. (1992). *Elements of Dynamic Optimization*. New York: McGraw-Hill Book Company.
- Chitrakar, Kamal (2002). *Mathematical Economics*. Kirtipur, Kathmandu: Kshitiz Prakashan.
- Dernberg, T.F. and J.D. Dernberg (1969). *Macroeconomic Analysis: An Introduction to Comparative Statics and Dynamics*. Reading, Mass.: Addison-Wesley Publishing Company, Inc.
- Guru-Gharana, Kishor K. and Jeetendra P. Aryal (2001). *Mathematical Economics*. Kirtipur, Kathmandu: New Hira Books Enterprises.
- Hadley, G. (1962). *Linear Programming*. Reading, Mass.: Addison-Wesley Publishing Company, Inc.
- Lancaster, Kelvin (1969). *Mathematical Economics*. New York: The Macmillan Company.
- Madhani, G.M.K. (1991). *Mathematical Economics: Microeconomic Theory*, Second Edition. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.
- Morishima, Michio (1964). *Equilibrium, Stability and Growth: A Multisectoral Analysis*. Oxford Clarendon Press.
- Quirk, James and Rubin Saposnik (1968). *Introduction to General Equilibrium Theory and Welfare Economics*. New York: McGraw-Hill Book Company.

- Raddar, Trout ( ). *General Equilibrium Theory*. London and New York: Academic Press.
- Silberberg, Eugene (1990). *The Structure of Economics: A Mathematical Analysis*, Second Edition. New York: McGraw-Hill Publishing Company.
- Takayama, Akira (1985). *Mathematical Economics*, Second Edition. Cambridge: Cambridge University Press.
- Varian, Hal R. (1992). *Microeconomic Analysis*, Third Edition. New York: W.W. Norton & Company.

## Population Economics

Eco. 535-3  
Paper: V

Full Marks: 100  
Teaching Hours: 150

**Course Objective:** This course aims at using economic perspective to analyze demographic changes. It will demonstrate recent innovations in the application of microeconomic theory to the demographic behavior, more importantly on fertility and marriage. The course will also provide students some basic knowledge on the techniques of demographic measurement. Topics would be discussed with reference to developed and developing countries with special emphasis on Nepal.

Teaching Hours  
16

### Unit I: Introduction to Population Economics

1. Importance of population economics
2. Economic demography
3. Ratios: Sex ratio, child-women ratio, dependency ratio, and survival ratio
4. Rates: population growth rates: linear, geometrical and exponential; rate of natural increase; doubling time
5. Demographic rates: crude birth rate; general fertility rate; age-specific fertility rate; total fertility rate; gross reproduction rate; net reproduction rate; crude death rate; infant and child mortality rate; maternal mortality rate; migration rates; rate of urbanization

### Unit II: Sources of Population Data

1. Population census; vital registration; demographic sample surveys; other sources
2. Accuracy and errors in demographic data
3. Use of demographic data in socioeconomic planning

### Unit III: Population Theories

1. Malthusian perspective/Malthusian population trap
2. Neo-Malthusian theory
3. The Marxist theory
4. Optimum theory of population
5. Demographic transition theory
6. Reformulation of the demographic transition theory
7. Threshold hypothesis
8. Theory of demographic change and response
9. Theory of relative income

### Unit IV: Population Growth, Distribution and Structure

#### a) Growth and Distribution

1. Growth and distribution of population (world, developed countries, developing countries, SAARC)
2. Growth and distribution of population of Nepal

#### b) Age and Sex Structure

1. Age and sex distribution of population
2. Population pyramid

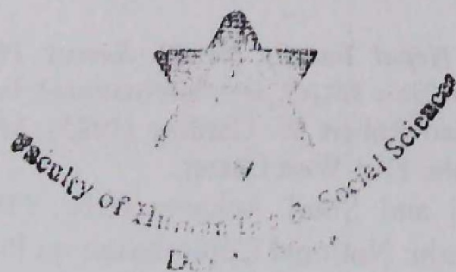
#### c) Population Aging

1. Concepts and measurements
2. Global perspective on population aging
3. Population aging and its consequences

#### d) Child Labor: Its dimensions

- Issues, causes, and consequences

<b>Unit V: Fertility</b>	<b>15</b>
<b>a) General Level and Trends</b>	
1. Fertility levels and trends in developing countries	
2. Fertility levels and trends in developed countries	
3. Determinants of fertility: Davis and Blake intermediate variable framework; Bongaarts proximate determinants	
4. Fertility differentials: urban/rural, educational status, economic status, occupational status, religion, and caste/ethnicity	
5. Women's status and fertility	
<b>b) Economics of Fertility</b>	
1. Harvey Leibenstein's theory	
2. Becker's model	
3. The Easterlin hypothesis	
4. Caldwell's intergenerational wealth flow model	
<b>Unit VI: Mortality</b>	<b>15</b>
1. Determinants of mortality	
2. Levels and trends in developed and developing countries	
3. Life table: construction and interpretation	
<b>Unit VII: Migration and Urbanization</b>	<b>17</b>
<b>a) Migration</b>	
1. Definition and types	
2. Determinants and consequences of internal and international migration	
3. Theories of migration: Ravenstein, Lee, and Todaro	
<b>b) Urbanization</b>	
1. Definitions and concepts	
2. Global trends of urbanization	
3. Urbanization in Nepal	
4. Consequences of urbanization	
<b>Unit VIII: Population Projections</b>	<b>15</b>
1. Importance of population projections in development planning	
2. Methods of population projection: mathematical and component	
3. Population projection in Nepal	
<b>Unit IX: Population Growth and Economic Development</b>	<b>17</b>
1. Economic consequences of demographic change: effects on income, agriculture, land, food and environment, education and health, savings and investment, employment, productivity, and forests	
2. Population growth and poverty	
3. Gender and Status of Women	
<b>Unit X: Population Policy</b>	<b>15</b>
1. Population policy: aims and objectives	
2. Population influencing policies: fertility, mortality, migration, and distribution	
3. Current trends in policies and policies of the SAARC countries	



### Basic References

- Barclay, George W. (1958). *Techniques of Population Analysis*. New York: John Wiley & Sons, Inc.
- Central Bureau of Statistics (2004). *Population Monograph of Nepal*, Vol. 1 and 2. Kathmandu: CBS.
- Shryock, Henry S., Jacob S. Siegel and Associates (1976). *The Methods and Materials of Demography*, Condensed Version. New York: Academic Press.
- UNFPA (1989). *South Asia Study on Population Policies and Programmes, Nepal*. Kathmandu: UNFPA.

### Supplementary Readings

- Becker, Gary S. (1960). "An Economic Analysis of Fertility," in *Demographic and Economic Changes in Developed Countries*. Princeton: Princeton University Press.
- Becker, Gary S. (1973). "A Theory of Marriage: Part I," *Journal of Political Economy*, July/August 1973, pp. 813-846.
- Becker, Gary S. (1991). *A Treatise on the Family* (enlarged edition). Cambridge, Mass.: Harvard University Press.
- Bhende, Asha A. and Tara Kanitkar (2002). *Principles of Population Studies*. Bombay: Himalaya Publishing House.
- Bogue, Donald, J. (1969). *Principles of Demography*. New York: John Wiley & Sons, Inc.
- Caldwell, John C. (1976). "Toward a Restatement of Demographic Transition Theory," *Population and Development Review*, Vol. 2, No. 3 and 4, pp. 321-366.
- CNAS (1998). "Fertility Transition in Nepal," *Contribution to Nepalese Studies* Vol. 25, Special Issue (July 1998).
- Coale, Anseley J. and Edgar M. Hoover (1958). *Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects*. Princeton, NJ: Princeton University Press.
- Easterlin, Richard (1969). "Towards A Socio-Economic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility," in S.J. Berhman et al. (ed.) *Fertility and Family Planning: A World Review*. Ann Arbor: University of Michigan Press.
- Easterlin, Richard (1983). "Modernization and Fertility: A Critical Essay in Determinants of Fertility in Developing Countries," in R. Bulatao and Ronald Lee (ed.). New York: Academic Press.
- Gillis, Malcolm, Dwight H. Perkins, Michael Roemer, and Donald Snodgrass (1987). *Economics of Development*. New York: W.W. Norton & Company.
- Ghosh, B.N. (ed.) (1987). *Studies in Population and Economic Development*, Vols. 1 and 2. New Delhi: Deep & Deep Publications.
- Harris, John R. and Michael P. Todaro (1970). "Migration, Unemployment and Development: A Two Sector Analysis," *American Economic Review*, Vol. 60 (March 1970), pp. 126-142.
- K.C., Bal Kumar (ed.) (1992). *Population and Development in Nepal*. Kathmandu: Central Department of Population Studies, T.U.
- Leibenstein, Harvey (1957). *Economic Backwardness and Economic Growth*. New York: John Wiley & Sons.
- Mahaderan, K. (1986). *Fertility and Mortality: Theory, Methodology and Empirical Issues*. New Delhi: Sage Publishers.
- Meier, Gerald M. (1989). *Leading Issues in Economic Development*. New York: Oxford University Press.
- Mishra, Bhaskar D. (1980). *An Introduction to the Study of Population*. New Delhi: South Asia Publishers.
- MoH et al. (1997). *Nepal Family Health Survey 1996*. Kathmandu: Family Health Division, Ministry of Health/New ERA/Carco International, Inc.
- Palmore, James A. and Robert W. Gardner (1983). *Measuring Mortality, Fertility, and Natural Increase*. Honolulu: East-West Center.
- Pant, Raghav Dhoj and Sunil Acharya (eds.) (1988). *Population and Development in Nepal*. Kathmandu: National Commission on Population (NCP).
- Schultz, T. Paul (1981). *Economics of Population*. Reading, Mass.: Addison-Wesley.

- Sharma, R.C. (1988). *Population, Resources, Environment and Quality of Life*. Delhi: Dhanpat and Sons.
- Shrivastava, O.S. (1983). *A Textbook of Demography*. New Delhi: Vikash Publishing House.
- Todaro, Michael P. (1983). *The Struggle for Economic Development*. New York: Longman, SPL, Part II, 527.
- Todaro, Michael P. (1997). *Economic Development*, Sixth Edition. Harlow, England: Addison-Wesley.
- Tuladhar, J.M. (1990). *The Persistence of High Fertility in Nepal*. New Delhi: Inter India Publications.
- UNO (1973). *Determinants and Consequences of Population Trends*, Revised Edition. New York: United Nations.
- United Nations (1989). *Case Study in Population Policy: Hungary*. New York: United Nations.
- United Nations (1991). *Economic and Social Aspects of Population Ageing in Argentina*. New York: United Nations.
- United Nations (1992). *Economic and Social Aspects of Population Ageing in India*. New York: United Nations.
- United Nations (1993). *Population Policies and Programmes*. New York: United Nations.
- United Nations (1994). *Ageing and the Family*. New York: United Nations.
- United Nations (1994). *The Ageing of Asian Populations*. New York: United Nations.
- United Nations (1994). *World Population Monitoring 1993*. New York: United Nations.
- United Nations (1998). *World Urbanization Prospects, The 1998 Revision*. New York: United Nations.
- Weeks, John R. (1994). *Population: An Introduction to Concepts and Issues*. Belmont: Wadsworth Publishing Co.

## Industrial Economics

Eco. 535-4

Paper: V

Full Marks: 100

Teaching Hours: 150

**Course Objective:** The objective of this course is to provide the knowledge of theoretical background of the structure of industrial economics; to familiarize the students with the issues of industrial development in developing countries; and to acquaint the students with the policy issues of industrialization in Nepal.

	Teaching Hours
<b>Unit I: General Background</b>	15
1. Scope and method of industrial economics	
2. Industrialization: objectives, strategies, and policies	
3. Issues in industrialization: pricing and marketing, research and development, wage determinants, and labor issues	
<b>Unit II: Industrial Location</b>	15
1. Theories of industrial location	
2. Location and regional planning	
3. Locational control and regulation	
4. Pattern of industrial location in Nepal	
<b>Unit III: Industrial Finance</b>	20
1. Factors influencing industrial decisions	
2. Project appraisal	
3. Sources of industrial financing	
4. Capital market	
5. Development banks and their role	
6. Industrial financing in Nepal: trends and problems	
<b>Unit IV: Industrial Management</b>	20
1. Concept of industrial management	
2. Scientific management	
3. Rationalization	
4. Labor participation in management	
<b>Unit V: Size and Monopoly</b>	20
1. Firm and industry	
2. Concept of an optimum firm	
3. Relation between size and efficiency	
4. Growth of monopoly power—combination movements	
5. Control of monopoly	
<b>Unit VI: Industrial Development in Developing Countries</b>	20
1. Issues of industrial development	
2. Trends of industrialization in developing countries	
3. Role of the state in industrialization	
4. WTO, FDI and industrialization	
<b>Unit VII: Industrial Development in Asia</b>	25
Industrial development in Japan, India, China, South Korea, and Malaysia	
<b>Unit VIII: Issues in Industrialization</b>	15
1. Competitiveness and comparative advantage	
2. Nepal's industrial policy of 1992	

## References

- Brown. *Industrial Combination.*  
Bryle, Murray D. *Policies and Methods for Industrial Development.*  
Devine, P.J. et al. *An Introduction to Industrial Economics.*  
Hoover, E.H. *Location of Industrialization.*  
Kimbal and Kimbal. *Principle of Industrial Organisation.*  
Koonz and Dannel, Cyril O'. *Principle of Management.*  
Kuchchal, S.C. *Corporate Finance.*  
Kuchchal, S.C. *Industrial Economy of India.*  
Robinson, E.A.G. *The Structure of Competitive Industry.*  
Robinson, E.A.G. *Monopoly.*  
Sutchiffe, R.B. *Industrial Underdevelopment.*  
Weber, Alfred. *Theory of Location of Industry.*

## International Economics

Eco. 535-5

Paper: V

Full Marks: 100

Teaching Hours: 150

**Course Objective:** The objective of this course is to expose the students to the theories which can explain the changing pattern of trade between countries; to give them knowledge about the terms of trade at which goods are traded in the international market and the relationship between trade and growth; and to enable the students to know about the trade problems of LDCs in the changing context of multilateral trading arrangements and about balance of payments, disequilibrium, possible measure for correcting the disequilibrium, the role of exchange rate, and commercial policies.

	Teaching Hours
<b>Unit I: Theories of International Trade</b>	30
1. The Classical theory of comparative advantage—Smith, Ricardo, Haberler	
2. Factor endowment and international trade—Heckscher-Ohlin Theory	
3. Factor price equalization empirical tests, Myint's vent for surplus theory—Demand- and supply oriented approaches	
4. Technological change and innovation-oriented theories	
5. WTO and international trade	
<b>Unit II: Law of Reciprocal Demand</b>	10
1. Offer curves	
2. Terms of trade	
3. Terms of trade as a measure of gains	
<b>Unit III: Trade and Growth</b>	10
1. Historical perspective and the present context	
2. Immersing growth	
3. Rybczynski's theorem	
<b>Unit IV: Trade and Developing Countries</b>	20
1. Export instability—Prebisch	
2. Singer and unequal exchange hypothesis	
3. Import-substituting and export-led growth	
4. UNCTAD, WTO and developing countries	
<b>Unit V: Balance of Payments</b>	30
1. Disequilibrium in the balance of payments	
2. Causes and adjustment mechanisms: automatic and policy-induced adjustments under various exchange rate regimes and open economy	
3. Devaluation, elasticity and absorption approaches	
4. Direct control	
5. Multiple exchange rates, money in the adjustment process	
<b>Unit VI: Foreign Exchange Market</b>	25
1. Theories of exchange rate determination: purchasing power parity, spot and forward rates, fixed and flexible exchange rates	
2. Exchange market intervention policy	
3. Economics of real exchange rate	

## Unit VII: Commercial Policy

25,

1. Theory of tariffs
2. Effects of tariffs
3. Effective rate of protection
4. Non-tariff barriers to trade
5. Cartels, commodity agreements, dumping, tax-subsidy policies
6. Regional trade and MFN
7. SAFTA

## References

- Caves and Jones (eds.). *Readings in International Economics*. American Economic Association.
- Caves, R.E. and R.W. Jones (1985). *World Trade and Payments*. Boston: Little-Brown.
- Corden, W.M. *Trade Policy and Economic Welfare*.
- Dornbusch, R. and F.L.C.H. Helmers. *The Open Economy*.
- Kindleberger, Charles P. *International Economics*.
- Myint, H. *Economic Theory and the Underdeveloped Countries*.
- Söderston, Bo and Geoffrey Reed (1994). *International Economics*, Third Edition. London: Macmillan Press Ltd.
- Wards, S. *Exchange Rate Misalignment in Developing Countries*.
- Young, David. *International Economics*.
- Journal Articles to be prescribed in the course of lecture.

## Environmental and Natural Resource Economics

Eco. 535-6

Paper: V

Full Marks: 100

Teaching Hours: 150

**Course Objectives:** This course is meant to equip the students with the knowledge of natural resource and environmental economics to enable them to use economic tools for studies in the fields of natural resource and environmental economics.

### Course Contents:

Units	Teaching Hrs.
<b>Unit I: Economy and Environment</b>	<b>10</b>
1. Circular flow of the Economy	
2. Material balances	
3. The emergence of resource and environmental economics and its linkage with welfare economics	
4. Nature of the problem (global and local): pollution and resources depletion	
<b>Unit II: Theory of Externalities</b>	<b>15</b>
Definition of Externality and Optimal Externality; Properties rights, transactions, costs and market failure, Pollution as Externality; Instruments of Control; Market, Taxes; Subsidies; Permits and Direct Control	
<b>Unit III: Natural Resources Management</b>	<b>15</b>
Renewable and Exhaustible Resources; Concept of Maximum Sustained Yield; Rate of Exploitation; Conditions under which extinction could arise; External Benefits of Resources	
<b>Unit IV: Economics of Environmental Pollution</b>	<b>10</b>
1. Residual emissions, Pollution and pollution damages.	
2. Efficient reduction in environmental pollution	
3. Static efficiency under perfect completion	
4. Static efficiency under imperfect competition	
5.	
<b>Unit V: Public Policies for Restricting Pollution</b>	<b>15</b>
1. Establishing property rights for environmental resources	
2. Pollution abatement policies for Point source pollution- taxes, emission charges, emission standards, tradable policies for non point source pollution- input tax emission charges, input restrictions, cost sharing, mandated production methods, tradable emission permits, other considerations	
<b>Unit VI: Natural and Environmental Resources Accounting</b>	<b>10</b>
1. Resource accounting methods-physical account, monetary accounts, satellite accounts and resources specific accounting	
2. Implication for sustainable development	
<b>Unit VII: Economic Valuation- A</b>	<b>20</b>
Option Value: Existence Value; Bequest Value; Willingness to pay and Willingness to accept. Valuation and Cost Benefit Analysis	
<b>Unit VIII: Economic Valuation- B</b>	<b>20</b>
Methods of Valuation; Direct and Indirect Valuation Methods; Hedonic Price Approaches; Contingent Valuation Method; Dose-response Method; Travel Cost Method and their applications; Valuation of human life: disability adjusted life years (DALYs) and quality adjusted life years (QALYs)	

**Unit IX: Economic Instruments for Environment Regulation**

15

Charges and Taxes; Use of Permits; Experiences with Permits, Country Case Studies

**Unit X: Sustainable Development**

20

Meaning of Sustainable Development;  
Measuring Sustainable Development; Relevance of concept of Sustainable Development in Developing Countries; Implications of Sustainability for Development Policy  
Economic Development, Poverty and the Environment  
Case Studies of Nepal

**Basic References**

- Baumol, W. and W. Oates (1988). *The Theory of Environmental Policy*, Second Edition. London: Cambridge University Press.
- Champ, Patricia A., Kevin J. Boyle, and Thomas C. Brown (eds.) (2003). *A Primer on Nonmarket Valuation*. Dordrecht/Boston/London: Kluwer Academic Publishers.
- Dasgupta, Partha S. and G.M. Heal (1979). *Economic Theory and Exhaustible Resources*. Cambridge: Cambridge University Press.
- Freeman, A. Myrick III (1997). *The Measurement of Environmental and Resource Values: Theory and Method*, Second Edition. Washington, DC: Resources for the Future.
- Hanley, Nick, Jason F. Shogren, and Ben White (1997). *Environmental Economics: In Theory And Practice*. London: Macmillan Press Limited.
- Kolstad, Charles D. (2003). *Environmental Economics*. Oxford and New York: Oxford University Press.
- Neher, Philip A. (1990). *Natural Resource Economics: Conservation and Exploitation*. Cambridge: Cambridge University Press.

**Supplementary Readings**

- Adhikari, Ambika, Bishnu Bhandari, and Bishwambher Pyakuryal (eds.) (1988). *Environmental Economics in Nepal*, Proceeding of Workshop on Environment, Kathmandu, Nepal.
- Barde, J.P. and D.W. Pearce (eds.) (1991). *Valuing the Environment, Six Case Studies*. Earthscan Publication.
- Conrad, J.M. and C.W. Clark (1987). *Valuing Natural Resource Economics: Notes and Problems*. Cambridge: Cambridge University Press.
- Crutilla, J.V. (1967). "Conservation Reconsidered," *American Economic Review*, 57.
- Dorfman, R. and N. Dorfman (eds.) (1993). *Economics of Environment*, Third Edition. New York: WW Norton.
- Fauheux, S., Pearce, D., and Proops J. *Models of Sustainable Development*.
- Field, Barry C. (1977). *Environmental Economics: An Introduction*. McGraw Hill, Inc.
- Fisher, A.C. (1981). *Resource and Environmental Economics*. Cambridge: Cambridge University Press.
- Hardin, G. (1968). "The Tragedy of the Commons," *Science*, Vol. 162, pp. 1243-48.
- IUCN, Nepal (????). *Linking Environment....*  
IUCN/Nepal Publications.
- Kirkpatrick, C. and Lee Norman, *Sustainable Development in a Developing World*.
- Perman, Roger, Yue Ma, and James McGilvaray (1996). *Natural Resource and Environmental Economics*. London and New York: Longman. (Third Impression in 1998)
- Tietenberg, Tom (2001). *Environmental Economics and Policy*, Third Edition. Boston: Addison Wesley.
- World Commission on Environment and Development (1987). *Our Common Future*. London: Oxford University Press.
- Arun Environmental Studies  
Markandaya, Anil  
Dixon, John

**IIInd year**  
**Macroeconomic Analysis**

**Eco. 536**  
**Paper: VI**

**Full Marks: 100**  
**Teaching Hours: 150**

**Course Objective:** The objective of this course is designed to provide of advanced concepts of macroeconomic analysis. It includes main areas such as national income accounting, classical and Keynesian approaches, macro-modeling, growth and business cycle theories, equilibrium of economy and macro policy issues. Upon completion of this course, students will be able to develop analytical tools and to apply them for formulating and analyzing economic models and theories.

	<b>Teaching Hours</b>
<b>Unit I: Basic Concepts</b>	<b>5</b>
1. Overview of Key Concepts: Variables; Economic Models—Static and Dynamic; Aggregation and Its Problems	
2. Methods and Approaches to Macroeconomic Analysis	
3. Macroeconomic Policy Goals	
<b>Unit II: National Income Accounting</b>	<b>10</b>
1. An overview of Measurement of National Income Accounts and their limitations	
2. System of National Income Accounting and Sector Accounting	
<b>Unit III: Classical and Neo-Classical Theories of Income, Employment and Money</b>	<b>10</b>
1. Classical and Neoclassical theory of income, employment and money	
2. Applications and limitations	
<b>Unit IV: Keynesian Macro Economics</b>	<b>10</b>
1. Overview of the Basic Keynesian Model	
2. Keynesian Model of closed and open economy including Multiplier analysis	
<b>Unit V: Consumption Demand</b>	<b>15</b>
1. Reconciliation of short-run and long-run consumption	
2. Consumption Theories: Absolute Income Hypothesis, Relative Income Hypothesis, Life-Cycle Hypothesis, Permanent Income Hypothesis and Random Walk Hypothesis	
3. Effects of Rational Expectations	
4. Excess Sensitivity and Liquidity Constraint in consumption	
<b>Unit VI: Investment Demand</b>	<b>15</b>
1. Classical, Neo-Classical and Keynesian approaches to Investment Demand	
2. The Accelerator Theory	
3. Jorgenson's Theory	
4. Irreversible Investment and Investment under Uncertainty	
<b>Unit VII: Post Keynesian Macro-Economics</b>	<b>25</b>
1. Keynesian-Classical Synthesis	
2. Price and Output Determination in the Economy (AD-AS Approach) – Long and Short Run: Classical, Neo-classical, Keynesian and Post-Keynesian, New-Classical and New-Keynesian Versions	
<b>Unit VIII: Modern Macro Modeling</b>	<b>20</b>
1. The Social Accounting Matrix (SAM)	
2. Computable General Equilibrium (CGE) Modeling	
3. Macro Economic Models for LDCs	
4. Shocks, Vulnerability and Macro Modeling	
<b>Unit IX: Growth Theories</b>	<b>10</b>

1. Harrod's Model, Domar's Model
2. Solow's Model, Kaldor's Model
3. Lucas-Romer Endogenous Model

**Unit X: Business Cycle Theories** 10

1. Kaldor, Samuelson, Hicks
2. Real Business Cycle

**Unit XI: Macro Distribution Theories** 5

1. Ricardo, Kalecki, and Kaldor

**Unit XII: Macro Policies** 10

1. Stabilization and Structural Adjustment
2. Market Failure and Government Interventions

**Basic References**

- Barro, Robert J. and Xavier Sala-i-Martin (2004). *Economic Growth* New Delhi: Second Edition. Prentice-Hall of India Private Limited.
- Branson, W.H and Litvack ( ). *Macroeconomic Policy*.
- Dervis, K., J. de Melo, and S. Robinson ( ). *General Equilibrium Models for Development Policy*. Cambridge: Cambridge University Press.
- Froyen, Richard T. (2002). *Macroeconomics: Theories and Policies*, New Jersey: Second Edition. Upper Saddle River, Prentice-Hall Inc.
- Shapiro, E. (2004). *Macroeconomic Analysis*, New Delhi: Fifth Edition. Galgotia Publications (P) Ltd (Indian Reprint).

**Supplementary Readings**

- Amin, S., (2002). *Spectre of Capitalism: A Critique of Current Intellectual Faction*, London: Zed Books,
- Bober, S. (1968). *The Economics of Cycles and Growth* London: John Wiley & Sons Inc.
- Buiter, Willem H. (1980). *Monetary, Financial, and Fiscal Policies Under Rational Expectations*. IMF staff papers Vol. 27 No. 4, December 1980.
- CBS (2002). *Manual on National Income Accounts of Nepal, HMG*. Kathmandu: NPCS.
- DeMelo, Jaime and Sherman Robinson (1989). *Product Differentiation and Foreign Trade in CGE Models of Small Economies*. Washington, DC: World Bank Working Paper series 144. The World Bank.
- Dillard, D. (1965). *The Economics of J. M. Keynes*. London: Crosby Lockwood & Sons Ltd.
- Dornbusch, Rudiger and Stanley Fischer (1987). *Macroeconomics*. New York: Fourth Edition. McGraw-Hill Book Company.
- Evans, K.K. (1969). *Macroeconomic Activity*. London: Harper & Row.
- Gordan, Robert J. (1990). "What is New Keynesian Economics?" *Journal of Economic Literatur*, Vol. XXVIII, September 1990. Pp. 1115-1171.
- Gurugharana, K.K. (1992). *Methods of Macroeconomic Modelling in Developing Countries* The Economic Journal of Nepal, Vo. 15. No. 2, 1992, CEDECON, T.U.
- Hicks, J.R. *A Contribution to the Theory of Trade Cycles*, London: Oxford,
- Kaldor, N.A. (1940) *Model of the Trade Cycle* Economic Journal, March 1940, pp.78-92.
- Keynes, J.M. (1961) *The General Theory of Employment Interest and Money*. New York: Harcourt Brace and Co.
- Khanal, Dilli Raj and Nav Raj Kanel (2005). *Macro Policies, Shocks and Poverty Reduction in Nepal*. Kathmandu: Institute for Policy Research and Development (IPRAD).
- Khanal, Dilli Raj, Pushpa Raj Rajkarnikar Keshav Prasad Acharya, and Dilli Ram Upreti (2005). *Understanding Reforms in Nepal: Political Economy and Institutional Perspective*. Kathmandu: Institute for Policy Research and Development (IPRAD).
- King, Benjamin B. (1981). "What is a SAM? *A Layman's Guide to Social Accounting Matrices*. World Bank staff working paper No. 463. Washington D.C. The World Bank.
- Levacic, R. (1978) *Macroeconomics*. London: Macmillan.
- Mankiw, N. Gregory. (1994) *Macro Economics*. New York: Second Edition. Worth Publishers.
- Mueller, M.G. (ed) (1977) *Readings in Macroeconomics*. New York: Holt Reinhart Winston?

- Ott, D.J., A.F. Ott and J.G. Yoo (1975) *Macroeconomics Theory*. Tokyo: Kogakusha, McGraw-Hill.
- Samuelson, P.A. (1939) *Interaction between the Multiplier Analysis and the Principles of Acceleration*. Review of Economic Statistics, May 1939, pp.75-78, Reprinted in G. Haberler, (ed.), *Readings in Business Cycle Theories*, Irwin 1944, pp. 261-69.
- Sen, A.K.(ed.) *Growth Economics*, Penguin Book Ltd. Middlesex.
- Sirkin, G. (1965) *Introduction to Macroeconomic Theory*, Home Wood Ill.
- Stiglitz, J. (2002) *Globalization and Its Discontent*. London: Oxford University Press.
- Surrey. M.J.C. (ed) ( ) *Macroeconomic Themes*. London: Oxford.
- Turnovsky, S.J. ( ) *Methods of Macroeconomic Dynamics*.

## Monetary Economics

Eco. 537  
Paper: VII

Full Marks: 100  
Teaching Hrs.: 150

**Course Objectives:** This course intends to acquaint the students to monetary economics, its development till date and its application in general. It includes major topics such as Monetary Theories, Financial Systems, Role of Money in Equilibrium and Economic Growth Models, Inflation, Monetary Policy, Balance of Payment and International Liquidity. Upon its completion, the students will acquire knowledge to deal with monetary problems.

	Teaching Hours
<b>Unit I: Basic Concepts</b>	5
<b>Unit II: Development of Monetary Theories</b>	20
1. Classical School	
2. Neo-classical School (Cash Balance approach)	
3. Keynesian School	
4. Patinkin's theory of Real Balance Effect	
5. Monetarism	
6. Neo-liberal School of McKinnon and Shaw	
7. New Classical School (Rational Expectations; Equilibrium Approach)	
<b>Unit III: Money and Capital Market</b>	5
1. Concept and Functions of Financial Market	
2. Inter-sectoral Flow of Funds Account.	
<b>Unit IV: Demand for and supply of Money</b>	20
1. <b>Demand for money:</b> Concept and Determinants: Money demand functions-equation of exchange (velocity and cash balance approaches), inventory (capital) theoretic approach of Baumol and Tobin, Portfolio Balance Approach of Tobin, Friedman's Money Demand Equation and money demand function of McKinnon.	
2. <b>Supply of Money:</b> Concept, determinants and implications; Money Supply Functions: theory of Base Money Multiplier; determinants of High-powered Money and Money Multiplier.	
<b>Unit V: Concept, Properties and Shapes of IS-LM Curves</b>	20
1. Properties of IS, LM Curves	
2. General Equilibrium Condition	
3. Impact of the Shifts of IS and LM Curves	
4. Conditions for the effective use of Monetary and Fiscal Policy	
<b>Unit VI: Role of Money</b>	15
1. Money in Neo-Classical Growth Model: Substitution Relation and capital Formation. (complementarity Relations)	
<b>Unit VII: Theories of Inflation</b>	20
1. Demand, Supply and Structural Inflation	
2. Theory of Inflationary Gap: process of Convergence and Divergence	
3. Phillips Curve: Phillips lip soy's version; Samulson Solow modification; Monitories approach	
4. Measure to control inflation	

## Unit VIII: Banking and Financial Institutions

20

1. Central Banking:
  - i) Significance in Underdeveloped Economies
  - ii) Basic Issues: Independence, transparency, accountability and credibility
  - iii) Monetary Policy: Objectives and Strategy
2. Commercial Banking:
  - i) Development and Regulatory Frameworks
  - ii) Significance in developing economy under liberalization policy frame
3. Other Financial Institutions: Insurance companies, Pension funds, Mutual funds
4. Financial Intermediation/ Disintermediation; Asymmetric information and financial Intermediation;
5. Micro financing

## Unit IX: Balance of Payments

25

1. Concepts and Accounts
2. Problems of Imbalance
3. Implications of Imbalance
4. Monetary Approach to Balance of Payments
5. Other measures: Elasticity and Absorption Approaches to Balance of Payment

### Basic References:

- Dornbusch, R. and S. Fischer, *Macro-Economics*. Singapore: McGraw Book Hill Company.,  
Handa, Jagadish (2000) *Monetary Economics*. London and New York: Rout ledge Taylor and Francis Group.
- Heller, H.R.,(1977) *International Monetary Economics*. New Delhi: Prentice-Hall of India.
- Lewis, Mervyn K. and Paul P. Mizen, (2000) *Monetary Economics*. UK: Oxford University Pffes, Oxford
- Frankel, J. A. and H. G. Johnson, (1976) *The Monetary Approach to the Balance of Payment*, George Allen and Unwin, London
- McKinnon, R.I., (1983) *Money and Capital in Economic Development* Washington: The Brookings Institution.
- Miskin, Fedrick S. (2000) *The Economics of Money, Banking and Financial Markets* Boston: Addison Wesley.

### Supplementary Readings

- Borltrop, Cisj., and McNaughton, Diana (1992) *Banking institutions in Developing Markets* Washington: WB.
- Chen, Edward and C.H. Kwan, *Asia's Borderless Economy*, Australia: Allen and Unwin, 89-123St. Leonards, New South Wales.
- Enoch, Charles and Green John H. (1997) (ed.) *Banking Soundness and Monetary Policy: Issues and Experiences in the Global Economy* Washington D.C.: IMF
- Fatum, R. and M. M. Hutchison, (2003) *Is Sterilised Foreign Exchange Intervention Effective After All?* The Economic Journal Vol. 113 No.487 April, 2003
- For up-dating on *Monetary Economics, Banking and Finance Economic Notes* is very helpful, visit [WWW.Blackwellpublishing.com/Journals/Ecno](http://WWW.Blackwellpublishing.com/Journals/Ecno)
- For *Monetary and Financial Information on Nepal*. Economic Review (Occasional Papers), Nepal Rastra Bank, is helpful, visit [www.nrb.org.np](http://www.nrb.org.np)
- Gibson, William E., and George G. Kaufman (Eds.) *Monetary Economics: Readings on Current Issues*
- Halm, G.N. (1991) *The Economics of Money and Banking* London: OUP
- IMF *The Monetary Approach to the Balance of Payments* Washington D. C, IMF
- John F., Kyle, *The Balance of Payment in Monetary Economics* New Jersey: Prinston University Press, Prinston
- Johnson, H.G., (1970) *Essays in Monetary Economics* London: George Allen and Unwin
- Jomo, K. S.,(Ed.), (1998), *Tigers in Troubles: Financial Governance, Liberalizations and Crises in East Asia* London: Zed Books Ltd
- Kim, Taeho (1993) *International Money and Banking* London: Routledge

- Ledgerwood, Joanna and Victoria White (2006) *Transforming Microfinance Institutions* The World Bank
- Markose, S.M. and Y. J. Loke, (2003) *Network Effects on Cash-Card Substitution in Transactions and Low Interest Rate Regimes* The Economic Journal, Vol. 113 No.487 April, 2003
- Mayer, Thomas, Duesenberry, James S. and Aliber, Robert Z. (1981) *Money Banking and Economy* New York: WW Norton,
- McKinnon, R.I., *Money and Capital in Economic Development*. Washington: The Brookings Institution
- Mead, J.E., *The Theory of International Economic Policy* London: Vol II, The Balance of Payment, Oxford University Press
- Miller, Roger LeRoy, and Pulsinalli, Robert W. (1983) *Modern Money and Banking* New York: McGrawHill,
- Nepal Rastra Bank (1998) *Forty Years of Nepal Rastra Bank* Kathmandu: NRB
- Obstfeld, M. and Rogoff K. (1996) *Foundations of International Macroeconomics* Cambridge: MA MIT Press
- Pitter, Lawrence S. and Silber, William L. (1993) *Principle of Money Banking and Financial Markets* New York: Basic Books,
- Romer, C. and D. Romer, (Eds.) (1997) *Reducing Inflation*. Chicago: University of Chicago Press
- Rose, Piter S. (2003) *Money and Capital Markets* Bangkok: 8th Ed. McGraw Hill Irwin
- Robinson, Merguerite, (2001) *The Micro Finance Revolution: Sustainable Finance for the poor*, World Bank, Washington
- Sayers, R.S. (1967) *Modern Banking* New Delhi: OUP
- Sharma, Gunanidhi, *Monetary Structure of the Nepalese Economy, Policy Issues in theory and Practice* New Delhi: South Asian Publisher
- Thyngenson, Kenneth James, (1993) *Financial Markets and Institution: A Managerial Approach* New Jersey: Harper-collins college
- Ugolini, Peiro C., Schaechter, Andrea and Stone Mark R. (2003) (ed.) *Challenges to Central Banking from Globalized Financial system* Washington: IMF
- Wright, S. (2004) *Monetary Stabilisation with Nominal Asymmetries* The Economic Journal Vol.114 No. 492, January 2004
- World Bank, (2002) *Nepal Financial Sector Study* Kathmandu: The World Bank
- Zhuang, Juzhong, David Edwards and Ma. Verginita Capulong (Eds), (2001) *Corporate Governance and Finance in East Asia: A Study of Indonesia, republic of Korea, Malaysia, Philippines, and Thailand* Manila: Vol. 1 & 2, ADB,

## Public Economics

Eco. 538  
Paper: VIII

Full Marks: 100  
Teaching Hrs.: 150

**Course Objectives:** This course is designed with a view to provide advanced theories of Public Economics and related policies. This includes studies on government expenditure, revenue, borrowing, fiscal policy, budgeting, deficit financing, foreign aid, public enterprises, local financing and black money and corruption. Upon completion of this course, the students will develop confidence towards building a comprehensive understanding of the dynamics of Government Finance.

	Teaching Hours
<b>Unit I: Role of Government in Development Finance</b>	<b>5</b>
1. Role of Government: (a) Keynesian approach (b) market economy and welfare approach (c) globalization, liberalization and post-liberalization.	
<b>Unit II: Government Expenditure</b>	<b>25</b>
1. Classical, Keynesian and functional approaches.	
2. Wagner's Law; Colin Clark's critical limit of taxation and expenditure; Stanley Please hypothesis, Peacock -Wiseman hypothesis.	
3. Public Choice in a Democracy: Theory of public goods and externalities, Pareto Optimality and Samuelson's Pure Theory of public expenditure.	
4. Evaluation of Public Investment Expenditure: Project evaluation and benefit-cost analysis and analysis of cost effectiveness.	
<b>Unit III: Government Revenue</b>	<b>40</b>
1. Benefit Principle of taxation; and Ability-to-Pay approach to taxation.	
2. Responsiveness and Productivity of Tax Yield: Concepts, methods of adjusting tax revenue series, estimation of elasticity and buoyancy of taxation; and Forecasting of revenues and expenditures.	
3. Direct <i>vs</i> Indirect taxation; Concept of Excess Burden propounded by Marshall, and Hicks and Joseph; Superiority of Direct taxation.	
4. Role of individual taxes: Taxation of income, property and capital gains; Taxation of goods and services (VAT and Excise); Taxation of international trade and transactions (Customs Duties).	
5. Quantitative characteristics of the tax System: Optimal tax theory and development policy.	
6. Taxation and economic development with special reference to resource mobilization and concept of resource gap.	
7. Tax reforms and tax design; Administrative dimension of tax reform; Tax reform and taxation policies in developed and developing countries.	
<b>Unit IV: Public Debt</b>	<b>20</b>
1. Role of public debt in economic development.	
2. Loan vs. taxes.	
3. Compensatory aspects of debt policy.	
4. Intergeneration equity and shifting of burden to posterity: The concept of Pigou; Bowen-Davis-Koff Hypothesis; The Concepts of Modigliani and Musgrave.	
5. The concept of debt trap; Economic effects of public debt.	
6. Management of the national debt.	

**Unit V: Fiscal Policy**

15

1. Objectives, nature and techniques of fiscal Policy.
2. Role of fiscal policy in developing countries.
3. Compensatory Fiscal Policy; Anti-inflationary fiscal policy; Counter-cyclical fiscal policy.
4. Effectiveness of fiscal Policy; alternative fiscal policies.
5. Fiscal reforms.

**Unit VI: Budget**

20

1. Budget cycle and operation of the budgetary process.
2. Strengthening performance in public expenditure management.
3. Proposal for reforms in budgeting: Program Budgeting; Performance Budgeting; Zero Based Budgeting; and Planning-Programming-Budgeting Systems (PPBS).

**Unit VII: Deficit Financing and Foreign Aid**

10

1. Methods of deficit financing.
2. Role of deficit financing as an instrument for resource mobilization - the context of internal and external borrowings.
3. Implications of foreign aid in deficit financing.

**Unit VIII: Public Enterprises**

5

1. Role of public enterprises in developing economies under liberalization.
2. Price and output policies of public enterprises.
3. Privatization of public enterprises.

**Unit IX: Local Government Financing and Users' Charges**

5

1. Concept of fiscal decentralization,
2. Users' Charges: Tariff on Utilities.

**Unit X: Black Economy and Corruption**

5

1. Concept, classification and consequences of black economy and corruption.
2. The concept of money laundering
3. Remedies for curbing the black money and corruption.

**Basic References**

- Bird, Richard M. (1992). *Tax Policy and Economic Development* The Johns Hopkins University Press.
- Bird, Richard M. and Oliver Oldman (1990) *Taxation in Developing Countries* The Johns Hopkins University Press.
- Campus, J. Edgardo and Sanjay Pradhan (2007) *The Many Faces of corruption* The World Bank
- Chelliah, Raja J. (1976) *Fiscal Policy in Underdeveloped Countries* George Allen and Unwin (Second Edition).
- Due, John F. (1993) *Government Finance: An Economic Analysis* Illinois: Richard D. Irwin.
- Due, John F. and Ann F. Friedlaender (1990) *Government Finance: Economics of the Public Sector* Illinois: Richard D. Irwin.
- Gillis, Malcolm; Carl S. Shoup and Gerardo P. Sicat (eds.) (1990). *Value Added Taxation in Developing Countries* Washington, D. C.: The World Bank
- Goode, Richard (1984) *Government Finance in Developing Countries*. Washington: Brookings Institution.
- Haughton, R. W. (ed.) (1970) *Public Finance* Penguin Books.
- Hicks, Ursula K. (1965) *Development Finance: Planning and Control* Oxford: Clarendon Press.
- Hyman, David N. (2007) *Public Finance: A Contemporary Application of Theory of Policy* Thomson South-Western
- Khalizadeh-Shirazi, Javad and Anwar Shah (1991) *Tax Policy in Developing Countries* Washington, D. C.: The World Bank.
- Musgrave, Richard A. (1959) *The Theory of Public Finance* New York: McGraw-Hill.
- Musgrave, Richard A. (1969) *Fiscal Systems* New Haven and London: Yale University Press.

- Musgrave, Richard A., and Peggy B. Musgrave (1989) *Public Finance in Theory and Practice* McGraw-Hill International Editions.
- Newbery, David and Nicholas Stern (eds.) (1987) *The Theory of Taxation for Developing Countries* Oxford University Press: A World Bank Research Publication.
- Premchand A. (1963) *Government Budgeting and expenditure Controls: Theory and Practice* Washington D. C.: International Monetary Fund (IMF).
- Schiavo-Campo, Salvatore and Daniel Tommasi (1999) *Managing Government Expenditure* Asian Development Bank (ADB).
- Shah, Anwar (ed.) (2005). *Public Expenditure Analysis* The World Bank
- The World Bank (1988). "*Public Finance in Development*" in World Development Report 1988, Oxford University Press.
- Turvey, R. (ed.) (1968) *Public Enterprise* England: Middlesex, Penguin Books.

#### Supplementary Readings

- Allan, Charles M. (1971) *The Theory of Taxation*: Penguin Books.
- Allan, William (1994) *Budget Structure and the Changing Role of the Government* New York: United Nations.
- Boadway, Robin and Anwar Shah (ed.) (2007) *Intergovernmental Fiscal Transfers: Principles and Practices* The World Bank
- Caiden, N. and A. Wildavsky (1990) *Planning and Budgeting in Poor Countries* New York: Wiley-Interscience.
- Hinrich, Harley H. (1966) *General Theory of Tax Structure Change during Economic Development* Harvard Law School.
- Klein, Thomas (ed.) (1990) *Managing External Debt in Developing Countries* Washington: Proceedings of a Joint Seminar, Jeddah, World Bank/Islamic Research and Training.
- Kumar, Arun (1999) *The Black Economy in India* New Delhi: Penguin Books.
- Lewis Jr., Stephen R. (1984) *Taxation for Development: Principles and Applications* Oxford University Press.
- Shah, Anwar (ed.) (2005) *Fiscal Management* The World Bank
- Shah, Anwar (ed.) (2006) *Local Governance in Developing Countries* The World Bank
- Shoup, Carl (1969) *Public Finance* Chicago: Aldine.
- Tanzi, Vito (1997) *Corruption, Public Investment and Growth* Washington: International Monetary Fund.
- United Nations (1998) *Budget Reform in Developing Countries* New York: Workshop December.

## Nepalese Economy

Eco. 539  
Paper: IX

Full Marks: 100  
Teaching Hrs.: 150

**Course Objectives:** The objective of this course is to provide an in-depth analytical knowledge about the different facets of Nepalese economy. In addition to regular classes, special lecture programs will be organized by inviting eminent economists, scholars, policy makers and development practitioners from within and outside Nepal. This will provide an opportunity to students for developing better understanding of the prospects and problems of Nepalese Economy.

	<b>Teaching Hours</b>
<b>Unit I: Historical Background</b>	<b>5</b>
1. Brief overview of the economic situation during the period 1768 – 1951.	
<b>Unit II: Biodiversity Profile</b>	<b>5</b>
1. Biodiversity profile and conservation strategy and its Economic and Commercial Potentiality	
2. Brief Review on National Economy and Its Resources	
<b>Unit III: Current Economic Status</b>	<b>10</b>
1. Review of current economic status employing macro-economic indicators and international comparison especially with reference to SAARC countries.	
<b>Unit IV: Foundations of Economy</b>	<b>20</b>
1. Biodiversity: energy especially water and forest resources: Present status, problems and prospects	
2. Population and human resources: Present status, problems and prospects	
3. Tourism: Present status, problems and prospects	
<b>Unit V: Sector Development and Policy</b>	<b>25</b>
1. Status of Agriculture Perspective Plan (APP) and agriculture development	
2. Industrial Enterprises Act 1992; Industrial Policy 1992; and Status of Industrial Development	
3. Infrastructure development	
4. Structure and Dimension of Foreign Trade and review of existing Nepal-India Trade Treaty	
5. Trends in Foreign Direct Investment (FDI), and	
6. Critical appraisal of Foreign Investment and Technology Transfer Act, 1992	
<b>Unit VI: Fiscal Policy</b>	<b>10</b>
1. Structure of the current budget and pattern of resource allocation with special reference to Medium Term Expenditure Framework (MTEF)	
2. Recent trends in taxation	
3. Review of expenditure and taxation policies	
4. Local financing and fiscal decentralization and fiscal federalism	
<b>Unit VII: Monetary Policy and Financial Sector Reform</b>	<b>10</b>
1. Review of existing monetary policy of Nepal Rastra Bank (Central Bank)	
2. Appraisal of the performance of commercial banks, finance companies, development banks and cooperative societies	
3. Status of financial sector reform	
4. Micro-financing and poverty alleviation	
5. Financial Sector after the accession of WTO	
<b>Unit VIII: Foreign Aid and Public Debt</b>	<b>10</b>

1. Structure and dimensions of foreign aid
  2. Review of foreign aid and public debt policies
  3. Recent trends in external and internal borrowings
- Unit IX: Sub-Regional, Regional and International Cooperation** 20
1. Growth Triangles and Quadrangles
  2. SAARC: SAFTA and its implications to Nepal
  3. Overview of the activities of BIMST-EC
  4. WTO and Nepal: prospects and problems in LDCs perspective
  5. Review of the current status of economic cooperation provided by the major donor countries to Nepal
  6. Assessment of the financial assistance of the World Bank (WB), International Monetary Fund (IMF), and the Asian Development Bank (ADB) to Nepal (Also review country Assessment strategies of respective institutions)
- Unit X: Poverty Alleviation and Employment** 10
1. Effort towards poverty alleviation
  2. Poverty Alleviation Fund
  3. Poverty Reduction Strategy (PRS) and Millennium Development Goals (MDGs)
  4. Employment and Labor Market Conditions
  5. Foreign employment and remittance economy
- Unit XI: Economic Planning and Development** 5
1. A critical appraisal of the economic development during the period of planned economic development in Nepal from 1956 onwards
  2. Evaluator Review of preceding plan
  3. Analysis of the objectives, policies, priorities, strategies and resource allocation in the current Plan
- Unit XII: Economic Reforms and Economic Diplomacy** 10
1. The role of private sector in the economic development after the induction of globalization, liberalization and privatization
  2. The States Role in Private Sector Development (PSD)
  3. Assessment of the activities of private sector
  4. Appraisal of the current reform initiatives of Government of Nepal/GON
  5. Critical appraisal of Aid commitments by donors with special reference to Nepal Development Forum (NDF)
  6. Critical evaluation of the status of privatization of public enterprises, specific highlights on Public Private Partnership (PPP) concept
  7. Global Economic Melt down and its Impact on Nepalese Economy
  8. Concept, Classification and Generic Guideline of Economic Diplomacy in Nepal
- Unit XIII: Conflict Economy:** 5
1. Estimating costs and analysis of the impact of conflict on the economy
  2. Recent fiscal and sectoral interventions to neutralize the adverse impact of conflict
- Unit XIV: Nepalese Economy-Vision 2025** 5
1. Vision, mission, objectives and efforts towards building a strong economic nation-state, with the concept of New Nepal

## Basic References

- Acharya, Meena (2003) *Gender Budget Audit in Nepa*, Kathmandu: United Nations Development Fund for Women/IIDS.
- Acharya, Meena, YubRaj Khatiwada and Shankar Aryal (2003) *Structural Adjustment Policies and Poverty Eradication* Kathmandu: IIDS.
- Dahal, Madan K. (ed.) (1993) *Future of Nepalese Economy* Kathmandu: NEFAS/FES.
- Dahal, Madan K. (ed.) (1998) *Impact of Globalization in Nepal* Kathmandu: NEFAS/FES.
- Dahal, Madan K. (ed.) (2004) *Nepalese Economy* Kathmandu: Towards Building a Strong Economic Nation-State, Central Department of Economics (CEDECON), Tribhuvan University (TU) and New Hira Books Enterprises.
- Dahal, Madan K. and Horst Mund (1996) *Social Economy and National Development* Kathmandu: NEFAS/FES.
- Dahal, Madan K.; K. Acharya; D. Dahal; K. B. Bhattachan; and M. Nepal (2002 reprint). *Development Challenges for Nepal* Kathmandu: FINNIDA/NEFAS.
- Dahal, Madan K; M.M. Sainju, M.P. Lohani, S. Sharma and Umakant Parajuli (2008) *Nepal: A Generic Guideline for Development through Economic Diplomacy*
- Dhungel, Kamal Raj. (2004) *Reading in Nepalese Economy* Delhi: Adroit Publishers
- HMG/NPC/CBS (2004) *Population Monograph of Nepal* (current issue). His Majesty's Government of Nepal/National Planning, Commission/Central Bureau of Statistics.
- ILO-SAAT (1997) *Employment in Nepal: Prospects and Problems* New Delhi: International Labor Organization (ILO)-South Asia Multidisciplinary Advisory Team (SAAT).
- Mund, Horst (ed.) (1999) *WTO: Regional Cooperation and Nepal* NEFAS/CASAC/FES.
- Pandey, Devendra Raj (1999) *Nepal's Failed Development: Reflections on the Mission and Maladies* Kathmandu: Nepal South Asia Center.
- Piers, Blaikie; John Cameron; and David Seddon (1985) *Nepal in Crisis: Growth and Stagnation at the Periphery* Oxford University Press.
- Poudyal, Sri Ram (1988) *Foreign Trade, Aid and Development in Nepal* Delhi: Commonwealth Publishers.
- Poudyal, Sri Ram (1994) *Trends in Foreign aid in Nepal* in Heinz Bongartz et al. (eds.) *Foreign aid and the Role of NGOs in the Development Process of Nepal* NEFAS.
- Pradhan, R.S. (1984) *Industrialization in Nepal* NBO Publishers' Distributors
- Pyakuryal, Bishwambher (2004) *Nepal's Conflict Economy: Costs, Consequences and Alternatives* Nepal Economic Association.
- Pyakuryal, Bishwambher, et.al., (2008) *Is Foreign Aid Working?* Mandala Book Point, Kathmandu
- Pyakuryal, Bishwambher and R. Sainju (2007) *Nepal's Conflict: A Micro Economic Impact*, Kathmandu
- RIS (2004) *South Asia Development and Cooperation Report 2004* New Delhi: Research and Information System for the Non-Aligned and Other Developing Countries (RIS).
- Seddon, David (1987) *Nepal: A State of Poverty in Nepal* New Delhi: Vikash Publishing House
- Seddon, David (2003) *Migration and Remittances: The Case of Nepal* The Economic Journal of Nepal. Vol. 26, No. 2, Issue No. 102, April-June.
- Seddon, David; J. Adhikari and G. Gurung (1999) *The New Lahures, Foreign Employment and Remittance Economy of Nepal* Kathmandu: Institute for Development Studies
- Sharma, G. N. (1987) *Monetary Structure of the Nepalese Economy* New Delhi: South Asian Publishers
- Sharma, Sharad (1997) *Strategies of Economic Development Issues Facing Nepal* Kathmandu: Annapurna Publishing Press
- Sharma, Sharad (1998) *Some Aspect of Industrial Development in Nepal* Kathmandu: Annapurna Printing Press
- Shrestha, Badri Prasad (1981) *An Introduction to Nepalese Economy* Kathmandu: Ratna Pustak Bhandar.

## Supplementary Readings

- Adhikari, B.M. (2006) *Problem of Industrialization in Nepal* (Nepalma-Audhyogikaranka Samasya) in Nepali, Kathmandu: Ratna Pustak Bhandar
- APROSC/ADB/JMA (1995) *Agriculture Perspective Plan (APP)* Agriculture Projects Services Center (APROSC) and John Mellor & Associates (JMA).

- Banstola, S. N. (1994) *Water Resources Development* Kathmandu: S. Banstola.
- Dahal, Madan K. and Dev Raj Dahal (Ed.) (1993) *Environment and Sustainable Development Issues in Nepalese Perspective*. Kathmandu: NEFAS/FES.
- Dahal, Madan K. (2003) *Improving Nepal-India Economic Relations: A Study of the Impact of Foreign Direct Investment (FDI) and Transfer of Technology in Nepal* Kathmandu: A Report commissioned by and submitted to South Asia Networking of Economic research Institutes (SANEI), IIDS.
- Dahal, Madan K. and Kyoko Inoue (1994) *A Profile of Industrial Development in Nepal* Tokyo: Institute of Developing Economies (IDE).
- Dahal, Madan K. et al. (1999) *Productivity, Wages, Employment and Labor Relations* NEFAS.
- Gautam, B.D. (2003) *Political Economics of Nepal* (in Nepali) Kathmandu: T. Thapa Hancock,
- Gurugharana, K. K. (1994) *Development Cooperation: An Appraisal of the Activities of Donor Agencies in Nepal* in Heinz Bongartz et al. (eds.) *Foreign aid and the Role of NGOs in the Development Process of Nepal* NEFAS
- Hancock, Graham (1991) *Lords of Poverty* United Kingdom: Macmillan London Ltd.
- Himsworth, E. (1965) *The Fiscal System of Nepal* A Report Submitted to His Majesty's Government of Nepal.
- HMG/N/FINNIDA (1998) *Strategic Guidelines for Forest Utilization* (Main report), Finland: Forest Resource Information System Project (FRISP). FRISP/HMG/N/ Forest and Park service,
- HMG/N/UNDP (2002) *Millennium Development Goals* United Nations Country Team.
- IDS (1983) *Foreign Aid and Development in Nepal* Kathmandu: Proceedings of a Seminar Integrated Development System.
- Kanel, Pushpa Raj (2007) *Restructuring of the State, Context of Political Economy and Issues relating Federalism (in Nepali) (Rajyako Punarsamrachana, Artha Rajnitik Saandharbha Ra Sanghiyatako Prasna)* Asia Publications
- Khadka, Keshab (2004) *LDCs Accession to WTO and Poverty Alleviation Nepal: A Case in perspective* Kathmandu: Economic Journal of Development Issues. Vol 4, No.2 & Vol. 5, No.1 (Jan.-June), Department of Economics, Patan Multiple Campus, Lalitpur
- Khadka, Narayan (1991) *Foreign Aid, Poverty and Stagnation in Nepal* Vikash Publishing House.
- Khadka, Rup B. (2000) *The Nepalese Tax system*. Katmandu: Sajha Prakashan.
- Khanal, D. R , P. R. , Rajkarnikar et. al. (2005) *Understanding Policy Reforms in Nepal* Kathmandu: Institute for Policy Research and Development (IPRAD)
- Mallik, Vidhyadhar (2003) *Nepalko Adhunik Ayakar Pranali* (in Nepali) Kathmandu: Mrs. Anita Mallik.
- Mihaly, Eugene B. (1965) *Foreign Aid and Politics in Nepal* Oxford University Press.
- MICS (2004) *Nepal: Trade and Competitiveness Study* Ministry of Industry, Commerce and Supplies, HMG/N.
- Nagesh Kumar (2002) *Globalization and the Quality of Foreign Direct Investment* Oxford University Press
- NPC (2003) *The Tenth Plan, 2002-07* National Planning Commission (NPC).
- NPC (2008) *Three year Interim Development Plan, 2007-2010* National Planning Commission, Government of Nepal
- Pyakuryal, Bishwambher (1995) *Impact of Economic Liberalization in Nepal* Kathmandu: Evergreen publishing House.
- Regmi, Mahesh C. (1984) *The State and Economic Surplus: Production, Trade and Resource Mobilization in Early 19<sup>th</sup> Century Nepal* Varanashi: Nath Publishing House.
- Regmi, Mahesh C. (1988) *An Economic History of Nepal* Varanasi: Nath Publishing House.
- Regmi, Mahesh C. (1999 Reprint) *Land Ownership in Nepal* New Delhi: Adroit Publishers.
- Sharma, C. K. (1990) *Geology of Nepal Himalaya and Adjacent Countries* Kathmandu
- Sharma, G. N. (1989) *A Macro Economic Study of Nepalese Plan Performance* New Delhi: Nirala Publications.
- Sharma, Sharad (1989) *Nepal's Foreign Trade: Trends and Issues Trends in Nepalese Economy Edited by Sri Ram Poudyal*, Kathmandu Centre for Policy Studies
- Sharma, Sharad (1998) *Decentralization and Local Participation for Development: Policies and Realities in Nepal* Kathmandu: Annapurna Printing Press

- Shrestha, Narendra R. (1998) *In the Name of Development: A Reflection on Nepal*. Kathmandu: Educational Enterprise.
- Stiller, Ludwig and Ram P. Yadav (1979) *Planning for People: A Study of Nepal's Planning Experience* Kathmandu: Sahayogi Prakashan.
- Thapa, Krishna B.; Parthibeshwar P Timilsina; and Madan K. Dahal (1997) *Economic History of Modern Nepal, 1768-1951* Center for Nepal and Asian Studies (CNAS).
- UNDP (2004) *Human Development Report 2005* (Current issue), United Nations Development Program.
- World Bank (2009) *The World Development Report, 2008* (Current issue), Oxford University Press.

## Economics of Energy

Eco. 540-1

Paper: X

Full Marks: 100

Teaching Hrs.: 150

**Course Objectives:** The course will focus on the role of energy and energy resources in economic perspective. Basic economic principles and methods regarding the use of energy, in all its important forms (e.g coal, oil, gas; nuclear, electricity, and the various alternative fuels) and policy issues such as the environmental problems of energy use, regulation, the depletion of energy resources, and other problems pertaining to the energy are many areas of discussion. At end of the course the students will be familiarized with current energy issues and be enabled to review and prospects energy policy formulation.

	Teaching Hours
<b>Unit I: Introduction &amp; Energy Issues</b>	5
Definition of energy and concepts of exhaustible and non resource of Energy, Meaning & importance: Energy economics in the perspective of local, national and global issues.	
<b>Unit II: Energy: Demand Analysis and Demand Projection</b>	10
Macro versus sectoral demand	
Process analysis and Elasticity approach	
Input-output method	
End use energy demand	
Demand forecast and generation expansion plans	
Solving energy systems (matrix formulation, optimization, etc)	
Incorporating environmental dimension with reference to energy system	
<b>Unit III: Energy: Supply Analysis and Supply Projection</b>	30
Energy resource assessment	
Domestic resources	
Sustainable energy resource	
Introduction to sustainable energy technologies: Definitions of sustainable energy; patterns of global energy supply and evaluation; fossil fuel energy vs. sustainable energy; current energy reserves; resources assessment environmental impacts; historical notes.	
Solar energy: General characteristics; passive and active solar thermal energy; power generation with thermal solar energy; solar photovoltaic systems (solar cells); economics of solar energy; sustainability attributes.	
Wind energy: History of wind energy, global wind resources, wind energy wind energy technologies, wind tower and turbine design, economics of wind energy, sustainability attributes.	
Geothermal energy: Types of geothermal energy, geographic, distribution and availability of geothermal resources, economics of geothermal energy, sustainability attributes.	
Biomass energy: Promise of biomass energy resources, conversion of biomass to thermal energy, conversion of biomass to intermediate energy resources (e.g) ethanol, economics of biomass energy, sustainability attributes.	
Hydro energy: Extent and prevalence of hydropower, geographic distribution and availability of hydropower resources, economics of hydropower, sustainability attributes.	
Energy transformation	



**Unit IV: Energy and Pricing Theory** 20  
 Theory of consumers and producers  
 Market equilibrium  
 Consumers' surplus  
 Producers' surplus  
 Elasticity  
 Prices of different sources of energy with reference to Nepal  
 Review of domestic players such as Nepal Oil Corporation, Nepal Electricity Authority and private sectors. Pricing policy analysis and their prospects.

**Unit V: Energy Economics in Macroeconomics Background** 15  
 National accounts, balance of payments  
 Import-export and foreign aid  
 Impact of external shocks (price and supply)  
 GDP and other macro-economic parameters  
 Energy balance: energy accounts, unit and conversions  
 Treatment of electricity  
 Treatment of non-commercial energy  
 Different form of energy balance: examples and supplementary issues

**Unit VI: Energy, poverty and development** 20  
 Aspects of development theory, poverty studies and the relationship with energy use; availability, consumption and characteristics of energy use in developing areas; assessing consumption patterns; relationships between energy, poverty, education, health, water access, and development; gender perspectives on energy procurement and use; urban and rural energy technologies and strategies as applies to households, community facilities and small scale enterprises, (including electrification, biomass and renewable energy); related energy efficiency and environmental issues.

**Unit VII: Energy Option Evaluation and Policy Analysis** 20  
 Economic analysis of energy options  
 Energy pricing, taxes and subsidies, rationing  
 Supply-demand matching  
 Energy-GDP interaction  
 Energy poverty linkages and poverty reduction impact indicator for energy sector

**Unit VIII: Political Economy of Oil marketing: International perspective** 30  
 OPEC, brief history of oil exploration; role of major oil companies; nationalization; OPEC's oil production and pricing policies; oil price shocks/ adjustments (1973-74, 1979-80, 2000-01, 2004-05); balance of power and internal conflict; Persian Gulf crisis; reserve/production ratio; oil pricing and trading; role of OPEC in future oil supply; can the oil market live without OPEC; establishment of International energy outlook (short/long term); global warming issues: growth and the environment; and the politics of energy.

#### Basic References

- Banks, Ferdinand, (2000) *Energy Economics: A Modern Introduction* Kluwer Academic  
 Bardley, Robert L. and Richard W. Flumer, (2004) *Energy: The Master Resource* Pennwell Press  
 Cassidy. E., and P. Grossman, *Introduction to Energy Resources* 2<sup>nd</sup> (ed.) Cambridge University Press  
 Dahl, Carol, (2004) *International Energy Markets: Understanding Pricing, Policies and Profit* Pennwell Press  
 Griffin, James M. and Henry B. Steele. (1996) *Energy Economics and Policy* 2<sup>nd</sup> (ed.) Academic Press  
 Gyawali, Deepak. (2001) *Water in Nepal* Himal Books and Panos South Asia with Nepal Water Conservation Foundation  
 Hartwick. J. nad. N. Olewiler. (1998) *The Economics of Natural Resources Use* Addison Wesley  
 Nepal Water Conservation Foundation: Various Publishers

- Nepal, Govinda, V.B.Amtya (2006) *Understanding Rural Energy Program and Poverty Reduction Linkage: An Empirical Study of Nepal* Kathmandu: Energy Sector Assistant Program, Alternative Energy Promotion Centre (AEPC)
- Odell, Peter, *Oil and Gas: Crisis and Controversies* Multi-Sciences Pub. Co.
- Pindyck, R. (1979) *The Structure of World Energy Demand* MIT Press
- Ristinen, Robert and Kraushaar, Jack, (1999) *Energy and the Environment* John Wiley & Sons
- Shresthacharya, Anop, (2002) *Energy Economic in Nepal* (Issues and Options), Udaya books
- Sternner, T. (1992) *International Energy Economics* Kluwer Academic Publisher
- Titenberg, T. (2002) *Environmental and Natural Resources Economic* 5<sup>th</sup> (ed.), Addison
- Tester, Drake, Driscoll, Golay, and Peters. (2005) *Sustainable Energy: Choosing Among Options* The MIT Press, Cambridge MA
- Water Nepal** Journal of Water Resources Development, Various Issues

Various publications and issues of Central Bureau of Statistics, Ministry of Finance. Intermediate Technnology Group (ITDG), Nepal Electricity Authority, Water Energy Commission and Winrock International.

#### **Others Academic Journals**

- Energy Economics
- The Energy Journal
- Energy Policy
- International Journal of Regulation and Governance
- The Journal of Energy and Development
- The Journal of Energy Finance & Development
- Resources, Energy and Development
- Resources and Energy Economics

#### **Text book, Reference and Journals**

- Sthresthachary, A. Energy Economy Modelling
- Energy use in Mountain Areas: ICIMOD (1999)
- Energy Data and Directory and Year Book 1997/98: Tata Energy Research Institute
- Energy Statistic year book-United Nations Publication
- Energy Policy: National and Regional Implications, Ed. Khatri et. al. and NEFAS, CASAC and FES Nepal, 2002
- Economic Survey, Ministry of Finance, HMG/N
- G. Nepal and Vishwa B. Amatya. (2006) *Understanding Rura Energy Programme and Poverty Reduction Linkage: An Emprical study of Nepal*, AEPC/ ESAP, (Forth coming)
- Hirshleifer, Jack, *Energy Pricing Theory*, Prentice Hall
- Integrated Energy Planning*, Vol. 1,2,3, APDC, Malaysia
- Nicholson, Walter. (1995) *Microeconomic:Theory, Basic Principles and Extensions*, sixth ed., The Dryden Press, Harcourt Brace College Publishers, Orlando
- Prasanna, Chandra. *Projects: Planning Analysis , Selection Implementation and Review*, Tata McGraw-Hill Publishing Company Limited, New Delhi
- Rural Energy Planning, APDC Malaysia
- Renewable Energy Technologies: A Brighter Future, ed. K. Rijal, ICIMOD

## Economics of Human Development

Eco: 540-2  
Paper: X

Full Marks: 100  
Teaching Hours: 150

**Course Objectives:** The primary objective of this course is to impart knowledge on various dimensions of human development comprising concept, measurement, theories of human development and divergence between human development and human resource development. The course will focus on the study of gender and human development, investment in people, human development in economic growth, human capital and economic growth, human development and poverty alleviation, globalization and human development, good governance and human development, and review of policies and programs on human development in Nepal. The course will also provide some basic knowledge of demography, which helps to measure human development index.

	Teaching Hours
<b>UNIT I: Introduction to Human Development</b>	6
1. Concept of Human Development.	
2. Human Development Approach	
3. Scope of Human Development	
4. Indicators of Human Development	
<b>UNIT II: Theories of Human Development</b>	15
(A) <i>Psychoanalysis</i>	
1. Sigmund Freud's Psychoanalysis Theory	
2. Erik Erickson's Psychosocial Theory	
(B) <i>Cognitivism</i>	
1. Jean Piaget's Cognitive Development Theory	
2. Lev Vygotsky's Socio-cultural Theory	
(C) <i>Behaviorism</i>	
1. John B. Watson and B. Skinner's Classical and Operant Conditions Theory	
2. Albert Bandura's Social-cognitive Learning	
(D) <i>Ecological Model</i>	
1. Urie Bronfenbrenne's Ecological Theory of Development	
(E) <i>Humanistic Perspective</i>	
1. Carl Rogers's Theory on Humanism	
2. Abraham Maslow on Humanism	
(F) <i>Evolutionary</i>	
1. Konrad Lorenz's Evolutionary Theory	
<b>UNIT III: Demography and Human Development</b>	8
1. Concept of Demography	
2. Demographic Variables and its Determinant Factors:	
• Fertility	
• Mortality, and	
• Migration.	
3. Fertility Level (Crude Birth Rate (CBR), Total Fertility Rate (TFR) and Human Development.	
4. Mortality/Longevity ((Infant Mortality Rate (IMR), Child Mortality Rate (CMR), and Under Five Mortality Rate (U5MR)) and Human Development.	
5. Population Ageing and Human Development.	
<b>UNIT IV: Human Resources Development and Human Development</b>	15
1. Concept of Human Resources Development (HRD)	
2. Determinant Factors of Human Resources Development	
3. Indicators of Human Resources Development	
4. Measurement of HRD by Harbison and Myer's Composite Index and Morris David Morris's Physical Quality of Life Index.	

5. Differences between Human Development and Human Resources Development	
6. Significance of Human Resources Development in Human Development and Economic Development	
<b>UNIT V: Measurement of Human Development Index and its relationship</b>	<b>8</b>
1. Measurement of Human Development Index (HDI).	
2. Level and Trends of HDI in high, middle and low human developed countries.	
3. Per Capita Income and HDI	
4. Education and HDI (Literacy rate and HDI, adult literacy rate and HDI).	
<b>UNIT VI: Gender and Human Development</b>	<b>14</b>
1. Concept of Gender Equality and Equity	
2. Gender Dimension in Human Development Approach	
3. Measuring Gender-related Human Development	
• Gender Development Index (GDI)	
• Gender Empowerment Measure (GEM)	
4. Level and Trends of GDI, GEM in high, middle and low human developed countries.	
<b>UNIT VII: Investment in People</b>	<b>12</b>
1. Types of Expenditure on Human Development	
a. Public Expenditure	
b. Private Expenditure	
2. Level and Trends of Public Expenditure on Social Sector by Gender with respect to high, middle and low human developed countries.	
3. Foreign Aid in Human Development in Nepal.	
<b>UNIT VIII: Human Capital and Economic Growth</b>	<b>10</b>
1. Concept of Human Capital and Physical Capital	
2. Indicators of Human Capital	
3. Stock and Accumulation of Human Capital	
4. Role of Human Capital in Economic Process	
5. Human Capital and Economic Growth	
<b>UNIT IX: Human Development in Economic Growth</b>	<b>12</b>
1. Inter-linkage between Economic Growth and Human Development	
2. Economic Growth and Labour	
3. Human Development and Unemployment	
4. Human Development and Sustainable Development	
5. Human Development and ethnicity: marginalization and inclusion	
6. Human Development and Social Mobilizations	
<b>UNIT X: Human Development and Poverty Reduction</b>	<b>10</b>
1. Concept of Human Poverty and Income Poverty	
2. Impact of Poverty in Human Development	
3. Human Development to Eradicate Poverty	
4. Measurement of Human Poverty Index	
<b>UNIT XI: Globalization and Human Development</b>	<b>10</b>
1. Conceptual framework of globalization	
2. Social impact of globalization	
3. Economic reforms and globalization	
4. Institutions of global governance and globalization	

**UNIT XII: Good Governance and Human Development**

12

1. Concept of Good Governance and its Principles
2. Good governance for human development
3. Significance of good governance to prevent conflict and build peace
4. Good governance at the global level
5. State of governance in Nepal.

**UNIT XIII: Plans and Policies Related To Human Development in Nepal**

10

1. Population
2. Education
3. Health and Nutrition
4. Employment
5. Tax
6. Budget

**UNIT XIV: Seminar and Workshop**

8

Students will present seminar papers, and workshops will be organized on various issues in human development and allied areas.

**Basic References**

Central Bureau of Statistics (2003) *Population Monograph of Nepal* Kathmandu: National Planning Commission /HMG.

Dhesi, Autar S. (1979) *Human Capital Formation and Its Utilization* New Delhi: Sterling Publishers Pvt.Ltd.

Diane E. Papalia and Sally Wendekor (1986), *Human Development, USA: McGraw Hill Inc.*

Haq, Mahbub Ul (2003), *Human Development in South Asia: The Employment Challenge* Karachi: Oxford University Press.

\_\_\_\_\_ (2001) *Human Development in South Asia: Globalization and Human Development* Human Development Centre for Oxford, Karachi: Oxford University Press

\_\_\_\_\_ (2000) *Reflections on Human Development* New Delhi: Second Edition, Oxford University Press.

\_\_\_\_\_ (2000) *Human Development in South Asia-The Gender Question* Karachi: Oxford University Press.

\_\_\_\_\_ (1998) *Human Development in South Asia: The Educational Challenge* Karachi: Oxford University Press

\_\_\_\_\_ (1997) *Human Development in South Asia: The Challenge of Human Development* Karachi: Oxford University Press.

[http://sesd.sk.ca/psychology/Psych30/Topics/module\\_1\\_2.html](http://sesd.sk.ca/psychology/Psych30/Topics/module_1_2.html)

<http://www.arches.uga.edu/~cmsgls/theories.html>

Lerner, Richard M. and David F. Hultsch, (1983) *Human Development: A Life Span Perspective* USA: Mc Graw-Hill Ins.

Morris David Morris (1979) *Measuring the Condition of the World's Poor: The Physical Quality of Life Index* New York: Pergaman Press.

Morris David Morris and Michelle B. McAlpin (1982) *Measuring the Condition of India's Poor: The Physical Quality of Life Index*, New Delhi: Promilla & Co. Publishers.

National Planning Commission (NPC), Various Plans.

Raja, J. Chelliah and R. Sudarshan (1999) *Expenditure for Human Development and Public Provisioning for Poverty Alleviation* in Income, Poverty and Beyond Human Development in India, New Delhi: Social Science Press.

Rao, T.V. (1996) *Human Resources Development Experiences, Interventions and Strategies*, New Delhi: Oxford and IBH.

Sakiko Fukuda-Parr and A.K.Shiva Kumar (2003) *Readings in Human Development* New Delhi: Oxford University Press, India.

The World Bank (1980) *World Development Report-1980* New York: Oxford University Press.

Thurow, Lester C. (1970), *Investment in Human Capital* California: Wadsworth Publishing Company, Inc, Belmont.

- UNDP (2004) *Readings in Human Development* Kathmandu: Report Prepared by Building Capacity to Promote Human Development, Nepal.
- UNDP (2005) *Human Development Report: International cooperation at a crossroads: Aid, trade and security in an unequal world* New York: Oxford University Press.
- \_\_\_\_\_ (2003) *Human Development Report: Millennium Development Goals: A Compact Among Nations to End Human Poverty* New York: Oxford University Press.
- \_\_\_\_\_ (2002) *Human Development Report: Deepening democracy in fragmented world* New York: Oxford University Press.
- \_\_\_\_\_ (2001) *Human Development Report: Making New Technologies Work for Human Development* New York: Oxford University Press.
- \_\_\_\_\_ (1999) *Human Development Report: Globalization with Human Face* New York: Oxford University Press.
- \_\_\_\_\_ (1997) *Human Development Report: Human Development to Economic Eradicate* New York: Oxford University Press.
- \_\_\_\_\_ (1996) *Human Development Report: Economic Growth and Human Development* New York: Oxford University Press.
- \_\_\_\_\_ (1995) *Human Development Report: Gender and Human Development* New York: Oxford University Press.
- \_\_\_\_\_ (1992) *Human Development Report: Global Dimension of Human Development* New York: Oxford University Press.
- \_\_\_\_\_ (1991) *Human Development Report: Financing Human Development* New York: Oxford University Press.
- \_\_\_\_\_ (1990) *Human Development Report: Concept and Measurement of Human Development* New York: Oxford University Press.
- UNDP (2004) *Nepal Human Development Report: Empowerment and Poverty Reduction* Kathmandu: United Nations Development Programme.
- \_\_\_\_\_ (2001) *Nepal Human Development Report: Poverty Reduction and Governance* Kathmandu: United Nations Development Programme.
- \_\_\_\_\_ (1998), *Nepal Human Development Report 1998* Kathmandu: Nepal South Asia Center.
- UNDP/University of Oxford (2002), *Human Development: From Theory to Practice*. Oxford Course 2002. Presentations. (<http://hdr.undp.org/training/oxford/2002>)
- UNDP (1993), *Human Development and Structural Adjustment*, Kirti S. Parick a S. Sudarchan (eds), Madras: Macmillan Pvt. Ltd., India.
- UNDP (2005) *Nepal Millennium Development Goals-Progress Report 2005* Kathmandu: National Planning Commission/United Nations Country Team of Nepal/HMG, Nepal.
- UNDP/Moscow State University School of Economics (2000) *A Textbook Human Development* Prof. Vassily Kolesov and Terry McKinley (eds), Moscow: Human Rights Publishers.

### Supplementary Readings

- Caldwell, John, C. (2003) *Mortality in Relation to Economic Development* Bulletin of the World Health Organization, Nov, Vol.81, No.11, PP 831-832, ISSPN 00429686.
- Carr, Dara (2004) *Improving the Health of the World's Poorest People* Washington DC.:Health Bulletin,
- Harbison, Frederick and Charles A. Myers (1970) *Education, Manpower and Economic Growth* New Delhi: Second Print, Oxford & IBH Publishing Co.12
- International Labour Organization (2004) *Investing in Every Child: An Economic Study of the Costs and Benefits of Eliminating Child Labour* Geneva: International Programme on the Elimination of Child Labour.
- Kothari V.N. (1965) *Investment in Human Resources* Bombay: Popular Prakashan.
- Meier Gerald M. and James E. Rauch (2000) *Leading Issues in Economic Development* Oxford: Seventh Edition, Oxford University Press.
- Schultz, Theodore W. (1981) *Investing in People: The Economics of Population Quality* New Delhi: Hindustan Publishing Corporation
- Shah, Maya (1982) *Economic Growth and Human Capital-An Indian Experience* Manpower Journal, Vol.XVII, No.4:1-21.
- UNESCAP (2004), "What is Good Governance", <file://C:/WINDOWS/Desktop/Governance Readings in HD/What is good governance.htmohn>.

World Commission on Environment and Development (1987) *Population and Human Resources*  
New Delhi: in Our Common Future Oxford University Press.

World Bank (2004) *Poverty Matters Governance*

<http://www.worldbank.org/html/extdr/gc/governance/governance.htm>

## Health Economics

Eco. 540-3

Paper: X

Full Marks: 100

Teaching Hours: 150

**Course Objectives:** This course is designed to apprise students basic concepts of Health Economics Analysis with a view to strengthen their capacity to apply economic principles and analysis to issues in the health sector, health policy and medical interventions. It aims to clarify the nature and implications of health policy options and enable students to handle analytical tools of Health Economics.

	Teaching Hours
<b>Unit I: Introduction</b>	5
1. Inter-relations between Health and Economics	
2. Definition of Health Economics	
3. Scope and importance of Health Economics	
<b>Unit II: Demand, Elasticity and Health</b>	10
1. Demand for health care: Individuals, Households and Community	
2. Supplier induced demand	
3. Elasticity of demand for health care and its measurement	
4. Elasticity of demand and health promotion	
5. Elasticity of prices of health care	
<b>Unit III: Production, Health and Health care</b>	10
1. Efficiency in production and health promotion	
2. Health care providers as multi-product firms	
3. Production efficiency and health care services	
<b>Unit IV: Cost Evaluation</b>	15
1. Cost efficiency: A) Technical B) Allocative	
2. Cost equity: A) Horizontal B) Vertical	
3. Cost effectiveness and competition	
4. Estimating cost functions in health care	
5. Cost equity/efficiency trade-off: health for all	
<b>Unit V: Economic Evaluation</b>	15
1. Cost benefit analysis	
2. Cost utility analysis	
3. Cost effectiveness analysis	
4. QALY and DALY measurements	
<b>Unit VI: Fundamental Market Models for Health Care</b>	15
1. Demand supply and equilibrium	
2. Perfect and monopolistic market model	
3. Alternative models and provider competition in health care	
4. Monopoly and Oligopoly model and contestability	
5. Alternative models and health policy implications	
<b>Unit VII: Public Health Service System</b>	20
1. Philosophy and Objectives of PHS	
2. Health Status performance	
3. Under funding and rationing of services	
4. Health care provider behaviour in a public system	
<b>Unit VIII: Economics of Regulation and Privatization in Health Sector</b>	20
1. Meaning of Regulations and its application in Health Sector	
2. Review of Regulatory Measures	
3. Private Sector in Health care system	
4. Cost recovery and profit Maximization	
5. Incentive management and equity compatibility	

**Unit IX: Budgeting and Financing Health care**

15

1. Health Budgeting-concept and importance
2. Level and trends of health budget
3. Health expenditure pattern in developed and underdeveloped countries
4. Financing health care
  - a) Direct payment system
  - b) Private insurance system
  - c) Social insurance system

**Unit X: Health sector reform trends**

5

1. User charges in tax-financed system
2. Managed competition and public sector contracting

**Unit XI: Economic Development and Health**

15

1. Health services in Economic Development process
2. Demographic development and health
3. Changing Demand for health care and implications
4. Contribution of health economics to planning
5. Strategy formulation and objective setting
6. Operations and research
7. System approach in health services planning

**Unit XII: Overview of Health plan and policies**

5

1. Health policies in SAARC countries: problems and prospects
2. Nepal's second long-term health plan (1997-2017): objectives policies and priorities

**Basic Reference**

- Dixit, H. (1998) *Quest for Health*, Education Enterprises, Kathmandu
- Jack, W., (1999) *Principles of Health Economics for Developing Countries* The World Bank, Washington D.C.
- Green, Andrew (2003) *An Introduction to Health Planning in Developing Countries* 2nd ed. OUP
- WHO (2001) *Macro Economics and Health: Investing in health for economic development* Geneva: WHO
- HMG/N (1999) *Second Long Term Health Plan (1997-2017)*, His Majesty Government of Nepal, Ministry of Health, Kathmandu, Nepal
- Folland
- Sharman, Allen C., Goodman and Miron stano (1997) *The Economics of Health and Health care* New Jersey: Prentice Hall,
- Sen, Kasturi,(2003), (Ed.) *Restructuring Health Services* London: Zed Books
- Rapoport, John; R.L. Robertson and Bruce Stuart (1998) *Understanding Health Economics* Maryland: Aspen Publication,
- WHO (1995) *Health Economics: a WHO Perspectives* Geneva: World Health Organisation
- Wittes, S. and Ensor, J and M. Fowett and R Thompson (2000) *Health Economics for Developing Countries: A Practical Guide* Oxford: McMillan Education,
- Yazbeck, Abdo S., (2003) *Health Policy Research in South Asia* Washington D C.: World Bank,

### Supplementary Readings

- Feldstein, Paul J., (1993) *Health Economics* New York 4th Edn., Dalmer Publishers, Hsiao, Fuchs, V.R. (2000) *The Future of Health Economics* Journal of Health Economics, Vol. 19 pp 141-157
- Hammer, J.S. (2000) *Economics Analysis for Health Projects* Research Observer Vol. 12. No. 2, World Bank
- Homedes, N. (1995) *The Disability Adjusted Life Years (DALY): Definition Measurement and Potential Use* World Bank working paper, World Bank Washington D.C.
- Hsiao, William (2000) *What should Macro Economist know about Health Care Policy* Washington: IMF Working Paper, International Monetary Fund,
- Lee, K. (1983) *The Economics of Health in Developing Countries*, OUP
- McGuire, A., J. Henderson and Gavin Mooney (1988)<sup>2nd</sup> Edn., *The Economics of Health Care* New York: Rout ledge - Kegan Paul
- Mills, A., L. Gilson (1988) *Health Economics for Developing Countries* EPC Publication, Reprint
- Mils, A., L. Gilson (1988) *Health Economics for Developing Countries* EPC Publications, Reprint, 1992
- Murray, C.J. and A.D. Lopez (1996) (Ed.) *The Global Burden of Disease* Harvard: Cambridge M.A., Harvard University Press,
- Young, D.W. (1989) *Financial Control in Health Care* Maryland: Aspen Publisher Inc., Rockville,
- William (2000) *What should Macro Economist know about Health Care Policy* Washington: IMF working paper, International Monetary Fund,
- World Bank ( ) *Health Sector Financing in Asia*, a WB Report no 1DP68, World Bank, Washington D.C.
- World Bank (2000) *Nepal: Operational Issues and prioritization of Resources in the Health Sector* Health, Nutrition and Population Unit, The World Bank
- World Bank (1993) *World Development Report: Investing in Health* The World Bank, Washington D.C.
- World Bank ( ) *Financial Health Service in Developing Countries: An Agenda for Reform*, AWB Policy Study no. 20433, World Bank, Washington D.C.

# International Finance and Economic Cooperation

Eco. 540-4  
Paper: X

Full Marks: 100  
Teaching Hrs.: 150

**Course Objectives:** This course is designed to provide an adequate understanding of international finance, particularly foreign aid and various types of capital movements as they affect LDCs. It covers issues relating to Multinational Corporation. It provides through knowledge of various type of economic union in theory as well as in practice. It also deals with the structure of International Monetary System and also with the key issues and present status of the LDCs demand for New International Economic Order.

	Teaching Hours
<b>Unit I: Aid Relations between the rich and poor nations; Debt Problems of the LDCs and their solutions</b>	20
<b>Unit II: Theory of Capital Movements</b> The Transfer Problem: the Euro-currency markets- Foreign Direct Investment-Policies Towards Foreign Direct Investment-Portfolio Investment	
<b>Unit III: International Finance Demand for International Money and Capital Fund</b>	15'
1) Flows of Goods, Services and Funds across the border	
2) International Liquidity Crisis	
3) Investment requirements	
<b>Unit IV: Supply of International Finance</b>	30
1) Liquidity Problem; Composition and supply of International Reserves, Changing role of the Dollar, Operation and Breakdown of the Bretton Woods System MF, IBRD, IFC and WTO for supporting trade and finance	
2) Foreign exchange regimes: currency devaluation and depreciation	
<b>Unit V: Regional Economic Cooperation Objectives, Types and Models of Cooperation</b>	45
1) Objectives of Regional Integration	
2) Strong vis-avis weak order co-operations	
3) Models of Cooperation-Technical, Financial and Physical	
4) Co-operations. exchange of information and the monetary union	
5) <b>Customs Union and Free Trade Area:</b> Dynamic Effects of Customs Union-Trade creation and Trade Diversion, Distribution of Gains Empirical Studies	
6) <b>Regional Integration:</b> Regionalism vs Multilateralism, ADB, Asian Clearing Union, SWAP arrangements, Regional Cooperation in Practice: objectives, structure and performance; EEC, BENELUS, COMECON, ASEAN, SAARC, NAFTA, EU; Problems and Prospects of South Asian Free Trade Area, and SAARC Investments fund.	
<b>Unit VI: Multi-national Corporation:</b> Nature and Distributions; Host States concerns and benefits; Parent State concerns and benefits.	15
<b>Unit VII: New International Economic Order-Key Issues and Present Status</b>	10

Basic Reference

Bhagwati, J., **The New International Economic Order.**

Heller, H.R., *International Monetary Economics* New Delhi: Prentice Hall, 1977.

Kant, Kishore Bharagava , Heing Bongartz and Farrog, Sobhan, *Shaping*

Morton K. and P/ Tulloch, *Trade and Developing Countries*

Williamson, *The Failure of International Monetary Reform.*

**Supplementary Readings**

Blake, D.H. and R.S. Walters, *The Politics of Global Economics Relations.*

Caves and Jones, *World Trade and Payments*

Durning, J.H. (edt), *International Investment*

Johnson, *Essays in Monetary Economics* George Allen and Unwin, London, 1970.

Journal Articles to be Prescribed in the Course of Lecture

Kindeberger, C. (edt), *International Corporation.*

RIS, **South-South Economic Cooperation** New Delhi: Radiant Publishers, 1987.

# Transport Economics

Eco. 540-5  
Paper V

Marks: 100  
Teaching hours: 150

**Course Objective:** The objective of this course is to enable the students to possess sound theoretical knowledge of transport economics and introduce them to the systematic analysis of policy choices, planning techniques and research methods in the area.

	<b>Teaching Hours</b>
<b>Unit 1: Introduction</b>	10
1. Principles of Transport Economics	
2. Transport Planning and Policy Formulation	
3. Economic Implications of Transport Networking	
<b>Unit II: Economics of Public Transport Planning and Management</b>	20
1. Surface Transport System	
- Roads transport Infrastructure	
- Rail Transport Systems	
2. Ropeway/cable transport	
3. Air transport Systems	
4. Water Transport Systems	
5. Freight Transport	
<b>Unit III: Investment in Transport and Economic Development</b>	20
1. Economic Appraisal of Transport Projects	
2. Transport Infrastructure and Poverty Reduction	
3. Transport and International Trade	
4. Sustainable Transport Planning and Practice	
5. Economic Impacts of Transport Infrastructure	
<b>Unit IV: Demand Analysis and Capacity Management</b>	15
1. Marketing Research in Transport Economics	
2. Analysis of Transport Industries	
3. Economics of Regional and Sub-Regional transport network	
<b>Unit V: Economics of Urban and Rural Transport</b>	15
1. Economics of Urban Transport	
2. Economics of Rural transport	
3. Economic Complimentarity of Urban/Rural Transport	
<b>Unit VI: Environmental Cost of Transport</b>	15
1. Transport and public Utility Economics	
2. Pollution Cost of Surface Air and Water Transport	
3. Cost of Transport Pollution mitigation measures	
<b>Unit VII: Transport Modeling</b>	25
1. Economic Principles of Transport Modeling.	
2. Transport Data Collection and Analysis	
3. VOC, ROCKS, HDM, EBM Models etc	
4. Costs of Transport Safety Techniques	
5. Cost of Accident Analysis and Prevention	
<b>Unit VIII: Current Issues in Transport Economics</b>	20
1. Transport Costs in Transition Economies	
2. International Mobility and Transport Costs	
3. Technological Innovations and Transport Cost Reduction	
4. Private Sector and Transport Cost Reduction	

## Unit IX: Transport Economics and Regulations

10

1. Transport Economics and National Laws
2. Transport Economics and International Transport Agreements
3. Transport costs of Land-locked Countries

## Unit X: High Cost Transport and Competitiveness

1. High cost economies and competitive constraints
2. Introduction transport decision
3. Markov processes and simulation in transport decision

### Basic References

- Bamford, C. G., (1998) *Transport Economics* Heineman, 2<sup>nd</sup> edition.
- Cole, Stuart (2005) *Applied Transport Economics: policy, management and Decision making* Kogan Page.
- Harrison, Anthony (1974) *The Economics of Transport Appraisal* Croom helm
- OECD (2003), *Fifty Years of Transport Policy, Issues, Failures and new Challenges, A Publication of the Organization of the*
- Oum, TaeHoon et al (edit) 1997 *Transport Economics; Selected readings* Routledge.
- Quinet, Emile & Vikerma (2003) *Principles of Transport Economics* Amazon.ca
- Thomphson, Gerlad E., (1976) *An Introduction to Modern Quantitative Analysis and Decision Making* New York: McGraw-Hill Co.,

### Supplementary Readings

- Nathalie, G Schwab (1995), *Contingent Valuation, transport Safety and the Value of life*
- Leinbach, Thomas R. (1989), *South-East Asian Transport: Issues in Development* Amazon.ca
- Hensher, David A and Brewer Ann M, (2001), *Transport: An Economics and Management perspective* Oxford University press.
- Thomphson, Gerlad E., (1992) *Statistic for Transportation Decisions* Little, Brown and Co., Boston
- Howard, Ronald A., (1986) *Dynamic Programming and Marcov Processes* MIT Press, Cambridge, MASS.

Documents/ Research Papers/ Articles: Transport Laws of Nepal

Publications/ Rules and Regulations of the Department of Transport management His Majesty's Government, Nepal

International Agreements on Transport including Sub-Regional Transport Facilitation under SAARC.

Transport and Communications Bulletin for Asia and the Pacific: Governance for Sustainable Development in the Transport Sector no.70 march, 2003

Kubota, Hisashi, and Tetsuo Kidokoro. "Environmental Traffic Management: Micro Planning Approach: Creative Neighbourhoods for Pedestrians, Cyclists, and Buses." In *Urban Development, Transport, and the Environment. Proceedings of the Expert Seminar, Expert Group Meetings, and One-Day International Symposium on Urban Development, Transport, and the Environment, 4-8 June 1994, Sagamihara, Japan*, edited by James F. Goater, 339-353., UNCRD Proceedings Series, No. 5. Nagoya, Japan: United Nations Centre for Regional Development, 1994.

Quium, A. S. M. Abdul. "Integration of Motorized and Non-Motorized Transport Modes: An Alternative Strategy for Creating a Sustainable Urban Transport System for Dhaka, Bangladesh." In *Urban Development, Transport, and the Environment. Proceedings of the Expert Seminar, Expert Group Meetings, and One-Day International Symposium on Urban Development, Transport, and the Environment, 4-8 June 1994, Sagamihara, Japan*, edited by James F. Goater, 335-361. UNCRD Proceedings Series, No. 5. Nagoya, Japan: United Nations Centre for Regional Development, 1994.

Miyamoto, Kazuaki. "A Pilot System for Evaluating Integrated Policy Measures of Metropolitan Land Use, Transport, and the Environment." *Regional Development Dialogue* 16, no. 1 (1995): 73-86.

Tanaboriboon, Yordphol. "Transportation Demand Management: Problems and Issues in the Asian Developing Countries." In *Urban Development, Transport, and the Environment. Proceedings of the Expert Seminar, Expert Group Meetings, and One-Day International Symposium on Urban Development, Transport, and the Environment, 4-8 June 1994, Sagamihara, Japan*, edited by James F. Goater, 187-204. UNCRD Proceedings Series, No. 5. Nagoya, Japan: United Nations Centre for Regional Development, 1994.

Harper, Elizabeth A., and Marvin L. Manheim. "Geographic Information Systems in Transportation Planning: A Case for a Geographic-Based Information Services Strategy for Regional Planning." *Regional Development Dialogue* 11, no. 3 (1990): 188-212.

Anantha Rajan, T., Y. Shanmuga Sundaram, S. Ponnu Swamy, and K. Kumar. "Joint Venture of State and National Governments in Developing Rail Facilities: A Case Study of Chennai in India." In *Urban Infrastructure Development. Proceedings of the Second International Expert Panel Meeting on Urban Infrastructure Development, 8-9 December 1997, Bangkok, Thailand*, edited by Andrea Czarnecki, 303-345. UNCRD Proceedings Series, No. 26. Nagoya, Japan: United Nations Centre for Regional Development, 1998.

Black, John A. "Policy Measures for Land Use and Transport Demand Management and Their Implications in Managing Rapidly Growing Asian Metropolises." *Regional Development Dialogue* 13, no. 3 (1992): 3-25.

Manheim, Marvin L., and Joseph L. Schofer. "Urban Transportation Planning Information Systems for Use in Developing Countries." In *Information Systems for Urban and Regional Planning: Asian and Pacific Perspectives*, 249-302. Nagoya, Japan: United Nations Centre for Regional Development, 1986.

## Websites

[www.libraweb.net](http://www.libraweb.net) for the International Journal of Transport Economics, Rome  
[www.worldbank.org](http://www.worldbank.org) especially for the rural roads and other transport economics (research Reports, Proceedings etc.)

Thesis

Eco. 540-6  
Paper: X

Full Marks: 100

# Economics of Tourism

Eco. 535-7  
Paper: X

Full Marks: 100  
Teaching Hours: 150

## Course Objectives

The course is designed to familiarize the fundamentals of tourism economics as discipline. The primary objective of the course is to focus on economic aspect of tourism that would enable the students to understand and consider tourism as one of the prominent sector of the economy.

## Course content

### Unit I The Nature of Tourism Economics

- 1) Concept of Travel and Tourism
- 2) Principles of Tourism Economics
- 3) Tourism Resources, Products and Characteristics
- 4) Tourism as an Industry
- 5) Components of Tourism
- 6) Types of Tourist and Tourism
- 7) Historical Review of Travel and Tourism
- 8) Role of tourism in development countries

### Unit II Tourism Demand

- 1) Evolution of Tourism Demand
- 2) Diversity and Characteristics of demand
- 3) Measuring Tourist Demand (Number, Length of Stay, Expenditure, Frequency of Visit)
- 4) Elasticity of Tourism Demand (Income and Price)
- 5) Factors Influencing Demand
- 6) Variables Constraining Demand
- 7) Future Prospects of Tourism Demand

### Unit III Supply of Tourism Products

- 1) Supply of Tourism Services
- 2) Cost and Nature of Product
- 3) Supply of Accommodation: (Hotels, Resorts, Second Homes, Time Sharing)
- 4) Supply of Transport: (Surface, Water, Air)
- 5) Supply of other Related Services.
- 6) Control on Supply of Services
- 7) Significance of Souvenir and Handicrafts for the Promotion of Tourism

### Unit IV Tourism Marketing

- 1) Marketing Concept in Tourism
- 2) Corporate Analysis, Market Research, Market Segmentation and Marketing Mix
- 3) Marketing Process and Functions
- 4) Pricing of Tourism Product in Different Market Conditions: (Oligopoly, monopolistic Competition Market Intervention

### Unit V Tourism and Economy

- 1) Impact of Tourism in the Economy: Direct, Indirect and Induced
- 2) Effect of Tourism Expenditure in National Economy (Tourism Multiplier, Leakages, Input-output Analysis.
- 3) Tourism and Employment
- 4) Contribution of Tourism in National Economy (GDP, Foreign Exchange Earnings, Revenue)
- 5) Tourism and Balance of Payment
- 6) Tourism and Human Resource Development

### **Unit VI Tourism Planning**

- 1) Importance, Objectives, Advantages, Consequences of Unplanned Development,
- 2) Evolution of Tourism planning, Purpose of Planning, Level of Planning
- 3) Process of Tourism Planning
- 4) Stages in Destination Development, Allocentric vs Psychocentric Personality, Destination Area-Rise and fall in popularity

### **Unit VII Ecotourism**

- 1) Definition, Nature, Scope and Mechanism to Promote Ecotourism
- 2) Principles, Advantages and Benefits of Ecotourism for local Communities
- 3) Major Ecotourism Issues and Future of Ecotourism
- 4) Ecotourism as a Unique Component of Competitiveness as a Tourism Destination.
- 5) Protected Areas and Tourism and Economics Assessment of Protected Areas
- 6) Sustainable Tourism Development

### **Unit VIII International Tourism**

- 1) Trend of International Tourism
- 2) World and Regional Tourism Trends
- 3) International Tourism Markets (WTO Destination)
- 4) Theoretical Economic Determinants of International Tourism (The Theory of Factor Endowments, The Theory of comparative costs, The Theory of Absolute Advantage and Technology, The Theory of Conditions of Demand)
- 5) International Tourism in Industrialized and Developing Countries

### **Unit IX Tourism Organizations and Policies**

- 1) National Public Sector Tourism Organization
- 2) National Professional organizations
- 3) World Tourism organizations (WTO)
- 4) International Organizations Responsible for Tourism Development (PATA, IATA, ICAO)
- 5) NGO/INGO Non-governmental organizations
- 6) The General Agreement on Trade and Services and Tourism Policy
- 7) Tourism Element in WTO (World Trade organization)
- 8) Role of Government in Tourism Development

### **Unit X Tourism Investment and Finance**

- 1) Investment in Travel and Tourism
- 2) Special Considerations in Tourism Investment (capital and labour intensive)
- 3) Multinational Enterprises in Tourism Investment
- 4) Reasons for involvement of Multinational companies in Travel and Tourism
- 5) Sources of Finance in Tourism Sector and Foreign Direct Investment

## References

- Batra, G.S. (ed.) (1996). *Tourism in the 21st Century*. New Delhi: Anand Publication Pvt. Ltd.
- Batra, K.L. (1990). *Problems and Prospects of Tourism*. Jaipur, India: Print wall Publisher.
- Bhatia, A.K. (1993). *Tourism Development: Principles and Practices*. New Delhi: Sterling Publisher Private Ltd.
- Bukarat, A.J. and S. Medlik (1981). *Tourism: Past Present and Future*. London: Heinemann.
- Bull, Adrian (1990). *The Economics of Travel and Tourism*. Australia: Pitman Publishing.
- Chand, Dewakar (2000). *Nepal's Tourism: Uncensored Facts*. Varanashi: Pilgrims Publishing.
- Collier, Allen (1989). *Principles of Tourism*. New Zealand: Pitman.
- Davey, Adrian G. (1998). *National System Planning for Protected Areas*, IUCN.
- East P, Luger K. Inmann, K (eds). *Sustainability in Mountain Tourism*. Austria: Book Faith India/STUDIEN Verlag.
- Gunn, C.A. (1988). *Tourism Planning*. Taylor and Frances.
- Harison, David (1992). *Tourism and Less Developed Countries*. London: Belhaven Press.
- Kadt, Emanuel de (1979). *Tourism—Passport to Development*. Oxford, New York.
- Kumar, Nirmal (1988). *Tourism and Economic Development*. Oxford/New York.
- Kunwar, R. (1997). *Tourism and Development*. Kathmandu: Laxmi Kunwar.
- Kohan, Eric (1987). *Alternative Tourism: A Critique*. Tourism Recreation Research Vol 12, No 2, pp. 13-18.
- Lickorish, Lenonard and Alan Jefferson (1991). *Marketing Tourism*. London: Longman.
- Matheson, A&G Wall, (1982). *Tourism: Economic, Social and Physical Impacts*. London and New York: Longman.
- McIntosh/Göeldner/Ritchie (1995). *Tourism: Principles, Practices Philosophies*. New York: John Wiley & Sons, Inc.
- Mehmuda, Shafi (1994). *Tourism Dynamics in a Developing Economy*. Sanagar, Kashmir: Gulshan Publishers.
- Melntyre, George (1993). *Sustainable Tourism Development: Guide for Local Planners*. Spain: World Tourism Organizations.
- Mill, R.C. and A.M. Morrison (1985). *The Tourist System: An Introductory Text*. New Jersey: Prentice-Hall Inc.
- Murphy, P.E. (1985). *Tourism: A Community Approach*. London and New York: Routeledge.
- Murphy, Peter E. (1985). *Tourism: A Community Approach*. New York: Methuen.
- Negi, Jagmohan (1990). *Tourism and Travel: Concepts and Principles*. New Delhi: Gitanjali Publishing House.
- Papola, T.S., B.K. Joshi, H.S. Verma and R.G. Sinha (ed.) (1983). *Development of Hill Areas: Issues and Approaches*. Bombay: Himalaya Publishing House.
- Pears, Douglas (1989). *Tourism Development*, Second Edition. London: Longman.
- Poudel, P.C. (2060). "Ecotourism, and the Context of Nepal," in *Nepal Bhugol Patrika*. Kathmandu: Nepal Geography Society.
- Robinson, H.A. (1976). *A Geography of Tourism*. London: ManDonald and Evans.
- Sethi, P.N. and S.S. Bhat (2000). *An Introduction to Travel and Tourism*. New Delhi: Sterling Low Price Edition, Sterling Publishers Pvt. Ltd.
- Sharma, Pitamber (1995). *A Framework for Tourism Carrying Capacity Analysis*. Kathmandu: ICIMOD, Discussion Paper series No MEI 95/1.
- Sharma, P. (ed.) (2000). *Tourism as Development*. Austria/ Nepal: Himal Books and Studien Verlag Inn sbruck wien Mucha.
- Shrestha, H.P. (1999). *Tourism in Nepal: Marketing Challenges*. New Delhi: Nirala Publications.
- Smith, S.L.J. (1987). *Tourism Analysis: A Handbook*. UK: Longman Group.
- Tewari, S.P. (1994). *Tourism Dimensions*. New Delhi: Atmaram & Sons.
- Theobald, William (ed.) (1994). *Global Tourism: The Next Decade*. Oxford: Butterworth Heinemann Ltd, Lincare House, Jordan Hill, Oxford ox28DP.
- Tribe, John. *The Economics of Leisure and Tourism*. Butterworth/Heinemann.
- Vellas and Becherel. *International Tourism: An Economic Perspective*. Macmillan.
- World Bank (1979). *Social and Cultural Dimension of Tourism*. Staff working paper No 326.