

FOUR-YEAR UNDERGRADUATE PROGRAMME IN DEVELOPMENT ECONOMICS
DETAILS OF COURSES OFFERED
LIST OF DISCIPLINE-SPECIFIC COURSES (DSC)

SEMESTER	COURSE CODE	COURSE NAME	MARKS					CREDITS	HOURS/WEEK
			CCA		ESE		TOTAL		
			P	L	P	L			
I	KU1DSCDEC101	Introductory Microeconomics	0	30	0	70	100	4	4
	KU1DSCDEC102	Economic Journalism	0	30	0	70	100	4	4
	KU1DSCDEC103	Economics of Tourism & Development	0	30	0	70	100	4	4
II	KU2DSCDEC104	Introductory Macroeconomics	0	30	0	70	100	4	4
	KU2DSCDEC105	Indian Financial System	0	30	0	70	100	4	4
	KU2DSCDEC106	Personal Finance	0	30	0	70	100	4	4
III	KU3DSCDEC201	Intermediate Microeconomics	0	30	0	70	100	4	4
	KU3DSCDEC202	Economics for Environment & Development	0	30	0	70	100	4	4
	KU3DSCDEC203	Introductory Managerial Economics	0	30	0	70	100	4	4
	KU3DSCDEC204	Economics of Care and Ageing	0	30	0	70	100	4	4
IV	KU4DSCDEC205	Intermediate Macroeconomics	0	30	0	70	100	4	4
	KU4DSCDEC206	Public Finance	0	30	0	70	100	4	4
	KU4DSCDEC207	Mathematical Tools for Economic Analysis	0	30	0	70	100	4	4
V	KU5DSCDEC301	Development Experience of Indian Economy	0	30	0	70	100	4	4
	KU5DSCDEC302	Statistics for Economic Analysis	0	30	0	70	100	4	4
	KU5DSCDEC303	Theoretical foundations of Development Economics	0	30	0	70	100	4	4
VI	KU6DSCDEC304	Contemporary Readings on Development Economics	0	30	0	70	100	4	4
	KU6DSCDEC305	International Trade theories and policies	0	30	0	70	100	4	4
	KU6DSCDEC306	Introductory Econometrics	0	30	0	70	100	4	4

VII	KU7DSCDEC401	Advanced Microeconomics I	0	30	0	70	100	4	4
	KU7DSCDEC402	Advanced Macroeconomics I	0	30	0	70	100	4	4
	KU7DSCDEC403	Quantitative Techniques for Economic Analysis	0	30	0	70	100	4	4
	KU7DSCDEC404	Readings in Political Economy	0	30	0	70	100	4	4
	KU7DSCDEC405	Financial Economics	0	30	0	70	100	4	4
VIII	KU8DSCDEC406	Advanced Microeconomics II	0	30	0	70	100	4	4
	KU8DSCDEC407	Advanced Macroeconomics II	0	30	0	70	100	4	4
	KU8DSCDEC408	Applied Econometrics	0	30	0	70	100	4	4
	KU8DSCDEC409	Rural Economic Development	0	30	0	70	100	4	4
	KU8DSCDEC410	Behavioral Economics	0	30	0	70	100	4	4
Internship in Major Discipline/Research Project in Major Discipline									
VI	KU6INTDEC301	(Credit for internship to be awarded only at the end of Semester 6)		50	-	50	2		
VIII	KU8RPHDEC401	Project (in Honours Programme)		60	140	200	8		
VIII	KU8RPHDEC402	Research Project (in Honours with Research Programme)		90	210	300	12		

FOUR-YEAR UNDERGRADUATE PROGRAMME IN DEVELOPMENT ECONOMICS
LIST OF DISCIPLINE SPECIFIC ELECTIVE COURSES
DETAILS OF COURSES OFFERED

SEMESTER	COURSE CODE	COURSE NAME	MARKS					CREDITS HOURS/WEEK	
			CCA		ESE		TOTAL		
			P	L	P	L			
V	KU5DSEDEC301	Basic methodology for Economic Research	0	30	0	70	100	4	4
	KU5DSEDEC302	Industrial Economics	0	30	0	70	100	4	4
	KU5DSEDEC303	Heterodox Economics	0	30	0	70	100	4	4
	KU5DSEDEC304	Mathematical Economics I	0	30	0	70	100	4	4
VI	KU6DSEDEC305	Intellectual Property Rights	0	30	0	70	100	4	4
	KU6DSEDEC306	Business Economics	0	30	0	70	100	4	4
	KU6DSEDEC307	Green Economics & Environmental Auditing	0	30	0	70	100	4	4
	KU6DSEDEC308	Mathematical Economics II	0	30	0	70	100	4	4

	KU6DSEDEC309	Development Issues in Kerala	0	30	0	70	100	4	4
VIII	KU8DSEDEC401	Public Policy & Economic Development	0	30	0	70	100	4	4
	KU8DSEDEC402	Project management	0	30	0	70	100	4	4
	KU8DSEDEC403	Economics of Innovation	0	30	0	70	100	4	4
LISTS OF MDC/ SEC/ VAC IN DEVELOPMENT ECONOMICS									
MULTIDISCIPLINARY COURSES									
I	KU1MDCDEC101	Economics in Daily Life	0	25	0	50	75	3	3
I	KU1MDCDEC102	Economics for Competitive Examination	0	25	0	50	75	3	3
II	KU2MDCDEC103	Issues in Indian Economic Development	0	25	0	50	75	3	3
II	KU2MDCDEC104	Economics of Startup and Entrepreneurship	0	25	0	50	75	3	3
VALUE ADDED COURSES									
III	KU3VACDEC201	Environmental Sensitisation and Disaster Management	0	25	0	50	75	3	3
III	KU3VACDEC202	Academic Writing in Social Science	0	25	0	50	75	3	3
IV	KU4VACDEC203	Economics of Crime and Corruption	0	25	0	50	75	3	3
IV	KU4VACDEC204	Ethics in Academic Writing	0	25	0	50	75	3	3
SKILL ENHANCEMENT COURSES									
IV	KU4SECDEC201	Data Analysis with Spreadsheet	20	10	30	15	75	3	6
IV	KU4SECDEC202	Hospital Economics	10	15	15	35	75	3	4
V	KU5SECDEC301	Experiencing Indian Stock Market-	10	15	15	35	75	3	4
V	KU5SECDEC302	Logistic and Supply Chain Management	10	15	15	35	75	3	4
V	KU5SECDEC303	Reading Economic Survey and Union Budget	10	15	15	35	75	3	4
VI	KU6SECDEC304	Goods and Service Tax	10	15	15	35	75	3	4
VI	KU6SECDEC305	Finance and Technology	10	15	15	35	75	3	4
VI	KU6SECDEC306	Databases and Basic Computational Techniques For Data Analysis	10	15	15	35	75	3	4

KU3DSCDEC201: INTERMEDIATE MICROECONOMICS

Semester	Course Type	Course Level	Course Code			Credits	Total Hours
III	DSC-Major	200-299	KU3DSCDEC201			4	60
Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)	
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total		
4	-	-	30	70	100	2	

Course Description:

This course sets a foundation for studying advanced microeconomics at the fourth year. The course enables the students to grab more grip in the microeconomic theory via getting hold of some of the theoretical developments. The course starts with the consumer behaviour analysis which would provide foundation for demand analysis under uncertainty conditions in the advanced level. Theories of production and cost are followed in the subsequent module. This is followed by analysis of competitive markets and subsequently analysis of market power with special emphasis on monopoly and monopolistic competition. In brief the course widens the theoretical understanding of an undergraduate student of economics so as to better experience learning of microeconomics at the advanced level.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course the student will be able to;

CO No.	Expected Outcome	Learning Domains
1	Apply theories for understanding the behaviour of a consumer in given market conditions	R, U, A

2	Apply theories for observing the behaviour of production and cost	U, A
3	Learn the dynamics and working of competitive markets by applying models and theories	U, A
4	Learn the dynamics of imperfect markets like monopoly and monopolistic competition by applying models and theories	U, A
5	Widen the analytical tool box of Microeconomics with applications for subsequent learning at the advance levels	A, An

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

-Mapping of Course Outcomes to PSOs

-	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓		✓				
CO 2	✓						
CO 3	✓						
CO 4	✓		✓				
CO 5	✓						

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	CONSUMER BEHAVIOUR ANALYSIS		15
	1	Consumer preferences	2
		a) Market baskets	
		b) Basic assumptions about consumer preferences: Completeness, consistency, transitivity and more is better than the less	
	2	Budget constraints - Budget line	1
	a) Effects of changes in income and prices on Budget lines		

	3	Cardinal vs. Ordinal utility - Marginal utility and consumer choice	2
	4	Indifference curve and indifference map	1
		a) Shape of indifference curves: convexity and diminishing marginal rate of substitution	
	5	Consumer choices: Utility Maximisation with indifference curves	2
	6	Price effect bifurcation for normal, inferior and Giffen good (as a special case)	5
		a) Income effect and substitution effect (Hicks and Slutsky)	
		b) Demand curve from price consumption curve	
	7	Revealed preference: with two budget lines	2
	ANALYSIS OF PRODUCTION AND COST		15
2	1	Production with one variable input (labour): the law of variable proportions	2
	2	Production with two variable inputs (labour and capital) with Isoquants	2
		a) Substitution among inputs and diminishing marginal rate of technical substitution	
	3	Return to a scale - Isoquant approach	2
	4	Empirical production function – Cobb-Douglas Production function	2
	5	Cost in the long run: user cost of capital	4
		a) Concept of Iso-cost line	
		b) Cost minimising input choice and producer's equilibrium: a given output at minimum cost, output maximization with given cost	
		c) Cost minimisation with varying output levels: the expansion path	
	6	Long run average cost and long run marginal cost	3
	a) Economies and diseconomies of scale		
	ANALYSIS OF COMPETITIVE MARKETS		10
3	1	Characterising perfectly competitive markets	1
	2	Profit maximisation by a competitive firm: TC and TR approach, MC and MR approach	2
	3	Short run profit maximisation by a competitive firm - shut down rule	1
	4	Short run supply curve of a competitive firm – the short run market supply curve	1

	5	Long run equilibrium and profit maximisation with zero economic profit	2
	6	Competitive factor market	3
		a) Demand for input, Derived demand, Marginal Productivity of Factor,	
		b) Supply of inputs	
		c) Equilibrium in a competitive factor market	
	ANALYSIS OF MARKET POWER		10
4	1	Conceptualizing Monopoly	6
		AR and MR under monopoly	
		Monopolist's output decision – Rule of thumb for pricing	
		Equilibrium of a multi-plant firm	
		Price discrimination – first degree, second degree and third-degree price discrimination	
		Monopoly power – Sources of monopoly power	
		Social cost of monopoly – Concept of Dead Weight Loss	
2	Monopsony and Bilateral monopoly (Concepts only)	1	
3	Monopolistic competition: the makings of monopolistic competition		3
	a) Equilibrium in the short run and long run		
	b) Economic inefficiency: excess capacity		
	Teacher Specific Module		10
	Directions: <i>Exercises from Schaum's Outlines</i>		-
5	<i>This module would preferably be set as a work-based module keeping Schaum's Outlines as basic reference without overlapping contents in the Introductory Microeconomics. The content would be preferably based on the modules in the current syllabus or any other topic so as to give better foundations for advanced learning of the course in the subsequent semesters.</i>		10

Essential Readings:

1. Pindyck, R. S., Rubinfeld, D. L., & Mehtha P L. *Microeconomics*. Pearson Education. Latest Edition, 437 - 463
2. Nicholson, W., & Snyder, C. M. *Intermediate microeconomics and its application*. Cengage Learning. Latest Edition
3. Dominick Salvatore, Schaum's Outlines, Basic Microeconomics, Latest Edition

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Reading 1 and 2	
	2	Essential Reading 1 and 2	
	3	Essential Reading 1	
	4	Essential Reading 1 and 2	
	5	Essential Reading 1	
	6	Essential Reading 1 and 2	
	7	Essential Reading 1	
2	1	Essential Reading 1	
	2	Essential Reading 1 and 2	
	3	Essential Reading 1	
	4	Essential Reading 1	
	5	Essential Reading 1 and 2	
	6	Essential Reading 1 and 2	
3	1	Essential Reading 1	
	2	Essential Reading 1	
	3	Essential Reading 1	
	4	Essential Reading 1	
	5	Essential Reading 1	
	6	Essential Reading 1 and 2	
4	1	Essential Reading 1 and 2	
	2	Essential Reading 1	
	3	Essential Reading 1 and 2	
5	-	Essential Reading 3	Preferably

Suggested Readings:

1. Mankiw. G, Principles of Microeconomics, Cengage-MindTap, Latest Edition
2. Hall R Varian, Intermediate Microeconomics: A Modern Approach, Latest Edition
3. Salvatore. D, Principles of Microeconomics, Oxford International, Latest Edition
4. Krugman, P & Wells, R. Microeconomics, Worth Publishers, Latest Edition

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	6
b)	Test Paper-2	6
c)	Assignment	9
d)	Seminar/Debate	5
e)	Book/ Article Review	-
f)	Viva-Voce/quiz	4
g)	Field Report	-
Total		100

KU3DSCDEC202: ECONOMICS FOR ENVIRONMENT AND DEVELOPMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC-Major	200-299	KU3DSCDEC202	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	-	30	70	100	2

Course Description:

This course explores the critical intersection of economic activity, environmental sustainability, and development goals. It equips students with the tools to analyze the complex relationship between these three pillars and understand the challenges and opportunities of achieving a sustainable future.

Course Prerequisite: Basic understanding of Economics and interest in Environment and sustainability.

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Students will be able to explain the concept of externalities and their impact on the environment.	U
2	Able to apply economic reasoning to analyze environmental issues and propose solutions.	A
3	Able to analyze the strengths and weaknesses of different policy instruments (market-based vs. command-and-control) used to address environmental problems.	An
4	Able to evaluate the concept of sustainable development and its importance for the future.	E
5	Critically assess the challenges and opportunities associated with achieving sustainable development, including population growth, resource depletion, climate change, poverty, and technological advancements.	C

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓			✓			
CO 2		✓			✓		
CO 3			✓				✓
CO 4			✓			✓	
CO 5	✓			✓			

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
		INTRODUCTION TO ENVIRONMENTAL ECONOMICS	10
1	1	Basic concepts and principles of environmental economics.	5
		a) Market failures and the role of economics in addressing environmental issues.	
		b) Externalities, public goods, and common property resources.	
	2	Economic Tools for Environmental Analysis	5
		a) Cost-benefit analysis and its application to environmental projects.	
		b) Valuation techniques for environmental goods and ecosystem services (contingent valuation, hedonic pricing, travel cost method).	
2		ENVIRONMENTAL POLICY INSTRUMENTS	14
	1	Command and control regulations versus market-based instruments (e.g., emissions trading, pollution taxes, subsidies).	3

	2	International agreements and their role in addressing global environmental challenges (e.g., climate change, biodiversity loss).	3
	3	Climate change mitigation and adaptation strategies.	3
	4	The role of carbon pricing and emissions trading systems.	2
	5	Impacts of climate change on sectors such as agriculture, water resources, and health.	3
	SUSTAINABLE DEVELOPMENT AND ECONOMIC GROWTH		15
3	1	The concept of sustainable development and its economic dimensions.	4
	2	Trade-offs between economic growth and environmental quality.	8
		a) Indicators of sustainable development (e.g., Genuine Progress Indicator, Ecological Footprint).	
		b) Economics of renewable and non-renewable resources.	
		c) Dynamic efficiency and optimal resource extraction.	
3	Fisheries management, forestry economics, and land use planning.	3	
	DEVELOPMENT ECONOMICS AND ENVIRONMENTAL JUSTICE		10
4	1	Linkages between poverty, inequality, and environmental degradation.	5
		a) Environmental justice issues in developing countries.	
	2	Role of economic policies in promoting sustainable development goals (SDGs).	5
		a) Ethical considerations in environmental economics	
	b) Social impacts of environmental policies and development projects.		
	TEACHER SPECIFIC MODULE		10
5	<i>Directions</i>		
		<ul style="list-style-type: none"> ● Public Engagement and Advocacy ● Field visit to regional environmental sites not less than 3 days, ● Case studies, debate on relevant environmental issues, Book review. 	

Essential Readings:

1. Field, B. C., & Field, M. K. (2020). *Environmental economics: An introduction* (8th ed.). McGraw-Hill Education.
2. Stavins, R. N. (Ed.). (2012). *Economics of the environment: Selected readings* (6th ed.). W. W. Norton & Company / National Bureau of Economic Research (NBER).
3. Van Kooten, G. C., & Bulte, E. H. (2000). *Environmental policy instruments for conserving global biodiversity*. Palgrave Macmillan.
4. Baumol, W. J., & Oates, W. E. (2011). *The political economy of environmental policy* (4th ed.). Cambridge University Press.
5. Tietenberg, T., & Lewis, L. (2020). *Environmental and natural resource economics* (12th ed.). Pearson Education.
6. Bartelmus, P., & Duraiappah, A. K. (2010). *Sustainable development and economic growth*. Oxford University Press.
7. Tietenberg, T., & Lewis, L. (2021). *Environmental and natural resource economics* (12th ed.). Routledge.
8. Tirole, J. (2017). *Economics for the common good*. Princeton University Press.
9. United Nations Environment Programme (UNEP). (n.d.). *Environmental sustainability resources*. Retrieved from <https://www.unep.org>
10. Resources for the Future (RFF). (n.d.). *Environmental economics resources*. Retrieved from <https://www.rff.org>
11. Harris, J. (2007). *Development and environmental justice: Perspectives from development economics*.
12. Sen, A. (1999). *Development as freedom*. Anchor Books.
13. United Nations Environment Programme (UNEP). (n.d.). *Environmental sustainability and economic development* [Online resource]. Retrieved from <https://www.unep.org>

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Readings 1 and 2	-

	2	Essential Readings 1 and 2	-
2	1	Essential Readings 3 ,4 and 5	-
	2	Essential Readings 3 ,4 and 5	-
	3	Essential Readings 3 ,4 and 5	-
	4	Essential Readings 3 ,4 and 5	-
	5	Essential Readings 3 ,4 and 5	-
3	1	Essential Readings 6,7,8,9 and 10	-
	2	Essential Readings 6,7,8,9 and 10	-
	3	Essential Readings 6,7,8,9 and 10	-
4	1	Essential Readings 11,12 and 13	-
	2	Essential Readings 11,12 and 13	-

Suggested Readings:

1. OECD Publishing. (2011). Environmental policy instruments in OECD countries: Case studies from Europe, North America and Japan. OECD Publishing.
2. Sen, A. (1999). Development as freedom. Anchor Books..

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	5
b)	Test Paper-2	5
c)	Assignment/ Seminar	5
d)	Book/ Article Review	5
e)	Field Report	10
Total		100

KU3DSCDEC203: INTRODUCTORY MANAGERIAL ECONOMICS

Semester	Course Type	Course Level	Course Code		Credits	Total Hours
III	DSC-Minor	200-299	KU3DSCDEC203		4	60
Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	-	30	70	100	

Course Description:

This course introduces students to the application of economic principles to managerial decision-making. It explores how firms can analyze markets, costs, demand, and competition to optimize resource allocation and achieve their objectives.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand the fundamental economic concepts relevant to managerial decisions.	U
2	Apply economic theory to analyze market structures and firm behaviour.	A
3	Evaluate demand and cost functions for effective pricing and resource allocation strategies.	E
4	Analyze the impact of competition on firm performance and strategic decision-making.	An
5	Develop skills in economic reasoning and problem-solving for business applications.	C

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
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CO 1	✓			✓			
CO 2		✓			✓		
CO 3			✓				✓
CO 4			✓			✓	
CO 5	✓			✓			

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	INTRODUCTION TO MANAGERIAL ECONOMICS		10
	1	a) Definition, scope, and importance of managerial economics.	3
		b) The firm as a decision-making unit, its Managerial Goals	2
		c) Economic models and their applications in business.	2
2	The Role of Managerial Economics in Business Decision Making		3
2	DEMAND, SUPPLY AND MARKET EQUILIBRIUM		15
	1	Theory of consumer behaviour and demand determinants-Hicksian – Slutskian approaches	7
	2	Elasticity of demand and supply and its applications in pricing decisions.	4
	3	Demand forecasting-factors , purpose, methods, and general approach	4
3	PRODUCTION AND COST ANALYSIS		15
	1	Production and cost: short-run and long-run.-equilibrium analysis	6
	2	Cost behaviour: fixed, variable, and total costs.	5
	3	Economies and diseconomies of scale.	4
4	MARKET STRUCTURE, PRICING PRACTICES AND STRATEGIES		15

	1	Market structure (Perfect competition, Monopoly, Monopolistic competition, Oligopoly)	5
	2	Pricing practices and strategies-risk analysis ,Game theory and decision making under uncertainty	5
	3	Capital budgeting and investment decision, Government regulation and antitrust policies.	5
	TEACHER SPECIFIC MODULE		10
	<i>Directions:</i>		
5	1. Case studies and problem-solving exercises on elasticity-		
	2. Industrial visit(not less than two days)-prepare a report on structure of organization, production and cost analysis.		
	3. Debate on Market structure		

Essential Readings

1. Paul G. Keat, Philip K.Y. Young, & Stephen Erfle (2013). *Managerial Economics: Economic Tools for Today's Decision Makers* (7th Edition). Pearson Education.
2. Walter Nicholson, *Managerial Economics: Theory, Applications, and Cases*.
3. William F. Samuelson & Stephen G. Marks (2015). *Managerial Economics* (8th Edition). Wiley.
4. Christopher R. Thomas & S. Charles Maurice (2015). *Managerial Economics: Foundations of Business Analysis and Strategy* (12th Edition). McGraw-Hill.
5. Luke M. Froeb, Brian T. McCann, Michael R. Ward & Mike Shor (2018). *Managerial Economics: A Problem-Solving Approach* (5th Edition). Cengage Learning.
6. Michael Baye *Managerial Economics and Business* (7th Edition, 2014)
7. Dominick Salvatore *Managerial Economics* (11th Edition,)
8. Froeb, L.M., McCann, B.T., Ward, M.R., & Shor, M. (2018). *Managerial Economics: A Problem-Solving Approach* (5th ed.). Cengage Learning.
9. Robert S. Pindyck and Daniel L. Rubinfeld *Microeconomics and Behavior* by (8th Edition)
10. A Sailaja, *Managerial Economic and Financial Analysis* Pearson Education
11. RL Varshney & KL Maheshwari *Managerial economics*, Sulthan Chand & Sons
12. Lija J. Truett *Managerial Economics-Analysis, Problems, Cases*.
13. MM Varma & RK Agarwal (1998), *Managerial Economics*, King Books Educational Publishers, New Delhi
14. DM Mithani, *Managerial Economics Theory and Applications*, Himalaya Publishing house.

Reference distribution

Module	Unit	Reference Number	Remarks
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1	1	Essential Reading 1,2,7	
	2	Essential Reading 1,6,7	
2	1	Essential Reading 1,10,11	
	2	Essential Reading 1,10	
	3	Essential Reading 6	
3	1	Essential Reading 1, 5,7	
	2	Essential Reading 7,10,11	
	3	Essential Reading 9	
4	1	Essential Reading 12,13,14	
	2	Essential Reading 1,10	
	3	Essential Reading 1,10	

Suggested Readings:

1. Paul G. Keat, Philip K.Y. Young, & Stephen Erfle (2013). *Managerial Economics: Economic Tools for Today's Decision Makers* (7th Edition). Pearson Education.
2. DM Mithani, *Managerial Economics Theory and Applications*, Himalaya Publishing House.
3. Christopher R. Thomas & S. Charles Maurice (2015). *Managerial Economics: Foundations of Business Analysis and Strategy* (12th Edition). McGraw-Hill.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	5
b)	Test Paper-2	5
c)	Assignment	5
d)	Seminar	5
e)	Book/ Article Review	
f)	Viva-Voce	
g)	Field Report	10
Total		100

KU3DSCDEC204: ECONOMICS OF CARE AND AGEING

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC-Minor	200-299	KU3DSCDEC204	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	-	30	70	100	2

Course Description:

The 'Economics of Care and Ageing' course offers an in-depth exploration of the economic aspects of care work and the implications of an ageing population, with a special focus on India and Kerala. It covers theoretical frameworks, demographic trends, gender dimensions, and the economic significance of both formal and informal care. The course examines Kerala's social policies, healthcare infrastructure, and long-term care services for the elderly. Additionally, it addresses the economic impact of ageing on labour markets, health expenditure, and intergenerational support systems. Through research, case studies, and fieldwork, students will gain a comprehensive understanding of the challenges and opportunities in fostering sustainable development amidst ageing demographics.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand and apply economic theories related to care work and ageing to develop a comprehensive perspective.	R
2	Assess ageing trends in India and Kerala to understand their socio-economic impacts.	U
3	Evaluate the effectiveness of elderly care policies in Kerala to identify best practices and areas for improvement.	R, U
4	Analyze how ageing affects labour markets, healthcare costs, and family support to understand broader economic consequences.	U, A

5	Develop informed policy recommendations to support healthy and active ageing, ensuring sustainable development.	R, A
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*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)

Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1		✓					
CO 2			✓				
CO 3		✓	✓				
CO 4	✓						✓
CO 5	✓	✓					

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	INTRODUCTION TO CARE ECONOMICS AND AGEING		9
	1	Definition and Scope of Care Economics	2
	2	Types of Care: Formal and Informal - Economic Significance of Care Work	1
	3	Ageing Population Trends in India and Kerala	4
	4	Demographic Transition and Ageing - Implications of Ageing Population on Economy and Society	2
2	ECONOMIC THEORIES OF AGEING		16
	1	Economic Theories of Ageing: Life Cycle Hypothesis, Dependency Ratio, and Social Support	4
	2	Feminist Economics Perspective on Care Work	4
	3	Life Course Perspective on Ageing	5
	4	Challenges and Opportunities of Population Ageing	3
3	CARE ECONOMY AND SOCIAL POLICIES IN KERALA		11

	1	Overview of Care Economy in Kerala - Kerala's Model of Elderly Care: Initiatives, Challenges, and Best Practices	3
	2	Pension Schemes and Social Security for Elderly in Kerala	2
	3	Long-Term Care Services: Home-Based Care, Day Care Centers, and Residential Facilities	4
	4	Elderly Rights and Legal Frameworks in Kerala	2
4	AGEING AND ECONOMIC DEVELOPMENT IN KERALA		14
	1	Economic Impact of Ageing on Kerala's Development	4
	2	Demographic Dividend and Demographic Transition	5
	3	Strengthening Social Protection Systems	2
	4	Integrating Ageing Agenda into Development Plans	3
5	Teacher Specific Module		10
	<i>Directions: Activity based with discussion, interactions and assignment works</i>		-
	<i>The module may be designed as activity based one with emphasis to expert talks with discussions on the issue, assignment submission after old age home visits, report submission after interaction with palliative care units and the so forth.</i>		10

Essential Readings:

1. Daly, M. (Ed.). (2001). *Care work: The quest for security*. International Labour Organization.
2. England, P. (2005). *Emerging theories of care work*. Annual Review of Sociology, 31(1), 381-399.
3. Rummery, K., & Fine, M. (2012). *Care: A critical review of theory, policy, and practice*. Policy Press.
4. Bettio, F., & Plantenga, J. (2004). *Comparing care regimes in Europe*. Feminist Economics, 10(1), 85-113.
5. Lloyd-Sherlock, P. (2000). *Old age and urban poverty in the developing world: The shanty towns of Buenos Aires*. Macmillan Press.
6. Knijn, T., & Kremer, M. (1997). *Gender and the caring dimension of welfare states: Toward inclusive citizenship*. Social Politics: International Studies in Gender, State & Society, 4(3), 328-361.

7. . Irudaya Rajan and K. C. Zachariah, Ageing in Kerala: Perspectives, Issues, and Policies.
8. T. N. Srinivasan, Economics of Ageing: Indian Perspective.

Reference Distribution:

Module	Unit	Reference No.
1	1	Essential Readings 1,3,7 and 8
	2	Essential Readings 1,3,7 and 8
	3	Essential Readings 1,3,7 and 8
	4	Essential Readings 1,3,7 and 8
2	1	Essential Readings 2 and 6
	2	Essential Readings 2 and 6
	3	Essential Readings 2 and 6
	4	Essential Readings 2 and 6
3	1	Essential Readings 7 and 8
	2	Essential Readings 7 and 8
	3	Essential Readings 7 and 8
4	1	Essential Readings 7 and 8
	2	Essential Readings 7 and 8
	3	Essential Readings 7 and 8
	4	Essential Readings 7 and 8

Suggested Readings:

1. Academic journals such as "Ageing & Society," "Journal of Population Ageing," and "International Journal of Care and Caring"

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	6
b)	Test Paper- 2	6
c)	Assignment	9
d)	Seminar/Debate	5
e)	Book/ Article Review	-
f)	Viva-Voce/Quiz	4
g)	Field Report	-
Total		100

KU3VACDEC201: ENVIRONMENTAL SENSITISATION AND DISASTER MANAGEMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	VAC	200-299	KU3VACDEC201	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	25	50	75	1.5 Hours

Course Description:

This course provides for all the undergraduate students to acquire basic knowledge about natural resources, eco system and the major environmental challenges which presently threaten our global environment. The course is designed to sensitize the learners on the need for healthy environment for sustainable development. The course also intended to create awareness that the life of human beings is an integral part of environment and to inculcate the skills required to protect environment from all sides. It covers vital aspects related to environmental degradation. Apart from classroom teaching, this course includes field work and basic life skill practices related to protect from natural disasters.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course, the student will be able to;

COs	Expected Outcome	Learning Domains
1	Understand the major environmental issues and recognize the importance of conservation of natural resources	R, U
2	Analyse the prominent cases and laws related to environmental issues	An
3	Adopt sustainable life style approach for resolution of environmental problems faced by society	A
4	Acquire and apply the necessary theoretical and practical knowledge and prepare to respond effectively during an emergency	A

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

FYUGP DEVELOPMENT ECONOMICS

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1			✓				✓
CO 2			✓				✓
CO 3	✓						✓
CO 4							✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 45
1	INTRODUCTION TO ENVIRONMENTAL EDUCATION		12
	1	Importance of environmental studies- concept of Eco system- Components of eco system- functions of eco-system- Natural Resources available in the environment: renewable and non-renewable	2
	2	Relationship between human society and environment- Environmental effects of human Behaviour- Environment-Economy Interlinkages	3
	3	Bio-diversity and conservation- threats to bio-diversity- need to conserve natural resources	3
	4	Sustainable development: concept- definitions, indicators, measurements - circular economy model for a sustainable environment	4
2	SENSITIVITY ENVIRONMENTAL ISSUE, COMMUNITY PARTICIPATION AND LEGAL FRAMEWORK		14
	1	Concept of Environmental Sensitivity	1
	2	Sensitive environmental issues at the local, national and global level: Climate change, types of pollutions, depletion of natural resources, Problem of solid Waste management- causes and effects	3
	3	Control measures for various types of pollution: water conservation methods, solid waste management, 3 R's (Reduce, Reuse & Recycle) effluent charges, emission permits, Pigouvian tax, subsidies and economic incentives - Major environmental movements in India: Chipko, Appiko, Silent Valley and Narmada Bachao Andolan	5

	4	Relevance of environmental legislation- Environmental Laws: Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Land Acquisition Rehabilitation and Resettlement Act - International Agreements: Montreal and Kyoto Protocols and Conservation on Biological Diversity	5
	INTRODUCTION TO DISASTER MANAGEMENT		11
	1	Concepts of disaster management- natural and manmade disasters- Flood, Earthquake, Cyclones and Landslides - causes and effects	3
3	2	Disaster vulnerability profile of India: Case studies on environment and society: Bhopal gas tragedy-Coca-Cola Factory at Plachimada-Endosulfan Tragedy- Tsunami,2004- - Bhuj earthquake, 2001, Brahmapuram Fire 2023, Flood and Landslides in Kerala 2018 & 2019	4
	3	Phases of disaster management: pre and post disaster stage -brief description	2
	4	Disaster mitigation organizations in national and international levels- Role and services of Voluntary organisations	2
	TEACHER SPECIFIC MODULE		
	Directions: Field Visit and Presentation of Experience		8
4	<i>Visit to a local polluted site- urban/rural/agricultural/industrial or visit to an area to document environmental assets: river, forest, flora, fauna etc. and report and presentation of field visit/outreach activities to be maintained.</i>		8

Essential Readings:

1. Anubha Kaushik & C P Kaushik, Perspectives in Environmental Studies, New Age International (P) Ltd Publishers, 6th Edition
2. S.P Misra & S N Pandey, Essential Environmental Studies, Ane Books India New Delhi 2008
3. N K Uberoi, Environmental Studies, Excel Books, New Delhi 2007
4. Surinder Deswal & Anupama Deswal, A Basic Course in Environmental Studies, Dhanupat Rai Co(P)Ltd, Delhi
5. Shradha Sinha, Manisha Shukla & Ranjana Shukla, A Text book of Environmental Studies, AITBS Publishers & Distributors, New Delhi 2005
6. Gurdeep R Chatwal & Harish Sharma, Madhu Arora, A Textbook of Environmental Studies(Environmental Sciences), Himalaya Publishing House, Mumbai 2005
7. G Tyler Miller, Jr. Environmental Science: Working with the Earth, Cengage Learning India Pvt Ltd 11th edn. New Delhi

8. Anil Kumar De & Amab Kumar De, Environmental Studies, New Age International(p) Ltd Publishers , New Delhi, 2009
9. Karpagam M, Environmental Economics: A Text book, Sterling Publishers Pvt Ltd, New Delhi, 2014
10. Janet M Thomas & Scott J Callan, Environmental Economics, Cengage Learning India Pvt Ltd, New Delhi, 2009
11. V K Ahluwalia & Sunita Malhotra, Environmental Science, Ane Books Pvt Ltd, New Delhi 2013
12. M M Sulphey, Disaster Management, PHI Learning Pvt Ltd, Delhi 2016
13. Jagbir Singh, Disaster Management: Future Challenges and Opportunities, IK International Publishing House Pvt Ltd, New Delhi 2007
14. Paramjith S Jaswal & Nishtha Jaswal, Environmental Law: Environment Protection, Sustainable Development and the Law, Allahabad Law Agency, Delhi 2009
15. M Prasanthrajan & P P Mahendran, A Text book on Ecology & Environmental Science, Agrotech Publishing Academy, Udaipur 2006
16. V K Subramanian, A Text book in Environmental Science, Narosa Publishing House, New Delhi 2007
17. Jadhav, H & Bhosale V M, Environmental Protection and Laws, Himalaya Publication House, New Delhi
18. Pardeep Singh, Anamika Yadav, Indranil Chowdhuri and Ravindra Pratap Singh, Green Circular Economy: A Paradigm for Sustainable development. Springer

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Readings 1 to 6	-
	2	Essential Readings 1 to 7	-
	3	Essential Readings 1 to 7	-
	4	Essential Readings 18	-
2	1	Essential Readings 1	-
	2	Essential Readings 1 & 8	-
	3	Essential Readings 1, 9 & 10	-
	4	Essential Readings 1 &10	-
3	1	Essential Readings 1, 11 &12	-
	2	Essential Readings 1, 12,13 & 14	-
	3	Essential Readings 1, 12, 15, 16 &17	-
	4	Essential Readings 1, 12, 15, 16 &17	-

Suggested Readings:

1. Lester R Brown, Eco-Economy-Building an Economy for the Earth, Orient Longman Pvt Ltd, Himayatnagar 2004
2. Nick Hanley, Jason F Shogren & Ben White, Environmental Economics in Theory &Practice, Macmillan India Ltd, New Delhi 2005

3. Arvind Kumar, Disaster Management- Recent Approaches, Institute for Sustainable Development , Lucknow & Anmol Publication Pvt Ltd, New Delhi, 2010
4. Tushar Bhattacharya, Disaster Science & Management, Tata McGraw Hill Education Pvt Ltd, New Delhi 2012
5. Richard T Wright, Environmental Science – Toward a Sustainable Future, Prentice Hall of India Pvt Ltd, 9th edn. New Delhi 2007
6. S C Santra, Environmental Science, New Central Book Agency Pvt Ltd, Kolkata 2011
7. Gurdeep R Chatwal & Harish Sharma, Madhu Arora, A Textbook of Environmental Studies(Environmental Sciences), Himalaya Publishing House, Mumbai 2005
8. B S Chauhan, Environmental Studies, University Science Press(An Imprint of Laxmi Publications Pvt Ltd) New Delhi 2011
9. Benny Joseph, Environmental Studies 2nd edn., Tata McGraw Hill Edn. Pvt Ltd, New Delhi 2009
10. Gouri Suresh, Environmental Studies & Ethics, International Publishing House Pvt.Ltd, New Delhi 2007
11. N S Subrahmanyam & AVSS Sambamurty, Ecology 2nd edn. Narosa Publishing House, New Delhi 2008
12. S V S Rana, Essentials of Ecology & Environmental Science, Prentice Hall of India Pvt Ltd, New Delhi 2005
13. Asthana, D. K. Text Book of Environmental Studies. S. Chand Publishing
14. K,N Nair Antonyto Paul & Vineetha Menon, Water Insecurity, Institutions & Livelihood Dynamics A Study in Plachimada, Kerala

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		25
a)	Test Paper- 1	10
b)	Test Paper-2	-
c)	Assignment	5
d)	Seminar	-
e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report	10
Total		75

KU3VACDEC202: ACADEMIC WRITING IN SOCIAL SCIENCE

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	VAC	200-299	KU3VACDEC202	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	25	50	75	1.5

Course Description:

This course equips social science students with essential academic writing skills, focusing on the formal writing process, literature review techniques, and research proposal development. Students explore various writing styles, including expository, descriptive, persuasive, analytical, critical/evaluative, and narrative/reflective. Practical activities and interactive sessions provide hands-on experience in drafting research papers, book reviews, textual analysis, case studies, project reports, and dissertations. The course also addresses academic publishing ethics, the peer review process, and journal submission strategies. By the end, students will have a solid foundation in academic writing and research methodology, enhancing their ability to communicate ideas effectively and contribute to social sciences.

Prerequisites: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Learn the formal academic writing process, including structure, style, and citation formats.	U
2	Conduct comprehensive literature reviews and synthesize relevant research findings	A
3	Develop well-structured research proposals with clear objectives and methodologies.	A
4	Draft and revise research papers, incorporating feedback from peers and instructors.	A

5	Understand and apply ethical principles in academic publishing and peer review.	U, A
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**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓	✓	✓	✓		✓	
CO 2		✓	✓	✓		✓	
CO 3		✓		✓		✓	
CO 4		✓		✓			
CO 5	✓	✓	✓	✓		✓	

COURSE CONTENTS

Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	OVERVIEW OF ACADEMIC WRITING AND ITS IMPORTANCE IN SOCIAL SCIENCES		10
	1.1	Introduction to Academic Writing	2
		a) What is Academic Writing?	
		b) Importance of Academic Writing in Social Sciences	
	1.2	Understanding Different Types of Academic Writing	4
		a) Essays and Research Papers	
		b) Book Reviews and Textual Analysis	
		c) Case Studies, Literature Reviews, Project Reports, and Proposals	
	1.3	Approaches to Academic Writing	4
		a) Expository, descriptive, persuasive	
b) Analytical, critical/evaluative			
c) Narrative/reflective			
2	LITERATURE REVIEW AND FORMULATING THE RESEARCH QUESTION		10

	2.1	Writing reviews of academic literature	7
		a) Selection of topic and identifying relevant literature	
		b) Writing process: Planning, Organizing, Drafting, Editing	
		c) Narrowing a topic into a research question	
	2.2	Drafting/preliminary write up of a Research Paper in Social Science	3
3	GENERAL GUIDELINES FOR WRITING A RESEARCH PAPER		9
	3.1	Introduction to Structure, Citations and Referencing	6
		a) Structure: Title page, abstract, introduction, method, results, discussion, references, tables and figures	
		b) APA format and other citation styles (APA, MLA, Chicago, Harvard)	
3.2	Key resources and databases in social sciences	3	
4	FUNDAMENTALS OF RESEARCH ETHICS AND PEER REVIEW PROCESS IN ACADEMIC PUBLISHING		8
	4.1	Research Ethics	2
		a) Ethics in research and publication	
		b) Academic misconduct: falsification, fabrication, plagiarism	
	4.2	Peer review process	6
		a) Double-blind, single-blind, and open models	
		b) Practical peer review exercises	
	c) Manuscript preparation and submission guidelines		
		d) Responding to reviewer comments	
5	TEACHER SPECIFIC MODULE		8
		Direction	
		<i>Writing a Formal Research Paper in the Social Sciences</i>	
		Students are required to write and submit a research proposal following the necessary formalities of drafting a proposal .	

Essential Readings:

1. Graff, G., & Birkenstein, C. (2021). They say / I say: The moves that matter in academic writing (5th ed.). W.W. Norton & Company.
2. Galvan, J. L., & Galvan, M. C. (2021). Writing literature reviews: A guide for students of the social and behavioural sciences (8th ed.). Routledge.
3. Booth, W. C., Colomb, G. G., & Williams, J. M. (2016). The craft of research (4th ed.) University of Chicago Press.

4. Swales, J. M., & Feak, C. B. (2021). *Academic writing for graduate students: Essential tasks and skills* (4th ed.). University of Michigan Press.
5. Turabian, K. L. (2018). *A manual for writers of research papers, theses, and dissertations* (9th ed.). University of Chicago Press.
6. Stephen Bailey. (2003). *Academic Writing A practical guide for students*. Routledge Falmer, Taylor & Francis Group. New York
7. Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
8. Resnik, D. B. (2020). *The ethics of research with human subjects: Protecting people, advancing science, promoting trust*. Springer.
9. Wager, E., & Kleinert, S. (2011). *Responsible conduct of research* (2nd ed.). BMJ Books.
10. Singh, Y. K. (2006). *Fundamental of research methodology and statistics*. New Age International Publishers.
11. Perrin, R. (2018). *Pocket guide to APA style* (6th ed.). Cengage Learning.

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Reading 1,4 and 6	-
	2	Essential Reading 1,4 and 6	-
	3	Essential Reading 1,4 and 6	-
2	1	Essential Reading 2,3 and 5	-
	2	Essential Reading 2,3 and 5	-
3	1	Essential Reading 5,7 and 11	-
	2	Essential Reading 5,7 and 11	-
4	1	Essential Reading 8,9 and 10	-
	2	Essential Reading 8,9 and 10	-

Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	25

FYUGP DEVELOPMENT ECONOMICS

a)	Test Paper- 1	10
b)	Test Paper-2	-
c)	Assignment	-
d)	Seminar	-
e)	Book/ Article Review	5
f)	Viva-Voce	-
g)	Research Proposal	10
Total		75

Employability for the Course: This course enhances employability by equipping students with vital academic writing and research skills. Graduates can pursue careers in academia, research institutions, policy analysis, and publishing. Mastery in writing, literature reviews, and research proposals is highly valued in roles such as research analysts, content writers, and academic editors, especially within the Indian social sciences sector.

KU4DSCDEC205: INTERMEDIATE MACROECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC-Major	200-299	KU4DSCDEC205	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	-	30	70	100	2

Course Description:

This course provides an examination of macroeconomic theory and its application to policy analysis. The course begins with an exploration of the concept of money, its supply, kinds, and functions. Students will delve into the mechanisms of credit creation by commercial banks and understand the importance of money supply measures such as high-powered money and the money multiplier. Similarly, it covers classical and Keynesian approaches to supply and demand for money. An introduction to inflation and employment and the basic analysis of ISLM model is also introduced. Lastly, various theories of trade cycles and macroeconomic policies, both monetary and fiscal, are studied extensively. The course emphasizes algebraic analysis of ISLM and general equilibrium to provide students with a solid understanding of macroeconomic theory and its practical applications.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Recall the definitions and concepts related to money supply, demand for money, unemployment, inflation, and business cycles	R
2	Understand the relationship between money supply and demand and understand the causes and consequences of unemployment, inflation, and business cycles, as well as the significance of each in macroeconomic analysis.	U
3	Apply the theories of unemployment and inflation to evaluate the impact of various policy interventions on economic outcomes and the IS-LM model to analyse the effects of fiscal and monetary policies.	A
4	Analyse the factors influencing money supply, credit creation, and liquidity preference in the economy and also analyse the determinants of aggregate supply and the Phillips Curve	An

FYUGP DEVELOPMENT ECONOMICS

5	Evaluate the effectiveness of policy measures in reducing unemployment or controlling inflation in different economic environments	E
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**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓						
CO 2	✓	✓					
CO 3	✓	✓					
CO 4	✓	✓					
CO 5	✓	✓					

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	UNI T	DESCRIPTION	HOURS 60
1	MONEY SUPPLY AND DEMAND FOR MONEY		10
	1	a) Supply of money; definition, kinds and functions of money. b) measures of money supply; high powered money and money multiplier	4
	2	Demand for money- Classical Theories of Money: Fisher's and Cambridge Versions of Quantity Theory of Money.	3
	3	Keynesian liquidity preference theory – indeterminacy of rate of interest in the liquidity preference theory – the liquidity trap.	3
2	INFLATION AND UNEMPLOYMENT		14
	1	Inflation, types of inflation, measures of inflation	2
	2	Economic Effects of inflation	1
	3	Theories of inflation- classical, Neo-classical and, Keynesian theories of inflation	3
	4	Monetarist view on inflation	1
	5	Modern theories of inflation-Demand pull and cost push inflation	1
	6	Unemployment, measurement of unemployment rate and different types of unemployment	3
7	Okun's Law	1	

FYUGP DEVELOPMENT ECONOMICS

	8	Inflation and the rate of unemployment – The Phillips Curve	2
3	BASIC IS-LM MODEL		14
	1	Integration of Real and Monetary sector	2
	2	Product market equilibrium – IS curve and real sector	3
	3	Money market equilibrium -LM curve and monetary sector	3
	4	General equilibrium – integration of ISLM, limitations of the basic IS-LM model.	4
	5	Factors determining the slope and shifts in ISLM curves (Algebraic analysis of ISLM and General equilibrium is required)	2
4	THEORIES OF TRADE CYCLES AND MACRO-ECONOMIC POLICIES		12
	1	Trade cycles – Meaning and definitions of trade cycles – phases of trade cycles	1
	2	Theories of trade cycles- Hawtrey’s theory – Hayek’s theory – Keynesian theory – Hicks’ theory- Samuelson’s theory.	5
	3	Macroeconomic policy- meaning and scope, objectives of macroeconomic policies	2
	4	Monetary policy measure, instruments and limitation	2
	5	Fiscal policy measures-meaning – instruments and limitation	2
5	Teacher Specific Module		10
	<i>This module would preferably be set as a work-based module keeping Schaum’s Outlines of Macroeconomics as basic reference without overlapping contents in the Introductory Macroeconomics. The content would be preferably based on the modules in the current syllabus or any other topic so as to give better foundations for advanced learning of the course in the subsequent semesters.</i>		10

Essential Readings:

1. Mankiw, N.G.: Elementary Macroeconomics, Worth Publishers, 7th edition, 2010. •
2. Dwivedi, D.N. (2006) Macroeconomics – Theory & Policy, Tata Mcgraw Hill Publishing Company Microeconomics Theory & Application Pearson.
3. Mukherjee, Sampat. *Maco economics A global Text*. New Central Book Agency (P) Ltd, 2013
4. Backus, David, Patrick J. Kehoe, and Finn Kydland. "International business cycles: Theory and evidence.
5. Domanic Salvatore, Schaums’ Outlines, Macroeconomics, Latest Edition

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Reading 1/ 2 /3	-
	2	Essential Reading 1/ 2 /3	-
	3	Essential Reading 3	-
2	1	Essential Reading 1/ 2 /3	-
	2	Essential Reading 1/ 2 /3	-
	3	Essential Reading 1/ 2 /3	-
	4	Essential Reading 1/ 2 /3	-
	5	Essential Reading 1/ 2 /3	-
	6	Essential Reading 1/ 2 /3	-
	7	Essential Reading 1/ 2 /3	-
	8	Essential Reading 1/ 2 /3	-
3	1	Essential Reading 1/ 2 /3	-
	2	Essential Reading 1/ 2 /3	-
	3	Essential Reading 1/ 2 /3	-
	4	Essential Reading 1/ 2 /3	-
	5	Essential Reading 1/ 2 /3	-
4	1	Essential Reading 4	-
	2	Essential Reading 4	-
	3	Essential Reading 1/ 2 /3	-
	4	Essential Reading 1/ 2 /3	-
	5	Essential Reading 1/ 2 /3	-
5	-	Essential Readings 5	Preferably

Suggested Readings:

1. Mukherjee, Sampat. *Analytical macroeconomics: from Keynes to Mankiw*. New Central Book Agency (P) Ltd, 2021.
2. Froyen Richard T. *Macroeconomics-Theories and Policies*, Macmillan Pub., Company, NY.
3. Dornbusch R, Stanley Fischer, and Richard Startz, *Macroeconomics*, McGraw Hill Inc., NY.

4. D'Souza, Errol. *Macroeconomics*. Pearson Education India, 2009.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	6
b)	Test Paper-2	6
c)	Assignment	9
d)	Seminar/Debate	5
e)	Book/ Article Review	-
f)	Viva-Voce/quiz	4
g)	Field Report	-
Total		100

KU4DSCDEC206:PUBLIC FINANCE

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC-Major	200-299	KU4DSCDEC206	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	30	70	100	2

Course Description:

This course is tailored for learners with a curiosity to grasp the workings of government finances. The course aims to familiarize students with the significance of government intervention and understanding of how fiscal policy contributes to achieving macroeconomic objectives. This course explores into the efficiency and fairness considerations of taxation across central, state, and local government domains, particularly focusing on the Indian context. Additionally, it covers the dynamics of financial relations between the central and state governments in a federal system. The course will benefit students aspiring for careers in government, policy analysis, business, and journalism.

Course Prerequisite: NIL

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Gain comprehension of basic Public Finance concepts and utilize welfare economics principles to assess the effectiveness and fairness of government economic policies.	U, A
2	Analyse the significant taxes implemented in India and employ analytical abilities to evaluate the major tax reforms enacted in the country.	An, E
3	Familiarise with the theories of public expenditure and analyse trends and composition of public expenditure in India	U, An
4	Evaluate the sources of public debt, explore methods for debt redemption, and assess trends in Central Government Debt and Liabilities]	E, A
5	Analyse the budget and challenges in the financial relations between the central and state governments.	An, U

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

FYUGP DEVELOPMENT ECONOMICS

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓			✓	✓		
CO 2	✓	✓	✓		✓		
CO 3	✓		✓				✓
CO 4	✓	✓				✓	
CO 5	✓	✓		✓		✓	

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 60
1	INTRODUCTION TO PUBLIC FINANCE		12
	1	Why study public finance? a) The role of government in the economy. b) Fiscal Functions, Objectives of public finance -allocation, distribution, and stabilization.	3
	2	Tools of Normative Analysis. Welfare economics principles- Pareto Efficiency, Equity, and Social Welfare.	3
	3	Public Goods and Externalities. a) Market failures. b) Characteristics of public goods, Public good vs private good. c) Externalities: positive and negative.	3
	4	Creative Solutions for externality problem. a) Private sector solution to Negative Externalities- Property Rights and Coarse Theorem. b) Public sector solution to Negative Externalities -Tax incentives, subsidies, regulation.	3
	TAXATION		12
	1	Major Revenue Sources-Tax and Non-Tax Revenue.	2
	2	Principles of taxation - Principle of equity: Horizontal and Vertical– Ability to pay, cost of service and benefit principles.	2
	3	Impact and incidence of tax–Tax Shifting and its influencing factors.	2
	4	Major Taxes in India, Major Tax Reforms in India.	3
	5	Current Issues of India’s Tax System-Goods and Services Tax (GST) in India: Concept and Structure.	3
	3	PUBLIC EXPENDITURE AND PUBLIC DEBT	

	1	Public Expenditure –Major classification of Public Expenditure-Plan and Non-plan Expenditure-Developmental and Non-developmental expenditure- Revenue and capital expenditure.	3
	2	Theory of Public Expenditure-Wagner’s Hypothesis, Peacock - Wiseman Hypothesis.	3
	3	Trends and Composition of Public Expenditure in India - FRBM Phase.	3
	4	Public Debt- Sources, Methods of debt redemption- Trends in Central Government Debt and Liabilities.	3
	PUBLIC BUDGET AND FISCAL FEDERALISM IN INDIA		14
4	1	Public Budget: Structure -Classification of budget Concepts: Revenue Account, Capital Account.	3
	2	Types of Deficits and their significance - Revenue Deficit, Fiscal Deficit and Primary Deficit.	3
	3	Principles of Federal Finance -Finance Commission & it’s functions- latest Finance Commission report.	3
	4	Local Finance: Meaning and problems of local finance - Functions and Resources of local bodies -Municipalities and Municipal Corporation.	3
	5	Challenges facing the development of fiscal federalism in India.	2
	TEACHER SPECIFIC MODULE		10
5	<i>Directions: Seminar or Presentations on Selected Issues</i>		
	Tax evasion, black money and parallel economy in India OR An evaluative report on budgetary trends in India OR Public policy paper on Financing in higher education sector		10

Essential Readings:

1. Jonathan Gruber, (2019). Public Finance and Public Policy, 6th Edition. New York: Worth Publishers
2. Musgrave, R. A., Musgrave, P. B., & Bird, R. M. (1989). Public Finance in Theory and Practice (Vol. 5). New York: McGraw-Hill.
3. Harvey S. Rosen and Ted Gayer (2012) Public Finance ,8th Edition. New York: McGraw-Hill
4. Lekhi R.K., Joginder Singh (2022) Public Finance, Kalyani publication, New Delhi
5. Government of India, Ministry of Finance, Department of Economic Affairs, Budget Division. (November, 2022). Budget Manual.
6. Surajit Das, Some Concerns Regarding the Goods and Services Tax, Vol. 52, Issue No. 9, 04 Mar, 2017, EPW
7. D K Srivastava et al., Taxing Petroleum Products: Sharing Revenue Space between Centre and States, Vol. 56, Issue No. 9, 27 Feb, 2021, EPW .
8. Kim,J.and S.Dougherty(eds.)(2020),Local Public Finance and Capacity Building in Asia:Issues and Challenges, OECD Fiscal Federalism Studies, OECD Publishing, Paris, <https://doi.org/10.1787/a944b17e-en>.Reference Distribution
9. Kaplow, Louis (2008) The Theory of Taxation and Public Economics. STU- Student edition, Princeton University Press

10. Government of India Ch.2, Report of 15th Finance Commission, (Pg. 16-19)
11. Government of India Ch. 5, Report of 15th Finance Commission
12. Rao, M. Govinda. (2017).Central transfers to states in India: rewarding performance while ensuring equity.Final report submitted to NITI Aayog
13. Government of India, Report of 15th Finance Commission
14. Stiglitz, J. and Rosengard, J. (2015) Economics of the Public Sector, 4th edition, W. W Norton& Company
15. Ministry of Finance, Department of Economic Affairs, Budget Division. (2021-22). Status Paper on Government Debt. New Delhi.
16. Karnam,Gayithri, Public Expenditure in India: Policies and Development Outcomes (Oxford, 2022; online edn, Oxford Academic, 19 May 2022), <https://doi.org/10.1093/oso/9780192857569.001.0001>
17. Reddy Y. V and Reddy G. V(2019) Indian Fiscal Federalism .Oxford

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Reading 2	-
	2	Essential Reading 3	-
	3	Essential Reading 1 and 14	-
	4	Essential Reading 1	-
2	1	Essential Reading 4	-
	2	Essential Reading 9 and 14	-
	3	Essential Reading 14	-
	4	Essential Reading 4	-
	5	Essential Reading 6,7 and 8	-
3	1	Essential Reading 4	-
	2	Essential Reading 4	-
	3	Essential Reading 16	-
	4	Essential Reading 15	-
4	1	Essential Reading 5	-
	2	Essential Reading 15	-
	3	Essential Reading 10 and 11	-
	4	Essential Reading 4 and 17	-
	5	Essential Reading 8	-

Suggested Readings:

1. Kaushik Basu, and A. Maertens (ed.), The Oxford Companion to Economics in India, Oxford University
2. John Cullis and Philip Jones (1998), Public Finance and Public Choice, Chapter 3(sections 3.1, 3.2 and 3.3)

Assessment Rubrics:

FYUGP DEVELOPMENT ECONOMICS

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	6
b)	Test Paper-2	6
c)	Assignment	4
d)	Seminar	4
e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report/ Local Govt bodies Visit report	10
Total		100

KU4DSCDEC207: MATHEMATICAL TOOLS FOR ECONOMIC ANALYSIS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC - Major	200-299	KU4DSCDEC207	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	-	30	70	100	2

Course Description:

This course aims to equip students with the essential mathematical tools and techniques for understanding and analysing economic phenomena. The course familiarizes with uses and application of mathematics in economics. The course explores the concepts of functions, and different types of functions. The course covers topics such as limit of functions, differentiation of single and multivariable functions, integration and matrices.

Course Prerequisite: Nil

Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Describe the uses and applications of mathematics and statistics in economics	R
2	Understand the fundamental mathematical concepts	U
3	Describe the limit of functions	R, U
4	Apply the relevant methods for finding differentiation of single variable and multivariable functions and integrations of functions.	U, A

FYUGP DEVELOPMENT ECONOMICS

5	Understand the concept of matrix and apply matrices for economic analysis	U, A
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**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1		✓					
CO 2			✓				
CO 3		✓	✓				
CO 4	✓						✓
CO 5	✓	✓					

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	INTRODUCTORY MATHEMATICS		12
	1	a) Importance of mathematics in economics-Mathematical economics and non-mathematical economics	1
		b) Limitations of mathematical economics	
	2	a) Meaning and representation of set- Types and operations on set- Venn diagram- Ordered pairs- Cartesian product of two sets.	4
	b) Arithmetic and geometric progression- nth term and the sum of n terms of an AP and GP.		

	3	a) Meaning and concept of indices- Laws of indices- Problems based on the laws of indices.	4
		b) Logarithms- Common and natural logarithms - Rules of logarithm- Using logarithm to evaluate.	
	4	a) Functions-Type of functions- single variable, multi-variable, increasing, decreasing, monotonic, convex and concave functions, Linear, quadratic, cubic, rational, exponential and logarithmic function and their graphs.	3
		b) Economic functions- Demand, supply, utility, production, cost, revenue, profit and consumption.	
DIFFERENTIATION OF SINGLE AND MULTI-VARIABLE FUNCTIONS			20
	1	a) Limit and continuity (definition only)	6
		b) Concept of slope and differentiation- Properties of Convex and Concave curves	
2	2	a) Differentiation and derivative–Differentiation of single variable and Multi variable functions-Rules of differentiation–Problems	10
		b) Higher order differentiation	
		c) Unconstrained Optimisation	
		d) Partial derivatives- First and higher order partial derivatives.	
3	Application of derivatives in economics-		4
	a) Finding slope of Economic functions.		
	b) Finding maxima and minima of economic functions (cost, revenue, profit etc).		
	c) Finding point Elasticity of demand and supply and optimum value of economic functions.		
INTEGRAL CALCULUS			8
3	1	a) Concept of integration-definite and indefinite integration –	5

		b) Rules of definite and indefinite integration-integration by parts and integration by substitution	
	2	a)Application of definite integration and indefinite integration: Total value from marginal values-Area under a curve and area between curves	3
		b)Measurement of consumer surplus and producer surplus	
	MATRIX ALGEBRA		10
4	1	a)Definition of matrix	4
		b)Types and operations of matrices-Operations of matrix-Addition, Subtraction and Multiplication-Rank of matrix	
	2	Determinants and properties of determinants-Solving a system of linear equations-Cramer's Rule, Matrix inversion technique.	5
	3	Character root or Eigen Values	1
	TEACHER SPECIFIC MODULE		10
5	<i>Directions: Constraint and unconstraint optimisation</i>		
	The module would be set to make students learn constraint and unconstraint optimisation using any of the books from the essential reading list.		10

Essential Readings:

1. Bradley, T., & Patton, P. (2002). *Essential mathematics for economics and business*. John Wiley & Sons.
2. Chiang, A. C., & Wainwright, K. (2013). *Fundamental methods of mathematical economics*. McGraw Hill.
3. Sydsaeter, K., & Hammond, P. (2016). *Essential mathematics for economic analysis*. Pearson.
4. Edward T Dowling. (1992). *Introduction to Mathematical Economics*. McGraw-Hill International Edition, Schaum's Series
5. G.S. Monga. (2002). *Mathematics and Statistics for Economics*. Vikas Publishing House Pvt Ltd.

Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Readings 2, 4, 5	

FYUGP DEVELOPMENT ECONOMICS

	2	Essential Readings 1,2,5	
	3	Essential Readings 3,4,5	
	4	Essential Readings 3,4, 5	
2	1	Essential Readings 3,4, 5	
	2	Essential Readings 3,4, 5	
	3	Essential Readings 3,4, 5	
3	1	Essential Readings 4,5	
	2	Essential Readings 4,5	
4	1	Essential Readings 2	
	2	Essential Readings 4,5	
	3	Essential Readings 4,5	
5		Essential Readings 4, 5	Preferably

Suggested Readings:

1. Baruah, S. (2011). Basic mathematics & its application in economics. Macmillan.
2. Rosser, M., & Lis, P. (2016). Basic mathematics for economists. Routledge.

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		70
Continuous Evaluation		30
a)	Test Paper- 1	6
b)	Test Paper-2	6
c)	Assignment	6
d)	Seminar	6
e)	Book/ Article Review	-
f)	Viva-Voce	6
g)	Field Report	-

FYUGP DEVELOPMENT ECONOMICS

Total	100
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KU4SECDEC201: DATA ANALYSIS WITH SPREADSHEET

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC	200-299	KU4SECDEC201	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
1	2	-	30	45	75	1.5 Hrs

Course Description:

This course provides essential Excel skills tailored for economic data analysis. Students learn data import, manipulation, advanced formulas, and visualization techniques. Through practical projects on real economic issues, students gain hands-on experience and develop critical thinking skills. The course also emphasizes data ethics, ensuring students are equipped for responsible data-driven decision-making in economic contexts.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course, the student will be able to,

COs	Expected Outcome	Learning Domains
1	Confidently import, clean, and organize economic data in Excel spreadsheets.	R, U, A
2	Apply relevant formulas and functions to analyse and summarize data, drawing relevant economic conclusions.	R, U, A
3	Create various data visualizations (charts, graphs, etc.) to effectively communicate their findings to different audiences.	U, A, C
4	Gain familiarity with advanced Excel techniques for more complex data analysis tasks encountered in economic research.	R, U, A
5	Demonstrate an understanding of data ethics and responsible data-driven decision making in the economic context.	A, C

**Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
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FYUGP ECONOMICS

CO 1	✓		✓				
CO 2	✓			✓			
CO 3		✓			✓		
CO 4		✓			✓		
CO 5		✓			✓		

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 45
		EXCEL FOUNDATIONS AND DATA IMPORT	10
1	1	a) Launching Excel, navigating the interface, basic operations. b) Importing data from different sources (CSV, text files, web), creating and managing tables. Applying data validation to ensure data accuracy and consistency. c) Exploring the Ribbon and menus, customizing your Excel environment. d) Learning basic file management: saving, sharing, and version control. e) Practicing working with multiple worksheets and workbooks in your data analysis.	10
		DATA MANIPULATION AND FORMULAS	9
2	1	a) Sorting and filtering data based on various criteria for efficient analysis. b) Mastering basic formulas and functions: sum, average, count, max, min, etc. c) Using logical functions (if, and, or) for conditional calculations and data segmentation d) Applying lookup functions (VLOOKUP, MATCH) to integrate data from different sources. e) Exploring advanced functions like SUMIF, AVERAGEIF, COUNTIF for targeted calculations. f) Creating and using names for ranges and cells in excel	9
		DATA VISUALIZATION AND ANALYSIS	9
3	1	a) Creating different chart types (bar, line, pie, scatter) based on your data. b) Customizing charts for visual impact: titles, labels, legends, data labels, formatting. c) Data visualization and interpretation of charts.	9

		d) Descriptive statistics (mean, median, standard deviation, variance): calculation and interpretation.	
4	ESSENTIAL DESCRIPTIVE STATISTICS IN EXCEL		9
	1	Measures of Central Tendency:	3
		a) In-depth exploration of mean, median, mode, and weighted averages	
		b) Calculation and interpretation of percentiles and quartiles for understanding data distribution	
	2	Measures of Variability:	3
		a) Variance and standard deviation: mastering calculations and Interpretations.	
		b) Range, inter-quartile range, and coefficient of variation for understanding data spread.	
		c) Introduction to skewness and kurtosis for assessing data symmetry	
	3	Advanced Data Analysis Functions	3
		a) Mastery of VAR.P, STDEV.P, SKEW, KURT, and other descriptive statistics functions	
b) Correlation analysis using Pearson's correlation coefficient and scatter plots			
5	TEACHER SPECIFIC MODULE		8
	<i>Directions: Activity Based on Excel</i>		-
	<ul style="list-style-type: none"> ● Choosing an actual economic issue relevant to India (e.g., inflation, trade, poverty). ● Accessing and exploring relevant economic datasets from Indian or international sources. ● Applying your learned skills to analyze the chosen economic issue using Excel. ● Creating visualizations and descriptive statistics to support your analysis of the economic issue. ● Preparing a final project report summarizing your findings and economic insights. ● Class Presentations: Sharing your projects, receiving feedback, and engaging in discussions on real-world data analysis applications. 		8

Essential Readings:

1. Basic Computational Techniques for Data Analysis An Exploration in MS Excel, 2nd Edition (D Narayana, Sharad Ranjan, Nupur Tyagi)
2. Microsoft Excel 2019 Step by Step by Curtis Frye, Pearson Education
3. Microsoft Excel 2019: Data Analysis & Business Modelling by Wayne Winston, PHI Learning
4. Don't Fear the Spreadsheet: A Beginner's Guide to Overcoming Excel's Frustrations by Tyler Nash, Bill Jelen, Kevin Jones, Tom Urtis, Holy Macro! Books

5. Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Readings 1 - 4	
	2	Essential Readings 1 - 4	
	3	Essential Readings 1 - 4	
	4	Essential Readings 1 - 4	
2	1	Essential Readings 1 - 4	
	2	Essential Readings 1 - 4	
	3	Essential Readings 1 - 4	
	4	Essential Readings 1 - 4	
3	1	Essential Readings 1 - 4	--
	2	Essential Readings 1 - 4	--
	3	Essential Readings 1 - 4	--
	4	Essential Readings 1 - 4	
4	1	Essential Readings 1 - 4	
	2	Essential Readings 1 - 4	
	3	Essential Readings 1 - 4	
	4	Essential Readings 1 - 4	

Assessment Rubrics:

Evaluation Type		MARKS
End Semester Evaluation-Theory		15
End Semester Evaluation – Practical		30
End Semester Evaluation – Total		45
Continuous Evaluation – Theory		10
a)	Test Paper- 1	5
b)	Test Paper-2	-
c)	Assignment	5
d)	Seminar	-
e)	Book/ Article Review	-
f)	Viva-Voce	-
Continuous Evaluation -Practical		20
Continuous Internal Evaluation – Total		30
Grand Total		75

KU4SECDEC202: HOSPITAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC	200-299	KU4SECDEC202	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	1	0	25	50	75	1.5

Course Description:

This course is designed to provide students of economics with the knowledge and skills necessary to analyse hospital performance. The course will cover a wide range of topics, including the healthcare sector, hospital economics, measurement of hospital performance, cost and financial performance. The course will also include practical sessions to help the students apply the concepts they learn.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course the student will be able to;

CO No.	Expected Outcome	Learning Domains
1	Understand the importance of the healthcare sector in the economy	U
2	Analyse the outputs and inputs of hospitals	An, E
3	Analyse and interpret indicators of operational efficiency, cost and financial performance.	An, E

4	Evaluate cost analysis and analyse department wise average cost and procedure costing	An, E
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***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

-Mapping of Course Outcomes to PSOs

-	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓		✓				
CO 2	✓		✓				
CO 3	✓						
CO 4			✓				

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 45
		SIGNIFICANCE OF THE HEALTHCARE SECTOR	12
1	1	Introduction to the Healthcare Sector - Importance of healthcare sector in the economy - Uniqueness of the health care market- Physician dominance and Supplier Induced Demand	5
	2	Systems of medicine- Types of care: preventive, curative, promotive, rehabilitative, palliative – Ownership of hospitals-Layers of public and private facilities – Distribution of hospitals by ownership type in Kerala- Clinical Establishment Act – provider payment mechanisms – Public-funded insurance schemes (PMJAY, MEDISEP) – voluntary insurance	7
2		MEASUREMENT OF HOSPITAL PERFORMANCE (including practical sessions)	13
	1	Major Departments in a Hospital- Identifying Outputs and Inputs of Hospitals – Indicators of Operational Performance- Average Length of	6

		Stay (ALOS), Bed Occupancy Rate (BOR), Bed Turnover Rate (ToR), Turnover Interval (ToI),	
	2	Practical Sessions on Estimation - Pabon Lasso model for hospital performance assessment	7
	COSTING OF HOSPITAL SERVICES (including practical sessions)		12
3	1	Importance of costing in hospital management - Types of costs: fixed, variable, direct, indirect -Costing Methodology - Components of Cost - Operating and Capital Cost - Step down Costing	6
	2	Building Allocation rules - Step-by-step guide to conduct Step down costing- Activity based costing or procedure costing- Hands-on exercises to calculate Department wise Average Cost.	6
4	TEACHER SPECIFIC MODULE Direction: PRACTICAL: UNDERTAKE A CASE STUDY IN A NEARBY HOSPITAL		8
	1	Work out the Operational Indicators- Calculate the Department wise Average Cost using either step down method or through Activity based costing.	

Essential Readings:

1. Arrow, K (1963) Uncertainty and the Welfare Economics of Medical Care American Economic Review Vol 53 No 5 941-973
2. Mills, A & Gilson L (1988) Health Economics for Developing Countries: A Survival Kit HEFP Working Paper 01/88, LSHTM,1988
3. Langenbrunner, J., Cashin, C., & O'Dougherty, S. (Eds.). (2009). *Designing and implementing health care provider payment systems: how-to manuals* (Vol. 434). World Bank Publications.
4. Ramesh Bhat; Bharat Bhushan Verma, Elan Reuben (2001) Hospital Efficiency and Data Envelopment Analysis (DEA) An empirical analysis of district hospitals and grant-in-aid hospitals in Gujarat state of India, Working Paper No. 2001- 07-05, IIM, Ahmedabad
5. Shepard, D. S., Hodgkin, D., & Anthony, Y. E. (2000). *Analysis of hospital costs: a manual for managers*. World Health Organization.
6. World Health Organisation (2000). The World Health Report: Health Systems: Improving Performance, Geneva: WHO.
7. Wallace Hopp & William S Lovejoy (2023) Hospital Operations: Principles of High Efficiency Health Care

Reference Distribution:

FYUGP ECONOMICS

Module	Unit	Reference No.	Remarks
1	1	Essential Reading 1, 2	-
	2		-
2	1	Essential Reading 1, 2, 3	-
	2		-
3	1	Essential Reading 5, 6	-
	2		-
4	1	Essential Reading 4, 6, 7	-

Suggested Readings:

1. Hendriks, M. E., Kundu, P., Boers, A. C., Bolarinwa, O. A., Te Pas, M. J., Akande, T. M., ... & Tan, S. S. (2014). Step-by-step guideline for disease-specific costing studies in low-and middle-income countries: a mixed methodology. *Global health action*, 7(1), 23573.
2. Howard Barnum & Joseph Kutzin (1993) Public Hospitals in Developing Countries John Hopkins University Press for the World Bank, Washington
3. World Bank (1993). World Development Report: Investing in Health. Oxford University Press, New York.

Assessment Rubrics:

Evaluation Type		MARKS
End Semester Evaluation-Theory		35
End Semester Evaluation – Practical		15
End Semester Evaluation – Total		50
Continuous Evaluation – Theory		15
a)	Test Paper- 1	10
b)	Test Paper-2	-
c)	Assignment	5
d)	Seminar	-
e)	Book/ Article Review	-
f)	Viva-Voce	-
Continuous Evaluation -Practical		10
Continuous Internal Evaluation – Total		25
Grand Total		75

KU4VACDEC203: ECONOMICS OF CRIME AND CORRUPTION

Semester	Course Type	Course Level	Course Code		Credits	Total Hours
IV	VAC	200-299	KU4VACDEC203		3	45
Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	25	50	75	1.5

Course Description:

This course explores the intricate relationship between economics and crime, delving into the various dimensions of criminal activities, their economic impacts, and the policy responses aimed at mitigating crime. Students will engage with theoretical models, empirical data, and case studies to understand the economic costs associated with crime, the functioning of illegal markets, the complexities of corruption and money laundering, and the global challenges posed by white-collar and cybercrimes.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course, the student will be able to,

CO No.	Expected Outcome	Learning Domains
1	Gain a comprehensive understanding of the definitions, economic costs, and international comparisons of crime, allowing them to articulate the fundamental concepts of crime economics.	R, U
2	Acquire knowledge about the structure and functioning of illegal markets, including drug trading and the potential economic effects of drug legalization.	U, An
3	Develop the ability to apply economic models to analyze criminal behavior, including the use of opportunity costs, cost-benefit analysis, probabilities, and sensitivity analysis.	A
4	Understand the economic implications of corruption and money laundering, as well as the costs and causes of corruption from an economic perspective.	U
5	Critically evaluate anti-corruption strategies and their impact on development, as well as assess the economic burden of the criminal justice system.	E

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓						
CO 2		✓					
CO 3			✓		✓		
CO 4			✓				
CO 5							✓

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	INTRODUCTION TO ECONOMICS OF CRIME		8
	1	Crime definition, and economic costs of crime, international comparisons	3
	2	Parallel economy	2
	3	Basic concepts and statistics of the economics of crime	3
2	ECONOMIC IMPACT AND THE RATIONALITY OF CRIME		10
	1	Economic impact and the rationality of crime	2
	2	Economic model of criminal behavior: Opportunity costs of crime, cost-benefit analysis, probabilities and sensitivity analysis	4
	3	The Burden of Crime: Economic allocation of criminal justice system Cost comparisons of prison and corrections systems	4
3	UNDERWORLD ECONOMY: EXPLORING ILLEGAL MARKETS, ORGANIZED CRIME, CORRUPTION, AND MONEY LAUNDERING		19
	1	Illegal markets and organized crime	3
	2	Economics of drug trading and drug abuse	3
	3	The economic effects of legalizing a selected drug	3
	4	New psychoactive substances and trafficking in synthetic drugs	3
	5	Corruption and Money laundering	7
		a) Corruption and Money laundering	
		b) Key international crime issue: White collar crimes, cybercrimes (phishing, hacking)	
		c) Explore the costs and causes of corruption through an economic lens.	
	d) Analyze anti-corruption strategies by government and their impact on development		
4	TEACHER SPECIFIC MODULE		8

	<i>Directions: Students may be directed to identify study reports on issues related to economics of crime and make presentations. Discussions may be initiated on the selected issues and evaluated.</i>	
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Essential Readings:

1. Handbook of the Economics of Crime; edited by John P. Leubsdorf and Michael
2. Corruption and Governance: Concepts, Causes, Consequences by Susan Rose- Ackerman
3. Drugs & the World Economy: Global Policy Dilemmas by Peter Reuter and David P Greenwalt (2007)
4. Databases on crime.
 - NCRB
 - BPRD
 - SCRB
5. Interpol crime areas <http://www.interpol.int/Crime-areas>
6. UNODC <http://www.unodc.org/unodc/index.html>.

7. Reference Distribution:

Module	Unit	Reference No.	Remarks
1	1	Essential Readings 1 - 5	-
	2	Essential Readings 1 - 5	-
	3	Essential Readings 1 - 5	-
2	1	Essential Readings 1 - 5	-
	2	Essential Readings 1 - 5	-
	3	Essential Readings 1 - 5	-
3	1	Essential Readings 1 - 5	-
	2	Essential Readings 1 - 5	-
	3	Essential Readings 1 - 5	-
	4	Essential Readings 1 – 4	-
	5	Essential Readings 1 – 6	-

Suggested Readings:

1. Rose-Ackerman, S. (2018). Corruption & purity. Daedalus
2. Rose-Ackerman, S. and Palifka, B. J. (2016). Corruption and government: Causes, consequences, and reform. Cambridge University Press. Chapter 1
3. Svensson, J. (2005). Eight questions about corruption. Journal of Economic Perspectives
4. Bowler, S. and Donovan, T. (2016). Campaign money, congress, and perceptions of corruption. American Politics Research

5. Fadiman, J. A. (1986). A traveler's guide to gifts and bribes. Harvard Business Review
6. Escresa, L. and Picci, L. (2017). A new cross-national measure of corruption. The World Bank Economic Review
7. Duggan, M. and Levitt, S. D. (2002). Winning isn't everything: Corruption in sumo wrestling. American Economic Review
8. Fisman, R. and Miguel, E. (2007). Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets. Journal of Political Economy
9. Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research Annu. Rev. Polit. Sci.
10. Olken, B. A. and Barron, P. (2009). The simple economics of extortion: evidence from trucking in Aceh. Journal of Political Economy
11. Schnakenberg, K. E. and Turner, I. R. (2019). Signaling with reform: How the threat of corruption prevents informed policymaking. American Political Science Review
12. Malesky, E. J., Gueorguiev, D. D., and Jensen, N. M. (2015). Monopoly money: Foreign investment and bribery in vietnam, a survey experiment. American Journal of Political Science

Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		25
a)	Test Paper- 1	10
b)	Test Paper-2	-
c)	Assignment	-
d)	Seminar	5
e)	Book/ Article Review	-
f)	Viva-Voce	-
g)	Field Report	10
Total		75

KU4VACDEC204: ETHICS IN ACADEMIC WRITING

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	VAC	200-299	KU4VACDEC204	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	-	25	50	75	1.5 (Hours)

Course Description:

This course is open to students from various disciplines. This course explores the ethical principles underlying academic writing. It covers topics such as integrity, responsible authorship, plagiarism prevention, citation styles, copyright laws, and ethical research practices. Students will develop skills in evaluating sources, paraphrasing, quoting, and applying ethical principles to their writing.

Course Prerequisite: NIL

Course Outcomes:

At the end of the course, the student will be able to;

CO No.	Expected Outcome	Learning Domains
CO 1	Understand the core principles of academic integrity, responsible authorship, and intellectual honesty.	R, U
CO 2	Identify different types of plagiarism and apply strategies to prevent it.	U, E
CO 3	Master proper citation styles (APA, MLA, Chicago) and reference formatting.	R, E
CO 4	Navigate copyright laws and ethically use published materials.	E, A
Co 5	Develop self-evaluation skills and strategies for preventing academic misconduct.	An, C

***Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)**

Mapping of Course Outcomes to PSOs

FYUGP ECONOMICS

COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓						✓
CO 2		✓					
CO 3			✓			✓	
CO 4					✓		
CO 5				✓			

COURSE CONTENTS

Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	ACADEMIC WRITING: CORE PRINCIPLES		13
	1	Integrity and Authorship: Defining academic integrity, responsible authorship, and intellectual honesty.	3
	2	Understanding Plagiarism: Exploring different types of plagiarism and prevention strategies. act, detection software- Turnitin	3
	3	Citation Strategies: Mastering proper citation styles (APA, MLA, Chicago) and reference formatting	4
	4	Copyright and Fair Use: Navigating copyright laws and ethical utilization of published materials	3
2	RESEARCH ETHICS		12
	1	Informed Consent and Privacy: Protecting participants in research and respecting their privacy.	3
	2	Responsible Data Practices: Learning ethical techniques for data collection, analysis, and reporting	3
	3	Identifying Misconduct: Recognizing data manipulation and research misconduct	3
	4	Collaboration Challenges: Understanding and addressing ethical hurdles in collaborative research	3
3	ETHICAL WRITING SKILLS		12
	1	Evaluating Sources: Critically assessing information sources for credibility and relevance.	3
	2	Paraphrasing and Quoting: Mastering effective paraphrasing, summarizing, and quoting techniques.	3
	3	Applying Integrity: Putting ethical principles into practice across various writing tasks	3
	4	Reflection and Prevention: Developing self-evaluation skills and strategies for preventing academic misconduct.	3
4	TEACHER SPECIFIC MODULE		8

	Directions: This module can focus on engaging students in some of the following selected topics;	
	<ul style="list-style-type: none"> ● Pedagogical Approaches: Strategies for teaching academic integrity, responsible authorship, and ethical writing practices. ● Creating Assignments: Designing assignments that promote ethical writing and critical thinking. ● Providing Feedback: Effective feedback techniques to address plagiarism and promote ethical writing. ● Classroom Discussions: Facilitating discussions on ethical dilemmas in writing and research. ● Academic Integrity Policies: Implementing and enforcing academic integrity policies in the classroom. ● Professional Development: Resources for teachers to enhance their own understanding of ethical writing practices. 	

Essential Readings:

1. Writing with Purpose: A Rhetoric and Reader by Laurie G. Kirszner and Stephen R. Mandell
2. A Short Guide to Writing about Literature by Sylvan Barnet and William Cain
3. The ACS Style Guide: A Manual for Authors, Editors, and Publishers by American Chemical Society
4. MLA Handbook by Modern Language Association

5. Reference Distribution:

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1	1	Essential Reading 1 - 4	-
	2	Essential Reading 1 - 4	-
	3	Essential Reading 1 - 4	-
	4	Essential Reading 1 - 4	-
2	1	Essential Reading 1 - 4	-
	2	Essential Reading 1 - 4	-
	3	Essential Reading 1 - 4	-
	4	Essential Reading 1 - 4	-
3	1	Essential Reading 1 - 4	-
	2	Essential Reading 1 - 4	-
	3	Essential Reading 1 - 4	-
	4	Essential Reading 1 - 4	-

Suggested Readings:

1. Ahuja, Ram. Research Method, Rawat Publication, New Delhi, 2001

2. Art, RobertJ. and Jervis, Robert International Politics: Enduring Concepts and Contemporary Issues, Longman, 2010
3. Dhiman, Delhi, AK and SC Sinha. Research Methodology, EssEss Publication, New 2002
4. Fowler, Flyod J. (Jr). Survey Research Methods, Sage, Beverley Hills, 1984.
5. Gerring, John 2004. "What is a Case Study and What is it Good for?" American Political Science Review
6. Kuhn, Thomas, The Structure of Scientific Revolution, Chicago: University of Chicago Press, 2012. (50th edition).
7. Popper, Press, 2013. Karl, Open Society and Its Enemies, New Jersey: Pentagon University
8. Kohari, New Age C. R and Garg, Research Methodology: Methods and Techniques, International Publisher, New Delhi, 2019 (4th edition).
9. A, MacIntyre. (1974). A Short History of Ethics. London.

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