



**List of Courses Focus on Employability/ Entrepreneurship/
Skill Development**

Department : Economics

Programme Name : B.A. (Hon's) Economics

Academic Year : 2021-22

List of Courses Focus on Employability/ Entrepreneurship/Skill Development

Sr. No.	Course Code	Name of the Course
		B.A. 1st Semester
01.	ENUATT2	Mathematical Methods for Economics-I
02.	ENUATA1	NSS and Social Economic Development
03.	ENUATL1	Money and Financial Markets
		B.A. 2nd Semester
04.	ENUBTT4	Mathematical Methods for Economics-II
05.	ENUBTA2	NSS and Youth Development
06.	ENUBTL2	Environmental Economics
		B.A. 3rd Semester
07.	SS/EC/C-306	Statistical Methods for Economics
08.	SS/EC/C-(SEC-1)	Data Analysis
		B.A. 4th Semester
9.	SS/EC/C-410	Introductory Econometrics
		B.A. 5th Semester
10.	SS/EC/DSE-502A	Money & Financial Markets
		B.A. 6th Semester
11.	SS/EC/DSE-601A	Environmental Economics
		M.A. 3rd Semester
12.	1733-305	Econometrics-II
		M.A. 4th Semester
13.	1734-405	Econometrics-II



Scheme and Syllabus

*** MOOC's courses should be offered at least one time during entire UG programme in lieu of Core Course. If the core is not available any course similar to Generic elective, Discipline specific elective, AEC course, Skill enhancement course may be offered on MOOC's platform. If any such course related to your subject is not available on MOOC's platform, department may continue with regular courses.

**** The BOS has authorised the chairperson to modify and update the curriculum as and when required and as per the guideline of the university.

Table 3: Template for Semester wise courses (suggestive)

Semester	Course	Course Code	Course Name	Credits	L/T/P
I	C1		Introductory Microeconomics	5	L-4, T-1
	C2	ENVATT2	Mathematical Methods for Economics-I	5	L-4, T-1
	GE1		Introductory Microeconomics	5	L-4, T-1
	AEC1	ENVATA1	From pool of Ability Enhancement Course (AEC-I)	2	L-2
	SEC1	ENVATL1	From pool of Skill Enhancement Course (SEC-I)	2	L-2
		Additional Credit Course			
	Total			19	
II	C3		Introductory Macroeconomics	5	L-4, T-1
	C4	ENUBTT4	Mathematical Methods for Economics-II	5	L-4, T-1
	GE2		Introductory Macroeconomics	5	L-4, T-1
	AEC2	ENUBTA2	From pool of Ability Enhancement Course (AEC-II)	2	L-2
	SEC2	ENUBTL2	From pool of Skill Enhancement Course (SEC-II)	2	L-2
		Additional Credit Course			
	Total			19	
III	C5		Intermediate Microeconomics-I	5	L-4, T-1
	C6		Intermediate Macroeconomics-I	5	L-4, T-1

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Department of Economics (B.A. IIIrd & IVth Semester) CBCS

III	Core-5	Intermediate Microeconomics-I	5	5
	Core -5 Tutorial	Tutorial-5 based on Core-5	1	1
	Core -6	Intermediate Macroeconomics-I	5	5
	Core -6 Tutorial	Tutorial-6 based on Core-6	1	1
	Core - 7	Statistical Methods for Economics	5	5
	Core - 7 Tutorial	Tutorial-7 based on Core-7	1	1
	Generic Elective (GEII-A)-1	From pool of Generic elective courses (Money & Banking)	5	5
	Generic Elective - Tutorial	Tutorial-3 based on Generic Elective-3	1	1
	Skill Enhancement Course (SEC -1)	From pool of Skill Enhancement Course (SEC -1) (Data Analysis)	4	4
		Total	28	28
IV	Core-8	Intermediate Microeconomics-II	5	5
	Core -8 Tutorial	Tutorial-8 based on Core-8	1	1
	Core -9	Intermediate Macroeconomics-II	5	5
	Core -9 Tutorial	Tutorial-9 based on Core-9	1	1
	Core - 10	Introductory Econometrics	5	5
	Core - 10 Tutorial	Tutorial-10 based on Core-10	1	1
	Generic Elective (GEII-B)-2	From pool of Generic elective courses	5	5
	Generic Elective - Tutorial	Tutorial-4 based on Generic Elective-4	1	1
	Skill Enhancement Course (SEC -2)	From pool of Skill Enhancement Course (SEC -2)	4	4
		28	28	

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	Skill Enhancement Course (SEC -2)	SEC-II**	4	4
SUMMER	Internship: 15 days (Optional)	Swayam Swachhita / NSS / Industrial/ others -	28	28
	Core-11	Indian Economy-I	5	5
	Core -11 Tutorial	Tutorial-11 based on Core-11	1	1
	Core -12	Development Economics-I	5	5
	Core -12 Tutorial	Tutorial-12 based on Core-12	1	1
V	Discipline Specific Elective (DSE-1)	SS/EC/DSE-501A A Economic History of India (1857-1947) B Topics in Microeconomics-I	5	5
	DSE-1 - Tutorial	Tutorial-1 based on DSE-1	1	1
	Discipline Specific Elective (DSE-2)	A Money and Financial Markets B Public Economics	5	5
	DSE-2 - Tutorial	Tutorial-2 based on DSE-2	1	1
			24	24
VI	Core-13	Indian Economy-II	5	5
	Core -13 Tutorial	Tutorial-13 based on Core-13	1	1
	Core -14	Development Economics-II	5	5
	Core -14 Tutorial	Tutorial-14 based on Core-14	1	1
	Discipline Specific Elective (DSE-3)	A Environmental Economics B Topics in Microeconomics-II	5	5
	DSE-3 - Tutorial	Tutorial-3 based on DSE-3	1	1
	Discipline Specific Elective (DSE-4) + DSE-4 - Tutorial. Or Dissertation/ Project work followed by seminar	A International Economics B Dissertation/Project Viva-Voce	5+1=6 Or 5+1=6	6
			24	24
		TOTAL Credits		152 + 4 (SI)

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DEPARTMENT OF ECONOMICS
GURU GHASIDAS VISHWAVIDYALAYA, CGI

M.A. Economics

SEMESTER-III (Core Paper)

Paper	Semester-III	Marks (Total-100) Internal-40 End Semester-60
XI	Indian Economic Policy-I	100
XII	Economics of Growth and Development-I	100
XIII	International Economics-I	100
XIV	Economics of Social Sector and Environment -I	100
XV	Optional Paper (Any One)	100

Optional Paper (Any One)

Paper	Semester-III	Marks (Total-100) Internal-40 End Semester-60
XV	Econometrics-I	100
XV	Gandhian Economics-I	100
XV	Demography-I	100
XV	Labour Economics-I	100

Paper-XI
Indian Economic Policy-I

Unit 1

Fasters, Sustainable and Inclusive Growth; Role of State, market and other institutions; Indicators of development — PQLI, Human Development Index (HDI), gender development indices, Gender Empowerment Index (15 Classes)

Unit 2

Objectives and strategy of planning in India with reference to Current Five Year Plan;; Developing grass-root organizations for development — Panchayats, NGOs and pressure groups.

(15 Classes)

D. B. Singh
02/11/16

Shamha
02/11/16



SEMESTER-IV (Core Paper)

Paper	Semester-IV	Marks (Total-100) Internal-40 End Semester-60
XVI	Indian Economic Policy-II	100
XVII	Economics of Growth and Development-II	100
XVIII	International Economics-II	100
XIX	Economics of Social Sector and Environment -II	100
XX	Optional Paper (Any One)	100

Optional Paper (Any One)

Paper	Semester-IV	Marks (Total-100) Internal-40 End Semester-60
XX	Econometrics-II	100
XX	Gandhian Economics- II	100
XX	Demography-II	100
XX	Labour Economics-II	100

**Paper-XVI
Indian Economic Policy-II**

Unit 1

The Industrial Sector Industrial policy; Public Sector enterprises and their performance; Problem of sick units in India; Privatisation and disinvestment' debate; Growth and pattern of industrialisation; Small-scale sector; Productivity in industrial sector; Exit policy — issues in labour market reforms; Approaches for employment generation (15 Classes)

Unit 2

Public Finances Fiscal federalism — Centre-state financial relations; Finances of central government; Finances state governments; Parallel economy; Problems relating to fiscal policy; Fiscal sector reforms in India. (10 Classes)

Unit 3

Analysis of price behaviour in India; Financial sector reforms: Interest rate policy; Review of monetary policy of RBI; Working of SEBI in India. (10 Classes)

Shanbhay
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Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007, H.L. Ahuja.

SEMESTER I

B.A. (Hons.) Economics, Semester-I, Core-2
Course: Mathematical Methods in Economics-I
Course Code: FOY
Course Credit: (4+1)

FOY
MATHEMATICAL METHODS IN ECONOMICS-I

Course Outcomes

The course hones and upgrades the mathematical skills acquired in school and paves the way for the first semester course Mathematical Methods in Economics I. The analytical tools introduced in this course have applications wherever optimisation techniques are used in business decision-making. These tools are necessary for anyone seeking employment as an analyst in the corporate world. The course additionally makes the student more logical in making or refuting arguments.

Course Outline

Unit: 1

Variables, constants and parameters; Equations and Identities; Sets and Set operations;

Unit: 2

Relations and functions; types of functions: constant & polynomial functions; sequences and series: arithmetic & geometric progression

Unit: 3

The derivative and the slope of a curve; process of differentiation; derivatives of first and second order; condition of maxima and minima of a function

Unit: 4

Application of differentiation in economics-elasticity of demand, cost and revenues, conditions for profit maximization in perfect, monopoly & monopolistic competitions.

Unit: 5

Integration of function- Simple concepts, Consumer and Producer's surplus

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SEMESTER I

B.A. (Hons.) Economics, Semester-I, Ability Enhancement Course (AEC-I)
Course: NSS and Social Economic Development
Course Code: ECUATA1
Course Credit: (02)

NSS and Social Economic Development

Objectives: The main objectives of this course are:

1. To help learners know about environmental issues and disaster management.
2. To understand the role of entrepreneurship in social development.
3. To learn documentation and reporting.

Course Outcomes

Learners will learn to appreciate the concerns regarding the environment. They will have the background information to start a venture. They will also be able to prepare a socio-economic development plan.

UNIT 1: Environmental Issues

Natural Resource Management, Sustainable Development, Renewable & Non Renewable Resources, Environment & Development Trade-off;

UNIT 2: Disaster Management

Introduction; Definitions and types of disasters; Disaster Management, Role of NSS in disaster management; Civil defence & Disaster Management

UNIT 3: Entrepreneurship

Definition and meaning; Characteristics of Entrepreneurs; Types of Entrepreneurs
Types of Entrepreneurship; Entrepreneurs and the Economy;

UNIT 4: Funding a Venture

Sources of funding and formalities

Suggested Readings:

1. Biodiversity, Environment and Disaster Management by Shamna Hussain (Unique Publishers)
2. Environmental Studies by P K Pandey (Mahaveer Publications)
3. Fundamentals of Entrepreneurship by H Nandan (PHI)

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SEMESTER I

B.A. (Hons.) Economics, Semester-I, Skill Enhancement Course (SEC-I)
Course: Money and Financial Market
Course Code: ECUATL1
Course Credit: (02)

Money and Financial Market

Course Outcomes

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Outline

1. Money

Concept, functions, measurement; theories of money supply

2. Financial Institutions, Markets, Instruments and Financial Innovations

Money and capital markets: organization, structure and reforms in India; role of financial Institutions

3. Banking System

Indian banking system: Changing role and structure; banking sector reforms.

4. Central Banking and Monetary Policy

Central Bank: Functions, goals, targets, instruments of monetary control; current monetary policy of India.

Readings

1. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, Foundations of Financial Markets and Institutions, Pearson Education, 3rd edition, 2009.
3. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011.
4. M. Y. Khan, Indian Financial System, Tata McGraw Hill, 7th edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group, IMF Staff Papers.

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4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.

SEMESTER II

B.A. (Hons.) Economics, Semester-II, Core-4

Course: Mathematical Methods in Economics-II

Course Code:

FO8

Course Credit: (4+1)

MATHEMATICAL METHODS IN ECONOMICS - II

Course Outcomes

The course provides the mathematical foundations necessary for further study of a variety of disciplines including postgraduate economics, statistics, computer science, finance and data analytics. The analytical tools introduced in this course have applications wherever optimization techniques are used in business decision-making for managers and entrepreneurs alike. These tools are necessary for anyone seeking employment as an analyst in the corporate world.

Course Outline

Unit: 1

Linear Programming: Graphical solution and its application in economics, Duality

Unit: 2

Matrix: various types, addition and subtraction, multiplication of matrix.

Unit: 3

Determinants, singular matrix, inverse of a matrix, solution of simultaneous equations through crammer's rule.

Unit: 4

Game theory-simple and mixed strategy, saddle point solution, prisoner's dilemma

Readings:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

SEMESTER II

B.A. (Hons.) Economics, Semester-II, Generic Elective (GE-2)

Course: Introductory Macroeconomics

Course Code:

Course Credit: (4+1)

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SEMESTER II

B.A. (Hons.) Economics, Semester-II, Ability Enhancement Course (AEC-II)
Course: NSS and Youth Development
Course Code: ECUBTA2
Course Credit: (02)

NSS and Youth Development

Objectives: The main objectives of this course are:

1. To help learners know about NSS in the context of youth, community and voluntary service.
2. To appreciate the importance of health, hygiene and sanitation for a healthy nation.
3. To propagate Yoga as a way of healthy living.

Course Outcome:

Learners will have the knowledge about NSS and its role in the fields of health, hygiene and sanitation so as to build a strong country. They will be able to use Yoga for healthy living.

Course Outline

Unit 1: Introduction to NSS

History, philosophy, aims and objectives of NSS; Organization of NSS, Funding; Regular Activities; Special Camping; Adopted village; NGOs

Unit 2: Health, Hygiene and Sanitation

Importance of health, hygiene and sanitation; Various Govt. programmes

Unit 3: Youth Health

Healthy lifestyles; HIV/AIDS, drugs and substance use; Firstaid

Unit 4: Youth and Yoga

History and philosophy of yoga; Yoga for healthy living

Suggested Readings:

1. National Youth Policy Document.
2. National Service Scheme - A Youth Volunteers Programme For Under Graduate Students As Per UGC Guidelines by J D S Panwar, A K Jain & B K Rathi (Astral).
3. Communication Skills by N Rao & R P Das (HPH).
4. Light on Yoga by B K Iyenger (Thorsons).

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SEMESTER II

B.A. (Hons.) Economics, Semester-II, Skill Enhancement Course (SEC-II)

Course: Environmental Economics

Course Code: ECUBTL2

Course Credit: (02)

ENVIRONMENTAL ECONOMICS

Course Outcomes

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Outline

1. Introduction

What are environmental economics; Importance and Scope of Environmental Economics.

2. Pollution

Types of Pollution - Soil, Air, and Water, Problems and Prospects of different pollution.

3. The Design and Implementation of Environmental Policy

Overview: Implementation of environmental policy.

4. International Environmental Problems

Environmental problems; economics of climate change;

5. Disaster Management and Sustainable Development

Meaning and Importance of Disaster Management, Process and effects on environment,

Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W:W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, -Environmental Economics: A Survey, || *Journal of Economic Literature*, Volume 30:675-740.

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SEMESTER III
B.A. (Hon's) Economics, Semester III, Core-7
Course: Statistical Methods for Economics
Course Code: SS/EC/C-307
Course Credit: (5+1)

STATISTICAL METHODS FOR ECONOMICS

Course Description

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. It then develops the notion of probability, followed by probability distributions of discrete and continuous random variables and of joint distributions. This is followed by a discussion on sampling techniques used to collect survey data. The course introduces the notion of sampling distributions that act as a bridge between probability theory and statistical inference. The semester concludes with some topics in statistical inference that include point and interval estimation.

Course Outline

Unit I:

Introduction to Statistics Basic concepts: Population, Sample, Parameter, Statistic, primary and secondary data, Techniques of data collection; Questionnaire, schedule.

Unit II:

Central Tendency: Measures of central tendency; Mean, Median, Mode.

Unit III:

Measures of dispersion; Range, Quartile deviation, Mean Deviation, Standard deviation, Coefficient of variation

Unit IV:

Correlation; Simple, Coefficient of correlation — Karl Pearson, Calculation of Correlation coefficient in a bivariate frequency distribution, Spearman's Rank Correlation,

Readings:

1. Jay L. Devore, *Probability and Statistics for Engineers*, Cengage Learning, 2010.
2. John E. Freund, *Mathematical Statistics*, Prentice Hall, 1992.
3. Richard J. Larsen and Morris L. Marx, *An Introduction to Mathematical Statistics and its Applications*, Prentice Hall, 2011.
4. William G. Cochran, *Sampling Techniques*, John Wiley, 2007.

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Skill Enhancement Course (SEC-I)

SEMESTER III

B.A. (Hon's) Economics, Semester III, Skill Enhancement Course (SEC-I)

Course: Data Analysis

Course Code: SS/EC/C-(SEC-1)

Course Credit: 4

Data Analysis

Unit 1

Importance of Statistics in Economics, Collection of data

Primary and Secondary Sources of Data, Collection of Primary Data- Interview and Observation Method

Unit 2

Types of Sampling-Random Sampling, Purposive or Deliberate Sampling, Stratified or Mixed Sampling, Systematic Sampling, Quota Sampling, Convenience Sampling

Unit 3

Classification and Tabulation of Data

Unit 4

Diagrammatic Presentation of Data

Bar Diagrammes-Simple Bar Diagramme, Multiple Bar Diagramme, Differential Bar Diagramme
Pie or Circular Diagramme

Suggest Readings:

1. Goon, A. M, Gupta, M. K, and Dasgupta, B. *Fundamentals of Statistics (Volume One)*, The World Press Private Ltd
2. GOI, *Note on Sample Design and Estimation Procedure of NSS 68th Round*, National Sample Survey Office, Ministry of Statistics and Programme Implementation.
3. GOI, *SRS Statistical Report 2016*, Office of the Registrar General & Census Commissioner, India

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SEMESTER IV

B.A. (Hon's) Economics, Semester IV, Core-10

Course: Introductory Econometrics

Course Code: SS/EC/C-410

Course Credit: (5+1)

INTRODUCTORY ECONOMETRICS

Course Description

This course provides a comprehensive introduction to basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression models.

Course Outline

Unit: 1

Nature and Scope of Econometrics

Unit: 2

Simple Linear Regression Model: Two Variable Case; Estimation of model by method of ordinary least squares;

Unit: 3

Gauss-Markov theorem; properties of estimators; goodness of fit- R^2 ; tests of hypotheses; confidence intervals; forecasting

Unit: 4

Multiple Linear Regression Model: Estimation of parameters; goodness of fit - R^2 and adjusted R^2 ; partial regression coefficients;

Readings

1. D. N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, Latest edition, International/Indian Edition.
2. Christopher Dougherty, Introduction to Econometrics, Oxford University Press, Latest edition, Indian edition.
3. Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House, Latest edition.

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DISCIPLINE SPECIFIC ELECTIVE (DSE-2) PAPERS: ECONOMICS

(A) **MONEY AND FINANCIAL MARKETS**

Course Description

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

Course Outline

1. Money

Concept, functions, measurement; theories of money supply determination.

2. Financial Institutions, Markets, Instruments and Financial Innovations

- a. Role of financial markets and institutions; financial crises.
- b. Money and capital markets: organization, structure and reforms in India;

3. Interest Rates

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. Banking System

Indian banking system: Changing role and structure; banking sector reforms.

5. Central Banking and Monetary Policy

Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

Readings

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets*, AITBS, 1996.
4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market*, Oxford University Press, 2011. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.



DISCIPLINE SPECIFIC ELECTIVE (DSE-3) PAPERS: ECONOMICS

(A) ENVIRONMENTAL ECONOMICS

Course Description

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Course Outline

1. Introduction

What is environmental economics; review of welfare economics.

2. The Theory of Externalities

Pareto optimality and market failure in the presence of externalities; Negative and Positive Externalities, Property rights and the Coase Theorem.

3. The Design and Implementation of Environmental Policy

Overview: Pigouvian taxes, tradable permits, Implementation of environmental policy.

4. International Environmental Problems

Environmental problems; economics of climate change; trade and environment.

5. Disaster Management and Sustainable Development

Meaning and Importance of Disaster Management, Process and effects on environment, Sustainable Development

Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, -Environmental Economics: A Survey, *Journal of Economic Literature*, Volume 30:675-740.



Tietenberg, T. (1994), Environmental Economics and Policy, Harper Collins, New York.
Cambridge University Press, Cambridge

Paper-XV
Optional Paper (Any One)

Econometrics-I

1. Meaning and Methodology of Econometrics-Nature and Scope Econometrics. The Nature of Regression Analysis and Basics of Two-Variable Regression Analysis. Estimation and Hypothesis Testing (15 Classes)
2. Multiple Regression Model, Estimation and Inference of Non-Linear regression Model (10 Classes)
3. Nature, Consequences, Detection and Remedial Measures of Multi Collinearity. Heteroscedasticity and Autocorrelation. (15 Classes)
4. Regression on Dummy Variable, Dynamic Econometrics Models: Autoregressive and Distributed Lag Models-Koyek approach. (10 Classes)
5. Identification and Estimation Methods (Indirect Least Square and Two stage Least square). (10 Classes)

BASIC READING LIST

1. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
2. Dongherty, C. (1992). Introduction to Econometrics, Oxford University Press, New York.
3. Goldberger, A.S. (1998), Introductory Econometrics, Harvard University Press, Cambridge, Mass.
4. Hill R., C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
5. Kennedy. P. (1998). A Guide to Econometrics (4th-Edition), MIT Press, New York.
6. Koutsoyiannis. A. (1977), Theory of Econometrics (2nd ed.), The Macmillan Press Ltd., London.
7. Krishna, K.L. (Ed.) (1997), Econometric Applications in India, Oxford University Press, New Delhi.
8. Maddala. G.S. (Ed.) (1993), Econometrics Methods and Application (2 Vols.), Aldershot U.K.



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Optional Paper (Any One)

Econometrics-II

1. Regression Analysis with Single and Two Regressors, Two Way ANOVA (15 Classes)
2. Matrix Approach to Linear Regression Model, Assumptions, OLS Estimation and their properties, Interpretation of Results. (10 Classes)
3. Distributed Lag Model, Rationalization of Koyck Model, The Adaptive Expectation Model, Partial Adjustment Model, The Almon Approach to Distributed Lag Model. (15 Classes)
4. Test of equality between coefficient's (Chow Test) Application of LRM for estimation of Growth rate, demand function, production function. (10 Classes)
5. Mixed Estimation Methods, Restricted Least Squares (RLS), Durbin's Generalized Least squares and Method of Principal Components. (10 Classes)

BASIC READING LIST

1. Gujarati, D.N. (1995), Basic Econometrics (2nd Edition), McGraw Hill, New Delhi.
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