SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme	Total Notional Hours	Course credits
			L-P-T		
DSC	**P2ANC01ECO01**	Demand and Production analysis	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Differentiate economic methodologies and apply static and dynamic analysis to explain various economic phenomena.

CLO2: Evaluate equilibrium states and analyze stable, unstable and neutral equilibrium.

CLO3: Analyze consumer choice models with differentiating between income and substitution effects.

CLO4: Calculate price elasticity of demand using multiple techniques and measure consumer surplus.

CLO5: Synthesize production and returns and identify producer's equilibrium using marginal rate of technical substitution.

CLO6: Assess factor pricing and distribution and critically examine various theories of distribution.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Micro and Macro Economics:** 1.1 Static and dynamic Analysis, Methodology of Economics – Deductive and Inductive Methods 1.2 Equilibrium Analysis- Meaning and Kinds of Equilibrium – Stable, Unstable and Neutral 1.3 Marshall and Walras on stable and unstable equilibrium	CL, Inquiry-Based Learning, PBL, Experiential Learning (Practice-based Tasks)	CLO1 CLO2
II	**Demand Analysis**: 2.1 Utility Approach-Diminishing Marginal Utility and Equi- marginal utility, Indifference curve approach – characteristics 2.2 Consumer's equilibrium, Hicks and Slutsky Theorems 2.3 Inferior and Giffen Goods; Revealed preference theory; 2.4 Price Elasticity of demand –Percentage method, Total outlay method, Point method and Arc method, 2.5 Consumer's surplus – Marshall and Hicks	CL, PBL, ICT-Enabled Learning	CLO1 CLO2 CLO3 CLO4
III	**Theory of Production**: 3.1 Law of Variable proportions; Iso–quants-characteristics, 3.2 Diminishing marginal rate of technical substitution, 3.3 Producer's equilibrium, 3.4 Laws of Returns – The law of diminishing returns, the law of constant return, the law of increasing returns	CL, Collaborative Learning (Peer Discussion) ICT-Enabled Learning, Self-Directed Learning	CLO1 CLO5

IV	**Distribution Theory (Theory of factor pricing):** 4.1 General view 4.2 Marginal productivity theory 4.3 Euler's theorem 4.4 Theories of rent- Concepts, Ricardian and modern approaches 4.5 Theories of profit – Risk, Uncertainty, Innovation, Dynamic	CL, Self-Directed Learning, Collaborative Learning, ICT-Enabled Learning	CLO5 CLO6

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Problem-Based Learning (PBL)
  (c) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)
  (d) Experiential Learning (Community Engagement, Internship-linked Activities, Practice-based Tasks)
  (e) ICT-Enabled Learning (LMS-based Tasks, Digital Resources, Virtual Labs/Webinars)
  (f) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)
- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative assessment (30 marks)

(a) Class Assignment (05 Marks)
(b) Home Assignment (10 Marks)
(c) Attendance (05 Marks)
(d) Viva-voce (10 Marks)

b. Internal Summative Assessment (20 marks)

(a) Mid-term tests (20 Marks)

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO2	28	2	5	6	13
II	CLO1 CLO2 CLO3 CLO4	32	2	5	5	12
III	CLO1 CLO5	30	2	5	5	12
IV	CLO5 CLO6	30	2	5	6	13
		120	**08**	**20**	**22**	**50**

Master of Arts (Economics) Semester-I

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva-voce • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

(C) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1	3	-	-	2	-	-	-	2	-
CLO2	3	-	-	1	-	-	-	3	-
CLO3	3	2	-	2	3	2	1	3	1
CLO4	3	3	2	3	3	3	2	3	2
CLO5	2	-	-	2	-	2	1	2	2
CLO6	3	-	1	2	-	-	1	2	3

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	Advanced economic theory – Microeconomic Analysis	Ahuja H. L.	2025	S. Chand and company, New Delhi.
2	Micro economic theory and welfare economics	Chopra P. N.	2022	Kalyani Publishers, New Delhi
3	Modern economic theory	Deweet K. K.	2022	S. Chand and Company, New Delhi
4.	Price theory and applications	Hirshleifr J. and Glazer A.	2001	Prentice Hall, New Delhi
5.	Advanced Economic Theory	Jhingan M. L.	2021	Vrinda Publications, Delhi
6.	Modern Microeconomics	Koutsoyiannis A.	2001	Macmillan press, London
7.	Microeconomics Theory and Applications	Mishra and Puri	2024	Himalaya Publishing House

8.	Lectures on micro-economic theory	Prasad K. N.	2011	Himalaya publishing house
9.	Microeconomics-Theory and applications	Sen Anindya	2016	Oxford University press, New Delhi
10.	Principles of Economics (Micro and Macroeconomics)	Seth M. L.	2023	Lakshmi Narain Agrawas, Agra.
11.	Theory of price	Stigler	2015	Prentice hall, New Delhi
12.	A Textbook of Economic theory	Stonier A and Hague D.	2010	Longman group, London
13.	Economic Analysis	Sundharam K.P.M. and Sundharam E.N.	2021	S. Chand and sons, New Delhi
14.	Economics	Samuelson	2012	Tata Mcgraw Hill, New Delhi

- **Online Resources (Open Source)**

Sr. No.	Description of Resource(s)	Weblink
1	Marshall's quantity adjustment process with Walras's price adjustment process for market stability	https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/economics/advanced_macroeconomics/13._existence,_stability,_and_uniqueness_of_equilibrium/et/5072_et_13et.pdf
2	Walrasian and Marshallian equilibrium - stable and unstable equilibrium.	https://www.youtube.com/watch?v=j25j6AZDNis
3	Slutsky Vs Hicks - Income & Substitution effects	https://www.youtube.com/watch?v=lAOrEpqs04A
4	Economics Full Course – Microeconomics vs Macroeconomics	https://www.youtube.com/watch?v=5uE9NWf5hac

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSC	**P2ANC01ECO02**	Monetary Economics	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Analyze the nature and functions of money and evaluate the conceptual transition of money.

CLO2: Evaluate Money supply mechanics and differentiate between mechanistic and behavioral models of money supply.

CLO3: Appraise the evaluation of Quantity theory of money and critically compare the classical and neo-classical approaches.

CLO4: Investigate Demand for money and neutrality concepts and explain various motives of holding money.

CLO5: Synthesize theories of Investment and growth and understand the interaction between macro variables and investment function.

CLO6: Formulate and critique monetary policy framework, analyze the role of central banks and monetary policy in the economy and critically evaluate latest monetary policy of RBI.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Money & Supply of Money**: 1.1 Nature and significance of Money: a veil, a form of wealth, liquid asset-Money and other assets 1.2 The significance of money as an asset: Money and monetary economy 1.3 Financial intermediation — a mechanistic model of bank deposit determination; A behavioral model of money supply determination, a demand determined money supply process; 1.4 RBI approach to money supply; High powered money and money multiplier; budget deficits and money supply; 1.5 Money supply and open economy; control of money supply.	CL, Inquiry-Based Learning, PBL, Experiential Learning (Practice-based Tasks)	CLO1 CLO2 CLO4
II	**The Quantity Theory of Money**: 2.1 The Cambridge School- Keynesian General theory-Post Keynesian theories: Friedman & Don Patinkin 2.2 New Classical School: Rational expectation - J.R. Hicks on Classical and Keynes- Leijon Hufwood on Keynesian economics and economics of Keynes- Recent developments- 2.3 Neutrality of money-Classical, Keynesian and post-Keynesian views- Conditions of neutrality- Theory of	CL, PBL, ICT-Enabled Learning	CLO1 CLO3 CLO4

	money and prices- Income theory of money and Liquidity theory of money- Patinkin's real balance effect- Pigou's wealth effect. 2.4 The Transaction demand- The Asset demand for money: Keynesian and Classical approaches- Wealth approach- Post-Keynesian theories of demand for money: Friedman's Restatement of Quantity theory, Modigliani's approach.		
III	**Theory of Investment**: 3.1 Meaning and determinants of investment- Marginal efficiency of capital (MEC) and investment 3.2 Long and short run shifts in investment functions- Interest-elasticity of investment- impact of inflation 3.3 Influence of policy measures on investment 3.4 Multiplier and acceleration: empirical evidence- Capital- output ratio approach.	CL, Collaborative Learning (Peer Discussion) ICT-Enabled Learning, Self-Directed Learning	CLO2 CLO4 CLO5
IV	**Monetary Policy**: 4.1 The theory of monetary policy: Meaning, instruments, indicators and targets of monetary policy- External versus internal stability- Neutral money policy 4.2 Monetary policy and full employment- Cheap money policy- International banking and monetary policy- Constant money supply approach- Long-term objectives of monetary policy 4.3 Limitations of monetary policy- Rules versus discretion (Friedman's views)- Money and business cycles 4.4 Role of monetary policy in liberalization and market economy 4.5 Monetary policy framework of the Reserve Bank of India (RBI) and evaluation of Latest RBI's Monetary Policy	CL, Self-Directed Learning, Collaborative Learning, ICT-Enabled Learning	CLO1 CLO2 CLO6

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Problem-Based Learning (PBL)
  (c) Collaborative Learning (Group Tasks, Peer Discussion)
  (d) Experiential Learning (Practice-based Tasks)
  (e) ICT-Enabled Learning (LMS-based Tasks, Digital Resources, Virtual Labs/Webinars)
  (f) Inquiry-Based Learning
  (g) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)

- **Assessment Methodologies**

  (A) Internal Assessment

  a. Internal Formative assessment (30 marks)

  (a) Class Assignment (05 Marks)
  (b) Home Assignment (10 Marks)
  (c) Attendance (05 Marks)
  (d) Viva-voce (10 Marks)

b. Internal Summative Assessment (20 marks)

(a) Mid-term tests (20 Marks)

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO2 CLO4	28	2	5	6	13
II	CLO1 CLO3 CLO4	32	2	5	5	12
III	CLO2 CLO4 CLO5	28	2	5	5	12
IV	CLO1 CLO2 CLO6	32	2	5	6	13
		120	**08**	**20**	**22**	**50**

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva-voce • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

(C) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1	2	3	-	-	-	-	-	-	-
CLO2	1	3	-	-	-	1	-	-	-
CLO3	2	3	2	-	3	2	-	2	-
CLO4	1	3	2	-	-	3	3	3	-
CLO5	2	3	-	-	-	3	3	2	2
CLO6	1	3	2	2	3	3	-	3	3

Master of Arts (Economics) Semester-I

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	Macroeconomics: Theory and Policy	Ackley, G	1978	MacMillan, New York
2	Macroeconomics	Dornbusch, R. and F. Stanley	1997	MacMillan, New York
3	Modern Macroeconomics: Theory and Policy	Ghosh, B.N., and Rama Ghosh	1993	Himalaya Publishing
4	Monetary Planning in India	Gupta, S. B,	1995	Oxford University Press, New Delhi
5	Macroeconomics: Theory and Applications	Gupta, G.S.	2001	Tata McGraw-Hill publishing Company Ltd., New Delhi.
6	Money in a Theory and Finance	Gurley J. and E.S. Shaw	1960	Brookings Institution, Washington
7	Macroeconomics	Hall, R.E. and J.B. Taylor	1986	McGraw-Hill Inc. New York
8	Contemporary Macroeconomic Theory and Policy	Jha, R.	1991	Wiley Eastern Ltd. New Delhi
9	Demand for Money, Theory and Evidence	Laidler, D.E.W.	1977	Dum-Don Valley, New York
10	On Keynesian Economics and Economics of Keynes	Leijonhufwud, A.	1968	Oxford University Press, London.
11	New Keynesian Economics, 2 Vols.	Mankiw, N.G. and D. Romer (Eds.)	1991	MIT Press, Cambridge, Massachusetts, USA.
12	Reading in Macroeconomics	Mueller, M.G.	1966	Holt Rinehart & Winston, N.Y.
13	Money, Interest and Prices	Patinkin, D.	1965	Harper & Row, New York
14	Studies in Business Cycle Theory	Lucas, R.	1981	MIT Press, Cambridge, Massachusetts, USA
15	Structuralist Macroeconomics	Taylor, L.	1983	Basic Books, New Longman
16	Money, Banking, International Trade and Public Finance	Mithani D. M.	2010	Himalaya Publishing
17	Monetary Economics	M. L. Seth	2020	Lakshmi Narayan Agarwal

- **Online Resources (Open Source)**

Sr. No.	**Description of Resource(s)**	**Weblink**
1	Reserve Bank of India Official Website	https://www.rbi.org.in/
2	Investopedia-Monetary Theory	https://www.investopedia.com/terms/m/monetary_theory.asp
3	Khan Academy-Monetary System	https://www.khanacademy.org/economics-finance-domain/macroeconomics/monetary-system-topic/macro-monetary-policy/v/monetary-and-fiscal-policy
4	e-PG Pathshala	https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/economics/04._basic_macroeconomics/01._introduction__issues_studied_in_macroeconomics,_schools_of_macroeconomic/et/8787_et_1_et.pdf

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSC	**P2ANC01ECO03**	Statistical Methods for Economics	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Solve the real-world problems in decision-making, quality control and risk analysis using probability

CLO2: Analysis and understand the implications of economic inequality and evaluate the effectiveness of social policies using visual data.

CLO3: Determine the linear relationship between economic variables.

CLO4: Utilize various index numbers to analyse economic trends, formulate policies, and measure inflation or deflationary tendencies.

CLO5: Use price indices as "deflators" to convert nominal values into real terms for more accurate economic comparisons.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Descriptive Statistics:** 1.1 Method of Data Collection and Presentation of Data 1.2 Frequency Distribution 1.3 Measures of Central Tendency and their Application in Economics Analysis 1.4 Measures of Dispersion and their Application in Economics Analysis 1.5 Lorenz Curve.	CL, ICT-Enabled Learning (Digital Resources), PBL, Self-Directed Learning (Guided Readings, Concept Exploration Tasks)	CLO1 CLO2
II	**Simple Correlation:** 2.1 Concept and Types of Correlation 2.2 Scatter Diagrams 2.3 Coefficient of Correlation – Product Moment Method and Rank Correlation Method 2.4 Probable Error and Explanation of Co-Efficient of Correlation, 2.5 Application of correlation in Economics	CL, ICT-Enabled Learning (Digital Resources), PBL, Self-Directed Learning (Guided Readings, Concept Exploration Tasks)	CLO1 CLO2 CLO3
III	**Regression and Association of Attributes:** 3.1 Concepts and measurement 3.2 Methods for deriving the regression coefficients, regression equations, regression lines 3.3 Standard error and interpretation of regression coefficients and regression equations 3.4 Application of regression analysis in Economic Analysis. 3.5 Concept and type of association of attributes 3.6 Consistency of data **3.7** Methods for measuring the association of Attributes	CL, ICT-Enabled Learning (Digital Resources), PBL, Self-Directed Learning (Guided Readings, Concept Exploration Tasks)	CLO1 CLO2 CLO3

IV	**Index Numbers:** 4.1 Concept and types of indices 4.2 Importance and Utilisation of Index Numbers in Economic Analysis 4.3 Methods of Construction of various type of Index Numbers 4.4 Problems in Construction of Index Numbers 4.5 Testing of indices	CL, ICT-Enabled Learning (Digital Resources), PBL, Self-Directed Learning (Guided Readings, Concept Exploration Tasks)	CLO1 CLO2 CLO4 CLO5

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Problem-Based Learning (PBL)
  (c) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)
  (d) ICT-Enabled Learning (LMS-based Tasks, Digital Resources, Virtual Labs/Webinars)
  (e) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)

- **Assessment Methodologies**
  (A) Internal Assessment
  a. Internal Formative assessment (30 marks)
  (a) Class Assignment (05 Marks)
  (b) Home Assignment (10 Marks)
  (c) Attendance (05 Marks)
  (d) Viva-voce (10 Marks)
  b. Internal Summative Assessment (20 marks)
  (a) Mid-term tests (20 Marks)

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO2 CLO3 CLO4	34	2	5	6	13
II	CLO3 CLO4	28	2	5	5	12
III	CLO3 CLO4 CLO5	28	2	5	5	12
IV	CLO3 CLO4 CLO5 CLO6	30	2	5	6	13
		120	**08**	**20**	**22**	**50**

Master of Arts (Economics) Semester-I

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva-voce • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

(C) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	**PLO2**	**PLO3**	**PLO4**	**PLO5**	**PLO6**	**PLO7**	**PLO8**	**PLO9**
CLO1	3	2	2	1	2	3	3	3	1
CLO2	2	3	1	1	1	3	3	2	-
CLO3	1	1	2	2	3	3	3	3	-
CLO4	2	2	1		2	3	3	2	-
CLO5	1	1	1	1	-	3	3	2	-

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr.No.	Title	Author(s)	Edition/Year	Publisher
1	Fundamentals of Applied Statistics	Gupta S. C. & Kapoor V.K.	2007	S. Chand & Sons, New Delhi.
2	Numerical Methods of Statistical Analysis	Grewal P S	1987	S P Pvt. Ltd., New Delhi
3	Fundamentals of Mathematical Statistics	Gupta S. C. & Kapoor V.K.	2002 10th edition	S. Chand & Sons, New Delhi.
4	An Introduction to Statistical Methods	Gupta C.B. & Gupta Vijay	2004 23rd edition	Vikas Publishing House Pvt. Ltd., Noida
5	Quantitative Methods of Economics	Dave M.B & Pandya K	2012	Popular, Surat (Gujarati)
6	Business Statistic	Patel R.K. & Patel L.B.	2011	C. Jamanadas Co. Ahmedabad.
7	Statistical Analysis Made Simple Using Microsoft Excel	Suarbh R. Chaudhari & Dr. Dharmesh P. Raykundaliya,	2025 – First Edition	Madhuvan Stationery & General Store
8	Dhandhakiya Ankadashastra	Patel Balubhai	2015	University Granthnirman Board, Ahmedabad.

Master of Arts (Economics) Semester-I

9	Arthshastrama Ganitshastra	Zala M.L.	1995	Purbiti Prakashan, Vallabh Vidyanagar.
10	Arthvishayak Ankadashastra	Dr. Jaiswal M.C.	1992	University Granthnirman Board, Ahmedabad.

- **Online Resources (Open Source)**

Sr. No.	Description of Resource(s)	Weblink
1	Descriptive statistics and Probability	https://onlinecourses.swayam2.ac.in/e-learning/preview/cec26_hs38
2	Applied statistics for Economics	http://www.digimat.in/nptel/courses/video/109104182/L01.html
3	Applied statistics for Economics	Applied Statistics and Econometrics (NPTEL)
4	Statistical Methods for Economics	https://onlinecourses.swayam2.ac.in/e-learning/preview/cec24_hs51

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSC	**P2ANC01ECO04**	Kautilya's Economics for Modern Times	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Demonstrate comprehensive understanding of economic principles articulated in the Arthashastra, particularly relating to the role of the state, revenue systems, taxation, and public finance.

CLO2: Apply Kautilya's concepts of taxation, land management, state monopoly, and public goods provisioning to analyse contemporary public finance and governance frameworks.

CLO3: Critically analyse market regulation, consumer protection, and welfare mechanisms, including anti-profiteering measures and quality control, in the context of Dharmic capitalism.

CLO4: Evaluate the relevance of Kautilya's approaches to sustainable development, including water resource management, forest conservation, and biodiversity assurance, in modern environmental policy.

CLO5: Assess fiscal discipline, administrative vigilance (*Dandaniti*), taxation structures, and redistribution policies in promoting economic efficiency, equity, and accountability.

CLO6: Examine Kautilya's perspectives on international trade, trade route security, foreign policy, and strategic alliances, and relate them to contemporary global economic relations.

CLO7: Develop the ability to interpret and synthesize ancient economic ideas with modern economic theories to generate policy-relevant insights for governance, development, and institutional design.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Economic Role of the state, taxation and public finance in Kautilyanomics and its applicability in modern times** 1.1 Revenue systems and sources of state revenue 1.2 Land Management, Protection of private property and related rules 1.3 Infrastructure Development 1.4 Ensuring Sustainable Development: Water resources, forest management and biodiversity assurance	CL, CBL, PBL, Collaborative learning, self-directed learning	CLO1 CLO2 CLO4 CLO7
II	**Market regulation, consumer protection & welfare in Kautilyanomics: Dharmic Capitalism and its applicability in modern times** 2.1 Concept of Dharmic Capitalism: Balancing between profit-making and social welfare 2.2 Regulation of markets, anti-profiteering market supervision 2.3 Agricultural revenue administration 2.4 Quality control, prevention of fraud, adulteration and exploitation	CL, CBL, PBL, Collaborative learning, self-directed learning	CLO3 CLO7

Master of Arts (Economics) Semester-I

III	**Fiscal Discipline and Public Finance in Kautilyanomics and its applicability in modern times** 3.1 State monopoly 3.2 Taxation structure: progressive or proportional, equity and efficiency 3.3 Provision for public goods: roads, waterbodies, security 3.4 Administrative vigilance, *Dandaniti* 3.5 Economic welfare and redistribution	CL, CBL, PBL, Collaborative learning, self-directed learning	CLO1 CLO2 CLO4 CLO5 CLO7
IV	**International trade and economic relations in Kautilyanomics and its applicability in modern times** 4.1 International trade route security and management: Transportation and Warehousing 4.2 Foreign policy and strategic alliances 4.3 Ideas regarding exports, imports and trade balance 4.4 Trade revenues	CL, CBL, PBL, Role play, Collaborative learning, self-directed learning	CLO6 CLO7

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Case-Based Learning (CBL)
  (c) Problem-Based Learning (PBL)
  (d) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)
  (e) Simulation and Role-Play (Academic, Professional, or Policy-based Scenarios)
  (f) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)
- **Assessment Methodologies**
  (A) Internal Assessment
  a. Internal Formative Assessment (30 Marks)
  (a) Class Assignment – 5 marks
  (b) Home Assignment – 10 marks
  (c) Viva voce – 10 marks
  (d) Attendance – 5 marks
  b. Internal Summative Assessment (20 Marks)
  (a) Mid-term test: 20 marks

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage(Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO2 CLO4 CLO7	32	2	5	6	13
II	CLO3 CLO7	28	2	5	5	12
III	CLO1 CLO2 CLO4 CLO5	32	2	5	5	12

	CLO7					
IV	CLO6 CLO7	28	2	5	6	13
		120	**08**	**20**	**22**	**50**

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Viva voce • Attendance • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

- **CLOs – PLOs Matrix**

CLO	PLO								
	PLO1	**PLO2**	**PLO3**	**PLO4**	**PLO5**	**PLO6**	**PLO7**	**PLO8**	**PLO9**
CLO1	3	3	1	-	2	-	-	-	-
CLO2	2	3	1	2	-	3	-	-	-
CLO3	2	2	2	-	1	3	-	1	2
CLO4	1	-	3	2	-	2	-	-	3
CLO5	2	3	2	-	-	3	-	-	3
CLO6	2	2	-	-	3	2	-	1	1
CLO7	3	2	2	1	2	3	2	3	2

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	The Arthashastra.	Rangarajan, L. N. (Ed.).	1992	Penguin Books India.
2	Kautilya's Arthashastra	Shamasastry, R.	2017	Penguin Random House Pvt. Ltd. ISBN: 978-0143441700
3	Kautilyanomics	Balasubramanian, Sriram	2022	Bloomsbury Publishing India Pvt. Ltd. ISBN: 978-9354350368

Master of Arts (Economics) Semester-I

4	Indian Models of Economy, Business and Management	Kanagasabapathi, P.	3rd edition, 2012	Prentice Hall India Learning Private Limited; ISBN: 978-8120345638 https://www.youtube.com/watch?v=KB9L9nj6vyo
5	Kautilya's Arthashastra Strategic Cultural Roots of India's Contemporary Statecraft.	Kajari, Kamal	1st edition, 2023	Taylor & Francis Books India Pvt. Ltd., ISBN: 978-1032585215

- **Online Resources (Open Source)**

Sr. No.	Description of Resource(s)	Weblink
1	A lecture note written by Mr. Balbir Sihag, entitled Kautilya and Modern Economics, available on the website of Indira Gandhi National Centre for the Arts, Ministry of Culture, Government of India	https://ignca.gov.in/invitations/About_the_lecture.pdf
2	Lecture by Centre for Indic Studies on the title Kautilyonomics: For Modern Times - Sriram Balasubramaniam	https://www.youtube.com/watch?v=aoN6W77A3Yg
3	Lecture by Sangam talks on Ancient India's Economic Genius: How Kautilya's Arthashastra Predicted Modern Economics	https://www.youtube.com/watch?v=BAW6T7ik8Sk
4	Lecture by Sangam talks on Kautilya's Arthashastra: The Economic Blueprint Behind Ancient India's Wealth and Power	https://www.youtube.com/watch?v=Yg_yOUPrB5s

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSE	**P2ANE01ECO01**	Fundamentals of Agricultural Economics	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Explain and apply the principles of Agricultural Economics and its role in economic development.
CLO2: Analyse the relationship between agriculture and industry and evaluate balanced development.
CLO3: Assess agricultural resource management (land, labour, finance) and factors affecting productivity.
CLO4: Compare farming systems and evaluate their economic and environmental impact.
CLO5: Analyse agricultural instability and propose strategies for risk management.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Introduction to Agricultural Economics:** 1.1 Definition, nature, and scope of agricultural economics 1.2 Role of agriculture in economic development 1.3 Agriculture as an industry - economic distinction between agriculture and industry 1.4 Need for balanced development of agriculture and industry – complementarity between agriculture and industry	CL, Field Visit	CLO 1 CLO 2 CLO 3 CLO 5
II	**Resources Management in Agriculture:** 2.1 Concept of agricultural resources – land and labour 2.2 Land – characteristics – factors affecting productivity 2.3 Factors affecting land leasing 2.4 Labour – characteristics, types, efficiency of labour 2.5 Agricultural finance – features, needs, problems	CL, PBL	CLO 3 CLO 4 CLO 5
III	**Farm organization:** 3.1 Concept of modern different systems of farming – Mechanised - Precision agriculture - Hydroponics and Aeroponics - Tissue culture - Integrated pest management and Organic farming – Aquaponics - Digital farming and Mobile app 3.2 Specialized and diversified farming – advantages and disadvantages 3.3 Bhartiya agricultural system – Natural farming – Subsistence farming – Plantation agriculture – Mixed farming 3.4 Commercial farming - advantages and disadvantages	CL, ICT-Enabled Learning (Digital	CLO 4 CLO 5 CLO 1

IV	**Instability of agriculture:** 4.1 Meaning and causes of instability 4.2 Types of instability - Income and price fluctuations 4.3 Price instability – Problems – Reasons 4.4 Risk and uncertainty in agriculture – types and measures to deal with uncertainty	CL, Self-Directed Learning (Guided Readings)	CLO 5 CLO 4 CLO 3

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Industrial Visit/Field Visit/Institutional Visit
  (c) Problem-Based Learning (PBL)
  (d) ICT-Enabled Learning (LMS-based Tasks, Digital Resources, Virtual Labs/Webinars)
  (e) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)

- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative assessment (30 marks)

(a) Class Assignment (05 Marks)
(b) Home Assignment (10 Marks)
(c) Attendance (05 Marks)
(d) Viva-voce (10 Marks)

b. Internal Summative Assessment (20 marks)

(a) Mid-term tests (20 Marks)

(A) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO 1 CLO 2 CLO 3 CLO 5	30	2	5	5	12
II	CLO 3 CLO 4 CLO 5	30	2	5	6	13
III	CLO 4 CLO 5 CLO 1	32	2	5	6	13
IV	CLO 5 CLO 4 CLO 3	28	2	5	5	12
		120	**08**	**20**	**22**	**50**

Master of Arts (Economics) Semester-I

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva voce • Mid-term tests	50%
2	End-Semester Examination	Written Examination	50%

(B) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1	3	1	2	3	1	2	1	2	2
CLO2	3	2	3	2	2	3	1	2	2
CLO3	2	3	3	3	1	3	2	1	2
CLO4	2	1	3	3	1	2	1	1	3
CLO5	2	2	3	2	1	3	2	1	3

Values to the **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr. No.	Title	Author(s)	Edition/ Year	Publisher
1	Agricultural Economics: An Indian Perspective	R. K. Lekhi Joginder Sing	2021	Kalyani Publishers
2	Leading Issues in Agricultural Economics	R. N. Soni Sangeeta Malhotra	2020	Vishal Publication Co.
3	Economics of Agricultural Development	John W. Mellor	1967	Cornell University Press
4	Transforming Traditional Agriculture	T. W. Schultz	1964	Yale University Press
5	Agricultural Development and International Perspective	V. W. Ruttan and Yujiro Hayami	1971	Johns Hopkins University Press
6	The Economics of Agricultural Production and Resource Use	E. D. Heady	1952	Prentice-Hall
7	Tenant-Introduction to Agricultural Economic Analysis	C. E. Bishop and W. D. Toussaint	1963	Wiley

Master of Arts (Economics) Semester-I

- **Online Resources (Open Source)**

Sr. No.	Description of Resource(s)	Weblink
1	Food and Agriculture Organisation of the United Nations	www.fao.org
2	National Bank for Agriculture and Rural Development	www.nabard.org
3	Types and systems of farming	https://agri-bsc.kkwagh.edu.in/
4	Difference Between Modern & Traditional Agriculture Methods	https://krishispray.in/
5	Economic Survey	https://www.indiabudget.gov.in/
6	Ministry of Agriculture and Farmers' Welfare, Government of India	https://agriwelfare.gov.in/
7	Agricultural Statistics at a Glance	https://agriwelfare.gov.in/en/Agricultural_Statistics_at_a_Glance

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSE	**P2ANE01ECO02**	Theory of Environmental Economics	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Analyze the fundamental components of the ecological system and the linkages between the environment and the economy
CLO2: Evaluate the environment as an economic good
CLO3: Aanalyze the role of market inefficiencies, externalities, missing markets and lack of property rights as the causes of environmental degradation.
CLO4: Classify natural resources according to their properties
CLO5: Examine common property resources and open access resources in terms of market failures and transaction costs.
CLO6: Apply fundamental theorems of welfare economics to assess optimal levels of resource use.
CLO7: Examine the concepts, model and dimensions of sustainable development
CLO8: Apply various environmental valuation techniques to value natural resources
CLO9: Examine the construction of an integrated environmental and economic accounting framework
CLO10: Evaluate environmental policies including their objectives, instruments, and limitations

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Fundamental Concepts:** 1.1 Concepts of environment, Rationale of Environmental Economics, components of the ecological system, two-way environment-economy linkages 1.2 Characteristics of the environment as an economic good, Market inefficiencies-externalities, absence of property rights, missing markets 1.3 Open Access Resource, public goods, common property resources, transaction costs	CL, Collaborative Learning (Group Tasks, Peer Discussion) PBL Reflective Practices (Concept Mapping)	CLO1 CLO2 CLO3 CLO4
II	**Nature of Environment Policy:** 2.1 Policy failure and degradation of environment 2.2 Fundamental theorems of Welfare economics: Pareto optimality, compensation principle 2.3 Trade-off between environment and development, Kuznets curve 2.4 Concepts, definitions, dimensions of sustainable development	CL CBL Reflective Practices (Concept Mapping)	CLO5 CLO6

Master of Arts (Economics) Semester-I

III	**Measurement of Environmental Values:** 3.1 Use values and non-use values 3.2 Valuation methods 3.3 Methods based on observed market behavior 3.4 Objective methods: cost of illness method, human capital approach, statistical value of life approach, marginal abatement cost method 3.5 Subjective methods: travel cost method, hedonic property price method, net price (cost of extraction) method etc. 3.6 Methods based on response to hypothetical markets: 3.7 Contingent Valuation Method	CL Collaborative Learning (Group Tasks, Peer Discussion)	CLO7
IV	**Environmental Accounting:** 4.1 Accounting and the Environment 4.2 Integrated environmental and economic accounting and measurement of environmentally corrected GDP 4.3 Environmental Policy: Need, objectives, nature, instruments and limitations	CL, PBL, Reflective Practices (Concept Mapping)	CLO8 CLO9 CLO10

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Problem-Based Learning (PBL)
  (c) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)
  (d) Reflective Practices (Concept Mapping)
  (e) Case-Based Learning (CBL)
- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative assessment (30 marks)

(a) Class Assignment (05 Marks)
(b) Home Assignment (10 Marks)
(c) Attendance (05 Marks)
(d) Viva-voce (10 Marks)

b. Internal Summative Assessment (20 marks)

(a) Mid-term tests (20 Marks)

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	**CLO1 CLO2 CLO3 CLO4**	30	2	5	5	12
II	**CLO5 CLO6**	30	2	5	6	13

III	**CLO7 CLO8**	30	2	5	6	13
IV	**CLO9 CLO10**	30	2	5	5	12
		120	**08**	**20**	**22**	**50**

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva-voce • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

(C) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	**PLO2**	**PLO3**	**PLO4**	**PLO5**	**PLO6**	**PLO7**	**PLO8**	**PLO9**
CLO1	2	1	3	3	1	2	1	1	2
CLO2	3	2	2	3	1	2	1	1	2
CLO3	3	2	3	3	1	3	1	1	2
CLO4	2	1	2	3	1	2	1	1	1
CLO5	3	2	3	3	1	3	1	1	2
CLO6	3	2	2	3	1	3	2	1	2
CLO7	2	1	3	3	1	2	1	1	3
CLO8	2	1	2	3	1	3	3	2	2
CLO9	2	2	3	3	1	2	2	1	2
CLO10	3	3	3	3	1	3	2	2	1

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr. No.	Title	Author(s)	Edition/Year	Publisher
1	The Theory of Environmental Policy	Baumol, W. J. and W. E. Oates	1988 2nd Edition	Cambridge University Press
2	Handbook of Environmental Economics	Bromley, Daniel W. (Ed.)	1995 1st Edition	Blackwell Publishers

Master of Arts (Economics) Semester-I

3	Environmental Economics and Management: Theory, Policy and Applications	Callan, S. J. and J. M. Thomas	2000 2nd Edition	South-Western College Publishing
4	Economic Analysis of Environmental Impacts	Dixon, J.A. et al.	1994 2nd Edition	Earthscan Publications Ltd., London
5	Introduction to Environmental Economics	Hanley, N. et al.	2001 1st Edition	Oxford University Press, New York
6	Natural Resource Economics: Theory and Applications in India	Kerr, John M. et al (Eds)	1997	Oxford & IBH Publishing Co. Pvt. Ltd, New Delhi
7	Environmental Economics and Policy	Lesser, J. A. et al.	1997	Addison-Wesley
8	The Earthscan Reader in Environmental Economics	Markandya, Anil and J. Richardson (Eds.)	1992	Earthscan Publications Ltd., London
9	Economics of Natural Resources and the Environment	Pearce, D. W. and R. K. Turner	1990	Johns Hopkins University Press, Baltimore.
10	Managing Common Pool Resources: Principles and Case Studies	Singh, Katar	1994	Oxford University Press.
11	Environmental Economics and Policy	Tietenberg, Tom	2001	Addison-Wesley
12	Environmental Economics: An Indian Perspective	Bhattacharya, R. N. (Ed.)	2001	Oxford University Press.
13	The Cost of Inaction: Valuing the Economy-wide Costs of Environmental Degradation in India	Brandon, C., K. Hommann and N. M. Kishor	1995	UNU Conference on the `Sustainable Future', October 16-18, Tokyo, Japan.
14	Environmental Economics: An Introduction	Field, B. C. and M. Field	2002	McGraw-Hill Irwin (3rd ed.)
15	Paryavaraniya Arthashastrana Payana Siddhanto”	Khakhhar, K. K.	2004	Adarsh Printing Press, Rajkot

- **Online Resources (Open Source)**

Sr.No.	Description of Resource(s)	Web link
1	UNEP - United Nations Environment Programme	www.unep.org
2	CPCB - Central Pollution Control Board, India, MoEFCC, Government of India	cpcb.nic.in
3	MoEFCC - Ministry of Environment, Forest and Climate Change, Government of India	moef.gov.in
4	DoWR, RD & GR - Department of Water Resources, River Development & Ganga Rejuvenation (Ministry of Jal Shakti), Government of India	jalshakti-dowr.gov.in
5	NGT - National Green Tribunal, India	greentribunal.gov.in

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC ‘A’ Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
DSE	**P2ANE01ECO03**	Economic Theories of Rural Development	4-0-0	120	04

- **Course Learning Outcomes (CLOs)**

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

CLO1: Explain major paradigms of rural development, including the Modernisation Theory and their relevance in developing economies.

CLO2: Interpret the need, sources, and measurement of financing for rural development.

CLO3: Analyze planning strategies for effective project implementation.

CLO4: Evaluate different indicators and measures of rural poverty.

CLO5: Critically assess institutional frameworks (RRBs, NABARD) and their effectiveness in promoting inclusive and sustainable rural development

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Some Paradigms of Rural Development:** 1.1 Introduction - The Modernisation Theory 1.2 Rosenstein - Rodan's Theory of the 'Big Push' 1.3 Leibenstein's Critical Minimum Effort Thesis 1.4 Gunnar Myrdal’s Thesis of Spread and Backwards Effects - The Human Capital Model of Development 1.5 Gandhian Model of Rural Development	CL, Collaborative Learning	CLO1
II	**Financing Rural Development:** 2.1 Financing Rural Development: Need and Measurement 2.2 Domestic Institutional Sources 2.3 The Role of Non-institutional Agencies - Deficit financing and controlled Inflation - Foreign Sources of Funds - The role of foreign Investment - The role of foreign aid. 2.4 Working of RRBs and their role in rural development: Introduction - sources of Funds - Uses of Funds - Results of RRBs - Quality of assets- inspection of RRBs. 2.5 NABARD-its functions and role in rural development	CL, Collaborative Learning	CLO2 CLO5
III	**Project Implementation, Monitoring and Evaluation:** 3.1 Introduction - Project implementation 3.2 Planning for implementation 3.3 Project Control Integration and Coordination 3.4 People's Participation in Implementation 3.5 Project monitoring - Project Evaluation.	CL, Collaborative Learning	CLO3

IV	**Measures of Development:** 4.1 Measures of the level of Rural Development 4.2 Measures of Distribution of Income 4.3 Measures of Development: Some Measures of Rural Poverty	CL, Collaborative Learning	CLO4

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)

- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative assessment (30 Marks)

(a) Class Assignment (05 Marks)
(b) Home Assignments (10 Marks)
(c) Attendance (05 Marks)
(d) Viva Voce (10 Marks)

b. Internal Summative Assessment (20 Marks)

(a) Mid-term tests (20 Marks)

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	30	2	5	6	13
II	CLO2 CLO5	32	2	5	5	12
III	CLO3	28	2	5	5	12
IV	CLO4	30	2	5	6	13
		120	**08**	**20**	**22**	**50**

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Class Assignment • Home Assignment • Attendance • Viva-voce • Mid-term tests	50
2	End-Semester Examination	Written Exam	50

(C) CLOs – PLOs Matrix

CLO	PLO								
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1	3	1	3	3	2	2	-	2	2
CLO2	2	3	2	3	1	2	2	2	2
CLO3	2	2	2	3	1	3	2	2	2
CLO4	2	1	3	2	1	3	3	2	3
CLO5	2	3	3	3	1	3	2	2	3

Values to the **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr.No.	Title	Author(s)	Edition/Year	Publisher
1	Rural Development - principles policies and Management	Katar Singh	1999	Sage Publications, New Delhi
2	Rural Development	I. Satyasundaram	1999	Himalaya Publishing House, New Delhi
3	Economic Liberalisation and Indian Agriculture	Bhalla. G. S.	1994	Institute for Studies in Industrial Development, New Delhi
4	Agricultural Change and Rural Poverty	John Mellor and Gunvant Desai	1986	Oxford University Press, Bombay

- **Online Resources (Open Source)**

Sr.No	Description of Resource(s)	Weblink
1	The Human Development Reports **website for the** *Human Development Report 2025* is an official online platform managed by the United Nations Development Programme **(UNDP)** that provides comprehensive access to the latest global report on human development	Human Development Report 2025 | Human Development Reports
2	The Ministry of Statistics and Programme Implementation **(MoSPI) website** is the official digital platform of the Government of India for disseminating reliable, up-to-date statistical data and information on the country's economy and development, databases, including national income accounts, industrial production indices, consumer price indices, survey results conducted by the National Statistical Office (NSO), and information on sustainable development goals and policy formulation in India.	Ministry of Statistics and Program Implementation | Government Of India
3	The PAIMANA website is an online platform developed by the Ministry of Statistics and Programme Implementation to monitor and track the progress of major infrastructure projects across India. It provides real-time data, project status updates, and performance insights to improve transparency, coordination, and timely implementation of government projects.	PAIMANA – Infrastructure & Project Monitoring | MoSPI, Government of India

SARDAR PATEL UNIVERSITY

Vallabh Vidyanagar

NAAC 'A' Grade (10-01-2023 To 09-01-2028)

NEP-2020 aligned Curriculum with effect from Academic Year 2026-27

Master of Arts (Economics) Semester-I

Course Type	Course Code	Course Title	Teaching-Learning Scheme L-P-T	Total Notional Hours	Course credits
SKILL	**P2ANS01ECO01**	Research Ethics in Economics	2-0-0	60	02

- **Course Learning Outcomes (CLOs)**

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

CLO1: Develop a critical understanding of foundational ethical principles in research, including autonomy, justice, and professional integrity, and their relevance to economic inquiry.

CLO2: Identify and evaluate research misconduct and questionable research practices (such as plagiarism, data fabrication, falsification, and p-hacking) in the context of economic research.

CLO3: Apply ethical principles to the design and conduct of empirical research, including surveys, experiments, and use of secondary data, ensuring informed consent, confidentiality, and data protection.

CLO4: Assess ethical issues related to bias, conflicts of interest, and the use of economic models and evidence in policy-making, with attention to transparency and accountability.

CLO5: Demonstrate the ability to prepare ethically compliant research proposals, including data management plans and adherence to institutional and international ethical guidelines.

Unit	Course Content	Learning Pedagogies*	CLO(s)
I	**Research ethics foundations and caution during data collection:** 1.1 Importance of research ethics and impact of failure on stakeholders (through policies and recommendations) 1.2 Researcher bias (confirmation bias, ideological bias) 1.3 Funding bias (corporate, government influence) 1.4 Conflict of interest disclosure norms 1.5 Fabrication of data, selective reporting of data, data mining without disclosure 1.6 Informed consent, anonymization and deception in confidentiality and identity protection, vulnerable population	CL, CBL, PBL, Collaborative learning, self-directed learning	CLO1 CLO5
II	**Research ethics in publication, post research responsibilities and peer review ethics:** 2.1 Predatory journals- characteristics, identification, impact of publication on career 2.2 Ghost authorship, honorary authorship, authorship sequence ethics 2.3 Citation ethics and avoiding plagiarism, 2.4 APA referencing 2.5 Tools for citation 2.6 Legal implications of violation of plagiarism in India 2.7 Post study responsibilities (towards stakeholders, reviewers and readers)	CL, CBL, PBL, Collaborative learning, self-directed learning	CLO2 CLO3 CLO4 CLO5

	2.8 Peer review ethics – double blind peer review and its cautionary processes, appropriate method to review by section (appreciation and criticism)		

- **(*) Learning Pedagogies/Methods**
  (a) Classroom Lecture (CL)
  (b) Case-Based Learning (CBL)
  (c) Problem-Based Learning (PBL)
  (d) Collaborative Learning (Group Tasks, Peer Discussion, Joint Presentations)
  (e) Self-Directed Learning (Guided Readings, Concept Exploration Tasks)
- **Assessment Methodologies**

(A) Internal Assessment

a. Internal Formative Assessment (15 Marks)

(a) Home Assignment – 07 marks
(b) Viva voce – 05 marks
(c) Attendance – 03 marks

b. Internal Summative Assessment (10 Marks)

(a) Mid-term test: 10 marks

(B) Weightage of Learning Efforts for External Assessment

Unit	Aligned CLOs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1 CLO5	32	2	5	5	12
II	CLO2 CLO3 CLO4 CLO5	28	2	5	6	13
		60	**04**	**10**	**11**	**25**

- **Assessment and Evaluation**

Sr. No.	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	• Home Assignment • Viva voce • Attendance • Mid-term tests	50%
2	End-Semester Examination	Written Exam	50%

Master of Arts (Economics) Semester-I

- **CLOs – PLOs Matrix**

CLO	PLO								
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1	1	1	2	1	1	2	-	1	3
CLO2	-	-	-	-	-	3	2	1	3
CLO3	-	-	1	-	-	3	3	1	3
CLO4	2	2	2	2	2	3	1	2	3
CLO5	-	-	-	-	-	3	4	2	3

Values to **CLO-PLO** matrix are assigned **by judging the importance of the particular CLO** in relation to the **PLOs**.

CLO – PLO correlation	Value
Strong	3
Moderate	2
Low	1
No correlation	-

- **Suggested Learning Materials Books:**

Sr.No.	Title	Author(s)	Edition/Year	Publisher
1	The Student Guide to Research Ethics	Paul Oliver	2010 3rd Edition	Open University Press (UK)
2	The ethics of research with human subjects	Joan E. Sieber	1982	Springer US (part of the *Advances in Experimental Social Processes* series)
3	Publication ethics	Elizabeth Wager and Sabine Kleinert	2011	Wiley-Blackwell
4	Bias in social research	Martyn Hammersley and Roger Gomm	1997	Open University Press
5	Asking Questions: The Definitive Guide to Questionnaire Design	Norman M. Bradburn, Seymour Sudman, Brian Wansink	1981 (updated 2004)	Jossey-Bass (an imprint of Wiley)

- **Online Resources (Open Source)**

Sr.No	Description of Resource(s)	Weblink
1	'Ethics in research' as provided by egyankosh for IGNOU	https://egyankosh.ac.in/bitstream/123456789/90740/3/Unit-11.pdf
2	'Ethics in social research' as provided by egyankosh for IGNOU	https://www.egyankosh.ac.in/bitstream/123456789/88598/1/Unit-3.pdf
3	'Ethics in research' as provided by egyankosh for IGNOU	https://www.egyankosh.ac.in/bitstream/123456789/76514/1/Unit-8.pdf
4	In a course Research Methodology a module entitled 'research ethics' is offered in epathshala by MHRD	https://www.youtube.com/watch?v=h7lOJmYcxD8#:~:text=Paper%20:%20RESEARCH%20METHODOLOGY%20Module%20:%20Research%20Ethics.%20e%2DPG%20Pathshala%E2%80%A2945%20views%20%C2%B7%2028:07.
5	A course on SWAYAM entitled Research ethics and plagiarism	https://onlinecourses.swayam2.ac.in/e-learning/preview/nou26_ge26
6	Purdue University – OWL Purdue website presenting elaborately the APA publishing methods	https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/index.html

Master of Arts (Economics) Semester-I