



DEPARTMENT OF ECONOMICS AND POLITICS
VIDYA-BHAVANA,
VISVA-BHARATI
MA (ECONOMICS) SYLLABUS

REVISED in 2022

(As adopted in the BOS meeting held on 29th September, 2022 and subsequently at the Institute Board and Academic Council and effective from the academic year 2023-24)

- The MA (Economics) consists of 1000 marks or 100 credits.
- Semester I and II each consist of **5 compulsory papers** each carrying **50 marks** (40 marks in final + 10 in internal assessments) and **5 credits** (4 classes of 1 hour each and 1 tutorial of 1 hour per week). The Compulsory papers are listed in **Table 1** below.
- Semester III and IV each consist of **4 optional papers** each carrying **50 marks** (40 marks in final/semester examination + 10 in internal assessment) and **5 credits** (4 classes of 1 hour each and 1 tutorial of 1 hour per week). The optional papers of Semester III are listed in Group A and of Semester IV in Group B in **Table 2** below.
- All optional papers may not be offered in every semester. Also new optional papers may be added as and when faculties are willing to offer new courses in line with the latest economic development across the world.
- Additionally, in Semester III the student will choose a topic for **Guided Study**. This will be examined by the assigned guide, and a group of teachers would also examine the presentation of the candidate and eventually come up with a joint evaluation. This will be of **50 marks (20 marks for the guide and 30 marks for presentation)**. In Semester IV the student will write a **Dissertation** on her/his topic of choice which will again be examined by the assigned guide, and a group of teachers would examine the presentation of the candidate and make a joint evaluation. This will also be of **50 marks (20 marks for the guide and 30 marks for presentation)**.

MA Economics: Subjects / Courses / Papers with New Codes

Semester I July-Dec		Marks	Credits	Time / Classes Per Week	Semester II Jan-June		Marks	Credits	Time / Classes Per Week
Code	Name				Code	Name			
ECPC01	Microeconomics-I	50	5	5 Hours/ Classes	ECPC06	Microeconomics-II	50	5	5 Hours/ Classes
ECPC02	Macroeconomics-I	50	5	5 Hours/ Classes	ECPC07	Macroeconomics-II	50	5	5 Hours/ Classes
ECPC03	Econometrics	50	5	5 Hours/ Classes	ECPC08	Development Economics	50	5	5 Hours/ Classes
ECPC04	Quantitative Economic Analysis	50	5	5 Hours/ Classes	ECPC09	Computer Application	50	5	5 Hours/ Classes
ECPC05	Economic Thought	50	5	5 Hours/ Classes	ECPC10	Indian Economics	50	5	5 Hours/ Classes
Total		250	25	25 Hours/ Classes	Total	250	250	25	25 Hours/ Classes
Semester III July-Dec ECPC11 PLUS (4 optional papers from Gr-A)		Marks	Credits	Time / Classes Per Week	Semester IV Jan-June ECPC12 PLUS (4 optional papers from Gr-B)		Marks	Credits	Time / Classes Per Week
Code	Name				Code	Name			
ECPC11	Guided Study	50	5	5 Hours/ Classes	ECPC12	Dissertation	50	5	5 Hours/ Classes
ECPOxx	Optional Paper-I	50	5	5 Hours/ Classes	ECPOxx	Optional Paper-V	50	5	5 Hours/ Classes
ECPOxx	Optional Paper-II	50	5	5 Hours/ Classes	ECPOxx	Optional Paper-VI	50	5	5 Hours/ Classes
ECPOxx	Optional Paper-III	50	5	5 Hours/ Classes	ECPOxx	Optional Paper-VII	50	5	5 Hours/ Classes
ECPOxx	Optional Paper-IV	50	5	5 Hours/ Classes	ECPOxx	Optional Paper-VIII	50	5	5 Hours/ Classes
Total		250	25	25 Hours / Classes	Total		250	25	25 Hours / Classes

ECPC: Economics (EC) Post Graduate (P) Core Course (C);

ECPO: Economics (EC) Post Graduate (P) Optional Paper (O) The exact number from the list just below (xx)

OPTIONAL PAPERS

Group A (Semester III) (Any four have to be chosen)		Group B (Semester IV) (Any four have to be chosen)	
Code	Name	Code	Name
ECPO01	Industrial Organization	ECPO10	Games and Information
ECPO02	Agricultural Economics	ECPO11	International Trade Policy
ECPO03	International Trade Theory	ECPO12	Environment and Resource Economics
ECPO04	Public Economics & Policy	ECPO13	Applied Agricultural Economics
ECPO05	Advanced Econometrics-I	ECPO14	Advanced Econometrics-II
ECPO06	Political Economy of Development	ECPO15	Health Economics
ECPO07	General Equilibrium Theory	ECPO16	Modern Growth Theory
ECPO08	Urban Planning and Urban Governance in Developing Countries	ECPO17	Economics of Corruption
ECPO09	Labour Economics	ECPO18	Macroeconomics of Developing Countries

ECPO: Economics (EC) Post Graduate (P) Optional Paper (O)

COMPULSORY PAPERS

M.A SEMESTER I
ECPC01. Microeconomics I (50 marks)

Total Lecture Hours: 60

Course Objectives

This is the first part of the advanced course in microeconomic theory. The first part of the course covers the main topics of microeconomics from consumer and producer behaviour to partial and general equilibrium. This course deals with individual optimal decision making and equilibrium. Fundamental topics covered include rational choice, utility maximisation, expenditure minimisation, production theory, and partial equilibrium.

Learning Outcomes

By the end of the course, a successful student should be

1. familiar with the main elements and techniques of microeconomic theory at advanced level
2. be able to solve and interpret stylized problems based on microeconomic models;
3. be able to use these models to analyse real-world microeconomic phenomena and to evaluate issues of microeconomic policy.

Module 1

1. Theory of Consumer Behaviour

25L

- 1.1 Preference Relation and their Properties, Existence and Properties of the Utility Functions
- 1.2 Utility Maximization, Demand Functions and their Properties.
- 1.3 Indirect Utility Functions and Roy 's Identity.
- 1.4 Expenditure Minimization, Hicksian Demand and Duality.
- 1.5 Income Effect, Substitution Effect and Slutsky Equation.
- 1.6 The Theory of Revealed Preference.
- 1.7 Consumer 's Surplus and Analysis of Consumers 'Welfare

Module 2

2. Theory of the Firm

15L

- 2.1 Production Sets, Input Requirement Sets and Production Functions, Returns to Scale and Homogeneity.
- 2.2 Cost Minimization and Properties of Cost Functions, Input Demand Functions and Shephard's Lemma.
- 2.3 Duality between Cost and Production Functions, Short run and Long run Cost Functions.

Module 3

3. Partial Equilibrium in a Competitive Market

10L

- 3.1 Profit Maximization and Profit Functions, Input Demand Functions and Hotelling's Lemma.
- 3.2 Short Run Profit Maximization: Break-even and Shut-down points, Short Run Market Equilibrium and the Supply Function.
- 3.3 Long Run Supply, Market Equilibrium under Perfect Competition: Short and Long Runs.
- 3.4 Stability of Equilibrium, Comparative Static: Exogenous Changes and Impact of Policy.
- 3.5 Welfare in a Perfectly Competitive Market

Module 4

4. General Equilibrium Analysis: An Introduction

10L

- 4.1 The General Equilibrium Framework—Edgeworth Box Analysis of an Exchange Economy—4.2 The Robinson Crusoe Economy: A Single Producer and Consumer.
- 4.3** A Simple Exchange Economy with 2 consumers and 2 goods— The General Structure
- 4.4 The Basic Leontief Input-Output Model and the Hawkins-Simon Condition

References:

- 1. Hal Varian: Microeconomic Analysis, Viva Books, Indian Edition.
- 2. Mascollel, Whinston and Green: Microeconomic Theory, OUP (Indian Edition).
- 3. Kreps: Microeconomic Theory, Princeton University Press.
- 4. Jehle and Reny: Advanced Microeconomic Theory, Pearson.

ECPC02. Macroeconomics I (50 marks)

Total Lecture Hours: 60

Course Objectives: This is a rigorous course to address a variety of key issues of Macroeconomics (static and dynamic, closed and open economy) from different alternative/contesting perspectives. The course deals with both the demand and supply side problems of macroeconomics and is based on a variety of micro-foundations – Marxian, Structuralist and Neoclassical.

Learning Outcomes:

- The students will not only gain a critical vision but will also be able to analyze rigorously the functioning of a typical capitalist economy - its different sectors, and analyze the role played by different sectors, groups, classes and institutions.
- The students will also understand the fundamental problems of a capitalist macro economy and its different way outs (from different alternative perspectives).

1. Broad overview: Classical, Keynes, Monetarism, New Classical, New Keynesian, RBC Schools

6L

2. Macroeconomic policy debate: Classical, Keynes, Monetarism, New Classical, New Keynesian, RBC Schools

6L

3. An alternative approach to Macroeconomics and a critique of mainstream

22L

Basic concepts:

- a. the nature of capitalistic production and the structure of a closed economy
- b. class and distribution of national income
- c. the principle of effective demand and output determination
- d. price determination
- e. investment and consumption
- f. money and its role
- g. international trade and financial flows
- h. business cycle and inflation
- i. accumulation and growth
- j. economic policy – basic issues
- k. political aspects of full employment

4. Demand side static model-(one sector)

8L

- a. class and distribution of national income
- b. the principle of effective demand and output determination
- c. price determination
- d. investment and consumption
- e. economic policy– basic issues

5. Two sector static model with both demand and supply side considerations

8L

- a. structure of a basic closed economy
 - b. class and distribution of national income across two sectors
 - c. the principle of effective demand, supply constraint and output determination in two sectors
 - d. price determination in two sectors
 - e. investment and consumption across two sectors
 - f. economic policy impacts for the two sectors
- 6. Open economy issues and the role of the government** **10L**
- a. Trade and financial relations among nations
 - Open economic aspects of effective demand
 - International financial history
 - b. Economic Policy and the Theory of the State
 - The market and the state
 - The theory and practice of economic policy

Readings:

1. Amit Bhaduri - *Macroeconomics: Dynamics of Commodity Production*, Macmillan. Hampshire, London, Delhi 1986 (1st Published).
2. M. Kalecki - *Selected Essays on the Dynamics of the Capitalist Economy*, CUP.
3. J. M. Keynes - *The General Theory of Employment, Interest and Money*.
4. Amit Bhaduri - *Unconventional Economic Essays*, OUP.
5. Prabhat Patnaik - *Accumulation and Stability under Capitalism*, OUP.
6. Lance Taylor - *Structuralist Macroeconomics*, Basic Books, 1983.
7. N. Gregory Mankiw - *Macroeconomics*, Worth Publishers, 7th edition, 2010.
8. David Romer - *Advanced Macroeconomics*.
9. N. G. Mankiw. A Quick Refresher Course in Macroeconomics. *Journal of Economic Literature*. Vol. XXVIII (December 1990), pp. 1645-1660.

ECPC03. Econometrics I (50 marks)

Total Lecture Hours: 60

Course Objectives

This Course will provide a basic understanding of Classical Linear Regression Models and regression diagnostic. Lectures will focus of introducing the relevant econometric theory and explaining the theory with examples. Equal importance is attached to the development of an intuitive understanding of the material that will allow these econometric tools to be utilised effectively and creatively.

Learning Outcomes

On successful completion of this Course, students will be able to:

- (a) Learn various basic econometric methods, estimation methods and related econometric theories.
- (b) Apply these methods to data or econometric modelling techniques

1. Review of the CLRM (two variable case) 10L

- 1.1 Estimation
- 1.2 Properties of OLS Estimators.
- 1.3 Statistical Inference and Measuring Goodness of Fit.
- 1.4 Analysis of Variance.
- 1.5 Interpretation of Regression Results.
- 1.6 Maximum Likelihood Method of estimation

2. Multivariate Linear Regression Model (more than two variables) 15L

- 2.1 Specifications and assumptions
- 2.2 OLS estimation, Properties of estimators, The Gause-markov Theorem
- 2.3 Sampling distribution of OLS estimators
- 2.4 Testing of hypotheses and confidence intervals
- 2.5 Goodness of fit and selection of regressors
- 2.6 The maximum likelihood estimation method

3. Multicollinearity 7L

- 3.1 Definition of Multicollinearity; Consequences of Multicollinearity;
- 3.2 Tests for Multicollinearity.
- 3.3 Remedial Measures.
- 3.4 Illustrative Examples.

4. Heteroscedasticity 7L

- 4.1 Definition of Heteroscedasticity.
- 4.2 Consequences of Heteroscedasticity.
- 4.3 Detection of Heteroscedasticity.
- 4.4 Remedial Measures.

5. Autocorrelation 7L

- 5.1 Definition of Autocorrelation - Specification of Autocorrelation Relationship.

5.2 Consequences of Autocorrelation.	
5.3 Various Tests for Autocorrelation.	
5.4 Remedial Measures.	
6. Dummy Variables	7L
6.1 Nature and use of dummy variables.	
6.2 Interactions involving dummy variables.	
6.3 Testing structural stability of regression models.	
7. Specification and data Problems in Regression Analysis	7L
7.1 Functional Form Misspecification	
7.2 RESET – missing data, outlying observations etc.	

Readings:

1. Jeffrey M Wooldridge: Introductory Econometrics A Modern Approach, South Western Cengage Learning 2008.
2. G S Maddala: *Econometrics*, McGraw Hill International Edition.
3. J Johnston: *Econometric Methods* (3rd Edition) McGraw Hill International Edition.
4. Christopher Dougherty: *Introduction to Econometrics* (3rd Edition) Oxford University Press.
5. D N Gujarati: *Basic Econometrics* (4th Edition) McGraw Hill International Edition.
6. William H Green: *Econometric Analysis* (5th Edition) Pearson Education, Delhi.

ECPC04. Quantitative Economic Analysis (50 marks)

Total Lecture Hours: 60

Course objectives: The aim of this module is to develop students' ability to apply mathematical techniques in solving economic problems.

Learning Outcomes: The course provides students with advanced mathematical skills that are essential for the study and practice of economics at Post Graduate level. The aim will be achieved by introducing mathematical concepts and techniques, solving mathematical problems, and solving economic problems using mathematical techniques.

1. Difference Equations	7L
1.1 First Order Linear Difference Equations	
1.2 First Order Nonlinear (Higher Degree) Difference Equations	
1.3 Second (And Higher Order) Linear Difference Equations	
2. Differential Equations	7L
2.1 First Order Linear Differential Equations	
2.2 First Order Nonlinear (Higher Degree) Differential Equations	
2.3 Second (And Higher Order) Linear Differential Equations	
3. Optimal Control Theory	22L
3.1 Introduction and Examples	
3.2 Necessary and Sufficient Conditions for Solution: Pontryagin Maximum Principle	
3.3 Fixed and various End Point Problems	
4. Linear Programming	12L
4.1 The Basic Model : Graphical Analysis	
4.2 Concepts of Linear Algebra: A Review	
4.3 Some important Theorems	
4.4 The Simplex Method	
4.5 Inequality Constraints and Complementary slackness	
4.6 Duality and The Fundamental Theorem	
4.7 Applications: Production, Transportation and Diet Problems	
5. Inter-industry Problems and Input Output Problems	12L
5.1 Description of The Systems	
5.2 The Open and Closed Leontief Models	
5.3 The Hawkins Simons Condition	
5.4 The Theorem of No Substitution	

References:

1. Chiang A.C, Dynamic Optimisation, Wave Books, 1993.
2. M. Kamien and N. Schwartz: Dynamic Optimization, North Holland
3. A. C. Chiang: Mathematical Economics

ECPC05. Economic Thought (50 marks)

Total Lecture Hours: 60

Course Objective: The purpose of the course is to give students an overview of the process of development of economic thought. Special attention will be paid to the nature of the problems the economists of all times faced and tried to explain and/or solve. Understanding continuity and changes in the problem-solving and/or explaining activity of economists may contribute to a better grasp of the logic of evolution of economics as a discipline. Upon successful completion of the course, students should be able to distinguish between the main schools and trends in the history of economic thought and to understand the analytical foundations of the approaches in economics of the 20th century.

Learning Outcomes: At the conclusion of the course, students should have -

- a. The ability to understand the fundamental problems of economics, going beyond formalism.
- b. Some perceptions about economic history as well.
- c. The ability to understand contemporary problems and build theoretical frameworks accordingly, given the knowledge about the vast array of economic conditions (that prevail over time) and their theorizations.
- d. The essential skills of critical thinking and appraisal of theory.
- e. The interest in further study of this subject, knowing that economics as a subject is not static.

1. What is Economics? Why Study the history of economic thought? 2L

- a. Blaug, M. (2001). "No history of ideas, please, we're economists". Journal of Economic Perspectives, 15(1), 145–164. <https://doi.org/10.1257/jep.15.1.145>
- b. Roncaglia, Alessandro (2017). A Brief History of Economic Thought. Cambridge University Press. Chapter 1. file:///C:/Users/Admin/Downloads/vdoc.pub_a-brief-history-of-economic-thought.pdf
[<https://vdoc.pub/download/a-brief-history-of-economic-thought-5kf02p83ce80>]

2. The Beginnings of "Western" Political Economy and Mercantilism 3L

- a. Rubin, I.I. (1979). A history of economic thought. Chapters 3, 4, and 5 (all very short). Online: <http://digamo.free.fr/rubin29.pdf>
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 2

3. The Physiocrats: Land, the theory of value and a first "model" of the economy 4L

- a. Rubin, I.I. (1979). A history of economic thought. Chapters 10, 12, 13, 14 and 15 (all very short)
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 3 & 4

4. Economics of Adam Smith 7L

Division of labour, Competition, Increasing returns and Capitalist growth

- a. Foley, Duncan. K. (2006). Adam's Fallacy: a guide to economic theology. Harvard University Press. Chapter 1. <http://digamo.free.fr/duncan06.pdf>
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 5

5. Economics of David Ricardo and T.R. Malthus **8L**

- i. Theories of value and distribution ii. Malthus and Ricardo: on growth and distribution
- a. Foley, D.K. (2006). Adam's Fallacy: a guide to economic theology. HUP. Chapter 2
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 6,7,8
- c. Mitra, Ashok. (1977/2005). Terms of trade and class relations. Frank Cass. Chapter 2

6. Basic Postulates of Marginalism, Alfred Marshall and Liberalism **9L**

- a. Foley, D.K. (2006). Adam's Fallacy: a guide to economic theology. HUP. Chapter 4
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 10,11,12,13

7. Keynesian perspective **3L**

- a. Foley, D.K. (2006). Adam's Fallacy: a guide to economic theology. HUP. Chapter 5
- b. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 14

8. Marx **20L**

- 1. Marx's Method (2 lectures) Readings: - MC*: Ch. 1
- 2. History of Capitalism in Europe and America (6lectures) Readings: - MC*: Ch.6
- 3. Commodity Production (1 lecture) Readings: - MC*: Ch. 2
- 4. Absolute and Relative Surplus Value (2 lectures) Readings: - MC*: Ch. 3
- 5. Capital and Exploitation (3 lectures) Readings: - MC*: Ch. 3, 4
- 6. Technology and the Social Relations of Production (2 lectures) Readings: - MC*: Ch. 3, 4, 5
- 7. Accumulation of Capital (2 lectures) Readings: - MC*: Ch. 5, 6.
- 8. Capitalism and Crises (2 lectures) Readings: - MC*: Ch.7

*a. *MC: Marx's Capital, 2004. Ben Fine and Alfredo Saad-Filho, 4th Ed. Pluto Press.
<http://digamo.free.fr/benfika.pdf>

- b. Foley, D.K. (2006). Adam's Fallacy: a guide to economic theology. HUP. Chapter 3
- c. Roncaglia, A. (2017). A Brief History of Economic Thought. CUP. Chapter 9

9. Neo-liberalism **4L**

- a. Schwartz, P. In Praise of Neo-liberalism.
<https://www.econlib.org/library/Columns/y2013/Schwartzneoliberalism.html>
- b. Fine, Ben (2014). Politics of neoliberal development: Washington consensus and post-Washington consensus. In H. Weber (ed.) The Politics of Development: A Survey. London: Routledge.
[https://kclpure.kcl.ac.uk/portal/files/130001903/Fine_Saad_Filho_Neoliberal_Devt_Its_Critics_in_Weber .pdf](https://kclpure.kcl.ac.uk/portal/files/130001903/Fine_Saad_Filho_Neoliberal_Devt_Its_Critics_in_Weber.pdf)

ORIGINAL AND OTHER IMPORTANT SOURCES

- #Smith, Adam. The Wealth of Nations. <http://www.econlib.org/library/Smith/smWN.html>
- #Ricardo, David. Principles of Political Economy. <http://www.econlib.org/library/Ricardo/ricP.html>
- #Marx, Karl, Capital Volume 1: <http://www.econlib.org/library/YPDBooks/Marx/mrxCpA.html>
Volume 3: <http://www.econlib.org/library/YPDBooks/Marx/mrxCpC.html>
- #Marshall, Alfred. Principles of Economics <http://www.econlib.org/library/Marshall/marP.html>

#Keynes, John. The General Theory of Employment, Interest, and Money
<http://www.marxists.org/reference/subject/economics/keynes/general-theory/>
#Wolff, Richard D. and Stephen A. Resnick. 2012. Contending Economic Theories: Neoclassical, Keynesian, and Marxian; The MIT Press. <http://digamo.free.fr/wolffresnick12.pdf>
#Harvey, David (2017). Marx, Capital and the Madness of Economic Reason. Profile Books. UK (Chap – Prologue & 2 & 3)
#Basu, Deepankar (2021). The Logic of Capital. Cambridge University Press.
#Harvey, D. 2005. A Brief History of Neoliberalism, Oxford University Press.

Useful Online Resources:

#The History of Economic Thought Website: <http://www.hetwebsite.net/het/>
#Chang, Ha-Joon. Lecture 1.1: The Nature of Economics:
<https://www.ineteconomics.org/perspectives/videos/economics-for-people>
#5 Free Online Courses on Marx's *Capital* from Prof. David Harvey
<https://www.openculture.com/2021/04/prof-david-harvey-makes-5-courses-on-marxs-capital-available-for-free.html>

MA SEMESTER II

ECPC06. Microeconomics II (50 marks)

Total Lecture Hours: 60

Course Objective

The objective of this course is to train the second semester graduate students in some of the most important technical tools and approaches of the modern theory of decision making: specifically Economics of Uncertainty, Games and Information. In contrast to the standard equilibrium and optimization theories that form the basis of most of undergraduate micro and macro economics, the focus here is on decision making in an uncertain and interactive economic environment where agents are incomplete informed of each others strategies. These methodological tools are presently widely used in every field of micro, macro, public and development economics as well as international and financial economics.

Learning Outcome

The graduate students who have taken this course can now study and comprehend the technical arguments underlying research in a wide variety of areas as well as select the appropriate method for the theoretical analysis of their own research.

Course Credits and Grades

Credits 4 (4 hours per week) x 15 weeks = 60 class hours

(2 weeks for Semester Examination)

Total Marks 10 (Internal Assessment) + 40 (End Semester Exam)

1. Monopoly and Monopolistic Competition

12L

1.1 Review of Simple Monopoly Theory

1.2 Price Discrimination: First and Third Degree

1.3 Second Degree Price Discrimination: Two Part Tariff and Non Linear Pricing

1.7 Natural Monopoly

2. Economics of Uncertainty

12L

2.1 Uncertainty in Economics

2.2 Lotteries and Probability Distributions.

2.3 Von Neumann Expected Utility Axioms and the Allais Paradox

2.4 Linearity and Cardinality of von Neumann Expected Utility

2.5 Von Neumann Expected Utility Theorem

2.6. Risk, Risk Aversion and the Arrow Pratt Measure.

2.7 Applications: Insurance, Risk sharing and portfolio Choice

3. Game Theory-Simultaneous Move Games

12L

3.1 Normal Form Representation

3.2 Dominant Strategy Equilibrium and Prisoners Dilemma

3.3 Oligopoly and Collusion

- 3.4 Iterated Dominant Strategy Equilibrium
- 3.5 Bertrand Price Competition
- 3.6 Second Price Sealed Bid Auctions
- 3.7 Rationalizable Strategies and Games of Coordination
- 3.8 Cournot Equilibrium
- 3.9 Zero Sum Games:
- 3.10 Minimax Solution
- 3. Mixed Strategy Equilibrium: Matching Pennies

4. Game Theory – Sequential Move Games 12L

- 4.1 Extensive Form Representation
- 4.2 Subgame Perfect Equilibrium and Backward Induction
- 4.3 The Game of Entry
- 3.4 Stackelberg Equilibrium
- 4.5 Repeated Games and Repeated Bargaining
- 4.6 Repeated Oligopoly and Collusion

5. Economics of Information 12L

- 5.1 Games of Incomplete Information and Bayesian Equilibrium
- 5.2 Cournot Oligopoly with Incomplete Information
- 5.3 Adverse Selection, the Market for Lemons and the Insurance Market
- 5.4 Moral Hazard, Insurance Market and the Principal- Agent Model
- 5.5 Signaling: The Spence Model
- 5.6 Monopoly with Incomplete Information : Two Part Tariffs and Non-Linear Pricing

Readings:

1. Mascolel, Green and Whinston: 1995 *Microeconomic Theory*, OUP.
2. Tirole: J 1988 *The Theory of Industrial Organization*, MIT Press
3. Varian H: 2000, *Microeconomic Analysis*, W. W. Norton
4. Rasmusson, E: 2000, *Game Theory and Information*, Basil Blackwell

ECPC07. Macroeconomics II (50 marks)

Total Lecture Hours: 60

Course Objectives:

To make the students aware about the various concepts of advanced mainstream macroeconomics starting from the overviews on different schools of macroeconomics along with the corresponding policy debates. To introduce rigorously New classical and New Keynesian macroeconomics, recent business-cycle models and advanced models under open economy macroeconomics.

Learning Outcomes:

- Enhance the subject knowledge in understanding the macroeconomic dynamics both in a closed and an open economy set-up under different mainstream schools of thought.
- Understand the functioning of a market-based open macro economy, and the ways and means to keep such an economy functioning properly.

1. New Classical Macro-models

8L

- a. Distinction between adaptive and rational expectations
- b. The Natural Unemployment Rate (NUR) hypothesis with adaptive and rational expectations
- c. Macroeconomic model with rational expectation – Policy implications.
- d. Lucas's model with perfect information.
- e. Lucas's model with imperfect information.

2. Business cycle

12L

- a. Introduction: Some Facts about Economic Fluctuations
- b. Theories of Fluctuations
- c. A Baseline Real Business Cycle Model
- d. A Special Case of the Model
- e. Solving the model in the General Case
- f. Implications
- g. Extensions and Limitations

3. New Keynesian Macro-models and Theories of Unemployment

18L

- a. Aggregate Supply and Demand
- b. Aggregate Supply and the Phillips Curve
- c. Unemployment
- d. Inflation
- e. Policy

4. Growth Models

12L

- a. Harrod-Domar
- b. Neoclassical
- c. AK model
- d. Arrow model
- e. Public services and endogenous growth
- f. Transitional dynamics and endogenous growth

5. Macroeconomic Models and Policies in Open Economy

10L

- a. Mundell-Fleming Model- Monetary and Fiscal Policy
- b. Process of Adjustment and Exchange Rate Overshooting- An Alternative Formulation of the Process of Adjustment and Divergent Paths
- c. Treatment of Financial Crisis in Mundell-Fleming Model

Readings:

1. Advanced Macroeconomics: An Easy Guide by Filipe Campante, Federico Sturzenegger, Andrés Velasco, LSE Press, 2021.
2. Macroeconomics: Policy and Practice by Frederic S. Mishkin, Addison-Wesley, 2012.
3. Advanced macroeconomics by David Romer, Fifth Edition. McGraw-Hill Education, 2019.
4. R J Barrow and Xavier, Sala-i-Martin, Economic Growth, McGraw-Hill, 1995.
5. Charles I Jones, Introduction to Economic Growth (2nd edition), W. W. Norton & Co. (Indian edition: Viva Books Private Ltd., 2006)
6. *Macroeconomics for Developing Countries: Raghbendra Jha*, Routledge.

ECPC08. Development Economics (50 marks)

Total Lecture Hours: 60

Course Objective: The objective of this course is to teach the fundamental paradigms of development -- classical-neoclassical, structuralist, human development, inclusive growth, institutional and neoliberal, and some critical perspectives.

Learning Outcome: Students should be able to understand the major debates on why-what-how pertaining to development and should be able to enter into the contemporary development policy discourses and processes as well, as theoreticians and also practitioners.

1. Genesis of Development Economics. Its Fundamental Characteristics and Criticisms 7L

Readings:

1. H. Chenery and T.N. Srinivasan (ed) *Handbook of Development Economics Volume 1*, North Holland 1988; Chapters 3: Pranab Bardhan: Alternative Approaches to Development Economics*
2. John Teye. 2003. 'Changing perspectives in development economics', in *Rethinking Development Economics*, ed. by Ha-Joon Chang: Chap 1: pp. 21-40; Anthem Press.*
3. Gilbert Rist: *The History of Development: From Western Origins to Global Faith*, chapters 4 and 5, pp. 69-92 (London and New York: Zed Books, 2002)

2. Classical-Neoclassical Supply-Side Approach: Lewis-Ranis-Fei. Its Criticisms 10L

Readings:

1. A. Lewis: Economic Development with Unlimited Supplies of Labour. The Manchester School. 1954.
2. Ranis, G. and Fei, J.C.H., 'A Theory of Economic Development', *American Economic Review*, 51, 1961, pp 533 – 565.
3. Harris, John R. and Michael P. Todaro: Migration, Unemployment and Development: A Two-Sector Analysis, *The American Economic Review*, Vol. 60, No. 1 (1970), pp. 126-142
4. Debraj Ray: *Development Economics*: 353-367 & 379-382; Oxford University Press.
5. Kalyan Sanyal: *Rethinking Capitalist Development 2007*: 131-139. Routledge.

3. Structuralist Approach: Demand and Supply-Sides Together 8L

Readings:

1. Michal Kalecki: 'The problem of financing economic development', in *Collected Works of Michal Kalecki (Vol.5)*, (ed.) Jerzy Osiatynski: 23-32; Clarendon Press.*
2. Michal Kalecki: 'Problems of financing economic development in a mixed economy', in *Collected Works of Michal Kalecki (Vol.5)*, (ed.) Jerzy Osiatynski: 45-60; Clarendon Press.
3. Amit Bhaduri: 'Structural Change and Economic Development: On the Relative Roles of Effective Demand and the Price Mechanism in a 'Dual' Economy', in *Rethinking Development Economics*, edited by Ha-Joon Chang, pp. 219-233 (London and New York: Anthem Press, 2003)

4. Thematic Deficiency of Traditional Development Economics and the Capability Approach to Development 10L

Readings:

1. Amartya Sen: “Development: Which Way Now?” *Economic Journal*, 93 (372) (1983)*
2. Amartya Sen: *Resources, Values and Development* (Chap 20: Goods and People), OUP, 2006 (reprint).
3. Amartya Sen: *Choice, Welfare and Measurement* (Chap 16: Equality of What?), OUP, 2006 (reprint).
4. Amartya Sen: Development as capability expansion.* <https://livelihoods.net.in/wp-content/uploads/2020/05/DEVELOPMENT-AS-CAPABILITY-EXPANSION.pdf>

5. Contemporary Paradigm of Inclusive Growth

7L

(Through: Human Development promotion, Informal Sector development, Livelihood Guarantee, Direct Benefit Transfers; Agricultural development)

Readings:

1. S.R. Osmani. 2008: ‘The Demands of Inclusive Growth: Lessons from South Asia’, *The Pakistan Development Review*, 47: 4, Part I (Winter) pp. 381–402.*
2. S. Fukuda-Parr and A.K. Shiva Kumar (ed): *Readings in Human Development*, (Chap: Growth for human development? pp. 279-290); OUP, 2003.*
3. Martha Alter Chen: *The Informal Economy: Definitions, Theories and Policies*. WIEGO Working Paper No 1. August 2012.
https://www.wiego.org/sites/default/files/publications/files/Chen_WIEGO_WP1.pdf
4. L. Randall Wray: *Minsky’s Approach to Employment Policy and Poverty: Employer of Last Resort and the War on Poverty*, Working Paper No. 515, The Levy Economics Institute, NY, USA, 2007.*
5. The Experience of Conditional Cash Transfers in Latin America and the Caribbean, Sudhanshu Handa and Benjamin Davis. *Development Policy Review*, 2006, 24 (5): 513-536, 2006. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.461.4931&rep=rep1&type=pdf>
6. *World Development Report 2008: Agriculture for Development*. Chap. 5: *Bringing agriculture to the market*.
<https://openknowledge.worldbank.org/bitstream/handle/10986/5990/WDR%202008%20-%20English.pdf?sequence=3&isAllowed=y>

6. State, Market and Development: some contemporary debates on the efficacy of state, market and other institutions

8L

Readings:

1. P. Bardhan and C. Udry: *Development Microeconomics*. Chap. 11: Poverty alleviation; Chap. 17: Institutional economics and the state. OUP. 1999.
2. J. Bhagwati: *In Defense of Globalization*. OUP. 2007.
3. Ha-Joon Chang. 2003. ‘The market, the state and institutions’, in *Rethinking Development Economics*, ed. by Ha-Joon Chang: Chap 2: pp. 61-82; Anthem Press.
4. Deepak Nayyar: 2003. ‘Globalization and development’, in *Rethinking Development Economics*, ed. by Ha-Joon Chang: Chap 3: pp. 61-82; Anthem Press.

7. Some Critical Perspectives: Short introductions to Imperialism, ECLA, Dependency, Indian Perspectives, Accumulation by Dispossession, Post-Development

10L

Readings:

1. Rune Skarstein: *Development Theory*: chap-2 (Lenin on capitalist development and imperialism), chap-4 (ECLA: free-trade and underdevelopment) and chap-5 (dependency school); OUP, 1997.*
2. Tagore R: *The Co-operative Principle*; Visva-Bharati.
3. Gandhi, M.K: Village Industries. Navajivan Publishing House: Ahmedabad
4. David Harvey: *The New Imperialism*, OUP, 2003
5. Aram Ziai: Post Development 25 Years after The Development Dictionary. *Third World Quarterly*, Vol 27, Issue 12, 2017, pp. 2547-58

ECPC09. Computer Application in Economics (50 marks)

Total Lecture Hours: 60

Course Objective

Applied economics currently deals with large and complex datasets, which should be analyzed and interpreted with economic reasoning based on the theoretical understanding. As an empirical researcher in social sciences, a graduate in economics is expected to handle various dimensions of socio-economic data and find hidden patterns/results with the help of modern software. This Course aims to equip the students to deal with empirical information sets. Also, students in economics often need to plan and implement primary surveys that should yield datasets in the appropriate format for further statistical analyses. Other courses in this curriculum impart the knowledge of statistical parameters, modeling, and analytical logic. However, practical estimation of parameters and application of various statistical tools require data handling skills with the appropriate software. This course aims to impart that complementary skill to the students.

Learning Outcomes

This Course will enable the students to:

1. Develop survey instruments for generating primary datasets that are readily amenable to statistical analyses
2. Use of spreadsheet (MS_Excel) to organize datasets and application of statistical tools
3. Exploring datasets with advanced statistical software (Stata).
4. Handle primary/secondary data for their future research and/or as a data analyst
5. Present research results in a format commensurate with academic practices

Course Details:

1. Fundamentals of Computer and information presentation 8L

- 1.1 Basic idea of the digital world - Concept of binary and decimal system – representation of a decimal number in binary system and vice-versa
- 1.2 Short introduction to Word processing software and data arrangement in a spreadsheet: MS_Word and MS_Excel features
- 1.3 Revisiting variables and attributes in statistics – presenting information through charts and tables – generating charts using Excel and formatting tables in Word.

2. Generating primary information through survey instruments 7L

- 2.1 Designing a questionnaire to capture quantitative and qualitative information
- 2.2 Structured and modular questionnaires – sample questionnaires
- 2.3 Use of coding in survey instruments
- 2.4 Data entry rules in a spreadsheet - conditional formatting in Excel

2.5 Units of analyses and arrangement of data in the appropriate format

3. Data analyses with MS Excel

10L

- 3.1 Data management within a worksheet – use of functions
- 3.2 Creating charts (line, column, pie, scatter) and formatting components of a chart.
- 3.3 Statistical functions and tests in Excel – linear regression results
- 3.4 Understanding regressions results, ANOVA, P-values - using Excel
- 3.5 Understanding functional forms of two-variable relationships using scatter plots
- 3.6 Generating random numbers between specified intervals in MS_Excel
- 3.7 Use of random numbers in sample selection – practical exercises.

4. Data Analyses using Stata

15L

- 4.1 Introduction to Stata and its data formats
- 4.2 Managing variables in Stata – types of variables and their conversion – basic commands for variable description and data labeling
- 4.3 Managing data in Stata – shifting between ‘long’ and ‘wide’ formats depending on units of analyses – merging and appending datasets
- 4.4 Creating charts and diagrams in Stata – formatting of charts
- 4.5 Creating and formatting tables of summary statistics with basic Stata commands
- 4.6 Statistical tests using Stata – two-sample parametric and non-parametric tests
- 4.7 Managing Stata commands – use of batch files (Stata ‘Do’ files)

5. Advanced data exploration using Stata

15L

- 5.1 Linearization of non-linear models by transforming variables – exercises.
- 5.2 Test for normality of variables – appropriate transformation
- 5.3 Use of dummy variables, intercept and slope form – exercises
- 5.3 Dummy dependent variable models – logit and probit estimation – MLE estimation
- 5.4 Stata post-estimation – generating marginal effects

6. Presentation using MS_PowerPoint

5L

- 6.1 Preparing PPT slides and formatting - presentation of research works
- 6.2 Tips for a research report presentation – how to make it simple but effective

References:

There is no specific reference for this Course. Various web- based free tutorials are available as references and obtaining (online) socio-economic datasets on the Indian or world economy. These will be referred to, and web-links will be shared in the class.

ECPC10. Indian Economics (50 marks)

Total Lecture Hours: 60

Course Objectives: The objective of this course is to give an overview of India economy. This course develops the macroeconomics of the Indian economy in its dirigiste and "liberal" phases and examines the reasons for the transition from the one to the other. The course covers the evolving monetary, fiscal, balance of payments policies, the performance of the economy and its particular sectors. Furthermore, the objective is also to equip students with other contemporary issues of our economy such as, human development, inequality, employment and poverty.

Learning Outcomes

- (a) To able to equip the students with the theoretical, empirical and policy issues relating to the society, polity and economy of India.
- (b) To gain knowledge on the contemporary issues of Indian economy

A. Macroeconomic Perspectives

Module 1: Growth and Inflation:

6L

National Accounts Statistics for India – GDP deflator and Measures of Inflation – Macro balances of the economy: Savings and Investment in India – Growth rates of national income: Comparisons over time and across countries, Effect of compounding on the standard of living – Sectoral composition of output and growth: Services-led growth – Regional variations in growth

Module 2: Policy Reforms:

6L

LPG (Structural Adjustment & Stabilisation Policy); Fiscal Reforms: State of Fiscal Responsibility Legislations and FRBMA – Goods and Services Tax (GST) – Direct Tax Code (DTC); Centrally-sponsored schemes; Changing Stance of Monetary Policy – Monetary Targeting – Inflation Targeting – Multiple/ Lead Indicator Approach.

Module 3: Balance of Payments and Budgets:

6L

A. Components of Balance of Payments (BOP) – Exchange rate policies in recent years – Capital inflows and Sterilized intervention in the foreign exchange market
B. Components of Recent Budgets

Module 4: Poverty, Inequality and Human Development:

6L

Measurement of poverty in India and the debate regarding extent of poverty in India – National Sample Surveys – Human development indices in India, including Gender-related Development Index, and regional variations therein – Policies of inclusive growth

References:

Essential Readings

1. Mohan, R., "Growth Record of the Indian Economy 1950-2008: A Story of Substantial Savings and Investment," in Uma Kapila (ed), *Indian Economy since Independence*, New Delhi: Academic Foundation, 2009, pp. 683-712, (Module 1)

2. Kapila, U., "Growth and Structural Change since 1950," in Uma Kapila (ed), *Indian Economy since Independence*, New Delhi: Academic Foundation, 2009, pp. 683-712, (Module 1)
3. Gordon, J. and R. Banga, "Understanding India's Services Revolution," *IMF Working Paper*, No. 171, Washington, DC: IMF, 2004, (Module 1).
4. Deaton, A. and J. Dreze, "Poverty and Inequality in India: A Re-Examination," Chapter 18 in Angus Deaton and Valerie Kozel (eds), *The Great Indian Poverty Debate*, New Delhi: Macmillan, 2005, pp.428-465. (Module 4)
5. UNDP, *Human Development Report 2009*, New York: OUP, 2010
6. Radhakrishna, R., C. Ravi, and B. Sambi Reddy, "Can We Really Measure Poverty and Identify Poor When Poverty Encompasses Multiple Deprivations?" *Working Paper*, No. WP 02/2010, Hyderabad: Centre for Economics and Social Studies (CESS) 2010, (Module 4).
7. Acharya, S., "Macroeconomic Performance and Policies, 2000-2008," in Shankar Acharya and Rakesh Mohan (eds), *India's Economy, Performance and Challenges: Essays in Honour of Montek Singh Ahluwalia*, New Delhi: OUP, 2010, pp. 39-81 (Module 3).
8. GOI, *Economic Surveys and Budget Papers*, Various Recent Years (Module 3).
9. GOI, *Report of the Task Force on Implementation of GST*, New Delhi, 2009 (Module 2)
10. Lalwani, M., "Persistence of Fiscal Irresponsibility: Looking Deeper into the Provisions of FRBM Act," *Economic and Political Weekly*, Vol. 44 (37), Sept 12, 2009 (Module 2).
11. Mohan, R., "India's Financial Sector and Monetary Policy Reforms: Fostering Growth while Containing Risk," in Shankar Acharya and Rakesh Mohan (eds), *India's Economy, Performance and Challenges: Essays in Honour of Montek Singh Ahluwalia*, New Delhi: OUP, 2010, pp. 149-179 (Module 2)
12. RBI, *Annual Reports*, Various Recent Years (Module 2)

B. Sectoral Issues

(The sectoral issues will be dealt with by teachers who are specialized in the respective sectors. Issues considered will be based on two or three readings identified by the teacher and communicated to the students at the beginning of Semester)

1. Agriculture	6L
2. Industry and Infrastructure	6L
3. Services Sector	6L
4. Financial Sector	6L
5. External Sector: International Trade	6L
6. Informal Sector and Labour Markets	6L

SEMESTER-III

ECPC11. Guided Study

OPTIONAL PAPERS
SEMESTER III (GROUP A)
ECPO01. Industrial Organization (50 marks)

Total Lecture Hours: 60

Course Objective

This paper familiarizes the graduate student with what Jean Tiroles calls the Second Wave of research in Industrial Organization. The First Wave, associated with Joe Bain and Edward Mason developed the so called Structure-Conduct-Performance (SCP) framework – where market structure (eg number of buyers and sellers, cost structure, product differentiation etc) determined conduct (choice of price, quantity, R&D, investment and advertising) which in turn lead to performance (profits, efficiency, price cost ratio etc) and mainly concentrated on empirical studies. The Second Wave which began in the 1970s was much more involved with theoretical analysis – using the results of modern game theory and economics of information. It challenged the one-way relation envisaged in SCP in so far as market structure itself depended on entry and exit, investment and R&D etc. In this paper a number of selected papers in Industrial Organization are discussed by the Instructor and complemented with others presented by the students which are then discussed by the entire class.

Learning Outcomes

This paper familiarizes the students with modern theories of Industrial Organization which they may extend, apply or empirically study in their own research. Along with this the emphasis on student presentations and class discussions is to prepare the MA final year students for the job market – academic and non academic – where presentation and discussion skills are extremely important.

1. Monopoly and Monopolistic Competition

10L

- 1.1 Review of Simple Monopoly Theory
- 1.2 Durable Goods Monopoly
- 1.3 Two Part Tariffs and Non Linear Pricing
- 1.4 Monopoly and Product Selection
- 1.5 Monopolistic Competition and Optimum Product Diversity

2 Oligopoly

10L

- 2.1 – Cournot and Bertrand Equilibria
- 2.2 Stackelberg Model, Capacity Choice and Entry
- 2.3 Comparative Statics for Oligopoly
- 2.3 Repeated Oligopoly

- 2.4 Horizontal Product Differentiation: Hotelling's Model
- 2.5 Vertical Differentiation and Quality :Shaked and Sutton
- 2.6. Strategic Substitutes and Complements

3. Entry and Entry Barriers **10L**

- 3.1 The Barriers to Entry
- 3.2 The Simple Entry Model and First Mover Advantage
- 3.3 Sunk Cost as Entry Barrier
- 3.4 Capacity Choice as an Entry Barrier – Spence-Dixit-Stiglitz Model
- 3.5 Limit Pricing and Entry – Kreps, Wilson, Milgrom and Roberts
- 3.6 Contracts as Entry Deterrence

4. Mergers, JVs and Vertical Relationships **10L**

- 4.1 Horizontal Mergers
- 4.2 Vertical Mergers
- 4.3 Joint Ventures
- 4.4 Exclusive Dealing and Other Vertical Relationships

5. R&D, Patents and Technology Licensing **10L**

- 5.1 R&D and Market Structure
- 5.2 Cooperative and NonCooperative R&D
- 5.3 Economics of Patent Protection
- 5.4 Technology Licensing
- 5.5

6. The Theory of the Firm **10L**

- 6.1 The Nature of the Firm
- 6.2 The Contracting Approach: Agency Costs
- 6.3 The Incomplete Contracts Approach
- 6.4 The Control Approach

References:

1. Tirole, J 1988, The Theory of Industrial Organization, MIT Press
2. Shy, O, 1995, Industrial Organization,: Theory and Applications
3. Belleflame, P and Peitz, 2010, Industrial Organization, Markets and Strategies, Cambridge University Press

ECPO02. Agricultural Economics (50 marks)

Total Lecture Hours: 60

Course Objectives:

The course discusses some important microeconomic and institutional aspects of Agricultural Economics at the theoretical and empirical levels. It discusses (i) the production and consumption behaviour of agricultural households in terms of agricultural household models under various conditions including complete/incomplete markets with or without uncertainty and risk in production and/or in factor markets; (ii) the behaviour of agricultural households in supplying and marketing their products; (iii) efficiency and existence of share cropping relative to other forms of contractual arrangements such as wage-contract and fixed-rent contract; (iv) inter-linked transactions in rural markets; and (v) spatial integration of agricultural markets.

Learning outcomes

It helps the students to acquire up-to-date knowledge on the developments in some aspects of Agricultural Economics, and understand and explain the behaviour of agricultural households in terms of the theories and empirical evidence in the context of Indian agriculture. It enables them to understand the type of policies needed to improve the condition of farming communities.

1. Economics of Peasant Farming (Agricultural Household Models): 8L

- 1.1 Peasant and dualism with and without surplus labour
- 1.2 Subjective equilibrium conditions of subsistence and commercial family farms
- 1.3 Risk and uncertainty and behaviour of farms – Separation proposition of agricultural Household model with complete, and missing markets.

References:

- 1. Chayanov: *Theory of Peasant Economy* (Edited by Thorne, Kerbly and Smith).
- 2. A.K. Sen: Peasant and dualism with and without surplus labour, in Wadhwa (Ed.) *Some Problems of Indian Economy*.
- 3. A.K. Sen: *Resource, Values and Development*.
- 4. C. Nakajima: Article in Wharton (Ed.) *Subsistence Agriculture and Economic Development*.
- 5. T.B. Weines: Article in Oxford Economic Papers, 1977
- 6. P.K. Bardhan and C. Udry: *Development Microeconomics*.

2. Supply Response Models in Agriculture 10L

- 2.1 Inter-temporal price fluctuations and implications for agricultural production decision
- 2.2 Cobweb model and range of stability in agricultural prices
- 2.3 Nerlovian version of cobweb model and range of stability in agricultural prices
- 2.4 Estimations of short-run and long-run elasticity of acreage with different expectation hypotheses.

References:

- 1. M Nerlove: *The Dynamics of Supply – Estimation of Farmers' Response to Price*.
- 2. Raj Krishan: Article in *Economic Journal*, LXXIII (291), September, 1963.
- 3. Askari and Cummings: Article in *International Economic Review*, 18(2), 1977.

3. Marketable Surplus Functions **8L**

3.1 Different short-run and long-run models of marketable surplus for subsistence crops with empirical testing

3.2 Models by Raj Krishna, V. Nowshirvani, T.N. Krishnan, K. Bardhan, W. Haessel.

References:

1. Raj Krishna, and V. Nowshirvani in Wadhwa (Ed.) *Some Problems of Indian Economy* (Selected articles).
2. T.N. Krishnan: Article in P. Choudhury (Ed.) *Readings in Indian Agriculture*.
3. K. Bardhan: Article in *American Journal of Agricultural Economics*, February 1970.
4. W. Haessel: Article in *American Journal of Agricultural Economics*, February 1975.

4. Economics of Sharecropping – I **8L**

4.1 Relative efficiency of different types of land tenure - owner-cultivation, fixed-rent, and share contracts

4.2 Traditional (Marshallian) view on the efficiency of share tenancy – Gale Johnson’s model – Cheung’s model – Bardhan& Srinivasan’s model. 46

5. Economics of Sharecropping – II **8L**

5.1 Rationale of co-existence of sharecropping with other contracts – Different explanations

5.2 Transaction cost – Risk sharing – Risk sharing and work incentives (principal-agent model)

5.3 Cost sharing under uncertainty and moral hazard – Screening and sharecropping.

References:

1. G. Johnson: Article in *Journal of Political Economy*, 1950.
2. S.N.S. Cheung: *The Theory of Share Tenancy*.
3. Bardhan and Srinivasan: Article in *American Economic Review*, 1971.
4. P.K. Bardhan (Ed.) *Economic Theory of Agrarian Institutions*.
5. P.K. Bardhan and C. Udry: *Development Microeconomics*, Chapter 6.
6. Debraj Roy: *Development Economics*, Chapter 12.

6. Inter-linkage of Land, Labour and Credit Markets in Agriculture **10L**

6.1 Interlinked land, labour and credit markets – Interlinked land and credit markets

6.2 Interlinked transactions between trader-lender and farmer-borrower.

References:

1. K. Basu: *Analytical Development Economics*.
2. P.K. Bardhan and C. Udry: *Development Microeconomics*
3. Debraj Roy: *Development Economics*.

7. Spatial Integration of Food Grain Markets in India **8L**

7.1 Spatial integration and Law of One Price (LOP)

7.2 Methodology of testing for LOP and market integration – Empirical evidence

7.3 Policy implications.

References:

1. M. Ghosh: Spatial Price Linkages in Regional Food Grain Markets in India, *Margin – Journal of Applied Economics Research*, 4(4), 2010.
2. M. Ghosh: *Economic Reforms and Indian Economic Development – Selected Essays*, Bookwell, New Delhi, 2008, Chapter 7.
3. M. Ghosh: Spatial Integration of Wheat Markets in India, *Oxford Development Studies*, 31(2), 2003.

4. M. Ghosh: Co-integration Test and Spatial Integration of Rice Markets in India, *Indian Journal of Agricultural Economics*, 55(4), 2000.

ECPO03. International Trade Theory (50 marks)

Total Lecture Hours: 60

Course Objective: This course offers an introduction to the main theoretical tools central to the study of international trade. This course also emphasizes on application of basic trade models that characterize the global economy today including imperfect competition, firm heterogeneity, and contract theory.

Learning Outcome: At the end of this course students would be able to- Explain the Comparative Advantages Theory, Explain the Factor Endowments Theory and the New Trade Theories, Interrelate the Trade Theory with the process of Economic Development, follow the pattern of contemporary world trade.

I. Introducing trade and the concept of comparative advantage. 2L

II. The Exchange model 5L

1. The offer curve and the exchange equilibrium (2L)
2. The terms of trade and real income (1L)
3. Import substitution and export led growth and immiserization. (1L)
4. *Some selected papers (1L)*

III. The Ricardian model of trade 9L

1. Absolute and comparative advantage, pattern of trade and specialization. (2L)
2. Specialization and country size. (1L)
3. Specialization with a continuum of stages of production (2L)
4. Labor mobility and trade (1L)
5. *Some selected papers on Ricardian model (3L)*

IV. Specific-factor model of trade 10L

1. Factors and income distribution (3L)
2. The pattern of trade (1L)
3. Dutch diseases (1L)
4. Factor growth and factor prices (1L)
5. *Some selected papers on Specific factor model (4L)*

V. Factor endowment model of trade 9L

1. Pattern of trade and gains from trade (1L)

2. The Rybczynski theorem (2L)
3. The Stolper-Samuelson theorem (2L)
4. Higher dimensions of HOSV model of trade (2L)
5. *Some selected papers on H-O model (2L)*

VI. Introducing New trade theory

20L

(This section is primarily based on leading journal articles)

1. International Trade with Increasing Returns to Scale (3L)
2. IRS and Monopolistic Competition- Intra-industry Trade (3L)
3. IIT in identical products (3L)
4. Horizontal and Vertical Product Differentiation (2L)
6. The Game Theoretic Structure of Strategic Trade (2L)
7. Firm Heterogeneity and trade (2L)
8. *Some selected papers (5L)*

VII. Some recent developments in trade theory

5L

Readings:

- R. Caves, J. Frenkel and R. Jones, *World Trade and Payments*, 4th edition,
- R. Jones, *International Trade: Essays in Theory*, North Holland, 1979.
- R. Jones, *International Trade Theory and Competitive Models: Features, Values, and Criticisms*, World Scientific, 2018.
- P. Krugman, *Rethinking International Trade*, 1994, MIT press.
- Helpman, E. & P. Krugman (1987): *Market Structure and Foreign Trade*, MIT Press
- H. Kierzkowski (ed.): *Monopolistic Competition and International Trade*, 1984, OUP
- Robert C. Feenstra: *Advanced International Trade: Theory and Evidence*. Princeton University Press.
- R. Findlay: *International Trade and Development Theory*, Columbia University Press, 1973.
- S. Marjit: *International Trade and Economic Development- Theory and Policy*, OUP, 2008.
- Marjit, S., B. Mandal, N. Nakanishi, *Virtual Trade and Comparative Advantage: The Fourth Dimension*, Springer, 2020.
- Journal articles to be supplied during classes.

ECPO04. Public Economics & Policy (50 marks)

Total Lecture Hours: 60

- 1. MARKETS AND GOVERNMENTS:** The Prima Facie Case for the Market, Efficiency and Social Justice, Rule of Law. **5L**
- 2. INSTITUTIONS AND GOVERNANCE:** The Political Principal–Agent Problem, Government Bureaucracy, Life without Markets and Private Property. **5L**
- 3. PUBLIC GOODS:** Types of Public Goods, Information and Public Goods. Cost-Benefit Analysis **5L**
- 4. PUBLIC FINANCE FOR PUBLIC GOODS:** Taxation, Tax Evasion and the Shadow Economy, Government Borrowing. **10L**
- 5. MARKET CORRECTIONS:** Externalities and Private Resolution, Public Policies and Externalities, Paternalistic Public Policies. **5L**
- 6. VOTING:** The Median Voter and Majority Voting, Political Competition, Voting on Income Redistribution **5L**
- 7. SOCIAL JUSTICE:** Social Justice and Insurance, Moral Hazard, Social Justice without Government. **5L**
- 8. ENTITLEMENTS:** The Attributes and Consequences of Entitlements, Entitlement to Income during Old Age, Entitlement to Health Care and Health Insurance. **5L**
- 9. CHOICE OF TAXATION:** Optimal Taxation, Capital and Other Tax Bases, Fiscal Federalism, Decentralization Theorem, Optimum Size of Public Good, Inter-jurisdictional externalities. **5L**
- 10. THE NEED FOR GOVERNMENT:** Growth of Government and the Need for Government, Cooperation, Trust, and the Need for Government, Views on the Need for Government **5L**
- 11. POLICY FORMULATION & POLICY FABRICATION:** Corruption, Policy Induced Distortions, Formal – Informal Interactions in a Principal-Agent-Client Framework. **5L**

Reference:

1. Harvey Rosen, Public Finance
2. Arye A Hilman, Public Finance and Public Policy
3. Joseph Stiglitz & Jay K Rosengard, Economics of the Public Sector
4. Richard Cornes and Todd Sandler, The Theory of Externalities, Public Goods and Club Goods.
5. Musgrave and Musgrave, Public Finance in Theory and Practice.
6. Wallace Oates, Fiscal Federalism

ECPO05. Advanced Econometrics I (50 marks)

Total Lecture Hours: 60

Course Objectives

This Course will provide a basic understanding of limited dependent variable models, Simultaneous Equation Models and Dynamic Econometric Models. Lectures will focus of introducing the relevant econometric theory and explaining the theory with examples. Equal importance is attached to the development of an intuitive understanding of the material that will allow these econometric tools to be utilised effectively and creatively.

Learning Outcomes

On successful completion of this Course, students will be able to:

1. Learn various advanced econometric methods, estimation methods and related econometric theories.
2. Apply these methods to data or econometric modelling techniques
3. Use E-views/Stata to estimate econometric models, interpret econometric estimates and analyse the results.

1. Limited Dependent Variable Models

25L

Review of Dummy variable techniques

The Linear Probability Model

The Logit Model

The Probit Model

Estimation – the Maximum Likelihood Estimator for Logit and Probit Models

Problem of Inference; Measuring goodness of fit; Interpretation of Logit and Probit estimates.

The Tobit Model –Estimation and Interpretation of Tobit estimates

The Multinomial Logistic Regression Models

The Ordinal Logistic Regression Models

Estimation and Interpretations of the MLRM and OLRM

Applications using E-views/Stata

2. Dynamic Econometric Models

10L

Lagged effects in a Dynamic Model

Distributed Lag Models – Specification; Geometric Lag Approach; The Kyock approach to Distributed Lag Models

An application – The Adaptive Expectations Model

Polynomial Lag Model: The Almon approach

3. Simultaneous Equation Models

25L

The Nature of Simultaneous Equation Models with examples
The simultaneous equation bias and inconsistency of OLS estimators
The Recursive models
The Identification problem – rules of identification – The order and rank conditions
Single Equation/Limited Information Estimation Method –The Indirect Least Square Method
The Two-stage Least Square Method
The Least Variance Ratio Method
System Methods of estimation – The Three Stage Least Square
Applications using E-views/Stata

References:

1. Wooldridge, J (2012): *Introductory Econometrics A Modern Approach*, (5th Edition) South Western Cengage Learning.
2. Johnston, J (--): *Econometric Methods*, (3rd Edition) (McGraw Hill)
4. Green, W (2006): *Econometric Analysis* (5th Edition) Pearson Education, Delhi.
5. Dougherty, C (2011): *Introduction to Econometrics* (4th Edition), Oxford University Press.
6. Chatterjee, S and Hadi, A S (--): *Regression Analysis by Example* (Wiley Interscience)
7. Cameron, A C and Trevedi, P K (2005): *Micro Econometric Methods and Applications*, Cambridge University Press.
8. Bhaumik S K (2015): *Principles of Econometrics: A Modern Approach using E-views*, Oxford University Press, New Delhi

ECPO06. Political Economy of Development (50 marks)

Total Lecture Hours: 60

Course Objective: The objective of this course is to have a broad idea about the diverse development experiences across the Global South during the 20th Century and in the contemporary era.

Learning Outcome: The course is expected to enhance the ability of the students to understand comprehensively the history of post-colonial development. This broad but complex vision is essential not only for academics, but also for policy making and especially for becoming a practitioner of development.

A. 20th Century Development Experiences

30L

- A.1. Soviet experience
- A.2. Chinese experience
- A.3. Latin American experience
- A.4. South East Asian experience
- A.5. African experience

References:

1. The rise and decline of the Soviet economy. Robert C. Allen. *Canadian Journal of Economics*, Vol. 34, No. 4, 2001. <https://content.csbs.utah.edu/~mli/Economics%207004/Allen-103.pdf>
2. Preobrazhensky, E.A: *The New Economics*, Clarendon Press, 1965, Oxford, Oxford shire, (First published in 1926)
3. Ashok Mitra: The Soviet Debate, in *Terms of Trade and Class Relations 1977*: 44-67. Frank Cass.
4. Mao Tse-tung: A Critique of Soviet Economics, MR Press USA, 1977/2011
5. Alexander Eckstein: On the Economic Crisis in Communist China; *Foreign Affairs*; July 1964.
6. Cheng Enfua and Xin Xiangyanga: Fundamental elements of the China model; *International Critical Thought*; Published online: 27 Jun 2011.
7. Gabriel Palma: Latin America During the Second Half of the Twentieth Century; in *Rethinking Development Economics*, ed by Ha-Joon Chang, pp. 125-151 (London: Anthem Press, 2004).
8. Teo Ballve and Vijay Prashad (ed.): *Dispatches from Latin America (Experiments against Neo-liberalism)*, Left Word Books, 2006.
9. World Bank (1993): *The East Asian Miracle: Economic Growth and Public Policy*. Oxford: Oxford University Press.
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10. Prakash Kumar Shrestha: 'Economic development in South and East Asia: empirical examination of East Asian development model'. *Asia-Pacific Development Journal*, Vol. 20, No. 2, December 2013. file:///C:/Users/Admin/Downloads/2-Part1-Prakash.pdf
11. Yilmaz Akyüz, Ha-Joon Chang & Richard Kozul-Wright (1998): New perspectives on East Asian development, *The Journal of Development Studies*, 34:6, 4-36, DOI: [10.1080/00220389808422544](https://doi.org/10.1080/00220389808422544)
12. Elsa V. Artadi and Xavier Sala-i-Martin: *The Economic Tragedy of the XXth Century: growth in Africa*. NBER working paper series. Working Paper 9865. July 2003.

<http://www.nber.org/papers/w9865>.

https://www.nber.org/system/files/working_papers/w9865/w9865.pdf

13. Gareth Austin, “African Economic Development and Colonial Legacies”, *International Development Policy / Revue internationale de politique de développement* [Online], 1 | 2010, Online since 11 March 2010, connection on 15 May 2022. URL: <http://journals.openedition.org/poldev/78> ; DOI: <https://doi.org/10.4000/poldev.78>

*REFERENCES WILL BE ADDED/MODIFIED AS PER REQUIREMENT OF THE COURSE

B. Late 20th Century and 21st Century Development Practices: State, Market and Other Institutional Interventions (30L)

a. Managing Poverty, Human Development and Human Capital 9L

c.1 A theoretical perspective for ‘development management’

c.2 Some policy experiments

c.3 A critique of policy

References:

- i. Amartya Sen. What's the Point of a Development Strategy? Development Economics Discussion Paper, 1997, LSE STICERD Research Paper No. DEDPS 03; <http://sticerd.lse.ac.uk/dps/de/dedps3.pdf>.
- ii. Sudhir Anand and Martin Ravallion: Human Development in Poor Countries: On the Role of Private Incomes and Public Services. *Journal of Economic Perspectives*—Volume 7, Number 1—Winter 1993—Pages 133–150
- iii. Runa Sarkar, Anup Sinha. 2014. Another Development Participation, Empowerment and Well-being in Rural India (chapter on Gujarat’s Wadi experiment). Routledge.*
- iv. Brazil::Bolsa-Familia
(http://www.unicef.org/socialpolicy/files/The_Experience_of_Conditional_Cash_Transfers_in_LA_and_the_Caribbean.pdf) (*Development Policy Review*, 2006, 24 (5): 513-536, 2006. The Experience of Conditional Cash Transfers in Latin America and the Caribbean, *Sudhanshu Handa and Benjamin Davis*)*
- v. Kalyan Sanyal: Rethinking Capitalist Development. Routledge. 2007. Chap: 4: Capital and Governmentality
- vi. Pranab Kanti Basu ‘From Hegemony to Governmentality’ in *International Critical Thought*, April 2016, Routledge, Taylor and Francis

b. Managing the Informal-sector: 11L

a.1 Different theoretical perspectives on the informal sector (ILO, Structuralist, Legalist-Institutionalist, Neo-classical, Post-colonial)

a.2 Different policy perspectives pertaining to the informal sector and ‘inclusive growth’ (legal/institutional/governance-reform, micro-credit, skill-formation, linkages, NGO/CBO/CSO-intervention etc)

a.3 Critical policy analysis (a critique of inclusive growth and informality)

References:

- i. Martha Alter Chen 2012. The Informal Economy: Definitions, Theories and Policies, WIEGO Working Paper No. 1.
- ii. The global informal workforce: priorities for inclusive growth. IMF-ILO high-level event. 23 July 2021. <https://www.youtube.com/watch?v=niAq7QxoTNM&t=1976s>
- iii. Franziska Ohnsorge and Shu Yu (ed): The Long Shadow of Informality: Challenges and Policies, Advance Edition, The World Bank, 2021. <https://thedocs.worldbank.org/en/doc/37511318c092e6fd4ca3c60f0af0bea3-0350012021/related/Informal-economy-full-report.pdf>
- iv. Victor E. Tokman: Integrating the informal sector in the modernization process. <https://www.un.org/en/ecosoc/meetings/2006/forum/Statements/Tokman.pdf>
- v. NCEUS, Govt. of India: Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector, 2007: http://nceuis.nic.in/condition_of_workers_sep_2007.pdf
- vi. Saumya Chakrabarti 2016. Inclusive growth and social change: formal-informal-agrarian relations in India, OUP (Introduction: changing contours of development economics and Chap-9: political economy of (non)transition--the Indian informal sector).
- vii. Saumya Chakrabarti 2014. Formal-informal dichotomy: revisiting the debate on agriculture-industry linkage; *The Economic and Labour Relations Review*, Vol 25, Issue 1, <https://doi.org/10.1177/1035304613517988>
- viii. Pranab Kanti Basu, 'Inclusive Growth: A Lacanian Reading' in *Rethinking Marxism*, June 2016, Routledge, Taylor and Francis.

c. Managing Livelihood:

10L

- b.1 Theoretical perspective: employer of last resort
- b.2 Some policy experiments.
- b.3 A critique of policy (demand/supply-constraints)

References:

- i. Employer of last resort: a general view:: <http://www.econstor.eu/dspace/bitstream/10419/31565/1/585087865.pdf> (Promoting Equality Through an Employment of Last Resort Policy by Dimitri B. Papadimitriou, The Levy Economics Institute of Bard College, NY, USA)*
- ii. Argentina:: Jefes y Jefas (http://www.levyinstitute.org/pubs/wp_534.pdf)
- iii. India:: MGNREGA Sameeksha: An Anthology of Research Studies on the Mahatma Gandhi National Rural Employment Guarantee Act, 2005: 2006–2012; Ministry of Rural Development, GoI; Orient BlackSwan 2012:: nrega.nic.in/netnrega/writereaddata/circulars/mgnrega_sameeksha.pdf
- iv. Global Strategy for Livelihoods. A UNHCR Strategy 2014-2018. <https://cms.emergency.unhcr.org/documents/11982/81186/UNHCR%2C+Global+Strategy+for+Livelihoods+2014-2018/bbf30250-c485-49f6-9944-2fe9f3c0f97f>
- v. Saumya Chakrabarti, 2011: A macroeconomic structure of employment: rural-urban conflict in a Kaleckian framework, *Review of Radical Political Economics*, 43(2):172-97.
- vi. Saumya Chakrabarti, Pratip Kumar Datta, 2019. Problems of financing development management: a Kaleckian analysis. *Review of Radical Political Economics*, Volume 51, Issue 3. <https://doi.org/10.1177/0486613418820952>

ECPO07. General Equilibrium Theory (50 marks)

Total Lecture Hours: 60

- 1 General Equilibrium Analysis: A brief review** **3L**
- 2. Equilibrium in the Exchange Economy** **5L**
- 2.1 A Simple Model with 2 consumers and 2 goods— The General Structure-
- 2.2 Walras' Law— Existence and Uniqueness of Equilibrium —Comparative Statics and Stability
- 3 Equilibrium with Production** **7L**
- 3.1 The Basic Model with Production—The Leontief Economy. I-O analysis and the H-S Condition—
- 3.2 The Jones Simple 2 sector GE Model and comparative Statics—Stolper-Samuelson and Rybczynsky Theorems
- 3.3 The General Model with Production
- 4. General Equilibrium and Welfare** **15L**
- 4.1 Core of an Exchange Economy—
- 4.2 Core and Pareto Optimum—
- 4.3 The First and Second Welfare Theorems—
- 4.4 Social Welfare Function and Social Optimum—
- 4.5 The Arrow Impossibility Theorem
- 4.6 Possibility in Restricted Environments
- 5. General Equilibrium and Uncertainty** **15L**
- 5.1 Market Economy with Contingent Commodities—
- 5.2 Arrow-Debreu Equilibrium—
- 5.3 Asset Markets—
- 5.4 Incomplete Markets
- 6. Equilibrium and Time** **15L**
- 6.1 Intertemporal Utility —
- 6.2 Intertemporal Production and Efficiency —
- 6.3 Equilibrium: The One Consumer Case —
- 6.4 Stationary Paths, Interest Rates and Golden Rules —
- 6.5 Dynamics

References:

1. Hal Varian: *Microeconomics Analysis*, Viva Books, Indian Edition.
2. Mascollel, Whinston and Green: *Microeconomic Theory*, Publisher: OUP (Indian Edition).
3. Kreps: *Microeconomic Theory*, Princeton University Press.
4. A. Mukherjee: *An Introduction to General Equilibrium Theory*, OUP (Indian Edition)

ECPO08. Urban Planning and Urban Governance in Developing Countries (with Special Reference to India) (50 marks)

Total Lecture Hours: 60

Course Objectives

Urban planning and governance interventions in many cities in the Global South have been facing big challenges as rapid population growth has led to resource scarcity, environmental degradation, and social inequality. This Course addresses such challenges at the interface between Urban Studies and Development Studies. We will look at how various forces shape cities, the outcomes of urbanization for cities and their populations and how urban governments and planners have sought to respond to the challenges of urbanization. We will explore influential ideas which have changed our thinking about cities and examine some of the major global challenges facing cities today. Focusing on urban areas in the Global South, it looks at the city from a variety of spatial scales, from everyday practices of citizens at the grassroots level to the representation of the city within national policy and planning processes. We will pay particular attention to governance issues of the Indian cities, especially the role of global economic processes in producing of urban space, technologies of government and planning and insurgent modes of claiming space and rights.

Learning Outcomes

The students will be able to understand issues confronting cities in diverse socioeconomic, political, and cultural circumstances and the challenges and opportunities in formulating appropriate planning interventions. The Course will encourage students to think critically about the ways in which practitioners approach issues and define problems, and the theoretical viewpoints that inform their actions. Students will be able to develop their skills in researching, presenting and debating arguments drawn from the academic literature on international development and urban studies.

Unit 1: Urban planning practices in the cities of developing countries

12L

Robinson, Jennifer. (2011). "Cities in a World of Cities: The Comparative Gesture." *International Journal of Urban and Regional Research* 35, 1: 1-23.

Sassen S (2001) Overview. In *The Global City: New York, London, Tokyo* (pp 3-15). Princeton University Press

Peck J, N Theodore and N Brenner (2009): "Neoliberal urbanism: models, moments and mutations", *SAIS Review*, Vol XXIX No 1, Winter – Spring, 49-66.

Rao, Vyjayanthi. (2006). "Slum as theory: the South/Asian city and globalization." *International Journal of Urban and Regional Research*, Review Essay 30, 1: 225-232

Swyngedouw, E, F Moulaert and A Rodriguez (2002): "Neoliberal Urbanization in Europe: Large Scale Urban Development Projects and the New Urban Policy", *Antipode*

Hollands R G (2015): “Critical Interventions into the Corporate Smart City”, Cambridge Journal of Regions, Economy and Society, Vol 8.

Roy A and Ong A (2012) Selected chapters from Roy A and Ong A edited *Worlding Cities: Asian Experiments and the Art of Being Global* Oxford: Blackwell Publishing

F. Wu. 2003. “The (Post-) Socialist Entrepreneurial City as a State Project: Shanghai’s Reglobalisation in Question,” *Urban Studies* 40(9): 1673–1698.

Parnell, S. and Robinson, J. (2012) ‘(Re)theorizing cities from the global South: looking beyond neoliberalism’. *Urban Geography*, 33:4, 593-617.

IGC Working Paper 2014

Unit 2: Urban Governance: Institutions, Participation and Citizenship

12L

Devas, N (2004): *Urban governance, voice and poverty in the developing world*, Earthscan Publication Ltd, UK.

Jon Pierre. 2005. “Comparative Urban Governance: Uncovering Complex Causalities.” *Urban Affairs Review* 40: 446-462.

Chatterjee P (2004): *The politics of the governed: popular politics in most of the world*, Columbia University Press, New York.

Solomon Benjamin (2008) Occupancy Urbanism: Radicalizing Politics and Economy beyond Policy and Programs . *International Journal of Urban and Regional Research* 32(3):

Arjun Appadurai. 2002. “Deep Democracy: Urban Governmentality and the Horizon of Politics.” *Public Culture*.14:1, 21-47.

Merilee Grindle. 2010. “Good Governance: The Inflation of an Idea.” *KSG Faculty Research Paper Series*, RWP10-023.

Merilee Grindle. 2007. Going Local: Decentralization, Democratization, and the Promise of Good Governance (Princeton UP): Ch.1

Right to the City

Weinstein, Lisa. (2008). Mumbai’s Development Mafia’s: Globalization, Organized Crime and Land Development. *International Journal of Urban and Regional Research* 32, 1: 22-39

Weinstein, Lisa. (2012): “Democratic urban citizenship and mega project development inglobalizing Mumbai” in *Urbanizing citizenship: contested spaces in Indian cities*, Sage, 58-81.

Weinstein, Lisa. (2014): ““One man handled” fragmented power and political entrepreneurship in globalizing Mumbai in G Shatkin (ed) *Contesting the Indian city global vision and the politics of the local*, Wiley Blackwell, 91 – 120.

Harriss, John. “Antinomies of Empowerment: Observations on Civil Society, Politics and Urban Governance in India” *Economic and Political Weekly* June 30: 2716 – 2724

Kudva, Neema. (2013) Planning Mangalore: Garbage Collection in a Small Indian City,” in Gavin Shatkin ed. *Contesting the Indian City: Global Visions and the Politics of the Local*. Chichester: Wiley Blackwell

Batley, R. and D. Moran (2004) *Literature Review of Non-State Provision of Basic Services*. International Development Department, School of Public Policy, the University of Birmingham, Birmingham

- Grant U (2002): *Local government decision making: citizen participation and local government accountability – a literature review*, International Development Department, University of Birmingham, March.
- B. Sanyal & Mukhija V. (2001) Institutional pluralism and housing delivery: A case of unforeseen conflicts in Mumbai, India *World Development*, 29(12), 2043–57.
- Pranab Bardhan, 2002, Decentralization of governance and development, *The Journal of Economic Perspectives*, Vol. 16, No. 4. (Autumn, 2002), pp. 185–205.
- Faranak Miraftab, (2004) Public Private Partnerships: The Trojan Horse of Neoliberal Development? *Journal of Planning Education and Research* September 2004 24:89–101.
- Beaumont, J and W Nicholls (2008): ‘Plural governance, participation and democracy in cities’, *International Journal of Urban and Regional Research*, 32 (1): 87–94.
- Chandra, M (2004): “Bridging everyday and high politics – the 74th CAA and inclusion in Kolkata, India”, *Development Planning Unit*, University College London, London.
- Litvack J, J Ahmed and R Bird (1998): ‘Rethinking decentralization in developing countries’, *Sector Studies Series*, World Bank, Washington, DC.
- Mitlin, D (2004): ‘Reshaping local democracy’, *Environment and Urbanization*, 16 (1), 3–8.
- Rakodi C (2001): ‘Urban governance and poverty – addressing needs, asserting claims: an editorial introduction’, *International Planning Studies*, Vol 6, No 4, 343–356.
- Zerah, M H (2009): ‘Participatory governance in urban management and the shifting geometry of power in Mumbai’, *Development and Change*, 40 (5): 853–877.
- Williams G (2014): “Making space for women in urban governance? Leadership and claim making in Kerala Slum” *Environment and Planning A*
- Jha, S., V Rao and M Woolcock (2007): ‘Governance in the gullies: democratic responsiveness and leadership in Delhi slums’, *World Development*, 35 (2): 230–246.
- Nijman, J (2008): ‘Against the odds: slum rehabilitation in neoliberal Mumbai’, *Cities*, 25 (2), 73–85.
- Berenschot, W (2010): ‘Everyday mediation: the politics of public service delivery in Gujarat, India’, *Development and Change*, 41 (5): 883–905.
- Shatkin G and S Vidyarthi (2014): “Introduction” in G Shatkin (ed) *Contesting the Indian city: global vision and the politics of the local*, Wiley Blackwell, 1–38.

Unit 3: Urban Development Plan and Programmes in India

12L

Decentralization, JNNURM, Urban Water Policy, Sanitation Policy, Street Vendor Policy, Smart City, Slum free city

- Roy A (2009): “Why India cannot plan its cities: informality, insurgence and the idiom of urbanization” *Planning Theory*, 8 (1), 76–87.
- Nandi S and S Gamkhar (2013): “Urban Challenges in India: An overview of recent policy Habitat International measures”, 39(2013), 55–61.
- Mahadevia, D (2011): ‘Branded or renewed? Policies, politics and processes of urban development in the reform era’, *Economic and Political Weekly*, Vol XLIV No. 31, 56–64.
- Shaw A (1996): “Urban policy in post-independence India”, *Economic and Political Weekly*, 31 (4), 224–228.

- Shaw A (2012): “Metropolitan city growth and management in post-liberalized India”, *Eurasian Geography and Economics*, 53 (1), 44-62.
- Kennedy L and Zerah M H (2008): “The shift to city-centric growth strategies: perspectives from Hyderabad and Mumbai”, *Economic & Political Weekly*, 43 (39), 110-117.
- Aijaz, Rumi, 2012, Democracy and Urban Governance in India, Observer Research Foundation.

Unit 4: Urban Finance and Urban Service delivery in India

12L

- HPEC (2011): *Report on Indian Urban Infrastructure and Services*, March.
- Banidur V and L Kamath (2009): *Reengineering urban infrastructure: how the World Bank and the Asian development bank shape urban infrastructure finance and governance in India*, Bank Information Centre South Asia, August.
- Selected Chapters from Ahluwalia I J, R Kanbur and P K Mohanty (eds.) *Urbanization in India challenges, opportunities and the way forward*, Sage Publication, New Delhi (2014)
- Bahl R (2012): *Metropolitan city finances in India: options for a new fiscal architecture*, International Center for Public Policy Working Paper 12-33, Andrew Young School of Policy Studies, Georgia State University, December.
- Bandyopadhyay, S and M. G Rao (2009): *Fiscal Health of selected Indian Cities*, Working Paper No. 2009-58, National Institute of Public Finance and Policy, New Delhi, March.
- Baneree S, K Gangopadhyay, A Thampy and Z Wong (2013): *Constraints and prospects of financing via municipal bonds in India: an analysis with case studies*, Working Paper, International Growth Center, London School of Economics, April.

Unit 5: Urban Governance Reforms in India

12L

- Kundu A (2003): ‘Urbanization and urban governance search for a perspective beyond neo-liberalism’, *Economic and Political Weekly*, July 19, 3079 – 3087.
- Ramanathan R (2007): “Federalism, urban decentralization and citizen participation”, *Economic and Political Weekly*, February 24, 674-681.
- Coelho, K, L Kamath and M Vijayabaskar (2011): *Infrastructures of consent: interrogating citizen participation mandates in Indian urban governance*, Working Paper, Volume 2011 No 362 March, IDS, University of Sussex.
- Ren X and L Weinstein (2013): “Urban governance, mega-projects and scalar transformation in China and India” in T R Samara, S He and G Chen (eds) *Locating right to the city in the global South*, Routledge, 107-126.
- Selected Chapters from Baud, I. S. A. & Wit, J., de (Eds.) *New forms of urban governance in India: shifts, models, networks & governance*, Sage (2008).
- Ghosh A (2005): “Public-private or a private public: promised partnership of the Bangalore Agenda Task Force”, *Economic and Political Weekly*, Vol XL (47).

ECPO09. Labour Economics (50 marks)

Total Lecture Hours: 60

Unit 1: Supply

6L

Static Labour-Leisure Choice – Effects of Social Programs and Income Taxes – The Life-Cycle Model – Investments in Human Capital – Collective Models of Household Labour Supply – Occupational Choice

Unit 2: Demand

6L

Static Cost, Profit and Labour Demand Functions – Elasticity of Derived demand: the Hicks-Marshall Rules – Adjustment Costs and Dynamic Labour Demand

Unit 3: Equilibrium

8L

Compensating Differences – Adam Smith – Evidence on Premium for Risky or Nasty Jobs – Efficiency Wages – Segmented Labour markets – Migration

Unit 4: Cyclical Fluctuations

4L

Equilibrium Models of Employment Fluctuations – Real Wages over the Business Cycle

Unit 5: Wage Issues in Labour Market

12L

The Determination of Wages, Wage Structure and Components of Wages, Signaling –Minimum Wage Laws, Share of Wages Distribution and Inequality of Wage Income. Inter sectoral Wage Differentials.

Unit 6: Unemployment

6L

Definition and Measurement – Variations over time and Space – Job Search – Effects of Unemployment Insurance

Unit 7: Unions

6L

Objectives and Political Structure – Bargaining Theories – Relative Wage Effects – Strikes – Union Growth and Decline – Unions in the Public Sector – Union-Oligopoly Models

Unit 8: Regulations and International Labour Standards

12L

Regulation of Labour – Experience of India vis-à-vis Other Countries – Entry and Product Market Regulation – International Labour Standards- Globalization and Labour

References:

- Cahuc, Pierre, and Andre Zylberberg. Labor Economics. Cambridge, Mass. and London: MIT Press, 2004.
- Ashenfelter, Orley, and Richard Layard. The Handbook of Labor Economics. Vol. 1 and 2. New York: North-Holland, 1986; Vol. 3A, 3B, and 3C, 1999.
- Basu, Kausik (1997): Analytical Development Economics, Oxford University Press, Delhi.
- Marjit, S. and Acharyya, R. (2003): International Trade, Wage Inequality and the Developing Economy: A General Equilibrium Approach, Physica-Verlag.
- R. Solow (1990): The Labour Market as an Institution, Blackwell Publisher.

MA Semester IV

ECPC12. Dissertation (50 marks)

Optional Papers (GROUP B)

ECPO10. Games and Information (50 marks)

Total Lecture Hours: 60

PART I: NORMAL FORM GAMES

1 Review of Basic Elements

4L

1.1 Definitions

1.2 Dominant Strategies: The Prisoner's Dilemma

1.3 Iterated Dominance: The Battle of the Bismarck Sea

1.4 Nash Equilibrium: Boxed Pigs, The Battle of the Sexes, and Ranked Coordination

1.5 Focal Points

2 Continuous and Mixed Strategies

6L

2.1 Mixed Strategies: The Welfare Game

2.2 Chicken, The War of Attrition, and Correlated Strategies

2.3 Mixed Strategies with General Parameters and N Players: The Civic Duty Game

2.4 Randomizing versus Mixing: The Auditing Game

2.5 Continuous Strategies: The Cournot Game

PART II: EXTENSIVE FORM GAMES

3 Review of Extensive Form Games with Symmetric Information

6L

3.1 The Extensive Form of a Game

3.2 Information Sets

3.3 Perfect, Certain, Symmetric, and Complete Information

3.4 Subgame Perfectness

3.5 An Example of Perfectness: Entry Deterrence I

3.6 Credible Threats, Sunk Costs

3.7 Re-coordination to Pareto Dominant Equilibria in Subgames: Pareto Perfection

4 Reputation, Repeated Games and Bargaining

9L

4.1 Finitely Repeated Games and the Chainstore Paradox

4.2 Infinitely Repeated Games, Minimax Punishments, and the Folk Theorem

4.3 Reputation: The One-Sided Prisoner's Dilemma

4.4 Product Quality in an Infinitely Repeated Game

4.5 The Basic Bargaining Problem: Splitting a Pie

4.6 The Nash Bargaining Solution

4.7 Alternating Offers over Finite Time

4.8 Alternating Offers over Infinite Time

*4.9 Evolutionary Equilibrium: The Hawk-Dove Game (formerly Section 4.6) Notes Problems

PART III: INCOMPLETE INFORMATION

5 Games of Incomplete Information **10L**

5.1 The Harsanyi Transformation and Bayesian Games

5.2 Bayesian Equilibrium

5.3 Static Games of Imperfect Information: Cournot Model with Imperfect Information

5.4 Dynamic Games with Imperfect Information: Perfect Bayesian Equilibrium

5.5 Further Refinements: Trembling Hand Perfection and Sequential Equilibrium

5.6 Incomplete Information in the Repeated Prisoner's Dilemma: The Gang of Four Model

5.7 Sequential Bargaining with Incomplete Information

6 Moral Hazard **6L**

6.1 A Principal-Agent Model: A review

6.2 The Incentive Compatibility, Participation, and Competition Constraints

6.3 Optimal Contracts

6.4 The Revelation Principle and Moral Hazard with Hidden Knowledge

6.5 Efficiency Wages

6.6 Tournaments

6.7 Renegotiation

6.8 Joint Production by Many Agents: The Holmstrom Teams Model

7 Adverse Selection **6L**

7.1 A review of basic concepts

7.2 Adverse Selection under Uncertainty: Insurance Game

7.3 Mechanism Design in Adverse Selection and in Moral Hazard with Hidden Knowledge

7.4 Rate of Return Regulation and Government Procurement

8 Signalling **10L**

8.1 The Informed Player Moves First: Signalling

8.2 Variants on the Signalling Model of Education

8.3 General Comments on Signalling in Education

8.4 Signal Jamming and Limit Pricing

9. Cooperative Games **3L**

Axiomatic Bargaining— Coalitions and Shapley Value—the Core.

Readings:

1. Fudenberg and Tirole: 1991, Game Theory MIT Press
2. Eric Rasmusen, 2000, Games and Information, Blackwell
3. Osborne, M., 1995, Game Theory. Oxford University Press
4. Mascolel, Green and Whinston: *Microeconomic Theory*, OUP.
5. Tirole: *Industrial Organization*, MIT

ECPO11. International Trade Policy (50 marks)

Total Lecture Hours: 60

Course Objectives

It attempts to provide an updated and understandable analytical and evidence-based framework for masters' students in orienting them with current advances in international trade policy. In analyzing both the real and monetary sides of the subject, our approach would be to build up, step by step, a simple, unified framework in communicating the grand traditional insights as well as the newest findings and researches. To help the student grasp and retain the underlying logic of international economics, we motivate the theoretical development at each stage with pertinent data and policy questions.

Learning Outcomes

We attempt to take up real life problems and intend to test and solidify students' comprehension. The problems range from routine computational drills to big picture questions suitable for classroom discussions. These learning outcomes should motivate the students to do further research in this field and excel as successful academicians.

1. The Instrument of Trade Policy

8L

Basic Tariff Analysis; Cost – Benefits of Tariff & Subsidy; Tariff vs. Quota; Voluntary Export Restraint Models; Case Studies; Distortionary Effects of Trade Instruments.

2. The Political Economy of Trade

6L

Free vs. Protected Trade; Income Distribution; International Negotiation. Success & Failures: Case Studies

3. Trade Policy in Developing Countries

8L

Import Substitution vs. Export Promotion; Preferential & Non-preferential Trade; Custom Union & Free Trade Areas; Case Studies: NAFTA & SAFTA.

4. Controversies in Trade Policy

6L

Globalization & Activist Trade Policy: Brander – Spencer Theorem; Factor Returns & Environmental Concerns.

5. Exchange Rate & Open Economy Macroeconomics

14L

Balance-of-Payment; Money, Interest Rate & Exchange Rates; Price Level & Exchange Rate: Sticky Price Framework, Short vs. Long Run Analysis; Output & Exchange Rates: Nominal – Real - PPP Framework; Exchange Rates & Foreign Exchange Interventions.

6. International Macroeconomic Policy

10L

Policy Goal in an Open Economy: Policy Coordination under Fixed and Floating Exchange Rates; Optimum Currency Area; IMF, GATT, GATS & WTO.

7. International Trade in Services and Labor Standards

8L

Readings:

- Caves, Jones & Frankel: World Trade and Payments, Pearson Education, 2014.
- Krugman, Obstfeld & Melitz: International Economics: Theory and Policy (Pearson Education), 2018.
- Gandolfo, G: International Trade Theory and Policy, Springer, 2014
- Handbook on international trade policy / edited by William A. Kerr, James D. Gaisford., Edward Elgar, 2006
- GLOBALIZATION AND INTERNATIONAL TRADE POLICIES, Edited by Robert M. Stern, World Scientific Studies in International Economics, 2009.
- Marjit, Sugata: International Trade and Economic Development: Essays in Theory and Policy, OUP, 2008.
- Feenstra, Robert C.: Advanced International Trade: Theory and Evidence, Princeton University Press, 2004.
- Maurice Obstfeld & Kenneth Rogoff: Foundations of International Macroeconomics, MIT Press, 1996.
- (All references are indicative; many more journal references will be supplied time to time following the subject of discussion).

ECPO12. Environmental & Resource Economics (50 marks)

Total Lecture Hours: 60

Course Objectives

Management of environmental indicators and natural resources is an integral part of economics discourse in the present day. Almost all aspects of the production economy are now linked with the environment and natural resources directly or indirectly. This field of study has a wide canvas, from global issues like Climate Change to local issues like municipal solid waste management. Production and planning at micro and macro levels calls for monetary valuation of costs and benefits and between alternatives. Due to increasing demand from policy authorities at various level, environmental valuation techniques has seen immense growth in recent decades. Climate Change adaptation, mitigation, and Sustainable Development Goals (SDGs) occupy the center stage in development planning. Consequently, this field is also growing quickly in terms of literature volume. This course aims to introduce the students to the broad spectrum of topics and technical tools for possible research relating to the environment and natural resource management and sustainability.

Learning Outcomes

The outcomes for students of this Course would be the following:

1. The student would become aware of the major sub-themes of environmental economics and resource economics.
2. The students would learn about the latest trend in research across these sub-themes
3. The students would learn various market-based and non-market valuation techniques for empirical research
4. The Course exposes the students to a wide range of issues that might help them to decide on their future research agenda.
5. The Course also helps them to prepare for jobs in the NGO/Development sector

1. Externalities and market failure:

10L

- 1.1 Externality and public goods – environmental externalities and non-convexities
- 1.2 Types of market failure - property rights and transaction costs – Coase theorem
- 1.3 Common Pool Resources, Common Property Resources and Tragedy of Commons
- 1.4. Management of Commons

2. Economics Environment Interaction:

10L

- 2.1 Concept of sustainable development - sustainability rules
- 2.2 Environment-poverty interaction – Environmental Kuznets Curve (EKC)
- 2.3 Climate Change – mitigation and adaptation IPCC reports

3. Economics of Pollution Control:

10L

- 3.1 Pollution abatement - Coasian market bargaining – Pigovian taxes – standards and subsidies
- 3.1 Tradable pollution permits – uniformly and non-uniformly mixed pollution
- 3.3 Comparison between alternative policy tools for pollution abatement

4. Economics of exhaustible resources: 6L

- 4.1 Nature of exhaustible resources – user cost – Hotelling rule
- 4.2 Time path of price for exhaustible resources – the implication of a backstop

5. Economics of renewable resources: 10L

- 5.1 Fishing: Nature of biological growth function – MSY and carrying capacity
- 5.2 Optimum rate of harvesting for fish– optimum effort level under different property rights
- 5.3 Forestry: Theory of optimum rotation for timber harvesting – the role of discount rate

6. Valuation of Natural Resources and Ecosystem Services: 14L

- 6.1 Concept of Total Economic Value (TEV) and its different components
- 6.2 Valuation techniques – comparison between revealed and stated preference techniques
- 6.3 Stated Preferences – theory and applicability of Contingent Valuation Method and contingent choice models
- 6.4 Brief descriptions of valuation techniques by revealed preference methods – productivity, hedonic prices, travel cost method and averted expenditure approach

Readings:

1. Hanley, Shogren & White (1997): *Environmental Economics in Theory and Practice* (McMillan, India)
2. Bhattacharya R. N. (2001): *Environmental Economics: An Indian Perspective* (Oxford University Press)
3. Kolstad C. D.(2000): *Environmental Economics* (Oxford University Press)
4. Tietenberg T. and Lewis L (2012) :*Environmental and Natural Resource Economics* (9th ed) (Pearson, education)
5. Conrad J. M.(2010): *Resource Economics* (Cambridge University Press)
6. W. Baumol, W. Oates (1988): *The Theory of Environmental Policy*. Cambridge University Press
7. Costanza, et.al. (1998): *An Introduction to Ecological Economics*

ECPO13. Applied Agricultural Economics (50 marks)

Total Lecture Hours: 60

1. Agriculture in economic Transformation and sectoral balance. **10L**
2. Agricultural Transformation and Rural Development—the imperative of Agricultural Progress and Rural Development—Agricultural Stagnation and Growth since 1950—the structure of agrarian Systems in the Developing World—Peasant Agriculture in Latin America, Asia and Africa-Agriculture Diversification in South Asia—Patterns, Determinants & Policy Implications. **10L**
3. Dual Economy models: Technological Change Distributive Bias & Labour Transfer in a Two Sector Economy— Models by Jorgenson, Lele and Mellor. **10L**
4. Performance of Indian Agriculture since Independence—Stunted Capitalist Development in Indian Agriculture—Economic Reforms and Agrarian Crisis. **10L**
5. Different issues of Indian Agriculture. [e.g. i) Institutional and Technological characteristics—impact of new policies. (ii) India's Food grain Policy (iii) New policies and Trade in Agricultural Commodities. (iv) Capital Formation in Indian Agriculture. **10L**
6. Issues relating to agrarian economy of West Bengal. **10L**

References (The list is indicative and not exhaustive)

1. A. Dutta, Sectoral Balance in Development. A Survey, World Development 18, 1990
2. Todaro & Smith, Economic Development (Relevant Chapter), Pearson Education)
3. P. K. Joshi, et.al. Agriculture Diversification in South Asia—Patterns, Determinants & Policy Implications, EPW, June 12, 2004, pp. 2457-67.
4. U. Lele & J Mellor, Technological Change, Distribution Bias and Labour Transfer in a Two sector Economy, OEP, 33(3), 1981.
5. K. Basu (Ed), Agrarian Questions, OUP, 2000.
6. A. K. Chattopadhyay, Agrarian Crisis, Unemployment and Rural Livelihoods in Khan, et.al.(ed), Anatomy of Public Policy Reforms and Development, Macmillan Advanced Research Series, Delhi, 2011. Pp. 3-22.
7. G. S. Bhalla, Income, Consumption and Expenditure of Farmers: Stunted Capitalist Development in Indian Agriculture, in S. K. Bhaumik (ed), Reforming Indian Agriculture, Sage Publications, 2008.
8. C. H. Hanumantha Rao, Agriculture, Food Security, Poverty and Environment; Essays on Post-reform India, OUP, 2005.
9. Kaushik Basu, India's Food grain Policy: An Economic Theory Perspectives, EPW, January 29, 2011, pp. 37-46.
10. James K Boyce, Agrarian Impasse in Bengal: Agricultural Growth in Bangladesh and West Bengal 1949-1980. OUP 1987.
11. A. K. Chattopadhyay, 'Distributive Impact of Agricultural Growth in Rural West Bengal', EPW, December 31, 2005.
12. Arup Maharatna, Population, Economy and Society in West Bengal since the 1970s, Journal of Development Studies, 43 (8), November 2007.

ECPO14. Advanced Econometrics II (50 marks)

Total Lecture Hours: 60

Course Objectives

This course will present an advanced treatment of econometric principles for panel and time series data sets. The course will focus on modern econometric techniques, addressing both technical derivations and practical applications. Applications in the areas of microeconomics, macroeconomics and finance will be considered.

Learning Outcomes

On successful completion of this Course, students will be able to:

1. Learn various advanced econometric methods, estimation methods and related econometric theories.
2. Apply these methods to data or econometric modelling techniques
3. Use E-views/Stata to estimate econometric models, interpret econometric estimates and analyse the results.

1. Univariate Time Series Modelling

18L

Introduction

Concept of Stationarity

Moving Average Process

Autoregressive Process

ARMA Process

Autocorrelation Function and Partial Autocorrelation Function

The Box-Jenkins Approach

Forecasting with Time Series Models

Applications using E-views/Stata

2. Stationary Time Series Models, Cointegration and Error Correction Models

17L

Random Walk Models

Difference Stationary Process and Trend Stationary Process

Tests for Stationarity – Graphical Approach and Correlogram

Unit Root Test - Dicky-Fuller and Augmented Dicky-Fuller tests, Phillips-Peron tests

Tests for Unit Root in the presence of structural breaks

Cointegration

The Engle-Granger Methodology

Error Correction Models

Applications using E-views/Stata

3. Vector Autoregressions and Modelling Volatility

10L

Vector Autoregressive Models – Estimation and Identification
 The Impulse Response Function and Variance Decomposition
 Causality Tests – Granger Causality Test and it's application in VAR
 Autoregressive Conditionally Heteroscedastic (ARCH) models
 Generalized ARCH (GARCH) models
 Estimation of ARCH and GARCH models
 Applications using E-views/Stata

4. Panel Data Analysis

15L

Introduction and examples – balanced and unbalanced panels
 Panel data with two time periods
 Constant Coefficient Models
 Fixed effects models – The within and between group estimator, fixed time and group effects, testing for fixed effects
 Random effects models – generalized least squares, Hausman's specification test for the random effects models
 Problem of heteroscedasticity and autocorrelation in panel data models
 Panel Unit Root and Cointegration Tests
 Applications using E-views/Stata

References:

1. Brooks Chris (2014): *Introductory Econometrics for Finance* (3rd Edition), Cambridge University Press, Cambridge.
2. Walter Enders (2004): *Applied Econometric Time Series*, John Wiley & Sons, 2nd Edition.
3. Green, W (2004): *Econometric Analysis*, Pearson Education, Delhi, 5th Edition.
4. Wooldridge, J (2012): *Introductory Econometrics A Modern Approach*, (5th Edition) South Western Cengage Learning.
5. Wooldridge, J (--): *Econometric Analysis of Cross Section and Panel Data*, MIT Press.
6. Baltagi, H (2005): *Econometric Analysis of Panel Data* (3rd Edition): John Wiley.
7. Bhaumik S K (2015): *Principles of Econometrics: A Modern Approach using E-views*, Oxford University Press, New Delhi

ECPO15. Health Economics (50 marks)

Total Lecture Hours: 60

Course Objective:

Health economics is the study of how scarce healthcare resources are allocated among competing interventions and among groups in society. This course introduces basic concepts and practical issues faced by decision makers at all levels in the health system in allocating scarce resources so that the choices they make maximise health benefits to the population. The course content includes modules introducing public health and policy, basic research methods in health, microeconomic theory, health economics, and in-depth modules on concepts and applications of economic evaluation, health care financing, health policy, health system.

Learning Outcomes:

The overall goal of this course is to increase appreciation of role of health economics, health care financing and policy in public health. It will provide a fundamental understanding of key issues in health economics, health care financing, pharmaceutical economics, and economic evaluation for public health practice for informed decision making and implementation. Therefore, the emphasis on analytics will prepare you to address a wide-range of issues in public health, development economics, and more!

Module-1. Introduction to Economic Analysis in Health Care

4L

- 1.a. Why health economics?
- 1.b. Health care as an economic good
- 1.c. Differential characteristics of health care
- 1.d. Organization of health care market
- 1.e. Structure of a health care system

Module-2. The Demand for Health Care

10L

- 2.a. Demand, profits and health policy targets
- 2.b. Consumer choice theory in health care
- 2.c. Demand functions for health care
- 2.d. The value of life and quality of life
- 2.e. Modelling choice about health care

Module-3. The Production and Cost of Health Care

6L

- 3.a. Theory of production in health care
- 3.b. Multi-product firms
- 3.c. Returns to scale, additivity and fixed factors
- 3.d. Costs of health care

Module-4. The Supply of Health Care **10L**

- 4.a. Firms, markets and industries in the health care sector
- 4.b. Structure, conduct and performance in health care industry
- 4.c. Profit maximization models of health care
- 4.d. Other than profit maximization in health care

Module-5. Markets, Market Failures and government **10L**

- 5.a. Competitive markets to allocate resources
- 5.b. Market failures in health care
- 5.c. Government intervention in health care & government failures

Module-6. Health Insurance and Health Care Financing **20L**

- 6.a. Uncertainty and risk
- 6.b. Demand and supply of health insurance
- 6.c. Health insurance market failures
- 6.d. Asymmetric information in health care market
- 6.e. Supplier induced demand

Readings:

1. Paul J. Feldstein (**F**) – Economics of Health Care, Cengage Learning, India Edition (2011).
2. C. E. Phelps (**P**) – Health Economics, Routledge, (2012).
3. F. A. Sloan and C. Hsieh (**S-H**) – Health Economics, MIT Press (2012).
4. R. E. Santerre and S. P. Neun(**S-N**) – Health Economics, Cengage Learning (2012).
5. P. Zweifel and F. Breyer and M. Kifmnn(**Z-B-K**) – Health Economics, Heidelberg, Springer-Verlag, (2009).
6. A. McGuire, J. Hendersin and G. Mooney (**M-H-M**) – The Economics of Health Care, London, Routledge (1999).
7. S. Folland, A.C. Goodman and M. Stano(**F-G-S**) – The Economics of Health and health Care, Boston, Prentice Hall (2009).
8. P. Barros and Xavier Martinez-Giralt (**B-G**) – Health Economics: An Industrial Organization Perspective, Routledge, UK (2012).
9. A.M. Jones, N. Rice, T. B d’Uva, S. Balia(**J-R-D-B**) – Applied Health Economics, Routledge, UK (2012).
10. Bhattacharya J, T. Hyde, P. Tu (**B-H-T**) - Health Economics, London: Palgrave-MacMillan, (2013).

ECPO16. Modern Growth Theory (50 marks)

Total Lecture Hours: 60

Course Objectives: The Course emphasis is on developing formal models that are dynamic in nature. Modern Growth Theory requires a basic understanding of systems of difference and differential equations and techniques of intertemporal optimization. The course provides an elementary introduction to these techniques through some models that use them.

Learning Outcomes: This course will discuss recent developments in growth and development, and in particular dynamic macroeconomic theory focusing, among other issues, on labour market distortions, pollution and the heterogeneity of agents (e.g. in wealth, ability, preferences, information structures, etc.).

1. Review of traditional Growth Models (4L)
2. The Solow Model as a bench mark and its extensions (8L)
3. The Representative Agent Neoclassical Macro Model or the Ramsey-Cass-Koopmans (Ramsey-Solow Model) (8L)
4. The Overlapping Generations Model (OLG model) or the Diamond model (10L)
5. New Growth Theory (30L)
(Barro Model, Lucas Model, Green Growth Model, Romer Model)

Readings:

Charles I Jones, Introduction to Economic Growth (2nd edition), W. W. Norton & Co. (Indian edition: Viva Books Private Ltd., 2006)

D. Romer, Advanced Macroeconomics (3rded), McGraw-Hill, 2006. Ch 3.

R J Barrow and Xavier, Sala-i-Martin, Economic Growth, McGraw-Hill, 1995.

Robert Barro, Macroeconomics, MIT Press, 1997.

ECPO 17: Economics of Corruption (50 marks)

Total Lecture Hours: 60

Brief

Corruption is an economic, political, and human rights problem. Almost every country on the planet has some form of corruption. Corruption can undermine economic growth and political stability; lead to efficiency losses; and impede access to resources such as credit or public health; and ultimately reduce governance credibility and effectiveness. Corruption distorts trade and investment flows and it can facilitate illegal activities such as trafficking in women, drugs, or money laundering. In this course, we propose to examine corruption from real world as well as scholarly perspectives. We will use case studies, debates, guest lectures, and items from the news to examine how corruption can affect effective governance at the national and international levels and its trade spillovers. We will also examine how new technologies and strategies (from cell phones to the Extractive Industry Transparency Initiative) can reduce corruption and improve governance.

Course Objective

Upon completing the course, students will:

- Understand the roots of corruption and its variants;
- Understand the debate among scholarly disciplines on corruption;
- Evaluate how corruption affects and distorts economic growth;
- Be able to assess global and national strategies to reduce corruption; and
- Evaluate how technology can facilitate and undermine accountability.

Learning Outcomes

- Be able to comprehend both corruption and anticorruption counterweights.
- Understand strategies at the national and international level to combat corruption.
- Understand how corruption undermines democracy and constrains the voice of the poor.
- Understand its relationship to the resource curse, trade, and other economic activities.
- Understand that transparency does not automatically yield accountability.
- Help students develop comparative evaluation processes and skills essential to citizenship and policy stewardship.

Course Outline

Introduction: Conceptualizing and Measuring Corruption

10L

References:

- Mireille Razafindrakoto and Francois Roubaud, "Are International Databases on Corruption Reliable? A Comparison of Expert Opinion Surveys and Household Surveys in Sub-Saharan Africa," *World Development*, vol. 38, no. 8 (August 2010): 1057-69.
- Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi, "The Worldwide Governance Indicators: Methodology and Analytical Issues," *World Bank Policy Research Working Paper No. 5430*
- Benjamin A. Olken, "Corruption Perceptions vs. Corruption Reality," *Journal of Public Economics*, vol. 93, no. 7-8 (August 2009): 950-64.

Theoretical Models of Corruption

10L

References:

- Oskar Kurer, "Why do Voters Support Corrupt Politicians?" in Arvind K. Jain, ed., *The Political Economy of Corruption* (London and New York: Routledge, 2001).
- Susan Rose-Ackerman, *Corruption and Government: Causes, Consequences, and Reform* (Cambridge: Cambridge University Press, 1999), Chapter 7.
- Susan Rose-Ackerman, *Corruption: A Study in Political Economy* (New York: Academic Press, 1978), Chapters 2 and 5.
- David Kang, *Crony Capitalism: Corruption and Development in South Korea and Philippines* (Cambridge: Cambridge University Press, 2002), Chapter 3.
- Mancur Olson, *Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships* (New York: Basic Books, 2000), Chapters 1 and 2.3.
- Pranab Bardham, "Corruption and Development: A Review of Issues," *Journal of Economic Literature*, vol. 35, no. 3 (September 1997): 1320-1346.

Corruption as Rational Choice: Development & Corruption

10L

Reference:

- Banerjee, A.V., (1997), A theory of Misgovernance, *The Quarterly Journal of Economics*, November 1997.
- Becker, S.G., (1968), Crime and Punishment: An Economic Approach, *Journal of Political Economy*, 76/2.
- Marjit, S. & Shi, H. (1998), On Controlling Crime with Corrupt Officials, *Journal of Economic Behaviour & Organization*, 34.
- Mukherjee, D. & Png, I.P.L., (1995), Corruptible Law Enforcers: How Should They Be Compensated?, *Economic Journal*, 105, 145-159.
- Rose-Ackerman, S. (1975), The Economics of Corruption, *Journal of Public Economics*, 4, 187 – 203.
- Shleifer, A., & Vishny, R. (1993), Corruption, *Quarterly Journal of Economics*, 108.

Trade, Development & Corruption

10L

References:

- Bhagwati, J. N., & Chipman, J. S. (1974), (Eds.), *Illegal Transaction in International Trade: Theory & Evidence*, N-H Publishing Company, Amsterdam.
- Biswas A.K. & S. Sengupta, 2015, Corrupt Importers, Domestic Producers & Welfare: Role of Trade Policy. *Economics & Politics* 27/3.

Liu ,Xuepeng, 2013, Tax avoidance through re-imports: The case of redundant trade. *Journal Development Economics* 104, 152 – 64.

Environment, Development & Rent Seeking

10L

References:

Biswas, A.K., Farzanegan, M.R., and Thum, M. 2012. "Pollution, shadow economy and corruption: theory and evidence," *Ecological Economics*, 75, 114-125.

Biswas, A. K., &Thum, M. (2017). Corruption, environmental regulation and market entry. *Environment and Development Economics*, 22(1), 66-83.

Fredriksson, P.G., and Svensson, J. 2003. "Political instability, corruption and policy formation: the case of environmental policy," *Journal of Public Economics*, 87, 1383-1405.

Ivanova, K. 2011. "Corruption and air pollution in Europe," *Oxford Economic Papers*, 63, 49-70.

Development, Informal Sector & Shadow Economy

10L

References:

Agenor, P.R., 1996. The labor market and economic adjustment. *IMF Staff Papers* 32, 261–355.

Agenor, P.R., Montiel, P., 1996. *Development Macroeconomics*. Princeton Univ. Press, New Jersey.

Dessey, S., Pallage, S., 2003. Taxes, inequality and the size of the informal sector. *Journal of Development Economics* 70, 225–233.

Marjit, S., 2003. Economic reform and informal wage. *Journal of Development Economics* 72, 371–378.

Marjit, S., Ghosh, S. & Biswas, A. K. (2007), Informality, corruption and trade reform, *European Journal of Political Economy*, 23.

Marjit, S. & Mandal, B (2016), *International Trade, Migration & Unemployment – The Role of Informal Sector*, *Economics & Politics* 28/1.

ECPO18. Macroeconomics of Developing Countries (50 marks)

Total Lecture Hours: 60

Course Objectives: To teach Macroeconomics suitable for the developing countries using distinctive concepts, analytical structures and models as presented in different schools of thought. The objective of this course is not only to equip the students with a variety of new concepts and methods and a variety of policy analysis but also to make them understand the specificities of the developing countries.

Learning Outcomes: This course is expected to help the students to understand the distinctive structural features of the contemporary developing world with an understanding about the corresponding policy discourses – its problems and prospects from Structuralist, Neo-Keynesian, Marxian/Kaleckian and Neo-Classical point of views. The students would be equipped to handle policy challenges in the context of the developing economies.

1. Structuralist Models

5L

- a. Lance Taylor: Structuralist Macroeconomics, Basic Books, 1983. [Chapters: 1-3]

2. Neo-Keynesian Models

5L

- a. MihirRakshit: Labour Surplus Economy: A Neo-Keynesian Approach, Macmillan, 1982. [relevant sections]
- b. MihirRakshit: Effective demand in a developing country: approaches and issues', in Studies in the Macroeconomics of Developing Countries, ed. by MihirRakshit: 1-25; Oxford University Press. 1989.

3. Marxian/Kaleckian Models

20L

- a. M. Kalecki: Essays on Developing Economies, Harvester Press, 1976 [relevant sections]
- b. Amit Bhaduri: Macroeconomics, Macmillan 1986; chap. 2.
- c. Amitava Bose: Short period equilibrium in a less developed economy', in Studies in the Macroeconomics of Developing Countries, (ed.) MihirRakshit. 1989: 26-41.
- d. Saumya Chakrabarti, Inclusive Growth and Social Change, OUP, 2016 [Chapter: 2]
- e. Saumya Chakrabarti 2013: Interrogating inclusive growth: formal-informal duality, complementarity, conflict; in Cambridge Journal of Economics, Volume 37, Issue 6.
- f. Saumya Chakrabarti, Pratip Kumar Datta, 2019. Problems of financing development management: a Kaleckian analysis.. *Review of Radical Political Economics*, Volume 51, Issue 3. <https://doi.org/10.1177/0486613418820952>

4. Neo-Classical Models

30L

- a. Dornbusch, R. (1987). Open economy macroeconomics: new directions. NBER Working Paper Working Paper No. 2372.

- b. Mundell, R. A. (1963). Capital mobility and stabilization policy under fixed and flexible exchange rates. *Canadian Journal of Economics and Political Science/Revue canadienne de economiques et science politique*, 29(4), 475-485.
- c. Fleming, J. M. (1962). Domestic financial policies under fixed and under floating exchange rates. *Staff Papers*, 9(3), 369-380.
- d. Chowdury, A., & Hossain, A. (2001). Open Economy: Macro-Economics for Developing Countries. *Massachusetts (US): Edward Elgar Publishing Inc.*
- e. MacDougall, G. D. A. (1960). The benefits and costs of private investment from abroad: A theoretical approach. *Bulletin of the Oxford University Institute of Economics & Statistics*, 22(3), 189-211.
- f. Hansen, H., & Rand, J. (2006). On the causal links between FDI and growth in developing countries. *World Economy*, 29(1), 21-41.
- g. Driffield, N., & Jones, C. (2013). Impact of FDI, ODA and migrant remittances on economic growth in developing countries: A systems approach. *The European Journal of Development Research*, 25(2), 173-196.
- h. Chakraborty, C., & Nunnenkamp, P. (2008). Economic reforms, FDI, and economic growth in India: a sector level analysis. *World Development*, 36(7), 1192-1212.