



## ST. XAVIER'S UNIVERSITY, KOLKATA

### SYLLABUS FOR MA ECONOMICS (FOR THE BATCH 2022 onwards)

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COURSE OUTLINE								
Sem	Paper Type	Course Title	Full Marks	Pass Marks	CIA MARKS		End-Sem Marks	Credits
					WT	O		
I	Core Paper	Micro Economics - I	100	40	10	10	80	6
	Core Paper	Macro Economics - I	100	40	10	10	80	6
	Core Paper	Statistics and Econometrics	100	40	10	10	80	6
	Core Paper	Development Economics	100	40	10	10	80	6
<b>TOTAL</b>			<b>400</b>	<b>TOTAL</b>			<b>24</b>	
II	Core Paper	Micro Economics - II	100	40	10	10	80	6
	Core Paper	Macro Economics - II	100	40	10	10	80	6
	Core Paper	Econometrics and Computer Applications (Th.)	60	24	5	5	50	6
		Econometrics and Computer Applications (Pr.)	40	16	10		30	
	Core Paper	Contemporary Issues in Indian Economy	100	40	10	10	80	6
<b>TOTAL</b>			<b>400</b>	<b>TOTAL</b>			<b>24</b>	
III	Core Paper	International Economics	100	40	10	10	80	6
	Core Paper	Guided Study	100	40	20		80	6
	Elective Paper	Advanced Econometrics - I (Th.)	50	20	10		40	6
		Advanced Econometrics - I (Pr.)	50	20	10		40	
	Elective Paper	Financial Economics - I	100	40	10	10	80	6
	Elective Paper	Monetary Economics - I	100	40	10	10	80	6
	Elective Paper	Political Economy - I	100	40	10	10	80	6
	Elective Paper	Social choice and Mechanism Design - I	100	40	10	10	80	6
	Elective Paper	Sustainable Development-I	100	40	10	10	80	6
	Elective Paper	International Macroeconomics - I	100	40	10	10	80	6
Elective Paper	Labour Economics-I	100	40	10	10	80	6	

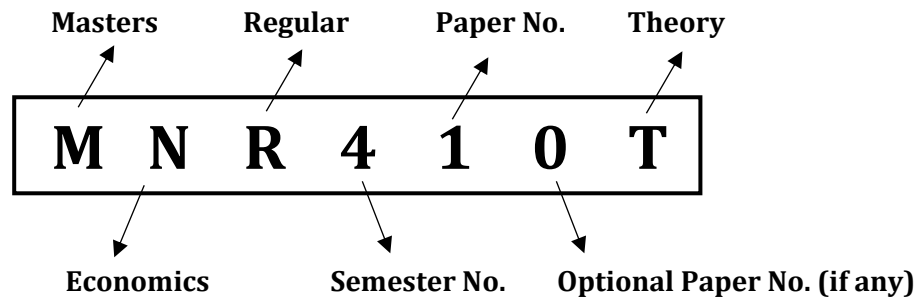
<b>COURSE OUTLINE</b>								
Sem	Paper Type	Course Title	Full Marks	Pass Marks	CIA MARKS		End-Sem Marks	Credits
					WT	O		
<b>TOTAL</b>			<b>400</b>	<b>TOTAL</b>				<b>24</b>
IV	Core Paper	Public Economics	100	40	10	10	80	6
	Core Paper	Guided Study	100	40	20		80	6
	Elective Paper	Advanced Econometrics - II (Th.)	50	20	10		40	3
		Advanced Econometrics - II (Pr.)	50	20	10		40	3
	Elective Paper	Financial Economics - II	100	40	10	10	80	6
	Elective Paper	Monetary Economics - II	100	40	10	10	80	6
	Elective Paper	Political Economy - II	100	40	10	10	80	6
	Elective Paper	Social choice and Mechanism Design - II	100	40	10	10	80	6
	Elective Paper	Sustainable Development-II	100	40	10	10	80	6
	Elective Paper	International Macroeconomics - II	100	40	10	10	80	6
	Elective Paper	Labour Economics-II	100	40	10	10	80	6
<b>TOTAL</b>			<b>400</b>	<b>TOTAL</b>				<b>24</b>

At the beginning of Semester III, the department will announce which of the elective papers will be offered in Semesters III and IV. The students are required to choose any two papers from these announced papers. The department may limit maximum/minimum number of students enrolled in any particular elective paper that is being offered, and such limit, if any, will be announced at the end of Semester II.

#### **ACRONYMS (AS APPLICABLE)**

T = Theory    WT = Written Test    P = Practical    O= Others (seminar/ presentation/class room activity, etc.)  
 J = Project

**PAPER CODE ILLUSTRATION**



- **Program Educational Objective for M.A. in Economics:**

This program aims to:

1. Get exposure to advanced Economic theory.
2. Develop the aptitude to integrate economic theory and practices of broad development aspects of international and national economic policies and analysis of different sectors.
3. Teach the quantitative technique to handle a wide range of real-life data.
4. Equip the students with the required skills so as to enable them to take prominent roles in a wide spectrum of employment and research.

- **Program Educational Outcome (PEOs)for M.A. in Economics:**

After completion of the program, students will:

1. Learn the concepts of advanced economic theories.
2. Get an idea of the various types of real-world economic problems and gain an understanding of the various policy responses.
3. Learn the advanced mathematical and statistical techniques, the art of economic modeling necessary to analyze the broad spectrum of economic problems.
4. Learn the professional efficiency which is required in the contemporary job market and also in the field of research.

**Course Name:** Microeconomics I  
**Course Code:** MNR110T  
**Credit:** 6  
**Semester:** I  
**Nature of the Course:** Core Course  
**No. of Lecture hours:** 75  
**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. The course will provide the students with knowledge of the utility maximization problem of a consumer along with concepts of compensating variation, equivalent variation, and duality in consumption using a mathematical approach. This course will also provide insight into how individuals make decisions in a risky environment.
2. This course will provide the students the knowledge of profit maximization and cost minimization problems using a mathematical approach. Furthermore, the students will be introduced to the perfect competitive behavior of the firm.
3. This course will provide the students with knowledge of the concepts of general equilibrium analysis, such as competitive equilibrium, Pareto optimality, and core with the help of the exchange economy, one-consumer, one-producer economy and 2 by 2 production model.
4. This course will provide the students with knowledge of how the efficient allocation of productive resources takes place in a free market economy. Furthermore, the students will be able to differentiate between private and social costs in the economy caused by externalities and be able to find solutions to the public goods and externalities problems.
5. The students will be able to link the current microeconomic theory to economic policies. Furthermore, the course will strengthen the problem-solving skills that are applied to microeconomic theory.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Consumer Behaviour	1.1 Preference and choice: Preference relation and utility function; choice rule; relationship between preference relation and choice rule.		5		1, 5

		<p>1.2 Classical demand theory: Consumption set, competitive budget, properties of preference, preference and utility, utility maximization problem, Indirect Utility Function, Walrasian demand correspondence; Expenditure minimization problem; Expenditure function; Hicksian demand correspondence; Duality approach: Relationship between demand indirect utility and expenditure function; <u>Integrability</u>; Welfare evaluation of economic changes.</p> <p>1.3 Revealed preference: Relationship between choice - based approach and preference-based approach.</p> <p>1.4 Uncertainty: Concept of lotteries, expected utility, measures of risk aversion, the demand for insurance.</p>				
2	<b>Theory of the Firm and the Competitive Market</b>	<p>2.1 Firm's technology: Production set and input-output vector; distinct input-output technology; single output technology; types of single output technology: Cobb-Douglas, CES.</p> <p>2.2 Profit</p>		15		2, 5

		<p>maximization: Profit function and its properties, Hotelling's Lemma and properties of factor demand functions.</p> <p>2.3 Cost minimization – Properties of Cost function and Conditional factor demand functions; Shephard's Lemma.</p> <p>2.4 The competitive firm – market equilibrium — taxes and subsidies.</p>				
3	<b>General equilibrium</b>	<p>3.1 The exchange economy: Equilibrium (Existence, uniqueness, stability) – Pareto Optimality - concept of core - Core equivalence theorem.</p> <p>3.2 One consumer one producer economy</p> <p>3.3 The Production Model- fixed and flexible coefficients – relation between endowments and product mix – relation between commodity prices and factor prices.</p>		15		3, 5
4	<b>Welfare</b>	<p>4.1 Fundamental theorems of welfare economics;</p> <p>4.2 Public goods and externalities.</p>		10		4, 5

**Suggested Readings:**

1. Anjan Mukherji, *An Introduction to General Equilibrium Analysis*, Oxford University Press, 2002.
2. Avinash Dixit, *Optimization in Economic Theory*, Oxford University Press, 1990.
3. David M. Kreps, *A Course in Microeconomic Theory*, Princeton University Press, 2020.
4. Hal R. Varian, *Microeconomic Analysis*, 3rd Edition, Viva Books Pvt. Ltd., 2009
5. Andreu Mas-Colell, Michael Dennis Whinston and Jerry R. Green, *Microeconomic theory*, Oxford University press, 2018.
6. Geoffrey Alexander Jehle and Philip J. Reny, *Advanced Microeconomics Theory*, Prentice Hall, 2011.



**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>	√		√	
CLO <sub>3</sub>	√		√	
CLO <sub>4</sub>	√		√	√
CLO <sub>5</sub>		√		
For MNR110T	√	√	√	√

**Course Name:** Macroeconomics—I**Course Code:** MNR120T**Credit:** 6**Semester:** I**Nature of the Course:** Core Course**No. of Lecture hours:** 75**No. of Tutorial contact hours:** 15**Course Learning Outcome:**

1. To understand and analyze the factors that affect income, demand, employment, price in an economy.
2. To know the alternative approaches towards macroeconomic analysis.
3. To understand and analyze the macroeconomic policy in an open economy.
4. To analyze the formation of expectations and its effect on the macroeconomy.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Preliminaries	A Short revision of important topics in the UG Course (AD-AS framework etc.)		5		1
2	Two Alternative Approaches: Demand based approach and supply-based approach	Keynesian Revolution— Demand Constrained System, Equilibrium unemployment		15		1, 2

		with wage-price flexibility. Monetarism and critique of Keynesian system— introduction to supply side models.				
3	Rational Expectation and New-classical Macroeconomics	Adaptive Expectation; Rational Expectation and the Lucas Critique - A Market clearing Model with rational Expectation and the Policy Irrelevance Results; Criticisms of Rational Expectations and Bounded Rationality		15		2, 4
4	Kaleckian framework and Structuralist Macroeconomics:	Role of effective demand; Stock-flow relationship; Prices and distribution; Neo-Kaleckian macro model – wage-led growth vis-à-vis profit-led growth. The Macroeconomics of Developing Countries: Wage-good constraint, balance of		15		1, 2

		payment constraint— quantity versus price adjustment under various constraints. Alternative model closures.				
5	Consumption and Investment	Consumption under uncertainty; Durable and nondurable consumption; Neo-classical Investment Theories and Tobin's q Theory; Investment and uncertainty		10		1, 2
6	Open Economy Macroeconomics	Monetary and fiscal policies with capital mobility; Mundell-Fleming Model; Theories of Exchange rate determination; Intertemporal theory of Current account: Micro foundation; International Capital Market Integration		20		3

**Suggested Readings:**

1. D. Romer, *Advanced Macroeconomics*, McGraw Hill, 2006.
2. P. R. Krugman, M. Obstfeld and M. J. Melitz, *International Economics: Theory and Policy*, Pearson Education, 2017.
3. M. Obstfeld, K. S. Rogoff and K. Rogoff, *Foundations of international macroeconomics*, The MIT Press, 1996.

4. L. Taylor, *Reconstructing Macroeconomics Structuralist Proposals and Critiques of the Mainstream*, Harvard University Press, 2009.
5. L. Taylor, *Structuralist Macroeconomics*, Basic Books, New York, 1983.
6. Amit Bhaduri, *Macroeconomics: Dynamics of Commodity Production*, Macmillan, 1987.
7. Michael Kalecki, *Selected Essays on the Dynamics of a Capitalist Economy*, Cambridge University Press, 1971.
8. Ben J Heijdra and F Van der Ploeg, *The Foundations of Modern Macroeconomics*, Oxford University Press, 2017.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>	√		√	√
CLO <sub>3</sub>	√		√	√
CLO <sub>4</sub>	√		√	√
CLO <sub>5</sub>	√		√	√
CLO <sub>6</sub>	√		√	√
For MNR120T	√		√	√

**Course Name:** Statistics and Econometrics

**Course Code:** MNR130T

**Credit:** 6

**Semester:** I

**Nature of the Course:** Core Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Outcome:**

1. To analyze models for time series and binary choice datasets.
2. Ability to use different software (EXCEL)
3. Students will learn the theoretical basis for techniques widely used in empirical research and consider their application in a wide range of problems.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Review of Probability and Statistics	Review of Descriptive Statistics; Fundamentals of Probability: Random Variables and their Probability Distributions (Binomial, Poisson and Normal).		10		1, 3
2	Review of Probability and Statistics	Mathematical Expectation and its Properties: Joint Distributions; Conditional Distributions and independence; Probability Density Function and Central Limit Theorem.		5		1
3	Review of Probability and Statistics	Sampling Theory: Distributions of sample mean and sample variance.		5		1, 3
4	Review of Probability and Statistics	Estimation: Parameter; Statistic; estimates and estimators; point estimators and its properties (small sample and its asymptotic properties) and confidence intervals for population parameters.		5		1, 3
5	Review of Probability	Practical Lab Sessions:		5		3

	and Statistics	Exposure to MS-Excel.				
6	Classical Linear Regression Model	Two-variable and K-variable CLRM ANOVA in CLRM Inference Analysis		15		3
	Violation of the OLS Assumptions	Heteroscedasticity : Meaning; Problems created by its Presence; Testing for its presence; Estimating Methods in its Presence		10		1, 3
	Violation of the OLS Assumptions	Autocorrelation: Meaning; Problems created by its Presence; Testing for its presence; Estimating Methods in its Presence.		10		1, 3
	Violation of the OLS Assumptions	Multicollinearity: Meaning; Problems created by its presence; Testing for its Presence; Estimating Methods in its Presence.		10		1, 3

References:

1. A. M. Goon, B. Dasgupta & M. K. Gupta, Fundamentals of Statistics, Vol I, World Press Private limited, 1968.
2. A. M. Mathai & P. N. Rathie, Probability and Statistics, Palgrave Macmillan, 1977.
3. Damodar N Gujarati & Dawn C. Porter, Basic Econometrics, McGraw Hill, 2009.
4. Dilip M. Nachane, Econometrics: Theoretical Foundations and Empirical Perspectives, Oxford University Press, 2006.
5. G. S. Maddala & Kajal Lahiri, Introduction to Econometrics, Wiley, 2009.
6. Jan Kmenta, Elements of Econometrics, McMillan-Maxwell, 1986.
7. Jeffrey M. Wooldridge, Introductory Econometrics: A Modern Approach, Cengage Learning, 2012.

8. John Johnston & John Enrico DiNardo, Econometric Methods, McGraw Hill, 2007.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>			√	
CLO <sub>2</sub>		√	√	
CLO <sub>3</sub>		√		
For MNR130T		√	√	

**Course Name:** Development Economics

**Course Code:** MNR140T

**Credit:** 6

**Semester:** I

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

After the completion of the course

**CLO1:** Students would be able to understand immense and varied economic challenges facing the world's impoverished and developing economies in general, and interpret what practical and effective policies can be implemented to address these challenges.

**CLO2:** Students would be able to understand and interpret theoretical models that illustrate important development issues.

**CLO3:** It will develop capability to derive and discuss policy implications.

**CLO4:** Students would be familiarized with cutting edge research topics in the field

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks Allotted	Associated Course Learning Outcome (CLO)
1	Roots of Development theory	Underdevelopment as a historical process and underdevelopment structures: capability and functioning and freedom; economic policy and the state; Gender related issues		13		1, 3

2	Coordination Failure and Big Push	Complementarities and Co-ordination failure – Demand Complementarities and Technological Complementarities - External Economies and multiple equilibria; Vicious circle of poverty and industrialization.		12		1, 2, 4
3	Economic Growth and Income Distribution	(a) Capital Market: - Imperfections in Capital Market: organized and unorganized capital market (b) Labour Market: Informal Sector- Importance, Nature of employment, Linkages with Formal Sector; (c) Land Market & Land Acquisition: Industry versus Agriculture Debate, the SEZ controversy. Problems of acquisition of agricultural land, country experiences; (d) Market Inter-linkage: Effects on Growth and Income Distribution		25		1, 2, 3, 4
4	Trade and Development	a. FDI- Modes, types, determinants, technology access & consequences b. Trade as a vent for surplus; Trade as an engine of growth; Capital Flow, International Labor Mobility and Welfare; Terms of Trade and Growth		25		2, 3, 4



**Suggested Readings:**

Bardhan, Pranab. "Alternative approaches to development economics." Handbook of development economics 1 (1988): 39-71.

Debraj Ray, *Development Economics*, OUP, 1999

Evans, David. "Alternative perspectives on trade and development." Handbook of Development Economics 2 (1989): 1241-1304.

Kaushik Basu, *Analytical Development Economics*, MIT Press, 2003.

Kremer, M. (1993). The O-ring theory of economic development. *The Quarterly Journal of Economics*, 108(3), 551-575.

Krugman, Paul. "History versus expectations." *The Quarterly Journal of Economics* 106, no. 2 (1991): 651-667.

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny. "Industrialization and the big push." *Journal of political economy* 97, no. 5 (1989): 1003-1026

Rajat Acharyya and Saibal Kar, *International Trade & Economic Development*, Oxford University Press, 2014.

Ravallion and Chen (2001): 'Measuring Pro-poor Growth'. World Bank

Sarbajit Chaudhuri and Ujjaini Mukhopadhyay, *Foreign Direct Investment in Developing Countries*, Springer India, 2014.

Sarbajit Chaudhuri and Ujjaini Mukhopadhyay, *Revisiting the Informal Sector, A General Equilibrium Approach*, Springer New York, 2010

Sen, A. (1999). Commodities and capabilities. OUP Catalogue.

Sugata Marjit and Saibal Kar, *The Outsiders - Economic Reform and Informal Labour in a Developing Economy*, Oxford University Press, 2011

**CLO-PLO Mapping:**

CLO/PLO	PLO1	PLO2	PLO3	PLO4
CLO1		√		
CLO2	√			
CLO3		√		
CLO4	√			√
For MNR140T	√	√		√

**Course Name:** Microeconomics II  
**Course Code:** MNR210T  
**Credit:** 6  
**Semester:** II  
**Nature of the Course:** Core Course  
**No. of Lecture hours:** 75  
**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. The course will provide the students with advanced knowledge of microeconomic theory and its applications.
2. The course will provide the students with the required knowledge to identify, analyze and solve diverse economic situations using techniques of game theory.
3. The course will provide the students with the required knowledge to address different issues that are related to the economics of information.
4. The course will provide the students with the required knowledge to identify research problems and pursue research work that is related to microeconomic theory.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	The Theory of firm	1.1 Competitive markets: pareto-optimality and competitive equilibrium, partial equilibrium and competitive analysis; Welfare analysis in the partial equilibrium context Free entry and long run competitive equilibrium 1.2 Monopoly pricing; Durable goods monopoly; Market failure, imperfect markets, sources of monopoly power, monopoly market equilibrium, price discrimination – first, second and		5		1

		third degree, tax incidence. 1.3 Monopolistic Competition.				
2	Game Theory	2.1 Strategic Form Games: Strategic Form Games and Dominant Strategies; Dominance Solvability, Nash Equilibrium, Mixed Strategies. 2.2 Extensive Form Games: Backward Induction; Subgame Perfect Equilibrium, Finitely Repeated Games, Infinitely Repeated Games. 2.3 Imperfect Information, Bayesian Games. 2.4 Bargaining		15		1, 2
3	Oligopoly and Strategic Interactions	3.1 Static Models of Oligopoly 3.2 Limit pricing and Entry Deterrence 3.3 The Cartel Problem- Detection and Public Policy 3.4 Dynamic Price Competition and Tacit Collusion.		15		1, 2,4
4	Information Economics	4.1 Adverse Selection-Signaling and Screening. 4.2 Moral Hazard and Principal Agent Problem- Symmetric information and Asymmetric information.		10		1, 3,4

### Suggested Readings:

Geoffrey Alexander Jehle and Philip J. Reny, *Advanced Microeconomics Theory*, Prentice Hall, 2011.

Jean Tirole, *The Theory of Industrial organization*, MIT Press, 1988.

Lynne Pepall, Daniel J Richards and George Norman, *Industrial Organization: Contemporary Theory and Empirical Applications*, Wiley, 2011.

Martin J. Osborne, *An Introduction to Game Theory*, Oxford University Press, 2009.

Martin J. Osborne and Ariel Rubinstein, *A Course in Game Theory*, MIT Press, 1994.

Oz Shy, *Industrial Organization: Theory and Application*, MIT Press, 1995.

P. K. Dutta, *Strategies and Games*, MIT Press, 1999.

Andreu Mas-Colell, Michael Dennis Whinston and Jerry R. Green, *Microeconomic theory*, Oxford University press, 2018.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√			
CLO <sub>2</sub>			√	
CLO <sub>3</sub>			√	
CLO <sub>4</sub>				√
For MNR210T	√		√	√

**Course Name:** Macroeconomics—II

**Course Code:** MNR220T

**Credit:** 6

**Semester:** II

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. To develop advanced analytical macroeconomic models.
2. Understanding and analyzing issues like business cycles and growth theory

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Mathematical Preliminaries	Dynamic Optimization		10		1
2	The Representative Agent Neoclassical Macro Model	Ramsey-Cass-Koopmans model		10		1, 2
3	Overlapping Generations Model	Diamond model; Dynamic inefficiency; Ricardian Equivalence		15		1, 2

4	New-Keynesian Macroeconomics and Real business cycles theory	Keynes and New-Keynesian; Price setting under monopolistic competition; Menu Costs, Price Stickiness and Monetary Non-Neutrality; Strategic Complementarities, Coordination Failures and Multiple Equilibria Some facts about economic fluctuations; Behavior of household and firm; A baseline real business cycle model – technology shock and fiscal shock		20		1, 2
5	Modern Growth Theory	Harrod-Domar Model and the problem of knife edge—Exogenous technical progress; Endogenous growth model – AK model; Endogenous growth from human capital accumulation – Lucas model; Endogenous technological change – Romer model		20		1, 2

**Suggested Readings:**

1. D. Romer, *Advanced Macroeconomics*, McGraw Hill, 2006.
2. R. J. Barro and X. Sala-i-Martin, *Economic Growth*, Prentice Hall of India, 2004.
3. O.J. Blanchard and S. Fischer, *Lectures on Macroeconomics*, Prentice Hall of India, 1989.
4. Amartya Sen, *Growth Theory*, Penguin, 1960.

5. Philippe Aghion and Peter W. Howitt, *The Economics of Growth*, MIT Press, 2008.
6. Christopher Tsoukis, *Theory of Macroeconomic Policy*, OUP, 2020.
7. George McCandless, *The ABCs of RBCs: An Introduction to Dynamic Macroeconomic Models*, Harvard University Press, 2008.
8. Ben J Heijdra and F Van der Ploeg, *The Foundations of Modern Macroeconomics*, Oxford University Press, 2017.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>	√		√	√
CLO <sub>3</sub>	√		√	√
CLO <sub>4</sub>	√		√	√
CLO <sub>5</sub>	√		√	√
CLO <sub>6</sub>	√		√	√
For MNR220T	√		√	√

**Course Name:** Econometrics and Computer Applications (Theory + Practical)

**Course Code:** MNR230T & MNR230P

**Credit:** 6

**Semester:** II

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. To analyze models for different datasets, including the cross section, time series, panel and binary choice dataset.
2. Ability to use Econometric software.
3. To understand the application of the econometric tools in Indian dataset.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Violation of Assumptions	Autocorrelation; Multicollinearity;		5		1

		Omitted variable; Errors in variable				
2	Model Evaluation and Diagnostic tests	Test for Stability; The LR, Wald and LM test; AIC, SIC, HQ; Functional form, Non-normality of errors, Selection of regressors		10		1, 3
3	Dummy Variables	Dummy variable for change in Intercept and Slope; Dummy variables for testing stability of regression coefficient; Dummy dependent variable – Linear Probability model, Logit and Probit model		10		1
4	Simultaneous Equation System	Problem of Identification: Structural Form and Reduced Form, Rank and Order Condition; Method of Estimation – ILS, 2SLS, 3SLS and Instrumental variable method; Test for Exogeneity		10		1
5	Time Series Data	Structure of time series- AR, ARMA, MA, ARIMA, identification of series-Box-Jenkins approach; Trend Stationary Process & Difference Stationary Process; Concept of Stationarity		10		1

		and Unit root test; Cointegration and Error Correction; Test for Causality				
6	Introduction to Panel Data	Pooled versus Panel Data; Random Effect and Fixed Effect Models		10		1
7	Practical	Bivariate and Multivariate OLS regression and its interpretation; Hypothesis testing; Model evaluation; Test for Heteroscedasticit y, Autocorrelation, Multicollinearity; Model Evaluation and other Diagnostic tests; OLS estimation with Dummy independent variables; Estimation of Simultaneous Equations; Introductory Time series – Identification of AR, MA process, ACF, PACF, Unit root test, Cointegration, ECM, Granger Causality		20		2, 3

**Suggested Readings:**

1. G. S. Maddala and Kajal Lahiri, *Introduction to Econometrics*, 4<sup>th</sup> Edition, Wiley, 2009.
2. Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, 6<sup>th</sup> Edition, Cengage Learning, 2015.
3. John Johnston and John Enrico DiNardo, *Econometric Methods*, 4<sup>th</sup> Edition, McGraw-Hill, 2007.
4. William H. Greene, *Econometric Analysis*, 8<sup>th</sup> Edition, Pearson, 2018.



5. Chris Chatfield, *The Analysis of Time Series: An Introduction*, 6<sup>th</sup> Edition, CRC Press, 2003.
6. Jeffrey M. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, 2<sup>nd</sup> Edition, MIT Press, 2010.
7. Samprit Chatterjee and Ali S. Hadi, *Regression Analysis by Examples*, 4<sup>th</sup> Edition, Wiley, 2006.
8. Walter Enders, *Applied Econometric Time Series*, 4<sup>th</sup> Edition, Wiley, 2014.
9. M. Hashem Pesaran, *Time Series and Panel Data Econometrics*, Oxford University Press, 2015.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>			√	√
CLO <sub>3</sub>			√	√
For MNR230T & MNR230P	√		√	√

**Course Name:** Contemporary Issues in Indian Economy

**Course Code:** MNR240T

**Credit:** 6

**Semester:** II

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Develop ideas about the basic characteristics of Indian economy and its potential.
2. Grasp the importance of planning undertaken by the government of India and have knowledge of the various objectives, failures, and achievements as the foundation of the ongoing planning and economic reforms undertaken by the government.
3. To understand the basic characteristics of economic development and the growth of Indian economy.
4. To analyze new economic policies (privatization, liberalization, and globalization) in India.
5. Understanding of problems and measures from a contextual standpoint.
6. Ability to identify and analyze current issues.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Pre-reform development experience	Indian Economy at Independence; Food crisis; Industrial stagnation since mid-60s; Macroeconomic crisis of 1980s: causes and dimensions – Rationale of Economic reforms in India – Issues related to regional disparity in growth and per capita income – the convergence debate		15		1, 2
2	Growth and Sectoral Performance in the Post Reform	Aggregate GDP growth – Structural changes and Productivity growth during reform era – Reforms in Agriculture sector and rural indebtedness – Agriculture growth and Distribution – Manufacturing growth and productivity issues – Disinvestment and Privatization – Service led growth.		15		1, 2, 3
3	Trade Reforms	Trade and Payments reform in India – Merchandise trade performance and determinants – Trade in services – Balance of Payments – Issues related to Foreign Exchange Reserves and Capital account convertibility.		10		1, 2, 4, 5, 6
4	Fiscal Reforms	Outline and Dimensions of Fiscal reforms – FRBM Act and fiscal prudence – Budgetary Developments with respect to state finances.		15		1, 2, 4, 5, 6
5	Financial Sector Reforms	Monetary policy reforms and their implication – Issues related to NPAs and Financial sector Reforms with emphasis on Banking sector reforms Narsimham Committee (I & II) –		10		1, 2, 4, 5, 6

		Insurance – Exchange rate and capital market; Finance and Growth in India, Corporate Firm performance and Economic growth in India.				
6	Inclusive Growth in India and Related Issues	Poverty and Income inequality: measurement issues–Poverty reduction–Employment generation (quantity and quality) – Reduction in regional disparities–Food security and the Public Distribution System Education and Health –Gender equity – Environmental sustainability.		10		1, 2, 3, 5, 6

### Suggested Readings:

1. Arvind Panagariya, *India the Emerging Giant*, Oxford University Press, 2008.
2. Bibek Debroy, *India: Redeeming the Economic Pledge*, Academic Foundation, 2004.
3. Economic Survey, Different Volumes.
4. Isher Judge Ahluwalia and I.M.D. Little, *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, 2012.
5. Isher Judge Ahluwalia, *Industrial Growth in India stagnation since the Mid-Sixties*, Oxford University Press, 1987.
6. Rao, J. Mohan and Amitava K. Dutt. "A decade of reforms: the Indian Economy in the 1990s." *External liberalization in Asia, post-socialist Europe, and Brazil* 13980 (2006).
7. John Felix Raj, *Disinvestment in India: Trends, Problems, and Prospects*, Regal Publications.
8. John Felix Raj, *Indian Economy: A Visionary Perspective*, Regal Publications.
9. Joshi, Vijay, and I. M. D. Little. "Macro-economic stabilization in India, 1991-1993 and Beyond." *Economic and Political weekly* (1993):2659-2665.
10. Charles W Calomiris and Jagdish N. Bhagwati, *Sustaining India's Growth Miracle*, Columbia University Press, 2008.
11. Jean Dreze and Amartya Sen, *An Uncertain Glory*, Penguin Books, 2013.
12. Jean Dreze and Amartya Sen, *India Development and Participation*, Oxford University Press, 2002.
13. Kaushik Basu and Annemie Maertens, *The Oxford Companion to Economics in India*, Oxford University Press, 2010.

14. Kaushik Basu, *An Economist in the real world*, Oxford University Press, 2016.
15. K. N. Raj et al., Dharma Narain studies on Indian Agriculture, Chapter 8, *Growth and Imbalances in Indian agriculture*, Oxford University Press.
16. Gupta, Monica Das, and PN Mari Bhat. *Intensified Gender Bias in India: A Consequence of Fertilty Decline*. Harvard University, Center for Population and Development Studies, 1995.
17. Pranab Bardhan, *The Political Economy of Development in India*, Blackwell, 1984.
18. Simmons, Colin. "The Indian economy: Recent development and future prospects edited by Robert E. Lucas and Gustav F. Papanek. (Delhi, Oxford University Press, 1988, pp. 374)." *Journal of International Development* 3, no. 4 (1991):565-566.
19. T. N. Srinivasan, Indian economic reforms: background, rationale, achievements, and prospects in *Economic Policy and state intervention* Edited by N. S. S. Narayanan, Oxford University Press.
20. Terence J. Byres, *The Indian Economy: Major Debates Since Independence*, Oxford University Press, 1999.
21. Uma Kapila, *Indian Economy Since Independence*, Academic Foundation, 1990.

#### **CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>		√		
CLO <sub>2</sub>		√		
CLO <sub>3</sub>		√		
CLO <sub>4</sub>		√		
CLO <sub>5</sub>		√		
CLO <sub>6</sub>		√		
For MNR240T		√		

**Course Name:** International Economics

**Course Code:** MNR310T

**Credit:** 6

**Semester:** III

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

### Course Learning Outcome: (CLO)

1. Have a good conceptual understanding of the key concepts and practical applications of international trade.
2. To understand the processes of international economic relations as a part of the global market economy's development.
3. Ability to outline the development of trade theory historically, differentiating between standard classical and orthodox trade theories.
4. To acquire skills that would help them to take rational decisions on issues related to the international economy.

### Course Content:

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1.	Trade theory & policy under perfect competition	Unit1: Basis of trade; absolute vs comparative advantage, gains from trade Unit2: Ricardian model of trade; Derivation of World Supply Curve; Multi-country extension, world PPF, Multi-good extension of Ricardian Model-; Dornbusch- Fisher-Samuelson model of continuum of goods  Unit 3: Specific factor model; output and income distribution, growth in factor endowments, the Dutch disease. Heckscher- Ohlin model; Rybczynski theorem; Stolper Samuelson theorem; factor price equalization; empirical tests of H-O theorem.  Unit 4: Commercial policy in trade, regional trading blocks. Trade creation		45		1, 2, 3

		and diversion.				
2	Trade, imperfect competition and development	<p>Unit 1: International trade, imperfect competition and increasing returns to scale, IRS and monopolistic competition, intra-industry trade ; horizontal product differentiation, vertical product differentiation, strategic trade theory and policy.</p> <p>Unit 2: Immiserizing growth; Brecher and Alejandro models of trade and welfare.</p> <p>Unit 3: Trade and wage inequality in developing; a simple general equilibrium analysis</p> <p>Unit4: Introduction to factor content approach.</p>		30		2, 4

### Suggested Readings:

Giancarlo Gondolfo, *International trade theory and policy*, Springer, 2013.

Jagdish N. Bhagwati, T. N. Srinivasan and Arvind Panagariya, *Lectures on International Trade*, MIT Press, 1998.

Kierzkowski (ed.), *Monopolistic Competition and International Trade*, OUP, 1984.

Paul Krugman, *Rethinking International Trade*, MIT Press, 1994.

Paul R. Krugman, Maurice Obstfeld and Marc J. Melitz, *International Economics: Theory and Policy*, Pearson Education, 2015.

Francisco L. Rivera-Batiz, Luis A Rivera-Batiz and Luis Rivera-Batiz, *International Finance and Open Economy Macroeconomics*, Macmillan, 1994.

R. Caves, J. Frankel and R.W. Jones, *World Trades & Payments* (9th Ed), Pearson Education, Rajat Acharyya, *International Economics: An Introduction to Theory and Policy*, Oxford University Press, 2013.

R. Jones, *International Trade: Essays in Theory*, North Holland, 1979.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>	√	√	√	
CLO <sub>3</sub>		√		√
For MNR310T	√	√	√	√

**Course Name:** Guided Study

**Course Code:** MNR320J

**Credit:** 6

**Semester:** III

**Nature of the Course:** Core Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. To design and manage a piece of original project work.
2. To develop a research proposal and protocol.
3. To discuss the ethical dimensions of their research and obtain appropriate ethical approval if needed.
4. To synthesize knowledge and skills previously gained and applied to an in-depth study.
5. To establish links between theory and methods within their field of study.
6. To select from different methodologies, methods, and forms of analysis to produce a suitable research design and justify their design.
7. To present the findings of their project in a written report.
8. Critically appraise and interpret published literature.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>		√		√
CLO <sub>2</sub>		√	√	√
CLO <sub>3</sub>				√
CLO <sub>4</sub>	√	√	√	
CLO <sub>5</sub>	√	√	√	
CLO <sub>6</sub>		√	√	√
CLO <sub>7</sub>				√
CLO <sub>8</sub>				√
For MNR320J	√	√	√	√

**Course Name:** Advanced Econometrics - I**Course Code:** MNR330T& MNR330P (Theory + Practical)**Credit:** 6**Semester:** III**Nature of the Course:** Elective Paper**No. of Lecture hours:** 75**No. of Tutorial contact hours:** 15**Course Outcome:**

On completion of this course, the students will be able:

1. To analyse models for time series and binary choice datasets;
2. Ability to use different software (Eviews)
3. To understand the application of the econometric tools in Indian dataset.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Unit root and VAR Models	Unit root and structural break; Vector Auto Regression Model - (Impulse Response Function, variance decomposition; vector error Corrections; Cointegration		6		1
2	Modelling	Motivation and		6		1, 3



	volatility	test for non-linearity; Historical and implied volatility; Univariate volatility models - ARCH, GARCH, EGARCH, TARARCH, and GARCH in Mean; Multivariate volatility models; Application in Finance.				
3	Models of Expectations and Distributed Lags	ARDL Models		6		1
4	Practical Lab Sessions	Applications in Eviews		15		2
5	Limited Dependent Variable Models	Censoring, Truncation; Selection Bias; Multinomial		10		1, 3
6	Response Models	Ordered and Sequential response Models		7		1
7	Practical Lab Sessions	Applications in Eviews		15		2

**References:**

1. A. Colin Cameron and Pravin K. Trivedi, *Microeconometrics: Methods and Applications*, Cambridge University Press, 2005.
2. Anindya Banerjee, Juan Dolado, John W. Galbraith and David Hendry, *Cointegration, Error Correction and the Econometric Analysis of Non-stationary Data*, Oxford University Press, 1993.
3. G. S. Maddala, *Limited-Dependent and Qualitative Variables in Econometrics*, Cambridge University Press, 1986.
4. G. S. Maddala and In-Moo Kim, *Unit Roots, Cointegration and Structural Change*, Cambridge University Press, 1998.
5. James Douglas Hamilton, *Time series analysis*, Princeton University Press, 1994.

6. John Y. Campbell, Andrew W. Lo and A. Craig MacKinlay, *The Econometrics of Financial Markets*, Princeton University Press, 2012.
7. Luc Bauwens, Christian Hafner and Sebastien Laurent, *Handbook of Volatility Models and Their Applications*, Wiley, 2012.
8. Walter Enders, *Applied Econometric Time Series*, Wiley, 2010.
9. William H. Greene, *Econometric Analysis*, Pearson, 2003.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>			√	
CLO <sub>2</sub>			√	√
CLO <sub>3</sub>			√	√
For MNR330T& MNR330P			√	√

**Course Name:** Financial Economics - I

**Course Code:** MNR340T

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

On completion of this course, the students will be able:

1. To understand the financial structure of a firm.
2. To analyze the financial structure by different financial tools.
3. To understand the activities of financial markets using macroeconomic tools.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Corporate Finance	Capital budgeting and Financial Ratio analysis; Financial statement and Ratio analysis; Net Present value approach; Payback period method;		15		2

		Discounted payback period method; Internal rate of return; Profitability index.				
2	Corporate Finance	Capital Structure and basic concepts: Modigliani-Miller theorem and the financial structure puzzle; Corporate tax and personal tax; Limits to debt and cost of financial distress; Pecking order theory.		15		1, 2
3	Corporate finance	Corporate financing and Agency Cost:  The role of net worth and credit rationing; Debt overhang; Borrowing capacity; The equity multiplier.		15		1, 3
4	Stock Market, Interest rate and Banking	Stock Market. Tobin's Q Model: Tobin's Q and Economic Activity; Dividend Growth Model.		10		3
5	Stock Market, Interest	Interest rate Term structure of Interest rate:		10		2, 3

	rate and Banking	Spot rate and Yield to maturity.				
6	Stock Market, Interest rate and Banking	Banking A model of perfect competition; The Monte-Kelein model of monopolistic bank.		10		2

**References:**

1. J. C. Hull, *Options, Futures and Other Derivatives*, Pearson Education, 2014.
2. J. Tirole, *The theory of Corporate finance*, Princeton University Press, 2010.
3. Jonathan B. Berk, Jarrad V. T. Harford, Peter M. DeMarzo, David Stangel and Andrés Marosi, *Fundamentals of Corporate Finance*, Pearson Education Canada, 2019.
4. Richard A. Brealey, Stewart C. Myers and Franklin Allen, *Principles of Corporate Finance*, McGraw Hill, 2011.
5. S. Kevin, *Portfolio Management*, Prentice Hall India, 2006.
6. X. Freixas and J. C. Rochet, *Microeconomics of Banking*, MIT Press, 2008.
7. Selected Papers.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√			
CLO <sub>2</sub>		√		
CLO <sub>3</sub>	√	√		
For MNR340T	√	√		

**Course Name:** Monetary Economics I

**Course Code:**

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Equip the students to the theoretical foundations of Monetary Economics.
2. Develop an understanding about the working of the monetary policy.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Different approaches to modeling money	Money-in-the-Utility Function; Cash –in-advance models; Money in the Walrasian and Non-Walrasian set up; Money in dynamic system		20		1
2	Monetary Policy Operation	Instruments and Goals; Operating Procedures and Policy Measures; Alternative rules of Monetary policy		20		1, 2
3	The consensus model of monetary policy	Monetary Policy Regimes and Economic Performance; The consensus model of monetary policy; Asset prices in the consensus model; Critique to the New consensus model		15		1
4	New Keynesian Monetary Economics	The basic New Keynesian model; Monetary Policy Analysis in New Keynesian Models		20		1, 2

**Suggested Readings:**

1. Carl E. Walsh, *Monetary Theory and Policy*, 4<sup>th</sup> Edition, The MIT Press, 2017.
2. Frank. Hahn, *Money and Inflation*, MIT Press, 1983.

3. Prabhat Patnaik, *The Value of Money*, Columbia University Press, 2009.
4. Michael Woodford, *Interest and Prices - Foundations of a Theory of Monetary Policy*, Princeton University Press, 2011.
5. Jordi. Gali: *Monetary Policy, Inflation, and the Business Cycle – An Introduction to the New Keynesian Framework*, 2<sup>nd</sup> Edition, Princeton University Press, 2015.
6. Ostroy, Joseph M., and Ross M. Starr. "The transaction's role of money." *Handbook of monetary economics* 1 (1990): 3-62.
7. Duffie, Darrell. "Money in general equilibrium theory." *Handbook of monetary economics* 1 (1990): 81-100.
8. Friedman, Benjamin M. "Targets and instruments of monetary policy." *Handbook of monetary economics* 2 (1990): 1185-1230.
9. Svensson, Lars EO. "Inflation targeting." In *Handbook of monetary economics*, vol. 3, pp. 1237-1302. Elsevier, 2010.
10. Bordo, Michael D., and Anna J. Schwartz. "Monetary policy regimes and economic performance: the historical record." *Handbook of macroeconomics* 1 (1999): 149-234.
11. Goodfriend, Marvin. "How the world achieved consensus on monetary policy." *Journal of Economic Perspectives* 21, no. 4 (2007): 47-68.
12. Kriesler, Peter, and Marc Lavoie. "A Critique of the New Consensus View of Monetary Policy." In *Post-Keynesian Essays from Down Under Volume II: Essays on Policy and Applied Economics*, pp. 61-68. Palgrave Macmillan, London, 2016.
13. Galí, Jordi, and Mark Gertler. "Macroeconomic modeling for monetary policy evaluation." *Journal of economic perspectives* 21, no. 4 (2007): 25-46.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>		√		√
For Monetary Economics I	√	√	√	√

**Course Name:** Political Economy—I

**Course Code:**

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Course

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. Develop an alternative political economic perspective on economics and economic development.
2. Develop an understanding of classical political economy and Marxian economics.
3. Analyze distribution and income inequality from a political economy perspective.
4. To know the epistemology of development and underdevelopment and their critique.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Genesis of Political Economy	How is political economy different from neoclassical framework? Introduction to the concept of power		5		1
2	Key Concepts of Marxian Political Economy	Class, Value, Surplus, Accumulation, Crisis, Reserve army of labour		15		2, 4
3	Theories of distribution	Theories of distribution in classical political economy and its difference with marginalist or neoclassical framework		15		3
4	Epistemology of Development	Enlightenment, colonialism and capitalism. Idea of dualism, economic dualism. Transition from underdevelopment		15		1, 4

		t to development				
5	Critique of the ideas of development	Centre-periphery, unequal exchange, dependency. Transition beyond development: Post development approach. Development beyond income and commodity—capability, human development and justice. Re-examining dual economic model		15		1, 4
6	Imperialism and capitalism	Introduction to the theory of imperialism and its relationship with capitalism		10		2, 4

### Suggested Readings:

1. Harvey, D. (2010). *A Companion to Marx's Capital*, Verso
2. Hahnel, R. (2014). *The ABCs of Political Economy: A Modern Approach*, Pluto Press
3. Kaldor, N. (1955). "Alternative Theories of Distribution", *The Review of Economic Studies*, Vol. 23, No. 2: pp. 83-100
4. Blecker, R.A. and Setterfield, M. (2019). *Heterodox Macroeconomics: Models of Demand, Distribution and Growth*, Edward Elgar
5. Larrain, J. (1989). *Theories of Development: Capitalism, Colonialism and Dependency*, Polity Press
6. Resnick, S. and Wolff, R. (2012). *Contending Economic Theories*, MIT Press
7. Sanyal, K. (2007). *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*, Routledge
8. Sen, S. and Marcuzzo, M.C. (2017). *The Changing Face of Imperialism: Colonialism to Contemporary Capitalism*, Routledge
9. Sen, A.K. (2009). *The Idea of Justice*, Penguin
10. Sen, A.K. (2003). *Rationality and Freedom*, Oxford University Press
11. Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*, Princeton University Press



**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√	√		
CLO <sub>2</sub>	√	√		
CLO <sub>3</sub>	√	√		
CLO <sub>4</sub>	√	√		
CLO <sub>5</sub>	√	√		
CLO <sub>6</sub>	√	√		
For Political Economy-I	√	√		

**Course Name:** Social choice and Mechanism Design I**Course Code:****Credit:** 6**Semester:** III**Nature of the Course:** Elective Paper**No. of Lecture hours:** 75**No. of Tutorial contact hours:** 15**Course Learning Outcome: (CLO)**

1. This course introduces students to the concepts of social choice and also gives the exposure of some important fundamental research work that had done in the field of social choice theory.
2. This course introduces students to the concepts of mechanism design theory. Further, provides the idea of solving the different mechanism design problem.
3. This course introduces students to the concepts of Auction theory. Further, provides the knowledge of how to solve the outcome of different auction settings.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Social Choice Theory	Unit-I: 1.1 Social welfare functions 1.2 Arrow's impossibility theorem		32		1

		<p>1.3 Restricted environments (May's Theorem, Median Voter Theorem)</p> <p>Unit-II</p> <p>2.1 The Gibbard-Satterthwaite Theorem</p> <p>2.2 Connection to Arrow's Theorem</p> <p>2.3 Restricted environments, e.g., single-peaked preferences.</p>				
2	Mechanism Design Theory I	<p>Unit-III: Introduction to Mechanism Design Environment</p> <p>3.1 Single Agent Mechanism Design.</p> <p>3.2 Two Agent Mechanism Design.</p> <p>3.3 Multi Agent Mechanism Design.</p>		25		2
3	Auction Theory I	<p>Unit-IV: Auctions</p> <p>4.1 Auction Types and Desirable Properties.</p> <p>4.2 Canonical Mechanisms for Single Indivisible Item auction.</p> <p>4.3 Revenue Equivalence of First price and Second price</p>		18		3

		auction. 4.4 Revenue Equivalence Theorem. 4.5 Combinatorial Auction				
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**Suggested Readings:**

**Books:**

1. Mas-Colell, A., Whinston, M. D., and Green, J. R. (1995). *Microeconomic theory* (Vol. 1). New York: Oxford university press.
2. Narahari, Y. (2014). *Game theory and mechanism design* (Vol. 4). World Scientific.
3. Krishna, V. (2009). *Auction theory*. Academic press.
4. Peters, H. (2015). *Game theory: A Multi-leveled approach*. Springer.
5. Tilman Börgers and Daniel Krahmer, *An Introduction to the Theory of Mechanism Design*, Oxford University Press.

**Papers:**

1. Dupuit, J. U. L. E. S. (1968). "On the Measurement of the Utility of Public Works,"(1844). *International Economic Papers*, (2).
2. Hotelling, H. (1938). The general welfare in relation to problems of taxation and of railway and utility rates. *Econometrica: Journal of the Econometric Society*, 242-269.
3. Myerson, R. B., & Satterthwaite, M. A. (1983). Efficient mechanisms for bilateral trading. *Journal of economic theory*, 29(2), 265-281.
4. Cramton, P., Gibbons, R., & Klemperer, P. (1987). Dissolving a partnership efficiently. *Econometrica: Journal of the Econometric Society*, 615-632.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>			√	
CLO <sub>3</sub>		√	√	
For Social choice and Mechanism Design I	√	√	√	√

**Course Name:** Sustainable Development-I

**Course Code:**

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. To understand the concepts of advanced developmental economic theories.
2. To identify major sustainability challenges and gain an understanding of the different policy responses.
3. To learn the tools and techniques to address the sustainable development problems.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Introduction	Need for studying the economics of sustainable development; meaning of sustainable development – Comparison with static and dynamic economic efficiency; Weak versus strong sustainability; Rawls and Solow Sustainability, role of discounting, Inter- and Intra-generational equity and sustainability		20		1
2	Welfare Economics	Compensating & Equivalent variation- WPT vs WTA: Why		20		1,3

		Differ. Household Production Function; Market instruments: Carbon prices, emission trading.				
3	Valuing Market and Non-market Ecosystem and Social Services	Uses of monetary valuation; Cost-benefit analysis; Techniques of monetary valuation – recap; Applications.		20		2, 3
4	Measuring Sustainable Development	Defining conventional gross net product (GNP); modifying GNP for missing (non-market) values – Green GNP; genuine savings; critical natural capital concerns and strong sustainability		15		3

### Suggested Readings:

#### Books

- Pearce, D. and E. Barbier, *Blueprint for a Sustainable Economy*, Earthscan, 2000.
- Daly, H.E., *Beyond Growth: The Economics of Sustainable Development*, Beacon Press, 1996.
- Rogers, P. K.F. Jalal and J.A. Boyd, *An Introduction to Sustainable Development*, Earthscan, 2008.
- Deb, D, *Beyond Developmentality: Constructing Inclusive Freedom and Sustainability*, Daanish Books, 2009.
- Sengupta, R. (2012), *Ecological Limits and Economic Development*, Oxford University Press, Delhi.
- Murty, M.N. (2009), *Environment, Sustainable Development, and Well-being: Valuation, Taxes and Incentives*, Oxford University Press, Delhi.

- N. Hanley, J. Shogren, Ben White, *Environmental Economics-In Theory and Practice*, Palgrave Macmillan, 2007.
- C.D. Kolstad, *Environmental Economics*, OUP, 2010.
- Tom Tietenberg and Lynn Lewis, *Environmental and Natural Resource Economics*, 8<sup>th</sup> Edition, Pearson, 2008.
- B. Copeland and S. Taylor, Trade, Growth and the Environment, *Journal of Economic Literature*. (NBER WP 2003), 2004.

**Journal Articles and Book Chapters**

- D.S. Brookshire et.al. *Valuing Public Goods; A Comparison of Survey and Hedonic Approaches*, *American Economic Review*, 72, pp. 165-177, 1982.
- W. Beckerman. *Sustainable development': is it a useful concept?*, *Environmental Values*, 3(3), pp. 191-209, 1994.
- R.H. Coase, *The Problem of Social Cost*, *Journal of Law and Economics*, 3, pp. 1-44, 1960.
- Peter A Diamond and Jerry A. Hausman. *Is Some Number Better Than No Number?* *Journal of Economic Perspectives*: 8(4) : 45-64, 1994.
- P. Ekins. *Sustainable development* in E.A. Page and J. Proops (eds) *Environmental Thought*, Cheltenham: Edward Elgar, pp. 144-172, 2002.
- Michael W. Hanemann. *Valuing the Environment through Contingent Valuation*, *Journal of Economic Perspectives*: 8(14): 19-43, 1994.
- A.M. McGrathland and W. E. Oates. *Marketable Permits for the Prevention of Environmental Deterioration*, *Journal of Environmental Economics and Management*, 12(3), pp.207-228, 1985.
- Paul R. Portney. *The Contingent Valuation Debate. Why Economists should care?*, *Journal of Economic Perspectives*: 8(4): 8-17, 1994.
- UNU-HIS, UNEP, *Inclusive Wealth Report 2014: Measuring Progress Towards Sustainability*, Cambridge University Press, 2014
- WHO, UNDP, UNEP & IPCC reports.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√			
CLO <sub>2</sub>		√		
CLO <sub>3</sub>	√		√	
Sustainable Development-I	√	√	√	

**Course Name:** International Macroeconomics I

**Course Code:**

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Equip the students to the theoretical foundations of international macroeconomics.
2. Develop an understanding about the working of the macroeconomic policies in an open economy framework.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Balance of Payments	Balance of Payments Accounting; The Basic Concepts; Current Account and National Accounting; Global imbalance		10		1
2	Intertemporal theory of current account	Small open economy; Large open economy; Stochastic model of current account		25		1, 2
3	Capital Market Imperfection	Financial autarky; Incomplete capital market; Complete capital market; International portfolio diversification; Asset pricing; Sovereign risk; Risk sharing with default		20		1, 2

		risk				
4	Nontradable goods, Relative price and Terms of trade	Intertemporal prices; Nontradable goods and relative price; Terms of Trade, World Interest Rates and the Current Account; Real exchange rate and Terms of trade		20		1, 2

**Suggested Readings:**

1. Carlos A. Vegh, *Open Economy Macroeconomics in Developing Countries*, MIT Press, 2013.
2. Maurice Obstfeld, Kenneth S. Rogoff and Kenneth Rogoff, *Foundations of international macroeconomics*, MIT Press, 1996.
3. Stephanie Schmitt-Grohé, Martín Uribe and Michael Woodford, *International Macroeconomics: A Modern Approach*, Princeton University Press, 2022.
4. Martín Uribe and Stephanie Schmitt-Grohé, *Open Economy Macroeconomics*, Princeton University Press, 2017.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>		√		√
For International Macroeconomics I	√	√	√	√

**Course Name:** Labour Economics-I

**Course Code:**

**Credit:** 6

**Semester:** III

**Nature of the Course:** Elective Paper

**No. of Lecture hours:**75

**No. of Tutorial contact hours:**15



**Course Learning Outcome: (CLO)**

1. Students will be able to understand the fundamental issues related to labour market.
2. Will get a comprehensive idea of how labour is treated in a market economy
3. Apply the tools to address major problems associated with labour market outcomes such as unemployment.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Background of Labour Economics	Historical perspective; marginalist perspective on labour; labour under Institutional Economics; Orthodox and alternative approaches to Labour Economics		15		1
2	Labour Supply	Neoclassical theory of labour supply; Labour supply: choice between consumption and leisure; Empirical aspects of labour supply; Human Capital formation		20		1, 2
3	Labour Demand	Static theory of labour demand; empirical estimation of labour-demand elasticities and estimation about substitution between different types of labour; dynamic labour demand under adjustment cost and		20		1, 2

		expectation; labour market policies to affect labour demand				
4	Unemployment; an equilibrium approach	Unemployment as steady-state equilibrium; The Beveridge- curve; Out of steady-states dynamics; review of empirical literature on aggregate matching function and Beveridge curve; models with endogenous job destruction and productivity shocks; notes on literature.		30		2, 3

### Suggested Readings:

1. Pierre Cahuc, Stéphane Carcillo and André Zylberberg, *Labor Economics*, MIT Press, 2014.
2. Daniel S. Hamermesh, *Labour Demand*, Princeton University Press, 1993.
3. Ben J Heijdra and F Van der Ploeg, *The Foundations of Modern Macroeconomics*, Oxford University Press, 2017.
4. Christopher A. Pissarides, *Equilibrium Unemployment Theory*, MIT press, 2000.
5. Jordi Galí, *Unemployment fluctuations and stabilization policies: a new Keynesian perspective*, MIT press, 2011.
6. Berg, Janine, et al. *In defense of labour market institutions*. Palgrave Macmillan UK, 2008.
7. Alison L. Booth, Booth, *The Economics of the Trade Union*. Cambridge University Press, 1995.

### CLO-PLO Mapping:

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√			
CLO <sub>2</sub>	√	√		
CLO <sub>3</sub>	√			√
For Labour Economics I	√	√		√

**Course Name:** Public Economics  
**Course Code:** MNR410T  
**Credit:** 6  
**Semester:** IV  
**Nature of the Course:** Core Paper  
**No. of Lecture hours:** 75  
**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Differentiate between public finance and private finance
2. Explain tax and non- tax revenue, differentiate between direct and indirect tax, explain shifting of taxation and effects of taxation
3. Describe the effects of taxation on production, distribution and economic stability, role of public expenditure in developing country
4. Explain the types of public debt and how debt is repaid
5. Explain the main objectives of fiscal policy
6. Describe the government budget

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1.	Equilibrium and Efficiency	Introduction to public economics, The exchange economy, The production and exchange, The efficiency of competition		10		1

2	Public Good	Definition; Private provision Efficient provision, Publicly provided private good Voting; Mechanism design		10		
3	Club good Two-part tariff	Definition; Single product clubs, Fixed utilization, Variable utilization,		10		
4	Externalities and Merit goods	Market inefficiency, Externality examples, The tragedy of commons, Pigouvian taxation, Internalization of externality, Coase theorem		10		
5	Tax Incidence	Canons of taxation Simple competitive equilibrium model, Static Two-sector model, Incidence of corporation tax General tax incidence		10		2, 3
6	Effects of tax on labour supply, Savings and Risk taking	Effect of tax on labour supply, Effect of tax on risk taking		10		

7	Public debt	Barro-Ricardo equivalence theorem, Debt and growth in Solow model		15		4, 5, 6
8	Fiscal policy and the macroeconomy	Macroeconomics of budget deficit, Sustainability, Solvency and Optimality				

**Suggested Readings:**

1. Anthony B. Atkinson and Joseph E. Stiglitz, Lectures on Public Economics, Princeton University Press.
2. Blinder, A. S., & Solow, R. M. (1972). Does fiscal policy matter? (Vol. 144). Econometric Research Program, Princeton University.
3. Jean Hindriks and Gareth D. Myles, Intermediate Public Economics, MIT Press.
4. John Cullis, Philip Jones and Philip R. Jones, Public Finance and Public Choice: Analytical Perspectives, OUP.
5. Rakshit, M. (2005). Budget Deficit: Sustainability, Solvency and Optimality. Readings in Public Finance, Oxford University Press, New Delhi, 143-164.
6. Amaresh Bagchi (ed), Readings in Public Finance, OUP.
7. A Ghosh and C. Ghosh, Economics of the Public Sector, Prentice Hall India Learning Private Limited; 2nd Revised edition.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>	√	√	√	
CLO <sub>3</sub>		√		
CLO <sub>4</sub>	√			
CLO <sub>5</sub>			√	
CLO <sub>6</sub>		√		
For MNR410T	√	√	√	√

**Course Name:** Guided Study

**Course Code:** MNR420J

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Core Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. To design and manage a piece of original project work.
2. To develop a research proposal and protocol.
3. To discuss the ethical dimensions of their research and obtain appropriate ethical approval if needed.
4. To synthesize knowledge and skills previously gained and applied to an in-depth study.
5. To establish links between theory and methods within their field of study.
6. To select from different methodologies, methods, and forms of analysis to produce a suitable research design and justify their design.
7. To present the findings of their project in a written report.
8. Critically appraise and interpret published literature.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>		√		√
CLO <sub>2</sub>		√	√	√
CLO <sub>3</sub>				√
CLO <sub>4</sub>	√	√	√	
CLO <sub>5</sub>	√	√	√	
CLO <sub>6</sub>		√	√	√
CLO <sub>7</sub>				√
CLO <sub>8</sub>				√
For MNR420J	√	√	√	√

**Course Name:** Advanced Econometrics - II (Theory + Practical)

**Course Code:** MNR430T& MNR430P

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. To analyze models for time series and binary choice datasets.
2. Ability to use different software
3. To understand the application of the econometric tools in Indian dataset.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Advanced Panel Data Econometrics	Basic Concepts Balanced and Unbalanced		10		1

		Panel, One way and two-way error components				
2	Advanced Panel Data Econometrics	Panel Unit Root; Panel Estimation; Fixed effects model, LSDV estimation, Random effects model; Hypothesis testing; Panel Limited dependent model		10		1, 3
3	Advanced Panel Data Econometrics	Simultaneous Estimation GMM estimation – System GMM; Difference GMM; Seemingly Unrelated regression (SUR) model; Applications using suitable Statistical Packages		10		1, 3
4	Multivariate Techniques	Multivariate Analysis and Indexing: Factor Analysis; Principal Component Analysis		10		1, 3
5	Multivariate Techniques	Grouping Observations Discriminant Analysis; Cluster Analysis		10		1, 3
6	Applied Econometric Methods	Use of International database: International		15		3

		data – World Bank, IMF, ILO, WTO, UNCTAD.				
7	Applied Econometric Methods	RBI database; ASI data, Prowess-CMIE, NSSO data.		15		3

**Suggested Readings:**

1. Badi H. Baltagi, *Econometric Analysis of Panel Data*, Wiley, 2005.
2. Cheng Hsiao, *Analysis of Panel Data*, Cambridge University Press, 2003.
3. David F. Hendry, *Dynamic econometrics*, Oxford University Press, 1995.
3. Jadhav, Narendra, Monetary modelling of the Indian economy: Reserve Bank of India, Occasional Papers 11, no. 2 (1990): 83-152.
4. Jeffrey M. Wooldridge, *Econometric Analysis of Cross Section and Panel Data*, MIT Press, 2010.
5. J. J. A. Tacq, *Multivariate Analysis Techniques in Social Science Research*, Sage, 1997.
6. Julia Hebden, *Applications of Econometrics*, Philip Allan, 1983.
7. K.L. Krishna, *Econometric Applications in India*, Oxford University Press, 1997.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>			√	
CLO <sub>2</sub>			√	√
CLO <sub>3</sub>			√	√
For MNR430T & MNR430P			√	√

**Course Name:** Financial Economics - II

**Course Code:** MNR440T

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. To understand the financial structure of a firm.
2. To analyse the financial market by different financial tools.
3. To understand the activities of financial markets using macroeconomic tools



**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Analysis of Stock Market and Portfolio Return	Efficient Market hypothesis Foundation of Efficient market hypothesis; Different types of efficiency; The behavioral and empirical challenge to market efficiency; Implications for Corporate finance		10		2,3
2	Analysis of Stock Market and Portfolio Return	Mean-Variance Portfolio Theory Asset return; Random variables; Portfolio Mean and Variance; The feasible set; The Markowitz Model; The One-Fund theorem: The Two-Fund theorem.		15		1,2
3	Analysis of Stock Market and Portfolio Return	Capital Asset Pricing Model  Market Equilibrium; Capital market line; The Pricing model; The		15		2

		Security market line; Investment Implications; Performance Evaluation; CAPM as a Pricing Formula.				
4	Analysis of Stock Market and Portfolio Return	Exchange rate dynamics & financial crisis Dornbusch's Overshooting Model; Overshooting model in the dependent economy framework; Indicators of financial crisis; Alternative approaches to crisis.		5		1
5	Derivative market	Forwards and Futures Basics of Futures contracts; Future Prices; Relation to expected spot price.		12		1, 2
6	Derivative market	Hedging The Perfect hedge; The Minimum-variance hedge; Optimal hedging; Hedging nonlinear risk.		6		2
7	Derivative market	Options and Swap The boundary space for call and put options; Option prices and interest rate; Option prices and stock price movements; Option prices and the riskiness of stocks; The single-period binomial		12		2,3

		model; The multi-period binomial model; Currency Swaps.				
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**References:**

1. D. G. Luenberger, *Investment Science*, Oxford University Press, 1998.
2. John. Hull, *Options, Futures and Other Derivatives*, Pearson Education, 2009.
3. R.A. Brealey and S.C. Myers, *Principles of Corporate Finance*, McGraw Hill/ Irwin, 2007.
4. Robert W. Kolb, *Futures, Options, and Swaps*, Wiley, 1999.
5. S. Kevin, *Portfolio Management*, Prentice Hall India, 2006.
6. Stephen A. Ross, Mark Christensen, Michael Drew, Robert Bianchi, Randolph Westfield and Bradford D. Jordan, *Fundamentals of Corporate Finance*, McGraw-Hill, 2013.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√			
CLO <sub>2</sub>	√	√		
CLO <sub>3</sub>	√	√		
For MNR440T	√	√		

**Course Name:** Monetary Economics II

**Course Code:**

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Equip the students to the theoretical foundations of Monetary Economics.
2. Develop an understanding about the working of the monetary policy.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Monetary policy in the open economy	The Obstfeld-Rogoff Two-Country Model; Policy coordination;		20		1

		Open economy new Keynesian model				
2	Financial Markets and Monetary Policy	Interest Rates and Monetary Policy; The Term Structure of Interest Rates; Financial Frictions in Credit Markets; Financial Intermediaries and Monetary Economics		20		1, 2
3	The Interaction Between Monetary and Fiscal Policy	Positive Theory of Price Stability; Normative Theory of Price Stability		15		1
4	Monetary Policy in India	History of monetary policy in India; Monetary policy framework; Transmission mechanism; Transition of RBI's policy framework		20		2

### Suggested Readings:

1. Carl E. Walsh, *Monetary Theory and Policy*, 4<sup>th</sup> Edition, The MIT Press, 2017.
2. Jordi. Gali, *Monetary Policy, Inflation, and the Business Cycle – An Introduction to the New Keynesian Framework*, 2<sup>nd</sup> Edition, Princeton University Press, 2015.
3. Bruce Champ, Scott Freeman and Joseph H. Haslag, *Modeling Monetary Economies*, 4<sup>th</sup> edition, Cambridge University Press, 2016.
4. Jin Cao and Gerhard Illing, *Money: Theory and Practice*, Springer, 2019.
5. Ashima Goyal, *History of monetary policy in India since independence*. Springer Briefs in Economics. New Delhi: Springer, 2014.
6. Dornbusch, Rudiger, and Alberto Giovannini. "Monetary policy in the open economy." *Handbook of Monetary Economics* 2 (1990): 1231-1303.
7. Canzoneri, Matthew, Robert Cumby, and Behzad Diba. "The interaction between monetary and fiscal policy." *Handbook of monetary economics* 3 (2010): 935-999.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>		√		√
For Monetary Economics II	√	√	√	√

**Course Name:** Political Economy—II**Course Code:****Credit:** 6**Semester:** IV**Nature of the Course:** Elective Paper**No. of Lecture hours:** 75**No. of Tutorial contact hours:** 15**Course Learning Outcome:**

1. Conceptualizing primitive accumulation of capital and its relationship with capitalism
2. Understand the change in relationship between state and capitalism under globalization
3. Comprehend the process of financialization and the importance of finance under globalization
4. To analyze changes in rural economy and class relations
5. Analyze rising inequality, land and resource related conflict in the current phase of globalization
6. Feminist and environmentalist critiques of capitalism

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Capitalism and Globalization	Neoliberalism and global capitalism—the relationship between capitalism and globalization		5		2
2	State under globalization	The shifting role of the state under globalization—policy		15		2

		convergence and the question of democracy				
3	Primitive accumulation of capital	Introducing the theory of primitive accumulation of capital— analysing the recent conflicts related to land through the prism of primitive accumulation of capital—concept of accumulation by dispossession versus primitive accumulation— regimes of primitive accumulation		15		1, 4
4	Agriculture, classes and land in rural India	Changes brought about by neoliberal policies in Indian agriculture— dominant classes in rural areas— are the old formulations valid?		10		4
5	Finance, capitalist crisis and inequality	Crisis and Capitalism— Theories of Marx, Keynes and Others. Imperialism and Finance. Global Financial Crisis of 2008— stylized facts— the role of finance, financial		15		5

		fragility and speculation. Inequality, growth and finance.				
6	Feminist and Environmentalist Critique of Capitalism	Economics of gender, gendered work, reproduction of capitalism through the lens of gender. Environmentalism and eco-socialism—tragedy of the commons—critique—community and environment.		15		6

#### Suggested Readings:

1. Duminel, G and D Levy: *The Crisis of Neoliberalism*, Harvard University Press, 2011
2. Harvey, David: *A Brief History of Neoliberalism*, Oxford University Press, 2005
3. Sanyal, K. (2007). *Rethinking Capitalist Development: Primitive Accumulation, Governmentality and Post-Colonial Capitalism*, Routledge
4. Krugman, P. *The Return of Depression Economics*, WW Norton, 2009
5. Foster, J.B. and Magdoff, F: *The Great Financial Crisis*, Monthly Review Press, 2009
6. Rohit: *It is not Over* Oxford University Press, 2013
7. Wolfonson, M.H. and Epstein, G: *The Handbook of the Political Economy of Financial Crises*, Oxford University Press, 2013
8. Sen, S. and Marcuzzo, M.C: *The Changing Face of Imperialism: Colonialism to Contemporary Capitalism*, Routledge, 2017
9. Strober, M. H.: “Rethinking Economics Through a Feminist Lens”, *The American Economic Review*, Vol.84(2), 1994
10. Nancy, Folbre and Julie A Nelson: “For Love or Money—or Both?”, *Journal of Economic Perspectives*, Vol. 14(4), 2000
11. Boyce, J.K: *The Political Economy of the Environment*, Edward Elgar, 2002
12. Magdoff, F and Foster, J.B. :*What Every Environmentalist Needs to Know*, Monthly Review Press, 2011
13. D’Costa, A.P and Chakraborty, A. (Ed): *The Land Question in India: State, Dispossession and Capitalist Transition*, Oxford University Press, 2017
14. Levien, M: “Special Economic Zones and Accumulation by Dispossession in India”, *Journal of Agrarian Change*, Vol. 11(4), 2011

15. Harriss, J: “Does ‘Landlordism’ Still Matter? Reflections on Agrarian Change in India”, *Journal of Agrarian Change*, Vol. 13(3), 2013

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√	√		
CLO <sub>2</sub>	√	√		
CLO <sub>3</sub>	√	√		
CLO <sub>4</sub>	√	√		
CLO <sub>5</sub>	√	√		
CLO <sub>6</sub>	√	√		
For Political Economy-II	√	√		

**Course Name:** Social Choice and Mechanism Design II

**Course Code:**

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. This course introduces students to the advanced concepts of mechanism design theory and also gives the exposure of some important fundamental research work that had done in the field of mechanism design theory.
2. This course introduces students to the application of mechanism design in the theory of auction.
3. This course introduces students to the application of mechanism design in the theory of matching.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Mechanism Design Theory II	Generalized Mechanism Design Theory: 1.1 The Mechanism Design Problem		30		1



		1.2 Dominant Strategy Implementation 1.3 Bayesian Implementation 1.4 Participation Constraint 1.5 Optimal Bayesian Mechanism.				
2	Auction Theory II	Optimal Mechanism and Myerson Auction: 2.1 Optimal Mechanisms 2.2 Myerson's Optimal Auction 2.3 Efficient Optimal Auction		25		2
3	Matching Problem.	Matching: 3.1 The matching problem 3.2 The Gale-Shapley algorithm 3.3 The Gale-Shapley algorithm and stability		20		3

### Suggested Readings:

#### Books:

1. Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic theory* (Vol. 1). New York: Oxford university press.
2. Narahari, Y. (2014). *Game theory and mechanism design* (Vol. 4). World Scientific.
3. Krishna, V. (2009). *Auction theory*. Academic press.
4. Peters, H. (2015). *Game theory: A Multi-leveled approach*. Springer.
5. An Introduction to the Theory of Mechanism Design by Tilman Borgers.

#### Papers:

1. Bikhchandani, S., Chatterjee, Lavi, R., Mu'alem, A. Nisan, N. and Sen, A. 2006. Weak monotonicity characterizes deterministic dominant strategy implementation. *Econometrica* 74, 1109-1132.
2. Clarke, E. H. 1971. "Multipart pricing of public goods", *Public Choice*, 11, 11-33.

3. Green, J., and Laffont, J-J. 1977. "Characterization of Satisfactory Mechanisms for the Revelation of Preferences for Public Goods," *Econometrica*, 45, 727-738.
4. Groves, T. 1973. "Incentive in Teams", *Econometrica*, 41, 617-631.
5. Holmström, B. 1979. "Groves' scheme on restricted domains", *Econometrica*, 47, 1137-1144.
6. Hurwicz, L. and Walker, M. 1990. "On the Generic Nonoptimality of Dominant-Strategy Allocation Mechanisms: A General Theorem That Includes Pure Exchange Economies" *Econometrica*, 58, 683-704.
7. Roberts, K. 1979. The characterization of implementable choice rules. In Jean-Jacques Laffont, editor, *Aggregation and Revelation of Preferences*. Papers presented at the first European Summer Workshop of the Econometric Society, pages 321-349, North-Holland Publications.
8. Vickrey, W. (1961). "Counter speculation, auctions and competitive sealed tenders", *Journal of Finance*, 16, 8-37.
9. Walker, M. (1980). "On the Nonexistence of a Dominant Strategy Mechanism for Making Optimal Public Decisions", *Econometrica*, 48, 1521-1540.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	√
CLO <sub>2</sub>	√	√	√	√
CLO <sub>3</sub>	√	√	√	√
For Social Choice and Mechanism Design II	√	√	√	√

**Course Name:** Sustainable Development-II

**Course Code:**

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome:**

1. To understand the different aspects of sustainable development.
2. To understand the carrying capacity of ecosystems as related to providing for human needs.
3. Students will be able to apply concepts of sustainable development to address sustainability challenges in a global context.
4. Students will identify, act on, and evaluate their professional and personal actions with the knowledge and appreciation of interconnections among economic, environmental, and social perspectives.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	Sustainable Development – Ecological Economics	Precautionary Principle; biodiversity and precautionary principle; economic growth and natural carrying capacity		10		2
2	Sustainable Development – Visions, Principles, and Operational Rules	Indicators of Sustainability and Sustainable Development Goals Indicators; Neoclassical economic growth, Inclusive and comprehensive wealth and sustainability; social capital, community sustainability and environmental justice; trans-boundary environmental degradation; global economic integration and environment		20		1, 3
3	Special Issues in Sustainable development	Gender, health, education, poverty, equity, access to resources, food security, clean energy, climate change etc.		30		1,3,4

4	National Policies for sustainable development in India	National Missions for sustainable development, smart city mission, National mission for adaptation and mitigation etc.		15		4
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### Suggested Readings:

#### Books

- Pearce, D. and E. Barbier, *Blueprint for a Sustainable Economy*, Earthscan, 2000.
- Daly, H.E., *Beyond Growth: The Economics of Sustainable Development*, Beacon Press, 1996.
- Rogers, P. K.F. Jalal and J.A. Boyd, *An Introduction to Sustainable Development*, Earthscan, 2008
- Deb, D. *Beyond Developmentality: Constructing Inclusive Freedom and Sustainability*, Daanish Books, 2009
- Sengupta, R. (2012), *Ecological Limits and Economic Development*, Oxford University Press, Delhi
- Murty, M.N. (2009), *Environment, Sustainable Development, and Well-being: Valuation, Taxes and Incentives*, Oxford University Press, Delhi
- N. Hanley, J. Shogren, Ben White. *Environmental Economics-In Theory and Practice*,
- Palgrave Macmillan, 2007
- C.D. Kolstad. *Environmental Economics*, OUP, 2010.
- Tom Tietenberg and Lynn Lewis. *Environmental and Natural Resource Economics*, 8<sup>th</sup> Edition, Pearson, 2008.
- B. Copeland and S. Taylor, *Trade, Growth and the Environment*, *Journal of Economic Literature*. (NBER WP 2003), 2004.

#### **Journal Articles and Book Chapters**

- D.S. Brookshire et.al. *Valuing Public Goods; A Comparison of Survey and Hedonic Approaches*, *American Economic Review*, 72, pp. 165-177, 1982.
- W. Beckerman. *Sustainable development': is it a useful concept?*, *Environmental Values*, 3(3), pp. 191-209, 1994.
- R.H. Coase, *The Problem of Social Cost*, *Journal of Law and Economics*, 3, pp. 1-44, 1960.
- Peter A Diamond and Jerry A. Hausman. *Is Some Number Better Than No Number?*, *Journal of Economic Perspectives*: 8(4) : 45-64, 1994.
- P. Ekins. *Sustainable development* in E.A. Page and J. Proops (eds) *Environmental Thought*, Cheltenham: Edward Elgar, pp. 144-172, 2002.
- Michael W. Hanemann. *Valuing the Environment through Contingent Valuation*, *Journal of Economic Perspectives*: 8(14): 19-43, 1994.
- A.M. McGrathland and W. E. Oates. *Marketable Permits for the Prevention of Environmental Deterioration*, *Journal of Environmental Economics and Management*, 12(3), pp.207-228, 1985.

- Paul R. Portney. *The Contingent Valuation Debate. Why Economists should care?*, Journal of Economic Perspectives: 8(4): 8-17, 1994.
- UNU-HIS, UNEP, Inclusive Wealth Report 2014: Measuring Progress Towards Sustainability, Cambridge University Press, 2014
- WHO, UNDP, UNEP & IPCC reports.

**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√	√		√
CLO <sub>2</sub>		√		
CLO <sub>3</sub>	√			√
CLO <sub>4</sub>				√
Sustainable Development-II	√	√		√

**Course Name:** International Macroeconomics II

**Course Code:**

**Credit:** 6

**Semester:** IV

**Nature of the Course:** Elective Paper

**No. of Lecture hours:** 75

**No. of Tutorial contact hours:** 15

**Course Learning Outcome: (CLO)**

1. Equip the students to the theoretical foundations of International macroeconomics.
2. Develop an understanding about the working of the macroeconomic policies in an open economy framework.

**Course Content:**

Module No.	Module Name	Topic	Description	No. of Lecture Hours allotted	Marks allotted	Associated Course Learning Outcome (CLO)
1	Exchange Rate theory	Structure of foreign exchange market; Macro approach to foreign exchange determination; Micro approach to		25		1

		foreign exchange determination; Exchange rate models; Optimal exchange rate regime				
2	Money and Exchange rate	Monetary exchange rate models; Target zones; Two-country Cash-in-advance model;		15		1, 2
3	Exchange rate policy and unemployment	Basic model; Wage determination and labour market disequilibrium		20		1, 2
4	Capital flows	Stylized facts; basic model; sudden stop; gross flows vis-à-vis net flows		15		1, 2

### Suggested Readings:

1. Carlos A. Vegh, *Open Economy Macroeconomics in Developing Countries*, MIT Press, 2013.
2. Maurice Obstfeld, Kenneth S. Rogoff and Kenneth Rogoff, *Foundations of international macroeconomics*, MIT Press, 1996.
3. Stephanie Schmitt-Grohé, Martín Uribe and Michael Woodford, *International Macroeconomics: A Modern Approach*, Princeton University Press, 2022.
4. Ian Marsh, Jessica James and Lucio Sarno, *Handbook of Exchange Rates*, Wiley, 2012.

### CLO-PLO Mapping:

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√		√	
CLO <sub>2</sub>		√		√
For International Macroeconomics II	√	√	√	√

**Course Name: Labour Economics-II**

**Course Code:**

**Credit: 6**

**Semester: IV**

**Nature of the Course:** Elective Paper

**No. of Lecture hours: 75**

**No. of Tutorial contact hours: 15**

**Course Learning Outcome: (CLO)**

1. To enhance the students to understand some of the fundamental issues related labour market.
2. To provide alternative perspectives of modeling labour market.
3. To understand various labour market institutions and their functioning across different countries.
4. To understand different issues pertaining in trade union in labour market.

**Course Content:**

<b>Module No.</b>	<b>Module Name</b>	<b>Topic</b>	<b>Description</b>	<b>No. of Lecture Hours allotted</b>	<b>Marks allotted</b>	<b>Associated Course Learning Outcome (CLO)</b>
1	New-Keynesian theory of Unemployment	Household, wage setting and unemployment; firms and price setting; equilibrium; Nominal wage-rigidity and Unemployment; Unemployment, output gap and welfare; Unemployment and Monetary policy design under the New Keynesian perspective.		25		1,2
2	Labour market institutions and policy	Why labour market Institution exist? International perspectives of labour market		25		3,4

		institutions; active public policy and it's evaluation; employment subsidies; economic analysis of minimum wage and employment protection legislations; empirical findings of labour market institutions and there economic impacts.				
3	Collective Bargaining	Unions and collective bargaining; the behaviour of union; the axiomatic approach ;Right to manage model and efficiency contract theory; bargaining with an infinite horizon; insider- outsider and the persistence of unemployment; Labour conflicts; strikes and arbitration.		25		4

### Suggested Readings:

1. Pierre Cahuc, Stéphane Carcillo and André Zylberberg, *Labor Economics*, MIT Press, 2014.
2. Daniel S.Hamermesh, *Labour Demand*, Princeton University Press, 1993.
3. Ben J Heijdra and F Van der Ploeg, *The Foundations of Modern Macroeconomics*, Oxford University Press, 2017.
4. Christopher A. Pissarides, *Equilibrium Unemployment Theory*, MIT press, 2000.
5. Jordi Galí, *Unemployment fluctuations and stabilization policies: a new Keynesian perspective*, MIT press, 2011.
6. Berg, Janine, et al. *In defense of labour market institutions*. Palgrave Macmillan UK, 2008.
7. Alison L. Booth, Booth, *The Economics of the Trade Union*. Cambridge University Press, 1995.



**CLO-PLO Mapping:**

CLO/PLO	PLO <sub>1</sub>	PLO <sub>2</sub>	PLO <sub>3</sub>	PLO <sub>4</sub>
CLO <sub>1</sub>	√	√		
CLO <sub>2</sub>		√	√	
CLO <sub>3</sub>	√			√
For Labour Economics II	√	√	√	√

*CO-LO Mapping for MA in Economics*

Course Code/Name	PO <sub>1</sub>	PO <sub>2</sub>	PO <sub>3</sub>	PO <sub>4</sub>
MNR110T	√	√	√	√
MNR120T	√		√	√
MNR130T		√	√	
MNR140T	√	√		√
MNR210T	√		√	√
MNR220T	√		√	√
MNR230T & MNR230P	√		√	√
MNR240T		√		
MNR310T	√	√	√	√
MNR320J		√	√	√
MNR330T & MNR330P			√	√
MNR340T	√	√		
Monetary Economics-I	√	√	√	√
Political Economy-I	√	√		
Labour Economics-I	√	√		√
Social choice and Mechanism Design-I	√	√	√	√
Sustainable Development-I	√	√	√	
International Macroeconomics-I	√	√	√	√
MNR410T	√	√	√	√
MNR420J		√	√	√
MNR430T & MNR430P			√	√
MNR440T	√	√		
Monetary Economics-II	√	√	√	√
Political Economy-II	√	√		
Labour Economics-II	√	√	√	√
Social choice and Mechanism Design-II	√	√	√	√
Sustainable Development -II	√	√		√
International Macroeconomics II	√	√	√	√
<b>Final Outcome</b>	√	√	√	√

