

Department of Economics

B.Sc. (Hons.) Economics Curriculum and Syllabus

(Applicable to the students admitted during AY: 2022-23)



**Easwari School of Liberal Arts
SRM University AP, Andhra Pradesh**

Department Vision

To develop globally oriented individuals who can adopt a multi-dimensional approach and solve the complex issues impacting business and society.

Department Mission

1. Provide high academic rigor and an inspiring environment to individuals to realize their true potential and sculpt them into future economists.
2. Cater to the growing market demand for professional economists and policy researchers.
3. Develop socially inclusive and responsible individuals and enable them to analyze and solve real-world economic issues.

Program Educational Objectives (PEO)

1. Along with acquiring content knowledge, students in each course will practice critical thinking skills, communication skills, quantitative reasoning, and economic citizenry.
2. To prepare them to pursue higher studies and conduct research.
3. To train them and build their careers where they are likely to make a long-lasting contribution in either policy making or research career.

Mission of the Department to Program Educational Objectives (PEO) Mapping

	PEO 1	PEO 2	PEO 3
Mission Statement 1	3	2	2
Mission Statement 2	2	3	3
Mission Statement 3	3	2	1

Program Specific Outcomes (PSO)

1. To solve real-life problems by using economic theory and applications.
2. Analyse data to solve complex economic problems.
3. Application of economic theories and concepts to contemporary social issues, and formulation and analysis of policy outcomes.

Mapping Program Educational Objectives (PEO) to Program Learning Outcomes (PLO)

Program Learning Outcomes (PLO)															
PEOs	POs												PSOs		
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
PEO 1	3	2	3	2	-	-	-	-	-	-	-	-	3	2	1
PEO 2	2	3	3	2	3	-	-	-	-	-	1	3	1	2	3
PEO 3	3	1	1	1	-	2	-	1	-	3	1	-	2	3	1

Category Wise Credit Distribution			
Course Sub-Category	Sub-Category Credits	Category Credits	Learning Hours
Ability Enhancement Courses (AEC)		4	120
University AEC	0		
School AEC	4		
Value Added Courses (VAC)		4	120
University VAC	4		
School VAC	0		
Skill Enhancement Courses (SEC)		14	420
School SEC	8		
Department SEC	0		
SEC Elective	6		
Foundation / Interdisciplinary courses (FIC)		24	720
School FIC	24		
Department FIC			
Core + Core Elective including Specialization (CC)		88	2640
Core	84		
Core Elective (Inc Specialization)	4		
Minor (MC) + Open Elective (OE)	12	12	
Research / Design / Internship/ Project (RDIP)		20	600
Internship / Design Project / Startup / NGO	8		
Internship / Research / Thesis	12		
Total		166	4980

Semester wise Course Credit Distribution Under Various Categories										
Category	Semester									
	I	II	III	IV	V	VI	VII	VIII	Total	%
Ability Enhancement Courses - AEC	0	0	2	2	0	0	0	0	4	2
Value Added Courses - VAC	0	0	0	0	0	4	0	0	4	2
Skill Enhancement Courses - SEC	3	1	2	2	3	3	0	0	14	8
Foundation / Interdisciplinary Courses - FIC	16	8	0	0	0	0	0	0	24	14
CC / SE / CE / TE / DE / HSS	0	16	16	16	16	16	8	0	88	53
Minor / Open Elective - OE	0	0	3	3	3	3	0	0	12	7
(Research / Design / Industrial Practice / Project / Thesis / Internship) -RDIP	0	0	0	0	4	0	4	12	20	12
Grand Total	19	25	23	23	26	26	12	12	166	100

Note: L-T/D-P/Pr and the class allocation is as follows.

- a) Learning Hours : 30 learning hours are equal to 1 credit.
- b) Lecture/Tutorial : 15 contact hours (60 minutes each) per semester are equal to 1 credit.
- c) Discussion : 30 contact hours (60 minutes each) per semester are equal to 1 credit.
- d) Practical : 30 contact hours (60 minutes each) per semester are equal to 1 credit.
- e) Project : 30 project hours (60 minutes each) per semester are equal to 1 credit.

SEMESTER - I								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	SEC	S SEC	ISES 101	Industry Specific Employability Skills-I	0	0	1	1
2	SEC	S SEC	IRH 101	Orientation on Internationalization	1	0	0	1
3	SEC	S SEC	ENTR 100	Exploratory Learning and Discover	0	0	1	1
4	FIC	S FIC	ENV 100	Introduction to Environmental Sciences	4	0	0	4
5	FIC	S FIC	PSY 101	Introduction to Psychology	4	0	0	4
6	FIC	S FIC	LBA 101	Liberal Arts: Perspectives and Approaches	4	0	0	4
7	FIC	S FIC	FIC 122	Understanding the Indian Constitution.	4	0	0	4
Semester Total					17	0	2	19

SEMESTER - II								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	SEC	S FIC	ISES 102	Industry Specific Employability Skills-II	0	0	1	1
2	FIC	S FIC	EGL 100	Introduction to Communicative English	4	0	0	4
3	FIC	S FIC	ECO 151	Understanding Economy and Markets	4	0	0	4
4	Core	CC	ECO 152	Introductory Microeconomics	4	0	0	4
5	Core	CC	ECO 153	Introductory Macroeconomics	4	0	0	4
6	Core	CC	ECO 154	Mathematical Methods for Economics I	4	0	0	4
7	Core	CC	ECO 155	Probability and Statistical Methods	4	0	0	4
Semester Total					24	0	1	25

SEMESTER - III								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	AEC	S AEC	AEC 104	Creativity and Critical Thinking Skills	1	0	1	2
2	VAC	U VAC	VAC 103	Co-Curricular Activities	0	0	2	2*
3	VAC	U VAC	VAC 104	Community Service and Social Responsibility	0	0	2	2*
4	SEC	S SEC	SEC 102	Digital Literacy	1	1	0	2
5	Core	CC	ECO 201	Intermediate Microeconomics	4	0	0	4
6	Core	CC	ECO 202	Intermediate Macroeconomics	4	0	0	4
7	Core	CC	ECO 203	Mathematical Methods for Economics II	4	0	0	4
8	Core	CC	ECO 204	Applied Statistics	4	0	0	4
9	Elective	OE		Open Elective / Minor	3	0	0	3
Semester Total					21	1	5	23

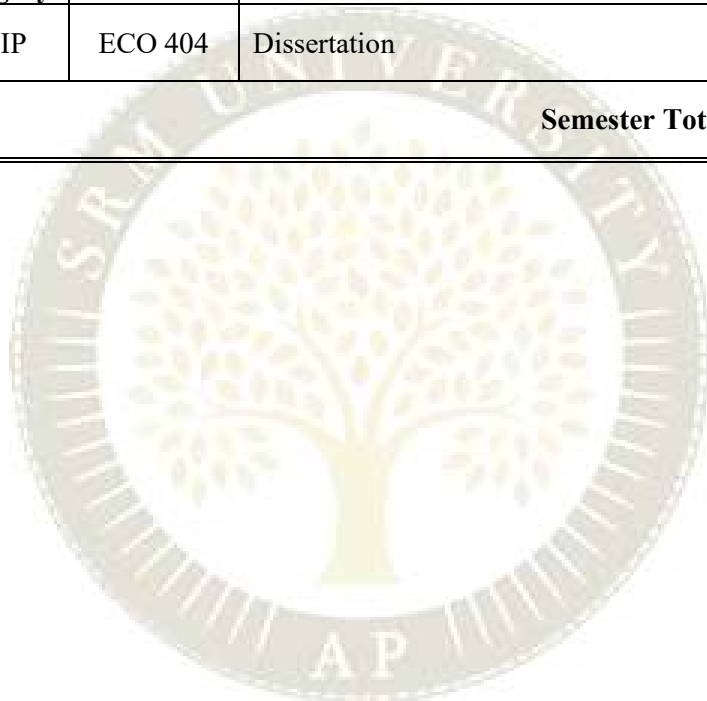
SEMESTER - IV								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	AEC	S AEC	AEC 103	Problem Solving through Programming in C	1	0	1	2
2	VAC	U VAC	VAC 103	Co-Curricular Activities	0	0	2	2*
3	VAC	U VAC	VAC 104	Community Service and Social Responsibility	0	0	2	2*
4	SEC	S SEC	SEC 108	Social Entrepreneurship	2	0	0	2
5	Core	CC	ECO 207	Public Economics and Policies	4	0	0	4
6	Core	CC	ECO 208	Game Theory	4	0	0	4
7	Core	CC	ECO 255	Growth and Development	4	0	0	4
8	Elective	CE	ECO 474	Money, Banking and Finance	4	0	0	4
9	Elective	OE		Open Elective / Minor	3	0	0	3
Semester Total					22	0	5	23

SEMESTER - V								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	VAC	VAC	VAC 103	Co-curricular activities	0	0	2	2*
2	VAC	VAC	VAC 104	Community Service and Social Responsibility	0	0	2	2*
3	SEC	SEC	SEC 122	Career skills I : Fintech	3	0	0	3
4	Core	CC	ECO 301	Introductory Econometrics	4	0	0	4
5	Core	CC	ECO 302	Financial Economics	4	0	0	4
6	Core	CC	ECO 303	Indian Economy	4	0	0	4
7	Elective	CE	CE	Core Elective	4	0	0	4
8	Elective	OE		Open Elective / Minor	3	0	0	3
9	RDIP	RDIP	ECO 304	Internship	0	0	4	4
Semester Total					22	0	8	26

SEMESTER - VI								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	VAC	U VAC	VAC 103	Co-curricular activities	0	0	2	2
2	VAC	U VAC	VAC 104	Community Service and Social Responsibility	0	0	2	2
3	SEC	S SEC	SEC 123	Career skills – II : Understanding India's Economic Survey and Union Budget	3	0	0	3
4	Core	CC	ECO 305	Advanced Econometrics	4	0	0	4
5	Core	CC	ECO 307	International Economics	4	0	0	4
6	Core	CC	ECO 309	Data analysis using computer applications	4	0	0	4
7	Elective	CE	CE	Core Elective	4	0	0	4
8	Elective	OE		Open Elective / Minor	3	0	0	3
Semester Total					22	0	4	26

SEMESTER - VII								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	Core	CC	ECO 401	Time Series Econometrics	4	0	0	4
2	Core	CC	ECO 402	Industrial Organization	4	0	0	4
3	Core	CC	ECO 403	Research Methodology	4	0	0	4
4	Core	CC	ECO 405	Economic Growth	4	0	0	4
Semester Total					16	0	0	16

SEMESTER - VIII								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	RDIP	RDIP	ECO 404	Dissertation	0	0	14	14
Semester Total					0	0	14	14



Core Electives								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	Elective	CE	ECO 421	Behavioural Economics	4	0	0	4
2	Elective	CE	ECO 422	Labour Economics	4	0	0	4
3	Elective	CE	ECO 423	Health Economics	4	0	0	4
4	Elective	CE	ECO 424	Money, Banking and Finance	4	0	0	4
5	Elective	CE	ECO 425	Theories of Growth	4	0	0	4
6	Elective	CE	ECO 426	Political Economy	4	0	0	4
7	Elective	CE	ECO 427	Industrial Economics	4	0	0	4
8	Elective	CE	ECO 428	Law and Economics	4	0	0	4
9	Elective	CE	ECO 429	Agricultural Economics	4	0	0	4
10	Elective	CE	ECO 430	Economics of Corruption	4	0	0	4

Minor in Economics								
S. No	Category	Sub-Category	Course Code	Course Title	L	T/D	P/Pr	C
1	OE	OE	ECO 241	Basic Statistics	3	0	0	3
2	OE	OE	ECO 242	Economics of Innovation	3	0	0	3
3	OE	OE	ECO 243	Introduction to Financial Economics	3	0	0	3
4	OE	OE	ECO 244	Fundamentals of Time Series	3	0	0	3
5	OE	OE	ECO 245	Central Banks and Monetary Policy	3	0	0	3
6	OE	OE	ECO 246	Evolution of Money and Banking	3	0	0	3
7	OE	OE	ECO 247	Environmental Economics	3	0	0	3
8	OE	OE	ECO 248	Contemporary Economics Issues	3	0	0	3
9	OE	OE	ECO 249	The Art and Science of Economic Policy	3	0	0	3
10	OE	OE	ECO 250	Entrepreneurship in Emerging Economies	3	0	0	3
11	OE	OE	ECO 251	Understanding of Market and Economy	3	0	0	3
12	OE	OE	ECO 252	Economic Development of India	3	0	0	3
13	OE	OE	ECO 253	Trade and Globalization	3	0	0	3

Industry Specific Employability Skills - I

Course Code	ISES 101	Course Category	HS			
			L	T	P	C
			0	0	1	1
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	CDC	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Develop interpersonal skills to become a good team player.
- Develop socialization skills, positive attitude, and behavioural skills.
- Eliminate their barriers of communication and take conscious efforts to improve their skill sets.
- Recognise practice and acquire the skills necessary to deliver effective presentation with clarity and impact.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Recognise the factors which motivate him in learning.	1	70%	60%
Outcome 2	Apply the knowledge of creativity and originality.	3	80%	70%
Outcome 3	Employ lateral thinking in solving problems.	1	70%	60%
Outcome 4	Identify themselves as team player.	1	90%	80%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1					1			2		2		1			
Outcome 2		2			3			3	3						
Outcome 3		3							2			2			
Outcome 4								2	3			2			
Course Average		3			2			4	4			3			

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Quants			
	Speed calculations, Time, and Distance	1	2,3	2,4
	Problems on Trains, Boats and Streams, Races and Games, Escalator problems	1	2,3	2,4
	Time and work, Chain rule, Pipes and Cistern	1	2,3	2,4
	Simplification, surds and indices,	1	2,3	2,4
	square roots and cube roots, Functions	1	2,3	2,4
Unit 2	Reasoning			
	Number Series, Alphabet series, Odd Man Out, Missing number, Wrong number	1	2,3	1,4
	Analogies, Mathematical Operations, Calendars, Clocks	1	2,3	1,4
	Cryptarithmetics, Identification of cross variable relations	1	2,3	1,4
	SUDOKU	1	2,3	1,4
Unit 3	Verbal			
	Basic sentence structure: Nouns, Pronouns, Adjectives, Parts of speech, Degree of comparison	1	1,2	3,7
	Articles, conditionals, and sentences (kinds), Verb Tense, Sentence formation.	1	1,2	3,7
	Paragraph formation, change of voice, Change of speech, Synonyms, Antonyms.	1	1,2	3,7
Unit 4	Communication Skills			
	Self-introduction	1	1,4	5,6
	Presentations	1	1,4	5,6
	E-Mail Etiquettes	1	1,4	5,6
Total Learning Hours		15		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		50%		40%		50%		50%	
	Understand										
Level 2	Apply	60%		50%		60%		50%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. R.S. Agarwal, A Modern Approach to Verbal & Non-Verbal Reasoning, S. Chand Publication
2. How to prepare for Quantitative Aptitude for CAT – Arun Sharma
3. Meenakshi Upadhyay, Arun Sharma -Verbal Ability and Reading Comprehension
4. How to prepare for Logical reasoning and data interpretation for CAT – Arun Sharma.
5. Mastering Soft skills – Julian Vyner.
6. Soft skills – Key to success in workplace and life – Meenakshi Raman, Shalini Upadhyay.
7. English grammar and composition – S. C. Gupta

Other Resources

1. Enter Data

Course Designers

1. Mr. Asghar Ahamad, Soft skills trainer, Department of CDC, SRM University AP.

Course Unitization Plan

Unit No.	Unit Name	Required Contact Hours	CLOs Addressed	References Used
Unit 1	INTERNATIONALISATION OF HIGHER EDUCATION	3		
	Internationalization, Global Trends and Indian Initiatives	1		
	Internationalization and Indian higher education	1		
	Internationalization as the pathway to the Future universities	1		
Unit 2	GUIDELINES FOR INTERNATIONALIZATION OF HIGHER EDUCATION	3		
	NEP and Internationalization	1		
	Strategic Programs and Initiatives - I	1		
	Strategic Programs and Initiatives – II and Role of Institutions	1		
Unit 3	INTENATIONALIZATION PATHWAYS	10		
	International Partnerships, Need and Importance, Key for Internationalization goals, Type, Process and Current status	1		
	Pathway -1: International Internships, its role in internationalization, Need, Scope and Benefits, Comparison with global institutions1	1		
	Opportunities, Process and Policy guidelines	1		
	Languages, Centre of Excellences for Languages, Purpose and Scope	1		
	Pathway -2: Immersion Programs (Inbound and Outbound), its role in internationalization, Need, Scope and Benefits, Comparison with global institutions, how it is different from Internships	1		
	Opportunities, Process and Policy guidelines	1		
	Pathway -3: Semester Abroad and Exchange Program, Its role in Internationalization, Scope and Benefits, Process and Guidelines	1		
	Pathway -4: International Transfer Program Program, Its role in Internationalization, Scope and Benefits, Process and Guidelines, Credit Transfer	1		
	Pathway -5: Higher Studies (India or Abroad), Importance, Need and Scope, Process and Component of Higher Studies abroad, Benefits, Training and Support	1		
	Other Pathways of Internationalizations, SRM University AP Goals and Vision for Internationalizations, Intranet Portal a tool.	1		
Total contact hours			16	

Learning Assessment

Course Nature			Theory	
Assessment Method – Theory Component (Weightage 100%)				
In-semester	Assessment tool	Mid Term I	Mid Term II	Total
	Weightage	15%	15%	30%
End semester examination Weightage: 70%				70%

Recommended Resources

1. Enter Data

Other Resources

1. <https://drive.google.com/drive/u/1/folders/1uUiQV30enEAuU3Ov6Gx0R0EGSaha4rzl>
2. https://drive.google.com/file/d/1yTO36ezB8x2kDIh-RtEfg6J-W3SxEai_/view?usp=sharing
3. <https://drive.google.com/file/d/1AYeCeGaGb4pQ4a7VvEAbmooywRJHDZVY/view?usp=sharing>

Course Designers

1. Directorate of International Relations and Higher Studies

Introduction to Environmental Science

Course Code	ENV 100	Course Category	FIC				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Environmental Science	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To study the scope of Environmental Science and the idea of sustainability.
- To acquire basic knowledge of environmental ethics, critical environmental laws, and policies.
- To explore various sources and challenges in the renewable energy sector in replacing conventional energy.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Recognise the scope and purview of Environmental Science, the Idea of sustainability, environmental ethics, and global efforts to overcome the hindrance for sustainability.	2	80%	70%
Outcome 2	Interpret the environmental laws and policies.	3	80%	70%
Outcome 3	Investigate climate change, the way it affects life at different scales (global, regional, and local scales), and various mitigation strategies.	2	70%	60%
Outcome 4	Analyse the extent of environmental pollution and pollution reduction strategies through and resource optimization, renewable energy, and waste management.	3	70%	60%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	1	-	-	-	1	-	3	1	1	-	1	1			
Outcome 2	1	-	1	-	1	-	3	-	1	-	1	1			
Outcome 3	1	-	-	-	1	-	3	-	1	-	1	1			
Outcome 4	1	-	-	-	1	-	3	-	1	-	1	1			
Average	1	-	1	-	1	-	3	1	1	-	1	1			

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	COs Addressed	References Used
Unit 1	Fundamental Concepts in Environmental Science	12	1	1, 2, 3, 4, 5, 6, 7, 8, 10
	Human population and environment	1		
	Environmental education and awareness Environmental ethics	2		
	Evolution of Environmental ethics – Leopold’s land ethics, Silent Spring Population growth, Ecological overshoot, and Ecological Footprint	2		
	Defining global sustainability, Garret Hardin’s “Tragedy of the Commons”, Brundtland commission report, Principles of sustainable development, Sustainable Development Goals (SDGs), Triple bottom line of sustainable development	2		
	Technology and Society: Information Technology - Human health & Environmental health, Environmental misconception	2		
	Sustainable ethics: Overcoming the obstacles of sustainability Individualizing Responsibility for a sustainable future - Consumption and its impact on sustainable development	3		
	Unit 2	Social issues and Environment		
Frontierism, Biological Imperialism, and Natural rights, Significance of Human rights; Human rights and environment		3		
Wastewater reclamation, Water conservation, Rainwater harvesting, Watershed management, Urban problems related to energy, Nuclear accidents		3		
Global Environmental Policy, Environmental acts and laws, Water Act 1974, Environmental Protection Act 1986		4		
Unit 3	Global Climate Change	14	3	10, 3
	Differentiating Climate and Weather, Interconnection of Earth systems (Hydrosphere, Geosphere, Cryosphere, Atmosphere, and Biosphere)	2		
	Climate change through data (global temperature, and CO ₂ – Mauna Lao Earth observatory)	3		
	Climate change: Impacts - Extreme weather events, Sea-level rise, Food and water security, and Human health & well-being, Biodiversity loss	4		
	Climate change: Adaptation – local to global scales, Synthesis	2		
	Disaster management – landslides, Tsunamis floods, earthquakes, anthropogenic disasters, Bhopal tragedy	2		
	Communicating climate change	1		
Unit 4	Energy and Environment	8	4	3, 4
	Renewable Energy: Global Status and trends	2		
	Global Renewable Energy Applications	2		
	Technical Issues, Challenges & Opportunities Solar, tidal, hydropower, Bioenergy, nuclear	2		
	Renewable Energy Markets	2		
	Unit 5	Environmental Pollution and Management		
Pollution: Air pollution, Noise pollution, Water pollution, Soil pollution		4		
Solid waste management: Collection, Handling, and solid waste management rules		4		
E-waste and hazardous waste management, biomedical waste management		4		
Wastewater treatment systems: Industrial and sewage treatment		4		
Total Learning Hours		60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	70%		70%		30%		30%		70%	
	Understand										
Level 2	Apply	30%		30%		70%		70%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Daniel D. Chiras (2012), Environmental Science 9th Edition. Jones & Barlet Publishers
2. Carson, R. (2002). Silent spring. Houghton Mifflin Harcourt.
3. Rajagopalan, R (2015). Environmental Science – from crisis to cure, 3rd Edition. Oxford Higher Education.
4. Walter K Dodds (2018). Humanity's Footprint: Momentum, Impact, and Our Global Environment. Columbia University Press
5. Hayley Stevenson (2018). Global Environmental Politics Problems, Policy and Practice. Cambridge University Press
6. Garette Hardin (1968). The Tragedy of the Commons. Science 162 (3859), 1243-1248. DOI: 10.1126/science.162.3859.1243
7. Brutland Commission Report, 1987. Oxford University Press
8. TRANSFORMING OUR WORLD: The 2030 Agenda for Sustainable Development
9. Shastri, S.C. (2015) Environmental Law by 5th edition, EBC Publications.
10. Intergovernmental Panel on Climate Change (IPCC) Synthesis Report, 2014.
11. C.S. Rao (2018) Environmental Pollution Control Engineering, New Age International Publishers.

Other Resources

1. W. Cunningham, M. Cunningham (2016). Principles of Environmental Science (8th Edition), McGraw-Hill
2. Divan Shyam (2002). Environmental Law and Policy in India, OUP India
3. Jonathan Cowie, (2002). Climate change: Biological and Human Aspects, 2nd Edition. Cambridge University Press
4. Hanjalic, Kemo, Roel Van de Krol, and Alija Lekic, eds. (2017). Sustainable energy technologies: options and prospects. Springer Science & Business Media

Course Designers

1. Dr Pankaj Pathak, Assistant Professor, Department of Environmental Science, SRM University AP
2. Dr Shoji, Assistant Professor, Department of Environmental Science, SRM University AP

Introduction to Psychology

Course Code	PSY 101	Course Category	Core Course (CC)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Psychology	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To analyse the different approaches to the study of psychology.
- To explore the fundamental processes underlying human behaviour.
- To learn the applications of various psychological concepts.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the concept of psychology and its school of thought	2	80%	70%
Outcome 2	Describe the nature of psychology and learning theories	2	70%	65%
Outcome 3	Describe consciousness and its types	2	75%	60%
Outcome 4	Compare sensation and perception	2	70%	60%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	1						1						3		
Outcome 2		2	2	1		1	1					1		3	
Outcome 3		2	2	2			2	2	1	1	1	2		2	2
Outcome 4	2	2		2	2	2	1	2	2	2	2	2			3
Course Average	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	CLOs Addressed	References Used
Unit No. 1	Nature of Psychology	12	1,2	2
	Definition and goals of psychology	3		
	Nature of Psychology: art or science	3		
	Traditional schools of thought in psychology	6		
Unit No. 2	Recent Schools of Psychology	12	1,2	2
	Contemporary perspectives in psychology	6		
	Schools of thought: Psychoanalysis Gestalt, Behaviourism, Humanistic, Cognitive, Evolutionary	6		
Unit No. 3	Consciousness	12	1,3	1
	Consciousness – Definitions	3		
	Sleep and dreams	4		
	Altering consciousness – hypnosis, meditation, biofeedback and drugs	5		
Unit No. 4	Sensation and Perception	12	1,4	1
	Definitions; Absolute and differential threshold	3		
	Signal detection theory	3		
	Perception: Understanding perception, Gestalt laws of organization	3		
	Perceptual constancy - depth perception, size perception, perception of movement	3		
Unit No. 5	Learning	12	1,2	1,3
	Learning – Definitions	1		
	Classical conditioning – experiments and concepts	3		
	Operant conditioning – experiments and concepts Schedules of reinforcement	3		
	Adult Learning	1		
	Cognitive learning; Observational learning	2		
	Insight learning; Experiential learning	2		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (%)				End Semester Exam (50%)
		CLA-1 (10%)	CLA-2 (10%)	CLA-3 (10%)	Mid Term (20%)	
		Th	Th	Th	Th	
Level 1	Remember	100%	100%	100%	100%	100%
	Understand					
Level 2	Apply					
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Baron, R. A. (2001). Psychology. 5th Ed. New Delhi: Pearson Education India.
2. Nolen-Hoeksema, S., Fredrickson, B.L. & Loftus, G.R. (2014). Atkinson & Hilgard's Introduction to Psychology. 16th Ed. United Kingdom: Cengage Learning.
3. Morgan, C. T., King, R. A., & Schopler, J. (2004). Introduction to Psychology. New Delhi: Tata McGraw Hill

Other Resources

1. Enter Data

Course Designers

1. Dr. Ayesha Parveen Haroon, Assistant Professor, Department. of Psychology, SRM University-AP.

Liberal Arts: Perspectives and Approaches

Course Code	LBA 101	Course Category	FC			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Liberal Arts	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To explain different literary forms to depict human experiences.
- To explore and understand the socio-cultural context of human experiences.
- To demonstrate various methods that can be used to derive knowledge and meaning from experiences.
- To explore various political perspectives about a just human world.
- To discuss the importance of media in representing knowledge

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss some literary genres like poetry, novels and plays	1	70%	80%
Outcome 2	Examine socio-cultural groups and discuss the nature of those groups.	2	70%	70%
Outcome 3	Discuss different philosophical methods used to create knowledge	1	60%	70%
Outcome 4	Demonstrate various views on politics and compare them.	2	60%	60%
Outcome 5	Examine the importance of medium in representing knowledge.	2	70%	60%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	3		3			3		2		3	3	2	3
Outcome 2	2	2	2		2			2		2		2	2	2	3
Outcome 3	3	2	3		2			2		2		3	3	2	2
Outcome 4	2	2	2		2			2		2		2	2	2	3
Outcome 5	2	2	2		2			2		2		2	2	2	3
Course Average	2.4	2	2		2.2			2.2		2		2.4	2.4	2	2.8

Course Unitization Plan

Unit No.	Unit Name	Required Contact Hours	CLOs Addressed	References Used
Unit 1	All Roads Do Not Lead To Rome	12		
	Literature as a liberal discipline	4	1	1
	The interdisciplinary features of Literature	4		1
	Examples from the literary works that reflect the spirit of liberalism	4		1,2,3
Unit 2	Individual, Community and Society	12		
	M Hierarchy and Difference	4	2	5
	Ethnocentrism	4		5
	Cultural Relativism and Beyond	4		2,3
Unit 3	Understanding Meaning	12		
	Existential meaning	4	3,4	7
	Phenomenological Meaning	4		7
	The limits of Phenomenology: What we can't know	4		
Unit 4	Understanding Politics from Different Perspectives	12		11
	Socialism	4	5	
	Conservatism	4		
	Anarchism	4		
	Liberalism			
Unit 5	The Politics of Representation and making of Spectacles in the Media.	12		12,13
	Introduction to semiotics, Sign: Signifier and signified.	4	5	
	What is representation: Stuart Hall's two systems of representation	4		
	Media and capitalist spectacle	4		
	Total contact hours	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid (15%)	CLA-2 (10%)	CLA-3 (15%)	
		Theory	Theory	Theory	Theory	
Level 1	Remember	30%	40%	30%	40%	50%
	Understand					
Level 2	Apply	70%	60%	70%	60%	50%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Dickens, C. (2009). A Tale of Two Cities: Abridge Edition. UK : Penguin.
2. Palgrave, F. (2002). Palgrave's Golden Treasury. OUP. Oxford..
3. Brown, M. F (2008). Cultural Relativism 2.0, Current Anthropology , 49 (3): 363-383.
4. Darnell, R. (2009). Anthropological Approaches to Human Nature, Cultural Relativism and Ethnocentrism. Anthropologica, 51(1):187-194.
5. Gardner, M. (1950). Beyond Cultural Relativism, Ethics, 61(1):38-45.
6. Gupta, D. (Ed.,). (1993). Social Stratification, Delhi ; New York : Oxford University Press.
7. Johnson, T. H. (2007). Cultural Relativism: Interpretations of a Concept. Anthropological Quarterly, 80(3):791-802.
8. Camus, A. (1942). The Stranger. New York: Vintage International
9. Young, I. (1980). Throwing like a Girl: A Phenomenology of Feminine Body Comportment Motility and Spaciality. Human Studies 3: 137-156.
10. Fricker, M. (2007). Epistemic Injustice: Power and the Ethics of Knowing. Oxford University Press.
11. Heywood, A. (2017). Political Ideologies: An Introduction. UK: Macmillan.
12. Fiske, J. (2011). Introduction to Communication Studies. New York: Routledge.
13. Hall, S. (2003). Representation. New Delhi: Sage Publication

Other Resources

Course Designers

1. Dr. Srabani Basu, Dr. Ipsita Pradhan, Dr. Bikku R, Dr, Anasuya A, Dr. Chandana Deka, Dr. Idris Hassan Bhat, Dr. Ugen Bhutia- Department of Liberal Arts, SLASS, SRM University-AP
2. Course Coordinator : Dr. Anasuya A, Dr. Chandana Deka.

Understanding the Indian Constitution

Course Code	FIC 122	Course Category	Core Course (CC)				L	T	P	C
			3	0	1	4				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	History	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To locate the plurality of ideas in the Indian constitution
- To appreciate the importance of dialogue in the making and the extension of the Indian constitution.
- To develop a multidisciplinary approach in understanding the functioning of Indian democracy.
- To critically interrogate the concepts of equality, liberty, justice, and non-discrimination

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Describe the need of having a constitution.	2	80%	70%
Outcome 2	Define the concept of liberty and non-discrimination.	1	90%	80%
Outcome 3	Review key institutions of Indian democracy.	2	80%	70%
Outcome 4	Examine the tradition of consensus and discontent in Indian democracy.	4	70%	60%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	2	1	2	1	2	1	-	2	2	2	2	2	2	2	2
Outcome 2	2	1	2	1	1	1	-	3	2	2	2	2	3	2	3
Outcome 3	2	2	2	1	2	1	-	2	2	2	2	3	2	2	2
Outcome 4	2	2	3	2	3	1	-	3	2	2	2	3	3	2	3
Course Average	2	1.5	2.25	1.25	2	1	-	2.5	2	2	2	2.5	2.5	2	2.5

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	CLOs Addressed	References Used
Unit No. 1	Making of the Indian Constitution	14	1,2	
	Why do we need a constitution?	2		1,2
	Beginning of constitutionalism in India: Colonial and Anti-colonial legacies	2		2,7
	Locating constituent Assembly debate: Consensus and Discontent.	3		2,3
	Reading the preamble of the Indian constitution.	2		2,6
Unit No. 2	Fundamental Rights and Directive Principles-Ideas of Equality, Justice and Liberty	13	2,3	
	Right to Equality	2		1,7
	Six Freedoms	2		1,5,7
	Religious Freedom	3		4,7
	Minority Rights	2		3,4
	Directive Principles: Goals to establish a social and economic Democracy	2		4,5
	The primacy of Rights over Directive Principles	2		4,7
Unit No. 3	Asymmetrical Federalism: Centre-State Relations	13	3,4	
	What is federalism?	1		3,6
	Constitutional provisions related to federalism	2		3,7
	Relationship between State and Centre	3		3,7
	Deliberative Ambiguities of Indian Federalism	2		1,7
	Special Provisions for Jammu and Kashmir, Himachal Pradesh, Northeastern states, and tribal areas.	3		3,7
	AFSPA and suspension of Indian democracy	2		3,7
Unit No. 4	Foundation of Governance	11	3	
	Division of Power: Legislative, Executive, and Judiciary	3		3,7
	Parliamentary form of government in India	2		3,7
	Government of the Union and Government of the State	3		1,6
	Role of Supreme Court and Judicial Activism in India	3		1,2
Unit No. 5	Constitution as a living document	9	1,4	
	Constitution as a dialogue	2		3,4
	Constitutional Amendments and the basic structure of the Indian Constitution	3		1,3,7
	Insertion of the 9 th schedule in the constitution	2		1,5
	The role of the judiciary and citizens in defending, negotiating and interpreting the constitution	2		3,7

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (_ %)								End Semester Exam (50%)	
		CLA-1 (10%)		CLA-2 (10%)		CLA-3 (10%)		Mid Term (20%)			
		Th	Prac	Th	Prac	Th	Pr.	Th	Prac	Th	Prac
Level 1	Remember	30%		20%				40%		20%	
	Understand	70%		80%				60%		60%	
Level 2	Apply										
	Analyse						100%			20%	
Level 3	Evaluate										
	Create										
Total		100%		100%			100%	100%		100%	

Recommended Resources

1. Austin, G. (1996). The Indian Constitution: Cornerstone of a Nation, Oxford: OUP.
2. Bhargava, R. (ed) (2008), Ethics and Politics of the Indian Constitution, New Delhi: OUP.
3. Choudhry, S. et al. (2017). The Oxford Handbook of the Indian Constitution, New Delhi: OUP
4. Hassan, Z., Sridharan, E. & Sudarshan, R. (eds). (2002). India's Living Constitution: Ideas Practices, Controversies. New Delhi: Permanent Black.
5. Kannabiran, K. (2012). Tools of Justice: Non- Non-discrimination and the Indian Constitution, Routledge,
6. Kashyap, C.S. (2011). Our Constitution, New Delhi: National Book Trust.
7. Thiruvengadam, K.A. (2017). The Constitution of India: A Contextual Analysis, India: Hart Publishing

Online Resources

1. Armed Forces (Special Powers) Acts 1958
(https://www.mha.gov.in/sites/default/files/armed_forces_special_powers_act1958.pdf)
2. Dr. Ambedkar's Last Speech in the Constituent Assembly on Adoption of the Constitution (November)
(<https://main.sci.gov.in/AMB/pdf/Closing%20speech%2025%20Nov%201949.pdf>)

Other Resources

Course Designers

1. Dr. Maanvender Singh, Assistant Professor, Dept. of History, SRM University-AP.
2. Dr. Aqsa Agha, Assistant Professor, Dept. of History, SRM

Industry Standard Employability Skills -II

Course Code	ISES 102	Course Category	Ability Enhancement Course (AEC)			
			L	T	P	C
			0	0	1	1
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	CDC	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

1. Develop interpersonal skills to be a good team player.
2. Develop socialization skills, positive attitude, and behavioural skills
3. Eliminate the barriers of communication and make conscious efforts to improve skill sets.
4. Recognise practice and acquire the skills necessary to deliver effective presentation with clarity and impact.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Recognise the intrinsic motivating factors.	1	70%	60%
Outcome 2	Demonstrate the ability to conceptualize an original idea.	3	80%	70%
Outcome 3	Solve the given problems using lateral thinking techniques	3	70%	60%
Outcome 4	Apply interpersonal skills to be a team player	3	90%	80%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1					1			2		2		1			
Outcome 2		2			3			3	3						
Outcome 3		3							2			2			
Outcome 4								2	3			2			
Average		2.5			2			2.3	2.7	2		1.7			

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	COs Addressed	References Used
Unit No. 1	Motivation	9		
	Soldiers' walk (Activity on factors of motivation)	3	1,4	1,4
	The Japanese fan (An activity on factors of motivation)	3	1,4	1,4
	Steps to ward off demotivation.	3	1,4	1,4
Unit No. 2	Creativity and innovation	9		
	Short film: (Students are encouraged to make a ten-minute documentary on various topics to enhance the power of aesthetics and precision)	3	1,2	1,4
	Creative short film (This activity is aimed at creating an interest on research and think out of the box)	3	1,2	1,4
Unit No. 3	Critical and lateral thinking	3		
	Fill me up, stimulating lateral thinking	9	1,2	2,4
	The curious case of Mary and Kevin (Activity triggering the different types of thinking)	3	2,3	2,4
	The creative college	3	2	2,4
Unit No. 4	Team dynamics	3		
	Story boarding, Frenzy, come to my island.	9	1,2,3	2,3
	Striking cars	3	1,2	2,3
	Defend the egg, tallest tower (Activities on the different stages of team building, team communication, coordination, and collaboration.	3	1,2,3	2,3
Unit No. 5	Mini project	3		
	Concept 1: Mini project presentation	9	1,2,3,4	1,4
	Concept 2: Mini project presentation	3	1,2,3,4	1,4
	Concept 3: Mini project presentation	3	1,2,3,4	1,4
Total Contact Hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		50%		40%		50%		50%	
	Understand										
Level 2	Apply	60%		50%		60%		50%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Personality development and soft skills – Braun K. Mitra
2. Key to success in workplace and life – Meenakshi Roman, Shalini Upadhyay.
3. Mastering soft skills – Julian Vyner
4. The Accidental Creative – How to be brilliant at a moment's notice – Todd

Other Resources

- 1.

Course Designers

Introduction to Communicative English

Course Code	EGL 100	Course Category	Foundation Course				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	English	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To Introduce the Principles and Practices of Effective Communication Skills in various contexts.
- To understand the purpose and differentiate various types of audience.
- To encourage self-evaluation while collaborating with peers during learning.
- To prepare the students to produce Language in various contexts be it Oral or Written form.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Employ all four skills (listening/speaking/ reading/writing) to express themselves using production skills (Speak and Write)	3	90%	90%
Outcome 2	Illustrate views using Power Point and Word.	3	70%	80%
Outcome 3	Express with proper grammar.	2	60%	50%
Outcome 4	Apply listening skills to practice.	3	80%	80%
Outcome 5	Employ reading skills to read the given text.	4	60%	50%
Outcome 6	Demonstrate the forms of writings	3	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1			2	2	3			3	3	3		3			
Outcome 2					3	3		3	3	3		3			
Outcome 3								3	2	3		3			
Outcome 4										3		3			
Outcome 5								2	3	3		3			
Outcome 6								3	3	3		3			
Average			2	2	3	3		2.8	2.8	3		3			

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	COs Addressed	References Used
Unit No. 1		7		
	Course Introduction and Overview	1	1,2,3	
	Parts of Speech	1		1,2
	Tenses	1		1,2
	Vocabulary (Etymology, Prefixes, Suffix)	2		1,2
	Capitalization & Punctuations	1		1,2
	Principles of Sentence Structure & Paragraph Writing (S+V+O)	1		1,2,3
		6		
Unit No. 2	The Fundamentals of Speech (<i>Ethos, Pathos & Logos</i>)	1	1,2	1,2
	How to give a good Speech? (<i>Rhetoric & Speech Delivery</i>)	1		1,2
	Verbal Communication (Turn taking strategies, Questioning, Types of Qs)	2		1,2
	Nonverbal Communication (Cultural Contexts, Importance and Types)	1		1,2
	Fundamentals of Personal, Informative, and Scientific Speech	1		1,2
				10
Unit No. 3	Listening Skills: Definition, Barriers, Steps to Overcome	2	4	2
	Listening Comprehension	3		2
	Listening to Influence, Negotiate	2		2
	Listening to Specific Information	1		2
	Note taking & Making while Listening	2		2
				10
Unit No. 4	Read to Skim, and Scan	2	5	1,2
	Read to Comprehend (Predict, Answer Questions & Summarize)	2		1,2
	Read to Appreciate, Compose and Present	3		1,2
	Read to Understand	3		1,2
	Referencing Skills for Academic Report Writing and Plagiarism (APA 6 th Ed)			
		12		
Unit No. 5	Write to Interpret Data (Flow charts, Bar Diagrams)	2	6	4
	Write to Inform (News, Emails, Notice, Agenda & Minutes)	2		4
	Write to Define (Definitions & Essays)	2		4
	Resume and Cover Letter	2		4
	Write an Effective Abstract and a Comprehensive Summary	2		4
	Write Project Proposal	2		4
Total Contact Hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50 %)								End Semester Exam (50 %)	
		CLA-1 (10 %)		CLA-2 (15 %)		CLA-3 (10%)		Mid Term (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		50%		30%		40%		50%	
	Understand										
Level 2	Apply	60%		50%		70%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Shoba, Lourdes. (2017). Communicative English: A Workbook. U.K: Cambridge University Press.
2. Steven, Susan, Diana. (2015). Communication: Principles for a Life Time. U.S.A: Pearson 6th Ed.
3. Publication Manual of the American Psychological Association, (2010). 6th Ed.
4. Kosslyn, S.M. "Understanding Charts and Graphs", Applied Cognitive Psychology, vol. 3, pp. 185-226, 1989.

Other Resources

- 1.

Course Designers

- 1.

UNDERSTANDING ECONOMY AND MARKETS

Course Code	ECO 151	Course Category	FC	L	T	P	C
				4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To educate students on the fundamental concepts of an economy.
- To introduce the concept of individual decision making and consumer behaviour.
- To understand the organization of an economy.
- To learn the value of the agricultural sector to the Indian economy?
- To acquire knowledge of fundamental principles of money and banking in India

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Analyse real-life situations by thinking rationally and demonstrating how economic concepts can be applied.	2		
Outcome 2	In the given situation, students will be able to comprehend how consumers maximize their satisfaction.	2	80%	70%
Outcome 3	It will help to understand the categories of all activities in three sectors of the economy and their importance.	3	80%	70%
Outcome 4	Familiarize students with the functioning of money and the functioning of the banking sectors in an economy.	2	80%	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	3	1						2	3	2	2
Outcome 3	3	3	3	3	2							3	3	1	3
Outcome 4	3	3	3	3	2	1						2	3	2	2
Outcome 5	3	2	3	3	2							2	3	1	3
Course Average	3	3	3	3	2	1						2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References
Unit I	Introduction	10		
1	Introduction to Economics	2	1,2	1
2	Central Problem of Economics	3	1,2	1
3	Trade-off, Opportunity Cost	3	1,2	1
4	Circular Flow of Income	2	1,2	1
Unit II	Market	12		
5	Households, Corporates and Government	3	2	1
6	Law of Demand	4	2	1
7	Law of Supply	3	2	1
8	Market Equilibrium	2	2	1
UNIT III	Economy	14		
09	Composition of an economy	3	1, 3	4,5
10	Five years planning	2	1, 3	4,5
11	Economic reforms	3	1, 3	4,5
12	Public sector and disinvestment	2	1, 3	4,5
13	Labour reforms	2	1, 3	4,5
14	Industrial Sickness and Remedial Measures	2	1, 3	4,5
UNIT IV	Agrarian Economy	17		
15	Nature and Characteristics	2	4	4,5
16	Cropping Patterns	1	4	4,5
17	Inputs and Output	1	4	4,5
18	Land Reforms	2	4	4,5
19	Green Revolution	2	4	4,5
20	Agricultural Investment	1	4	4,5
21	Agricultural Prices and Subsidies	2	4	4,5
22	Food Security in India	2	4	4,5
23	Agricultural Labour	1	4	4,5
24	WTO and Indian	2	4	4,5
25	Recent Agricultural Policies	1	4	4,5
Unit V	Money and Banking	7		
26	Indian Banking Sector and Inflation	2	5	4,5
27	Commercial Banking in India	1	5	4,5
28	Reserve Bank of India	1	5	4,5
29	Money and capital market	2	5	4,5
30	Price trends in India	1	5	4,5
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Textbooks/Reference:

1. N. Gregory Mankiw (2015), Principles of Economics, 7th Edition, Cengage Learning India.
2. Karl E. Case, Ray C. Fair and E. Oster Sharon (2017), Principles of Economics, 12th Edition, Pearson Education.
1. Robert S. Pindyk and D.L. Rubinfeld, (2017), Microeconomics, 8th Edition, Pearson Education.
3. V.K Puri and S.K Misra (2022), Indian Economy, 39th Revised Edition, Himalaya Publishing House.
4. Ramesh Singh (2022), Indian Economy, 14th Edition, McGraw Hill India.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Dr Ghanshyam Pandey, Assistant Professor, Department of Economics, SRM University AP

Introductory Microeconomics

Course Code	ECO 152	Course Category	Core			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Understand economic fundamentals, analyze systems, and interpret graphs to recognize market forces.
- Grasp determinants, and shifts in curves, and analyze resource allocation, elasticity, controls, taxes, and surplus.
- Understand consumer theory, applying budget constraints, indifference curves, and analyzing labor-leisure choices.
- Acquire knowledge of production functions, returns, technology impact, and analyze cost functions and structures.
- Develop an understanding of market structures, analyzing profit maximization, market power, and competition dynamics.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Analyze: Interpret graphs and recognize market forces by understanding economic fundamentals.	4	80%	75%
Outcome 2	Evaluate: Assess the impact of determinants on demand and supply, analysing resource allocation, elasticity, controls, taxes, and surplus.	5	80%	75%
Outcome 3	Apply: Utilize consumer theory concepts like budget constraints and indifference curves to inform decisions on labor-leisure choices.	3	80%	75%
Outcome 4	Understand: Combine knowledge of production functions, returns, and technology to analyze cost functions and structures in both short-run and long-run scenarios.	2	80%	75%
Outcome 5	Evaluate: Assess different market structures, demonstrating a comprehensive understanding of profit maximization, market power, and competition dynamics.	5	80%	75%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	2		1	1			2	3		2	2	1	1
Outcome 2	3	2	2		1	1			2	3		2	2	1	1
Outcome 3	3	3	3		2	1			3	3		2	2	1	1
Outcome 4	3	2	3		2	1			3	3		2	1	1	1
Outcome 5	3	2	3		2	1			2	3		2	1	1	1
Course Average	3	2	3		2	1			2	3		2	2	1	1

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Introduction to Economics	12		1,2
	Why study economics? Scope and method of economics; the economic problem: scarcity and choice	3	1	1,2
	The question of what to produce, how to produce and how to distribute output; science of economics	3	1	1,2
	The basic competitive model; prices, property rights and profits; incentives and information	3	1	1,2
	Rationing; opportunity sets; economic systems; reading and working with graphs	3	1	1,2
Unit 2	Concept of Demand and Supply	12		
	Determinants of individual demand/supply; demand/supply schedule and demand/supply curve	3	2	1,3
	Market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together	3	2	1,3
	How prices allocate resources, elasticity and its application	2	2	1,3
	Controls on prices; taxes and the costs of taxation, consumer surplus; producer surplus and the efficiency of the markets	4	2	1,3
Unit 3	Theory of Consumer Behaviour	12		
	The consumption decision - budget constraint, consumption and income/price changes, demand for all other goods and price changes	5	3	3,4
	Utility and preferences (indifference curves); properties of indifference curves; consumer 's optimum choice; income and substitution effects	5	3	3,4
	Applying consumer theory: Labour-leisure theory	2		3,4
Unit 4	Theory of Producer Behaviour	12		
	Production, short- run production function and returns to factor – Average-marginal relationship, long – run production function and laws of return to scale- role of technology.	6	4	1,3
	Cost function and cost structure of a firm in the short- run, long run cost function and cost structure.	6	4	1,3
Unit 5	Market Structure	12		
	Perfect competition including shut-down and break-even points.	3	5	1,2,3
	Monopoly: marginal revenue; marginal cost; profit maximization; shutdown rule; market power; price discrimination	6	5	1,2,3
	Monopolistic competition and product differentiation	3	5	1,2,3
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	60%	60%	60%	60%	50%
	Understand					
Level 2	Apply	40%	40%	40%	40%	50%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Principles of microeconomics, N. Gregory Mankiw, Publisher: Cengage Learning fifth edition,
2. Principles of Economics, Case Karl E, Fair Ray C; Oster Sharon M, Publisher: Pearson tenth edition
3. Modern Microeconomics, Koutsoyiannis, 2nd Edition,
4. Rittenberg, Libby, and Timothy Tregarthen. Principles of Microeconomics, 2009.

Other Resources

1. Enter Data

Course Designers

1. Manzoor Hassan Malik, Assistant Professor, Department of Economics, SRM University AP

Introductory Macroeconomics

Course Code	ECO 153	Course Category	Core Course (CC)				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To obtain an overview of the concepts used in macroeconomic analysis.
- To understand how economies function in the short run.
- To understand the competing schools of thought in macroeconomics

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Explain national income accounting.	2	70%	70%
Outcome 2	Explain classical macroeconomics.	2	70%	70%
Outcome 3	Describe the concepts in Keynesian economics in a simple closed economy.	2	70%	70%
Outcome 4	Relate Keynesian and classical economics to the short run functioning of a closed economy.	4	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	1	3	1				2	3	1	3	2	1	2
Outcome 2	3	1	1	3	1				2	3	1	2	3	2	2
Outcome 3	3	2	1	3	1				2	3	1	3	3	2	2
Outcome 4	3	3	2	3	1				2	3	1	3	3	1	2
Course Average	3	2	1	3	1				2	3	1	3	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	National Income Accounting	10		
	The circular flow of income.	2	1	1,2
	Concepts of GNP, GDP, NNP, and NDP at market price and factor cost. The measurement of National Income Value Added Method and Expenditure Method	3	1	1,2
	The problem of double counting & the role of government	2	1	1,2
	Corporate Income, Corporate Savings, Personal Income, Personal Disposable Income and Personal Savings	3	1	1,2
Unit II	The Simple Keynesian Model in a Closed Economy	17		
	The Simple Keynesian Model (SKM) in a Closed Economy without Government	2	3	1,3
	The Keynesian Consumption Function	2	3	1,3
	The Keynesian Saving Function; income determination in SKM; stability of equilibrium	3	3	1,3
	The concept of effective demand- the concept of demand-determined output	2	3	1,3
	The Simple Keynesian Multiplier; the paradox of thrift	2	3	1,3
	The SKM in a Closed Economy with Government; government expenditure and tax rate multiplier	4	3	1,3
	The balanced budget multiplier	2	3	1,3
Unit III	The closed economy in the short run	18		
	IS-LM model	3	4	1,4
	Fiscal and Monetary Multipliers	2	4	1,4
	Efficiency in Fiscal Policy and Monetary Policy	3	4	1,4
	Equilibrium in IS-LM model	2	4	1,4
	Stability and comparative statics in IS-LM model	3	4	1,4
	Crowding out	2	4	1,4
	Effects of fiscal and monetary policies	3	4	1,4
Unit IV	The Classical system	15		
	Say's Law and Quantity Theory of Money	2	2	1,2
	Loanable fund theory	3	2	1,2
	the Classical Theory of Income and Employment determination	4	2	1,2
	full Employment and wage-price flexibility	3	2	1,2
	Classical Dichotomy and Neutrality of Money	3	2	1,2
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		50%		60%		60%		70%	
	Understand										
Level 2	Apply	40%		50%		40%		40%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Richard T. Froyen, Macroeconomics, Pearson Education Asia, 2nd edition, 2005.
2. 2. Mankiw, N. (2016). Macroeconomics, 9th ed. Worth Publishers
3. 3. Blanchard, O. (2018). Macroeconomics, 7th ed. Pearson Education.
4. 4. Dornbusch, R., Fischer, S., Startz, R. (2018). Macroeconomics, 12th ed. McGraw-Hill.

Other Resources

1. Enter Data

Course Designers

1. . Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.
2. 2. Dr Raja Sethu Durai, Professor, School of Economics, University of Hyderabad
3. 3. Dr Ravinder Reddy, Professor, School of Management, NIT Warangal

Mathematical Methods for Economics I

Course Code	ECO 154	Course Category	Core Course (CC)				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)	ECO 324					
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Transmit the body of foundation of mathematics that enables the study of economic theory
- Employ popular economic tools as means for illustrating the method of applying mathematical techniques to economic theory in general

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Solve problems on numbers, sets and functions	3	80%	70%
Outcome 2	Calculate matrix exercises with applications to economics.	3	80%	70%
Outcome 3	Solve problems on limits and continuous functions.	2	80%	70%
Outcome 4	Apply the concepts of limits and continuity to differential calculus.	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1				2	2	1	3	3	3	2
Outcome 2	3	3	3	2	1				2	2	1	3	2	3	2
Outcome 3	3	3	3	2	1				2	2	1	3	3	3	2
Outcome 4	3	3	3	2	1				2	2	1	3	3	3	2
Course Average	3	3	3	2	1				2	2	1	3	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Basic Concepts of Numbers, Sets and Function	15		
	Functions of several real variables	1	1	2
	Number systems, Geometric Representations	1	1	2
	Differentiable Functions, Second Order Derivatives	2	1	2
	Homogeneous and Homothetic Functions	2	1	2
	Set Theory, Set Notions, Universal Set, Null Set, Convex Set	2	1	2
	Finite & Infinite Sets, Laws of Set Operation, examples, Exercises & solution	1	1	2
	Function and Equations, Variables, Relations and Functions	2	1	2
	Equations, Identities, Equilibrium Condition, Systems of Simultaneous Linear Equations	2	1	2
	The Straight line and its Slope.	2	1	2
Unit II	Matrix and Determinants	15		
	Vectors & Matrices	2	2	3
	Types of Matrices	1	2	3
	Rules of Addition and Multiplication	2	2	3
	Matrix Operations	2	2	3
	Determinants	2	2	3
	Solution of Linear Equations	2	2	3
	Illustrative examples, Exercises	4	2	3
Unit III	Limits & Continuity	15		
	Introduction	1	3	1
	Sequence, Neighbourhood, limit	2	3	1
	Evaluation of different types of limits, neighbourhood, limit	3	3	1
	Evaluation of different types of limits	3	3	1
	Continuity of a function	3	3	1
	Illustrative examples, Exercises	3	3	1
Unit IV	Differential Calculus	15		
	Derivative of a function	1	4	1
	Geometric interpretation of derivatives	1	4	1
	Deferability of a function	1	4	1
	Rules of differentiation	2	4	1
	Second and higher order derivatives	2	4	1
	Partial and total Derivatives	1	4	1
	L-Hospital's rules	2	4	1
	Application in economics	2	4	1
	Illustrative examples	1	4	1
	Homogeneous Function, Euler's Theorem	2	4	1
	Total Learning Hours		60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		40%		40%		40%		40%	
	Understand										
Level 2	Apply	60%		60%		60%		60%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Chiang, A.C. and K. Wainwright (2013), Fundamental Methods for Mathematical Economics, McGraw Hill, New Delhi.
2. Carl P Simon Lawrence Blume, Mathematics for Economists, Viva Books
3. Allen, R.G.D (2008), Mathematical Analysis for Economists, Macmillan Press, London

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Setu Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Probability and Statistical methods

Course Code	ECO 155	Course Category				
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To enable students to gain working knowledge of basic statistical methods
- To provide students with hands-on learning of probabilistic and statistical tools

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Define and explain the basic concepts and principles of statistics	2	70%	65%
Outcome 2	Formulate clear and concise quantitative solutions to statistical problems	5	70%	65%
Outcome 3	Demonstrate the ability to critically discern methods to solve economic problems using quantitative techniques	3	70%	65%
Outcome 4	Understand basic statistical concepts	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	3	2	2		2		2	2	3	3	3	3
Outcome 2	3	3	3	3	2	2		2		2	2	3	2	2	2
Outcome 3	3	2	3	2	2	2		3		2	2	3	3	3	3
Outcome 4	3	3	3	3	2	2		3		2	2	3	3	3	3
Course Average	3	3	3	3	2	2		3		2	2	3	3	3	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Probability - basics	10		
	Axioms of probability	1	1	1,2
	Sample spaces	1	1	1,2
	Counting Techniques	1	1	1,2
	Conditional probability	1	1	1,2
	Independent events	1	1	1,2
	Bayes Theorem	1	1	1,2
	Random variable (r.v.)	1	1	1,2
	Discrete r.v.s	1	1	1,2
	Mathematical expectations	2	1	1,2
Unit 2	Probabilistic distributions	10		
	Bernoulli and Binomials,.	2	2	2
	Moment generating functions, ,	2	2	2
	Poisson, Geometric, Negative Binomial, Hypergeometric distributions	2	2	2
	Continuous r.v.s, Uniform, Normal distributions, Exponential and Gamma distribution	4	2	2
Unit 3	Joint and marginal distributions	15		
	Joint distributions	3	3	2
	Marginal distributions	3	3	2
	Covariance and correlation	3	3	2
	Central limit theorem,	3	3	2
	Standard Normal distribution	3	3	2
Unit 4	Scientific Conduct	15		
	Testing Hypothesis about mean when Pop. Variance is known	3	4	1
	Creating confidence intervals	4	4	1
	Chi-Square distribution: Comparing Sample Variance with population distribution: Comparing two sample Variances,	3	4	1
	Student T distribution: Small sample size, population variance unknown	3	4	1
	Selective reporting and misrepresentation of data	2	4	1
Unit 5	Hypothesis testing	10		
	Hypothesis testing for correlation and regression	3	4	2
	Power and size of a test	3	4	2
	Pitfalls of Hypothesis testing, Type 1 and Type 2 errors	2	4	2
	Analysis of Variance	2	4	2
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	20%	40%	40%	20%	40%
	Understand					
Level 2	Apply	30%	20%	20%	30%	30%
	Analyse					
Level 3	Evaluate	50%	40%	40%	50%	30%
	Create					
Total		100%	100%	100%	100%	100%

References

1. Probability and Statistical Inference 9e (2015), Hogg and Tanis, Pearson
2. Probability and Statistics for Engineering and the Sciences 9e (2016), Jay L. Devore, Cengage

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.

Creativity and Critical Thinking Skills

Course Code	AEC 104	Course Category	Ability Enhancement Course (AEC)				L	T	P	C
			1	0	1	2				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Literature & Languages	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Identify key concepts associated with creative problem-solving and critical analysis.
- Interpret and summarize various models and frameworks used in fostering creative and critical thinking skills
- Apply divergent thinking methods to generate innovative solutions to multifaceted problems.
- Assess and compare the strengths and weaknesses of various critical thinking approaches in decision-making.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Define and describe fundamental concepts and theories related to creativity and critical thinking.	1	80%	80%
Outcome 2	Explain the significance of creativity and critical thinking in problem-solving and decision-making processes.	2	80%	60%
Outcome 3	Implement critical thinking strategies to analyse and evaluate information and arguments effectively.	3	80%	70%
Outcome 4	Analyse and assess the effectiveness of specific creative thinking methods in addressing real-world problems.	4	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2
Outcome 1	3	3	3	3	3		3		3		3	3	3	1
Outcome 2	3	3	3	3	3		3		3		3	3	3	1
Outcome 3	3	3	3	3	3		3		3		3	3	3	1
Outcome 4	3	3	3	3	3		3		3		3	3	3	1
Average	3	3	3	3	3		3		3		3	3	3	1

Course Unitization Plan

Unit No.	Unit Name	Required Contact Hours	CLOs Addressed	References Used
Unit 1	Introduction to Creativity and Critical Thinking	6		
	Introduction to key concepts	2	1,3	1
	Importance in personal and professional contexts	2	1,3	1,2
	Understanding the differences	1	2,3	1,4
	Real-world applications	1	1,3	1,3
Unit 2	Overcoming Mental Blocks	6		
	Identifying and addressing barriers	3	1	14
	Exercises for mental flexibility	3	4	1,2
Unit 3	Critical Thinking Skills	6		
	Recognizing common pitfalls	1	1,3	1,2
	Examples and group discussion	1	2,3	1,2
	Techniques for assessing information credibility	2	1,3	1
	Case studies and research exercises	2	1,3	3
Unit 4	Application of Creative Solutions	6		
	Practical problem-solving exercises	1	1,3	1,4
	Group projects and case studies	2	2,3	2,3
	Integrating ethics into creative and critical thinking	1	1,3	1
	Discussions on ethical dilemmas and decision-making	2	1,3	3
Unit 5	Application of Creative Solutions	6		
	Quizzes on concepts and techniques	1	1,3	1,2
	Individual and group assignments	1	2,3	1,2
	Applying creativity and critical thinking to a real-world scenario	2	1,3	1
	Presentation and peer evaluation	2	1,3	3
Total Contact Hours			30	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (75%)			
		CLA-1 (20%)	CLA-2 (20%)	CLA-3 (20%)	Project Work (45%)
Level 1	Remember	30%		10%	
	Understand				
Level 2	Apply	70%	100%	90%	100%
	Analyse				
Level 3	Evaluate				
	Create				
Total		100%	100%	100%	100%

Recommended Resources

1. Creative Confidence: Unleashing the Creative Potential Within Us All by Tom Kelley and David Kelley
2. Critical Thinking: An Introduction by Alec Fisher
3. Think Like a Freak: The Authors of Freakonomics Offer to Retrain Your Brain by Steven D. Levitt and Stephen J. Dubner
4. Creative Intelligence: Harnessing the Power to Create, Connect, and Inspire by Bruce Nussbaum

Other Resources

1. No Data

Course Designers

1. Dr. Sayantan Thakur, Assistant Professor, Department of Literature and Languages, SRM University-AP

Digital Literacy

Course Code	SEC 102	Course Category	SEC			
			L	T	P	C
			1	1	0	2
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	ITKM	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

1. Introduce basic digital skills that are needed in today's 21st century work environment.
2. develop the skills that they need to effectively integrate technology into their respective professional practices.
3. Learn practical-oriented and will have a lot of hands-on exercises.
4. Understand basic and practical digital skills.
5. learn and use software and hardware systems, including the basic troubleshooting.
6. Learn issues pertaining to emerging technologies and creating digital identity in various platforms.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the importance of Digital Literacy	2	75%	80%
Outcome 2	Compare and Contrast collaborative features in digital platforms	3	70%	70%
Outcome 3	Create digital identity profile on LinkedIn	3	75%	75%
Outcome 4	Demonstrate best practices of digitally managed workspace on MS office 365 and G Suite	3	70%	75%
Outcome 5	Identify relevant information from authentic data sources	3	70%	75%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1					3	3		1	2	3		3			
Outcome 2					3	3		1	2	3		3			
Outcome 3					3	3		1	2	3		3			
Outcome 4					3	3		1	2	3		3			
Outcome 5					3	3		1	2	3		3			
Average					3	3		1	2	3		3			

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	COs Addressed	References Used
Unit No. 1	Introduction - Digital Literacy	2	1	1,2,3
	About Digital Literacy	0.5	1	1,2,3
	Importance of digital literacy	0.5	1	1,2,3
	Overview of Computing Systems and Platforms	0.5	1	1,2,3
	Digital Proficiency for Career prospects and Everyday living	0.5	1	1,2,3
Unit No. 2	Know your computer	3	1	1,2,3
	Types of computing	0.5	1	1,2,3
	Accessories & peripherals	0.5	1	1,2,3
	System upkeep & maintenance	0.5	1	1,2,3
	Basic Troubleshooting	0.5	1	1,2,3
	Operating Systems	1	1	1,2,3
Unit No. 3	Microsoft Office Automation software	5	4	1,2,3
	Word Processing	1	4	1,2,3
	Excel - Data Analysis	1	4	1,2,3
	PowerPoint Presentations	1	4	1,2,3
	Digital software tools	1	4	1,2,3
	Best practices	1	4	1,2,3
Unit No. 4	Google Automation Software	3.5	4	1,2,3
	Word Processing	1	4	1,2,3
	Spreadsheet	1	4	1,2,3
	Presentations	1	4	1,2,3
	Best practices	0.5	4	1,2,3
Unit 5	Digital Communication tools	4	2	1,2,3
	Emails Systems - Gmail, MS Outlook, Zimbra, etc	0.5	2	1,2,3
	Calendar Functionality	0.5	2	1,2,3
	Drive - Access Permissions - Best practices	1	2	1,2,3
	Chat functionality and Use	1	2	1,2,3
	Zoom, MS Teams, Google meet, Jiomeet,	1	2	1,2,3
Unit No. 6	Network and Internet	3	1	1,2,3
	Basics of Network	1	1	1,2,3
	Types of browsers, Safety measures, bookmarks	1	1	1,2,3
	Search engines	1	1	1,2,3
Unit No. 7	Digital Identity for Professional Connect activities	5	3	1,2,3
	Social media	1	3	1,2,3
	Dos and Don'ts handling Social Media Accounts	2	3	1,2,3
	Digital Profile	3	3	1,2,3
Unit No. 8	Cybersecurity	1.5	1	1,2,3
	Introduction to Cybersecurity	0.5	1	1,2,3
	Strategies to protect the personal and professional data	0.5	1	1,2,3
	Awareness on various Cyber Attacks	0.5	1	1,2,3
	Security measures for Email, Personal computing systems		1	1,2,3
Unit No. 9	Information and Data Literacy	4	5	1,2,3
	Information & Data Mining Strategies	1	5	1,2,3
	Online resources	2	5	1,2,3
	Understanding on Plagiarism	1	5	1,2,3
Total Contact Hours			30	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Exam (40%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	CLA-3 (15%)	
Level 1	Remember	70%	40%	30%	30%	30%
	Understand					
Level 2	Apply	30%	60%	70%	70%	70%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Digital Literacy (20210401) Kindle Edition by Mandy Reininger (Author), Darrel Karbginsky (Author) Format: Kindle Edition
2. Digital Literacies: Concepts, Policies and Practices (New Literacies and Digital Epistemologies) New Edition by Colin Lankshear (Editor), Michele Knobel (Editor)
3. Read the World: Rethinking Literacy for Empathy and Action in a Digital Age Illustrated Edition by Kristin Ziemke (Author), Katie Muhtar (Author)

Other Resources

Course Designers

Intermediate Microeconomics

Course Code	ECO 201	Course Category	Core				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)	ECO 152	Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Analyze consumer behavior using axioms of preference, utility functions, and the concepts of Marshallian and Hicksian demand, considering income and substitution effects.
- Evaluate the production process, costs, and market structures, including technology, isoquants, cost curves, and the application of market power in monopoly, price discrimination, and oligopoly.
- Apply marginal productivity theory to analyze factor markets, understanding derived demand, productivity, marginal product, and determining labor and land markets in different market structures.
- Synthesize knowledge of pure exchange, Pareto optimality, welfare theorems, and general equilibrium with and without production, analyzing efficiency and market conditions under imperfect

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Analyze consumer behavior using preference axioms, utility functions, and Marshallian/Hicksian demand, considering income and substitution effects.	4	80%	75%
Outcome 2	Understand production, costs, and market structures, examining technology, isoquants, cost curves, and market power in monopoly, price discrimination, and oligopoly.	2	80%	75%
Outcome 3	Explain marginal productivity theory to analyze factor markets, demonstrating understanding of derived demand, productivity, marginal product, and dynamics in labor and land markets.	4	80%	75%
Outcome 4	Explain Pure exchange, Pareto optimality, welfare theorems, and general equilibrium, showcasing the ability to analyze market efficiency in imperfect competition.	4	80%	75%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	1	1		2	1			1	3		2	2	2	3
Outcome 2	3	2	3		3	1			2	2		3	2	2	3
Outcome 3	3	2	2		2	1			2	3		2	2	2	3
Outcome 4	3	2	2		2	1			2	3		2	2	2	3
Course Average	3	2	2		2	1			2	3		2	2	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Consumer Theory	16		
	Axioms of Preference, utility function, Cardinal and ordinal Theory	5	1	1,2
	Budget constraint; Convexity, Marshallian demand; Hicksian Demand, Income effect, Substitution effect, Slutsky equation	6	1	1,2
	Elasticity, Elasticity of substitution, revealed preference	5	1	1,2
Unit 2	Production, Costs and Market Structure	16		
	Technology; isoquants; production with one and more variable inputs; returns to scale	5	2	1,2
	Short run and long run costs; cost curves in the short run and long run; review of perfect competition	5	2	1,2
	Short run and long run costs; cost curves in the short run and long run; review of perfect competition	6	2	1,2
Unit 3	Factor Market	14		
	Basic concepts- derived demand, productivity of an input, marginal product of an input, marginal revenue product	7	3	2,3
	Marginal productivity theory of distribution, Labour demand and supply of labour in different market structure, Land markets and rent determination	7	3	2,3
Unit 4	General Equilibrium	14		
	Pure Exchange, Pareto Optimality, Productive and Allocative Efficiency	7	4	2,3
	Welfare Theorems, General Equilibrium with and without and production, Imperfect Competition.	7	4	2,3
Total Learning Hours		60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	60%	50%	60%	50%	50%
	Understand					
Level 2	Apply	40%	50%	40%	50%	50%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Hal R. Varian, Intermediate Microeconomics, a Modern Approach, 8th edition, W.W. Norton and
2. Company/Affiliated East-West Press (India), 2010. The workbook by Varian and Bergstrom could be used for problems.
3. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
4. B. D. Bernheim and M. D. Whinston, Microeconomics, Tata McGraw-Hill (India), 2009

Other Resources

1. Enter Data

Course Designers

1. Dr. Manzoor Hassan Malik, Assistant Professor, Department of Economics, SRM University AP

Intermediate Macroeconomics

Course Code	ECO 202	Course Category	Core Course (CC)				L	T	P	C
			4	0	0	4				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To obtain an overview of the formal modelling of a macro-economy in terms of analytical tools
- To discuss various alternative theories of output and employment determination in a closed economy in the short run and medium run, and the role of policy in this context.
- To understand the various important theoretical issues related to an open economy.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Explain consumption theories.	2	70%	65%
Outcome 2	Explain aggregate supply and aggregate demand schedules.	2	70%	65%
Outcome 3	Describe the concepts of inflation, unemployment and expectations.	2	70%	65%
Outcome 4	Extend analysis to macroeconomics in open economy models.	4	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	1	3	2				2	3	2	2	3	2	2
Outcome 2	3	2	2	3	2				2	3	2	2	2	2	3
Outcome 3	3	2	2	2	2				2	3	2	2	2	2	3
Outcome 4	3	2	2	3	2				2	3	2	2	3	2	3
Course Average	3	2	2	3	2				2	3	2	2	3	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Consumption Theories	10		
	Keynesian consumption function	3	1	1,2
	Fisher's theory of optimal intertemporal choice	3	1	1,2
	Lifecycle and permanent income hypotheses	2	1	1,2
	Dusenberry's relative income hypothesis	2	1	1,2
Unit II	Aggregate Demand and Aggregate Supply Curves	9		
	Derivation of aggregate demand curve	3	2	1,2
	Derivation of aggregate supply curve	3	2	1,2
	Interaction of AD & AS curves	3	2	1,2
Unit III	Inflation, Unemployment and Expectations	18		
	Phillips's curve	3	3	2,5
	Adaptive and rational expectations	3	3	2,4,5
	Policy ineffectiveness debate	3	3	2,5
	The concept of Inflationary Gap	2	3	2,5
	Demand-pull vs Cost-push inflation	1	3	2,5
	Mark-up inflation	3	3	2,5
	The concept of stagflation	1	3	2,5
	Rational expectations and random-walk of consumption expenditure	2	3	2,4,5
Unit IV	Open economy models	23		
	Short-run open economy models	2	4	3,7
	Mundell-Fleming model	4	4	3,7
	Exchange rate determination	3	4	6,7
	Purchasing power parity	3	4	6,7
	Asset market approach	3	4	6,7
	Dornbusch's overshooting model	3	4	1,7
	Monetary approach to the balance of payments	2	4	1,7
	International financial markets	3	4	7
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.
3. 3. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009.
4. 4. Steven M. Sheffrin, Rational Expectations, Cambridge University Press, 2nd edition, 1996.
6. 5. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.
7. 6. Errol D'Souza, Macroeconomics, Pearson Education, 2009
8. 7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, International Economics, Pearson Education Asia, 9th edition, 2012.

Other Resources

1. Enter Data

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.
2. Dr Raja Sethu Durai, Professor, School of Economics, University of Hyderabad
3. Dr Ravinder Reddy, Professor, School of Management, NIT Warangal

Mathematical Methods for Economics II

Course Code	ECO 203	Course Category	Department Specific Elective (DSE)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)	ECO 323	Co-Requisite Course(s)		Progressive Course(s)	ECO 252	
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level.
- Provide the mathematical foundations necessary for further study of a variety of disciplines

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Solve intermediate level problems in linear algebra	3	75%	65%
Outcome 2	Evaluate exercises on mathematical optimization	3	75%	65%
Outcome 3	Compute numerical related to integral calculus	3	75%	65%
Outcome 4	Solve exercises on differential equations	3	75%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary	Analytical Reasoning and	Critical and Reflective	Scientific Reasoning and	Research Related Skills	Modern Tools and ICT Usage	Environment and	Moral, Multicultural	Individual and Teamwork	Communication Skills	Leadership Readiness	Self-Directed and Life Long	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 4	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Linear Algebra	15		
	Vector Spaces	1	1	2
	Linear Transformations	3	1	2
	Systems of Linear Equations	2	1	2
	Determinants	3	1	2
	Characterization	2	1	2
	Properties, And Applications	4	1	2
Unit III	Optimization	14		
	Concept of maxima and minima	1	2	1
	Global & Local optima	2	2	1
	Identification of maxima and minima	2	2	1
	Points of inflection, illustrative examples	2	2	1
	Unconstrained and Constrained maximization	2	2	1
	Lagrange Method	2	2	1
	Illustrative examples.	3	2	1
Unit III	Integration	16		
	Concept of integration	2	3	2,3
	Rules of Integration	2	3	2,3
	Methods of Integration	2	3	2,3
	Integration by Parts	2	3	2,3
	Definite and Indefinite Integrals	2	3	2,3
	Improper integrals	1	3	2,3
	Fundamental Theorem of calculus	2	3	2,3
	Illustrated examples	2	3	2,3
	Computation techniques	1	3	2,3
Unit IV	Differential Equations	15		
	Concept of Differential Equation	1	4	2,3
	Exact Differential Equation Integrating Factor	3	4	2,3
	First Order Linear Differential Equation	2	4	2,3
	Economic Applications of First Order	2	4	2,3
	Second Order Differential Equation	2	4	2,3
	Economic Applications of Second Order	3	4	2,3
	Illustrative examples and exercises	2	4	2,3
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		40%		40%		40%		40%	
	Understand										
Level 2	Apply	60%		60%		60%		60%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Chiang, A.C. and K. Wainwright (2013), Fundamental Methods for Mathematical Economics, McGraw Hill, New Delhi.
2. Carl P Simon Lawrence Blume, Mathematics for Economists, Viva Books
3. Allen, R.G.D (2008), Mathematical Analysis for Economists, Macmillan Press, London.

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

APPLIED STATISTICS

Course Code	ECO 204	Course Category	Core				L	T	P	C
			4	0	0	4				
Pre-Requisite Course(s)	No	Co-Requisite Course(s)	Yes	Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To introduce and familiarize the students with descriptive and inferential statistics.
- To understand the methods of sampling and collecting data with practical applications.
- To equip students with methods for analysing and interpreting data.
- Make the students ready to solve different problems using statistical operations.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the concept of random variables and discrete and continuous distributions of random variables.	2	70%	65%
Outcome 2	Skilled in utilizing statistical techniques for quantitative, data-based problems, analysis, and inference	3	70%	65%
Outcome 3	Estimate and interpret statistical trends	4,5	70%	65%
Outcome 4	Understanding the concept of calculating inflation, WPI, and the CPI is something I will be able to do..	4,5	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2
Outcome 1	2	3	3	3	3	2		3			3	3	2	2
Outcome 2	2	3	3	3	3	2		3			3	3	2	2
Outcome 3	2	3	3	3	3	2		3			3	3	1	2
Outcome 4	2	2	2	2	2	2		3			2	3	3	2
Outcome 5	2	3	3	3	3	2		3			3	3	2	2
Course Average	2	3	3	3	3	2		3			3	3	2	2

Course Unitization Plan

	Description of Topic	Required Learning Hours	CLOs Addressed	Reference
Unit I	Inferential Statistics	08		
1	Nature and Classification of Data	2	1	1
2	Types of Data	2	1	1
3	Introduction to Sampling	2	2	1,2
4	Types of Sampling	2	2	1,2
Unit II	Design of Sample and Testing of Hypothesis	14		
5	Parameters	2	2	1,2
6	Statistics - Sampling and Non-Sampling Errors	1	2	1,2
7	Advantages and Disadvantages of Sampling	1	2	1,2
8	Definition of Sampling Distribution	2	2	1,2
9	Standard Error	2	2	1,2
10	Hypothesis (Null and Alternative)	1	2	1,2
11	Level of Significance—P Value	2	2	1,2
12	Type I and Type II Errors	1	2	1,2
13	Tests of Hypothesis (Z, t, F and χ^2).	2	2	1,2
Unit III	Index Numbers	15		
14	Concept and Definition	3	4	01, 02
15	Methods of Measuring Trend-Quadratic	3	4	01, 02
16	Quantity Relative, Value Relative, Ratio of Moving Average and Ratio of Trend.	2	4	01, 02
17	Laspeyer's Index, Paasche's Index and Fisher's index,	3	4	01, 02
18	Problems in the Construction and Limitations of Index Numbers	2	4	01, 02
19	Tests for Ideal Index Number	2	4	01, 02
Unit IV	Time Series Analysis	15 hrs		
20	Introduction; Components of Time Series;	1	3	01, 02
21	Determination and Elimination of Trend;	2	3	01, 02
22	Linear and Non – Linear	2	3	01, 02
23	Second Degree Parabola and Exponential Curves	2	3	01, 02
24	Measurement of Seasonality	3	3	01, 02
25	Cyclical and Random Components	2	3	01, 02
26	Models of Time Series and forecasting	3	3	01, 02
Unit V	Interpolation and Extrapolation	08 hrs		
27	Introduction; Assumptions; Definitions	2	5	01, 02
28	Methods	2	5	01, 02
29	Interpolation and Extrapolation Methods - Simple Examples	4	5	01, 02
	Total learning hours	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Readings

1. S.P. Gupta "Statistical Methods", Sultan Chand and Sons, Educational Publishers, New Delhi, 46th Revised Edition, 2021.
2. D.R. Agarwal "Elementary Mathematics and Statistics for Economists", Vrinda Publications(P), New Delhi, Reprint: 2002. Reference Book: A.N. ARORA, P.N. ARORA and Sumeet ARORA "Comprehensive Statistical Methods", Sultan Chand and Co. Second Edition

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Dr Ghanshyam Pandey, Assistant Professor, Department of Economics, SRM University AP

Problem solving through programming in C

Course Code	AEC 103	Course Category	Core Course		L	T	P	C
					1	0	1	2
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)				
Course Offering Department	CSE	Professional / Licensing Standards						

Course Objectives / Course Learning Rationales (CLRs)

- Gain basic knowledge in Computer Science and problem solving.
- Gain basic knowledge in C programming language.
- Acquire knowledge on Decision making and functions in C.
- Learn arrays, strings and pointers concept in C.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Describe basics of Computing and problem solving	2	75 %	70%
Outcome 2	Describe C structures, enumerators, keywords, header files and operators	3	70 %	65%
Outcome 3	Illustrate Decision-Making statements and Functions.	3	70 %	65%
Outcome 4	Interpret arrays, strings, and pointers programming in C	3	70 %	65%
Outcome 5	Apply Structures, unions, File handling operations on different scenarios	4	70 %	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	1									2	2	3
Outcome 2	3	3	2	1									3	2	3
Outcome 3	3	3	2	2									3	2	3
Outcome 4	3	3	2	2									3	2	3
Outcome 5	3	3	2	2								2	3	2	2
Average	3	3	2	2								2	3	2	3

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	CLOs Addressed	References Used
Unit No. 1	INTRODUCTION TO COMPUTING	10	1	1
	Fundamentals of Computing, Historical perspective, Early computers	2	1	1,2
	Computing machine. Basic organization of a computer.	2	1	1,2
	ALU, input-output units, and addresses - instructions	2	1	1,2
	Computer Memory	2	1	1,2
	Program counter - variables	1	1	1,2
	Store, arithmetic, input and output	1	1	1,2
Unit No. 2	INTRODUCTION TO PROBLEM SOLVING	10		
	Problem solving: Algorithm / Pseudo code, flowchart, program development steps	2	1	1,2
	Computer languages: Machine, symbolic and high-level language Level languages	2	1	1,2
	Creating and Running Programs: Writing, editing (any editor),	1	1	1,2
	linking, and executing in Linux environment	1	1	1,2
	Lab Experiment 1: GCC Compiler using Linux, various Linux commands used to edit, compile and executing	2	1	1,2
	Lab Experiment 2: a) Calculation of the area of the triangle. b) Swap two numbers without using a temporary variable. c) Find the roots of a quadratic equation	2	1	1,2
Unit No. 3	C PROGRAMMING BASICS	15		
	Structure of a C program, identifiers Basic data types and sizes. Constants, Variables	1	1	1,2
	Arithmetic, relational and logical operators, increment and decrement operator's	1	1	1,2
	Conditional operator, assignment operator, expressions Type conversion Type Conversions,	1	1	1,2
	Conditional Expressions Precedence and order of evaluation, Sample Programs.	1	1	1,2
	SELECTION & DECISION MAKING: if-else, null else, nested if, examples, multi-way selection: switch, else-if, examples.	2	1	1,2
	ITERATION: Loops - while, do-while and for, break, continue, initialization and updating, event and counter controlled loops and examples.	1	1	1,2
		2	1,2	1,2
	Lab Experiment 3: a) Find the sum of individual digits of a positive integer and find the reverse of the given number. b) Generate the first n terms of Fibonacci sequence. c) Generate all the prime numbers between 1 and n, where n is a value supplied by the user.	2	1, 2	1,2
	Lab Experiment 4: a) Print the multiplication table of a given number n up to a given value, where n is entered by the user. b) Decimal number to binary conversion. c) Check whether a given number is the Armstrong number or not.	2	1, 2	1,2
	Lab Experiment 5: Triangle star patterns	2	1, 2	1,2

	<pre> * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * </pre> <p>I II</p>			
Unit No. 4	FUNCTIONS AND ARRAYS	19		
	User defined functions, standard library functions	1	2,3	1,2
	Passing 1-D arrays, 2-D arrays to functions.	1	2,3	1,2
	Recursive functions - Recursive solutions for Fibonacci series, towers of Hanoi.	2	2,3	1,2
	C Pre-processor and header files	1	2,3	1,2
	Concepts, declaration, definition, storing and accessing elements	1	2,3	1,2
	one dimensional, two dimensional and multidimensional arrays	2	2,3	1,2
	array operations and examples, Character arrays and string manipulations	2	2,3	1,2
	Lab Experiment 6: a) (nCr) and (nPr) of the given numbers b) $1+x+x^2/2+x^3/3!+x^4/4!+\dots+X^n/n!$	2	2,3	1,2
	Lab Experiment 7: a) Interchange the largest and smallest numbers in the array. b) Searching an element in an array c) Sorting array elements.	2	2,3	1,2
	Lab Experiment 8: a. Transpose of a matrix. b. Addition and multiplication of 2 matrices.	2	2,3	1,2
	Lab Experiment 9: a. Function to find both the largest and smallest number of an array of integers. b. Linear search. c. Replace a character of string either from beginning or ending or at a specified location.	2	2,3	1,2
Lab Experiment 10: Pre-processor directives a. If Def b. Undef c. Pragma	1	2,3	1,2	
Unit No. 5	POINTERS	14		
	Concepts, initialization of pointer variables	1	3,4	1,2
	pointers as function arguments, passing by address, dangling memory, address arithmetic	2	3,4	1,2
	character pointers and functions, pointers to pointers	2	3,4	1,2
	pointers and multi-dimensional arrays, dynamic memory management functions	2	3,4	1,2
	command line arguments	1	3,4	1,2

Lab Experiment 10: a. Illustrate call by value and call by reference. b. Reverse a string using pointers c. Compare two arrays using pointers	2	3, 4	1,2,3
Lab Experiment 11: a. Array of Int and Char Pointers. b. Array with Malloc(), calloc() and realloc().	2	3, 4	1,2,3
Lab Experiment 12: a. To find the factorial of a given integer. b. To find the GCD (greatest common divisor) of two given integers. c. Towers of Hanoi	2	3, 4	1,2,3
Lab Experiment 14: a. File copy b. Word, line and character count in a file.	2	5	2, 3, 4
Total Hours	68		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50 %)								End Semester Exam (50 %)	
		CLA-1 (10 %)		CLA-2 (10 %)		CLA-3 (10 %)		Mid Term(20 %)		Th	Prac
		Th	Prac	Th	Prac	Th	Prac	Th	Prac		
Level 1	Remember	70%		30%		30%		60%	50%	50%	50%
	Understand										
Level 2	Apply	30%		70%		70%		40%	50%	50%	50%
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%	100%	100%	100%

Recommended Resources

1. The C programming Language by Brian Kernighan and Dennis Richie.
2. Programming in C, Pradip Dey and Manas Ghosh, Second Edition, OXFORD Higher Education, 2011.
3. Problem Solving and Program Design in C, Hanly, Koffman, 7th edition, PEARSON 2013.
4. Programming with C by R S Bichkar, Universities Press, 2012.

Other Resources

1. "Programming with C", Byron Gottfried, Mcgraw hill Education, Fourteenth reprint,2016.

Course Designers

- 1.

Social Entrepreneurship

Course Code	SEC 108	Course Category	SEC				L	T	P	C
							2	0	0	2
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Management	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To Equip Students with the Knowledge and Skills to Address Social Challenges through Entrepreneurial Solutions
- To Foster Practical Experience and Ethical Leadership in Social Entrepreneurship

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the Concept and Importance of Social Entrepreneurship	2	90%	80%
Outcome 2	Identify social problems and entrepreneurial opportunities	3	80%	80%
Outcome 3	Develop the Business Model for a Social Enterprise	3	70%	70%
Outcome 4	Prepare a plan to Manage and Scale Social Enterprises for Sustainable Impact	4	60%	60%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1		2					2	2				2			
Outcome 2		2	3				2	2	3		3	3			
Outcome 3		3	3				2	2	3		3	3			
Outcome 3		3	3				3	2	3		3	3			
Average		2.5	2.25				2.25	2	2.25		2.25	2.75			

Course Unitization Plan

Unit No.	Syllabus Topics	Required Contact Hours	CLOs Addressed	References Used
UNIT-1	Introduction to Social Entrepreneurship	2		
	Define social entrepreneurship and its importance	0.25	1	1,2
	Identify key challenges in addressing social issues	0.5	1	1,2
	Explore historical context and evolution of the field	0.25	1	1,2
	Analyze root causes of social issues	0.5	1	1,2
	Explore ethical considerations in social innovation	0.25	1	1,2
	Understand the importance of sustainability	0.25	1	1,2
UNIT-2	Identifying Social Problems and Opportunities	4		
	Identify pressing social problems and Methods for assessing community needs	1	2	1,2
	Techniques for spotting opportunities for social change	2	2	1,2
	Analyzing existing solutions and gaps in the market	1	2	1,2
UNIT-3	Developing a Social Enterprise Concept	10		
	Understand the role of empathy in social entrepreneurship	1	1,2	1,2
	Conduct needs assessments and market research	2	2	1,2
	Define a clear social mission and vision	1	2	1,2
	Business Model Canvas	6	2	1,2
UNIT-4	Managing Social Entrepreneurship	6		
	Role of leadership in driving social change	1	3	1,2
	Building a values-driven organization	1	3	1,2
	Explore legal structures for social enterprises	1	3	1,2
	Develop a marketing plan for social enterprises	1	2	1,2
	Understand the role of storytelling in impact	1	2,3	1,2
	Ethical marketing practices	1	1,2	1,2
UNIT-5	Funding & Scaling of Social Entrepreneurship	6		
	Explore investment options for social enterprises	1	3,4	1,2
	Identify funding sources and strategies	1	3,4	1,2
	Develop a fundraising strategy	1	3,4	1,2
	Importance of adaptability and learning	1	3,4	1,2
	Pitching for Social Impact	1	3,4	1,2
	Strategies for scaling social enterprises	1	3,4	1,2
UNIT-6	Challenges and Future Trends in Social Entrepreneurship	2	1	1,2
	Total Hours	30		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (70%)			End Semester Exam (30%)
		Mid Term Exam (20%)	CLA-1 (20%)	CLA 2 (30%)	
Level 1	Remember	80%	60%	70%	40%
	Understand				
Level 2	Apply	20%	40%	30%	60%
	Analyse				
Level 3	Evaluate				
	Create				
Total		100%	100%	100%	100%

Recommended Resources

1. Social Entrepreneurship: What Everyone Needs to Know" by David Bornstein and Susan Davis
2. "Social Entrepreneurship: Theory and Practice" by Ryszard Praszkiar and Andrzej Nowak
3. "Lean Impact: How to Innovate for Radically Greater Social Good" by Ann Mei Chang

Other Resources

1. <https://www.coursera.org/specializations/social-entrepreneurship-cbs>

Course Designers

1. Dr. Aftab Alam, Assistant Professor, Paari School of Business, SRM University-AP

Public Economics and Policies

Course Code	ECO 207	Course Category	Core				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)	ECO 152, ECO 153	Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Understand fiscal functions, gaining an overview of the public sector's role in economic systems.
- Evaluate the problem of externalities, comparing solutions and examining the role of taxes versus regulation.
- Examine the economic effects of taxation, considering deadweight loss, distortion, tax incidence, and principles of optimal taxation.
- Explore the structure and reforms of the Indian tax system, analyse the budget, deficits, and public debt, and examine fiscal federalism in the context of India.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the public sector's role and fiscal functions in economic systems.	2	80%	75%
Outcome 2	Evaluate solutions to externalities, demonstrating critical thinking in addressing economic inefficiencies.	4	80%	75%
Outcome 3	Analyse economic effects of taxation, including deadweight loss, distortion, and optimal taxation.	4	80%	75%
Outcome 4	Understand the Indian tax system, budgeting, deficits, and fiscal federalism, showcasing synthesis across public finance domains.	2	80%	75%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	1	1		2	1			1	3		2	2	1	2
Outcome 2	3	2	3		3	1			2	2		3	3	2	3
Outcome 3	3	2	2		2	1			2	3		2	3	2	3
Outcome 4	3	2	2		2	1			2	3		2	2	2	3
Course Average	3	2	2		2	1			2	3		2	2	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Public Finance Theory	14		
	Fiscal functions: an overview	4	1	1,3
	Public Goods: definition, models of efficient allocation,	4	1	1,3
	Pure and impure public goods, free riding.	3	1	1,3
Unit 2	Externalities	12		
	The problem and its solutions, taxes versus regulation	6	2	1,2, 3
	Property rights, the Coase theorem.	6	2	1,2,3
Unit 3	Taxation	16		
	Its economic effects; dead weight loss and distortion	8	3	1,3,4
	Efficiency and equity considerations, tax incidence, optimal taxation	8	3	1,3,4
Unit 4	Indian Public Finances	18		
	Tax System: structure and reforms	6	4	1,2,5
	Budget, deficits and public debt	6	4	1,2,5
	Fiscal federalism in India	6	4	1,2,5
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	40%	40%	40%	50%	50%
	Understand					
Level 2	Apply	60%	60%	60%	50%	50%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. .Hindriks, J., Myles, G. (2013). Intermediate public economics, 2nd ed. MIT Press.
2. 2. Cullis, J., Jones, P. (1998). Public finance and public choice, 2nd ed. Oxford University Press
3. 3. Stiglitz, J. (2009). Economics of the public sector, 3rd ed. W. W. Norton.
4. 4. Jonathan Gruber Public Finance and Public Policy, 5th Edition, Worth Publishers, A Macmillan Education Imprint, New York
5. 5.Rao, M., Kumar, S. (2017). Envisioning tax policy for accelerated development in
6. India. Working Paper No. 190, National Institute of Public Finance and Policy.
7. Other Resources:
8. 1. Rao, M. (2005). Changing contours of federal fiscal arrangements in India. In A.
9. Bagchi (ed.): Readings in public finance. Oxford University Press
10. 2.Reddy, Y. (2015). Fourteenth finance commission: Continuity, change and way forward. Economic and Political Weekly, 50(21), 27-36

Other Resources

1. Enter Data

Course Designers

1. Dr. Manzoor Hassan Malik, Assistant Professor, Department of Economics, SRM University AP

Game Theory

Course Code	ECO 208	Course Category	Core	L	T	P	C
				4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To understand the need and scope of Game Theory.
- To understand the fundamental concepts underlying static and dynamic games.
- Application of the concepts of Game Theory to real-life situations

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Define, explain, and apply Rational Choice Theory and game forms.	3	60	60
Outcome 2	Define and explain solution techniques for static and dynamic games.	2	60	60
Outcome 3	Apply backward induction, subgame equilibrium to different market types.	3	60	60
Outcome 4	Apply game theory solution techniques to solving for price and quantity of firms in different market types.	3	60	60

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3											2	2		
Outcome 2	3											2	2		
Outcome 3	3	3							2			2	2	3	3
Outcome 4	3	3	3	3					2			2	2	3	3
Course Average	3	3	3	3					2			2	2	3	3

Course Unitization Plan

Sl. No	Unit Name	Learning hours	CLO's Addressed	Reference
	UNIT I: Static games of complete information	16		
1	Rational Choice Theory	2	1	1
2	Normal vs Extensive game form, Solution Concept	2	1	1
3	Dominance Solution Techniques	4	1,2	1
4	Equilibrium Solution Techniques	4	1,2	1
5	Constant-Sum and Zero-Sum game	2	1,2	3
6	Best Response Functions	2	1,2	3
	UNIT II: Dynamic Games of Complete Information	20		
7	Introduction to Dynamic Game Theory	1	2	1,2
8	Extensive forms	1	1	1,2
9	Backward Induction	4	2,3	1,2
10	Application: Stackelberg Model of Duopoly	4	2,3,4	1,2
11	Sequential Bargaining	2	2,3	2
12	Dynamic model of complete but imperfect information	2	2	1,2
13	Subgame Perfect Nash Equilibrium	4	1,2	1,2
14	Solution Concept for Sequential Games	2	2	2
	UNIT III: Static Games of Incomplete Information	13		
15	Incomplete information	1		2
16	Notion of Type and Strategy	3	2	2
17	Static Bayesian games	3	2,3	2
18	Bayesian Nash Equilibrium	2	2,3	2
19	Examples of Bayesian Nash Equilibrium	4	2,3	2
	UNIT IV: Application	11		
20	Game theory and Strategic Decision Making under Oligopoly	6	3,4	3
21	Dominant Strategies	1	3,4	3
22	Nash Equilibrium	1	3,4	3
23	Entry Deterrence and Cartel games	2	2,4	3
24	Games with Incomplete Information	1	4	3
	Total Learning Hours		60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	80	70	70	60	60
	Understand					
Level 2	Apply	20	30	30	40	40
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

- Osborne, M. J., An Introduction to Game Theory, Oxford University Press, 2003.
- R. Gibbons, A Primer in Game Theory, Princeton University Press.
- R. Gibbons, Game Theory for Applied Economists, Princeton University Press Add Reference.

Other Resources

- Enter Data

Course Designers

- Enter Data

GROWTH AND DEVELOPMENT

Course Code	ECO 255	Course Category		L	T	P	C
				4	0	0	4
Pre-Requisite Course(s)	No	Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- The student will be able to understand the concept of growth and development.
- To assist students in comprehending the theories and strategies of growth and development.
- Evaluate how economic reasoning can be applied to study relevant problems and policies in economics.
- This course appraises students to some of the key ideas and concepts in the areas of economic growth and human development

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Describe the tools for measuring development	2	70%	65%
Outcome 2	Learn hardcore economic prescriptions to development; concerns hitherto relegated to background like education, health, sanitation and infrastructural development	2	70%	65%
Outcome 3	To explain development economic growth theories, international trade development theories, and related economic development theories.	2	70%	65%
Outcome 4	Describe the issues and challenges of development	2	70%	
Outcome 5	Identify the theories of development useful for Indian Economy	3	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	2	1	1		2			2	3	2	2
Outcome 3	3	3	3	3	2				2			2	3	2	2
Outcome 4	3	3	3	3	2	1			3			2	3	2	2
Outcome 5	3	3	3	3	3	1	1		2			3	3	2	2
Average	3	3	3	3	2	1	1		2			2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References
Unit I	Conceptions of Development	11		
1	Alternative measures of development	4	1	1
2	Documenting the international variations in these measures	4	1	1
3	Comparing development trajectories across nations and within them.	3	2	1
Unit II	Theories of Economic Development	11		
4	Adam Smith	2	3	2, 3
5	Ricardo	2	3	2, 3
6	Marx theory of growth	3	3	2, 3
7	Schumpeter theory of growth	2	3	2, 3
8	Rostow stages of growth	2	3	2, 3
UNIT III	Growth Models and Empirics	14		
9	The Harrod-Domar model	3	1, 2	2, 3
10	The Solow model and its variants	3	1, 2	2, 3
11	Fei and ranis' model	2	1, 2	2, 3
12	Lewis model of unlimited supply of labour	3	1, 2	2, 3
13	Evidence on the determinants of growth	3	1, 2	2, 3
UNIT IV	Poverty and Inequality: Definitions, Measures and Mechanisms	15		
14	Inequality axioms	2	1, 2	1
15	A comparison of commonly used inequality measures	3	1, 2	1
16	Connections between inequality and development	2	1, 2	1
17	Poverty measurement;	3	1, 2	1
18	Characteristics of the poor	2		1
19	mechanisms that generate poverty traps and path dependence of growth processes.	3		1
UNIT V	Political Institutions and the Functioning of the State	9		
20	The determinants of democracy	3	4	2
21	alternative institutional trajectories and their relationship with economic performance	3	4	2
22	Within country differences in the functioning of state	3	4	2
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Textbooks:

1. Debraj Ray, Development Economics, Oxford University Press, 2009.
2. Michael Todaro and Stephen Smith, Economic Development, Pearson

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Dr Ghanshyam Pandey, Assistant Professor, Department of Economics, SRM University AP

Money, Banking and Finance

Course Code	ECO 474	Course Category	Core Course (CC)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce concepts in money and banking.
- Exposes students to the theory and functioning of the monetary and financial sectors.
- It discusses the interest rate concepts as well.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the economic principles underlying the working of financial institutions.	2	70%	70%
Outcome 2	Describe the working of central banks conducting monetary policy.	1	70%	70%
Outcome 3	Apply models on monetary and macroeconomic problems.	3	70%	70%
Outcome 4	Conduct a theoretical analysis of given banking problems.	2	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	3	2	3	1			2		2	3	2	2	3
Outcome 2	3	2	1	2	3	1			2		2	3	2	3	1
Outcome 3	3	2	3	2	3	1			2		2	3	2	3	3
Outcome 4	3	2	1	2	3	1			2		2	3	2	1	1
Average	3	2	2	2	3	1			2		2	3	2	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Money	15		
	Introduction	2	1	1
	Theoretical and empirical approaches to money definition	2	1	1
	Functions	3	1	1
	Different Approaches	4	1	1
	Measurements	2	1	1
	Theories of money supply determination	2	1	1
Unit II	Money Financial Institutions, Markets, Instruments and Financial Innovations	15		
	Role of financial markets and institutions	3	1	1
	The problem of asymmetric information	2	1	1
	Adverse selection and moral hazard financial crises	3	1	1
	Money and capital markets	2	1	1
	organization, structure, and reforms in India,	2	1	1
	financial derivatives, and other innovations	3	1	1
Unit III	Interest Rates	16		
	Introduction of Interest rates	4	2	1,2
	Determination of interest rates	2	2	1,2
	Sources of interest rate differentials;	2	2	1,2
	Theories of term structure of interest rates	2	2	1,2
	Interest rates in India	3	2	1,2
	Comparison of interest rates	3	2	1,2
Unit IV	Banking System and Central Banking and Monetary Policy	17		
	Balance sheet and portfolio management	3	4	1,2
	Indian banking system: Changing role and structure; banking sector reforms	4	4	1,2
	Functions	2	4	1,2
	Balance sheet; goals, targets, indicators, and instruments of monetary control	4	4	1,2
	Monetary management in an open economy;	2	4	1,2
	current monetary policy of India.	2	4	1,2

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		60%		40%		60%		40%	
	Understand										
Level 2	Apply	60%		40%		60%		40%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Mishkin Frederick S (2015), The Economics of Money, Banking and Financial Markets
2. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011

Other Resources

1. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.

Fintech

Course Code	SEC 122	Course Category				
			L	T	P	C
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To understand fintech in the context of the digital economy.
- To introduce to the enablers of a digital economy.
- To understand the impact of fintech

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Gain a foundational understanding about fintech startups	3	80%	70%
Outcome 2	Familiarize with basic enablers of a digital economy	3	80%	70%
Outcome 3	Gain a foundational knowledge on fintech innovations and disruptions	2	80%	70%
Outcome 4	Gain a foundational knowledge on the impact of fintech	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 4	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Contact Hours	CLOs Addressed	References
Unit 1	Fintech in the Context of the Digital Economy	10 hrs		
	Fintech Startups	02	01	01,02
	The 10 Stacks of a Digital Economy	02	01	01,02
	Challenges in the Fintech Journey	01	01,03	01,02
	The Landscape of Fintech	01	01,03	01,02
	Influence of FinTech companies on banking landscape in the Indian context	02	01, 02	01, 02
	Role of FinTech in accelerating financial inclusion in India	02	01,04	01,04
Unit II	Enablers of a Digital Economy	10 hrs		
	Cryptoassets	02	02	01, 02
	Drawbacks of Cryptoassets: “Blockchain, not Bitcoin”	02	02	01, 02
	Open Banking: Digital Payments Systems	03	02	01, 02
	Essentials for Operating in the Open Banking Space	03	02,03	01, 02
Unit III	Fintech Innovations and Disruptions	15 hrs		
	Disruption in Asset Servicing	06	01,03	01, 02
	Disruptive Technologies	06	01,03	01, 02
	Disruption in the Capital Markets	03	01,03	01, 02
Unit IV	The Impact of Fintech	10 hrs		
	Legal Implications of Fintech	04	01	01, 02
	Smart Nations: Collaboration and Competition Between Jurisdictions	04	01, 03	01, 02
	Future Developments	02	01, 03	01, 02
Total Contact Hours		45 hrs		

Learning Assessment

Bloom’s Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		40%		40%		40%		40%	
	Understand										
Level 2	Apply	60%		60%		60%		60%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Gupta, P., & Tham, T. M. (2018). Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG.
2. Jaspal Singh (2022). Financial Technology (FinTech) and Digital Banking in India. New Century Publications.
3. Paul Vigna and Michael J. Casey (2015), The age of cryptocurrency: how bitcoin and digital money are challenging the global economic order, New York: St. Martin's Press.
4. Brett King (2020), Bank 4.0: Banking Everywhere, Never at a Bank, Wiley

Other Resources

1. Enter Data

Course Designers

1. Dr J Vineesh Prakash, Assistant Professor, Department of Economics, SRM University – Andhra Pradesh.

Lesson Plan

1. Topic(s): Fintech Startups, The 10 Stacks of a Digital Economy, Challenges in the Fintech Journey, The Landscape of Fintech		CO: 1
Name of Faculty from Synergy Dept. / Other Institution / Industry		
2. Topic Learning Outcome(s) Gain a foundational understanding of Data Analysis		
Previous:	Current:	Following:
3. Pedagogy (all that apply)		
PBL (Problem or Project Based Learning) / ABL (Activity Based Learning) / EL (Experiential Learning)		Topic Learning Hours 10
5. Active Learning Techniques <ul style="list-style-type: none">• Discussions / Interactions / Q&A / Jigsaw etc.	In Class Hours	Out of Class Hours 10
5. Resources <ul style="list-style-type: none">• Book Chapter/ Pages . Chapter 02, 03, Gupta, P., & Tham, T. M. (2018). Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG. Notes• E-resources• Problem Sets• Practice Work w/ solutions		Blended Learning Hours
6. Assessments		
Assessment Component(s) <i>(CLA 1)</i>	Assessment Type <i>Quiz</i>	Marks <i>15</i>

1. Topic(s): Cryptoassets, Drawbacks of Cryptoassets: “Blockchain, not Bitcoin”, Open Banking: Digital Payments Systems, Essentials for Operating in the Open Banking Space		CO: 1&2
Name of Faculty from Synergy Dept. / Other Institution / Industry		
2. Topic Learning Outcome(s) Gain a foundational understanding of Data Analysis, Familiarize with basic software’s for Data Analysis		
Previous:	Current:	Following:
3. Pedagogy (all that apply)		
PBL (Problem or Project Based Learning) / ABL (Activity Based Learning) / EL (Experiential Learning)		Topic Learning Hours 15

4. Active Learning Techniques		In Class Hours	Out of Class Hours 15
<ul style="list-style-type: none"> Discussions / Interactions /Q&A / Jigsaw etc. 			
5. Resources			Blended Learning Hours
<ul style="list-style-type: none"> Book Chapter/ Pages . Chapter 09, 10 Gupta, P., & Tham, T. M. (2018). Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG. Notes E-resources Problem Sets Practice Work w/ solutions 			
6. Assessments			
Assessment Component(s) <i>(Mid-Term)</i>	Assessment Type <i>Quiz</i>	Marks <i>15</i>	

1. Topic(s): Disruption in Asset Servicing, Disruptive Technologies, Disruption in the Capital Markets		CO: 2&3	
Name of Faculty from Synergy Dept. / Other Institution / Industry			
2. Topic Learning Outcome(s) Familiarize with basic software's for Data Analysis, Gain a foundational knowledge on statistical Analysis			
Previous:	Current:	Following:	
3. Pedagogy (all that apply)			
PBL (Problem or Project Based Learning) / ABL (Activity Based Learning) / EL (Experiential Learning)			Topic Learning Hours 15
4. Active Learning Techniques		In Class Hours	Out of Class Hours 15
<ul style="list-style-type: none"> Discussions / Interactions /Q&A / Jigsaw etc. 			
5. Resources			Blended Learning Hours
<ul style="list-style-type: none"> Book Chapter/ Pages . Chapter 13 and 14 Gupta, P., & Tham, T. M. (2018). Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG. Notes E-resources Problem Sets Practice Work w/ solutions 			
6. Assessments			
Assessment Component(s) <i>(CLA II)</i>	Assessment Type <i>Quiz</i>	Marks <i>10</i>	

1. Topic(s): Legal Implications of Fintech, Smart Nations: Collaboration and Competition Between Jurisdictions, Future Developments		CO: 3	
Name of Faculty from Synergy Dept. / Other Institution / Industry			
2. Topic Learning Outcome(s) Familiarize with basic software's for Data Analysis, Gain a foundational knowledge of inferential statistics with practical applications			
Previous:	Current:	Following:	
3. Pedagogy (all that apply)			

PBL (Problem or Project Based Learning) / ABL (Activity Based Learning) / EL (Experiential Learning)		Topic Learning Hours 15
4. Active Learning Techniques	In Class Hours	Out of Class Hours 15
<ul style="list-style-type: none"> Discussions / Interactions /Q&A / Jigsaw etc. 		
5. Resources		Blended Learning Hours
<ul style="list-style-type: none"> Book Chapter/ Pages . Chapter 25, Gupta, P., & Tham, T. M. (2018). Fintech: the new DNA of financial services. Walter de Gruyter GmbH & Co KG. Notes E-resources Problem Sets Practice Work w/ solutions 		
6. Assessments		
Assessment Component(s) <i>(CLA III)</i>	Assessment Type <i>Quiz</i>	Marks <i>10</i>

Introductory Econometrics

Course Code	ECO 301	Course Category	Core			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To understand the basics of econometrics.
- To interpret and analyse the results of single and multiple variable regression analysis.
- To apply the topics of regression to various real-life methods.
- To identify and solve the issues arising from violation of OLS assumptions

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To state and explain the OLS model for single and multiple variable regression	2	75	75
Outcome 2	To interpret and analyse the implications of various single and multiple variable regression	2	75	60
Outcome 3	To run regression on single and multiple variable models	3	60	50
Outcome 4	To identify the anomalies arising from violation of OLS assumptions	2	75	65

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3				3	3			1			3	3	3	2
Outcome 2	3	3	3	1	3	3			1			3	3	3	2
Outcome 3	3	3	3	3	3	3						3	3	3	2
Outcome 4	3	3	3	3	3	3						3	3	3	2
Course Average	3	3	3	2.3	3	3			1			3	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	UNIT II – SIMPLE LINEAR REGRESSION MODEL	26		
	Two Variable Case OLS estimation of linear regression model	6	1,2,3	1,2
	Properties of Estimators	1.5	1,2,3	1,2
	Goodness of Fit	1.5	1,2,3	1,2
	Testing of Hypotheses	6	1,2,3	1,2
	Scaling and Units of Measurement	1	1,2,3	1,2
	Confidence Intervals	6	1,2,3	1,2
	The Gauss Markov Theorem	2	1,2,3	1,2
	Forecasting and Prediction	2	1,2,3	1,2
Unit 2	UNIT III- MULTIPLE LINEAR REGRESSION MODEL	6		
	Extension to a multivariate setting	4	1,2,3	1,2
	Introduction of non-linearities through functions of explanatory variables	2	1,2,3	1,2
Unit 3	UNIT IV: Violations of Classical Assumptions	16		
	Consequences, detection, and remedies of multicollinearity	4	1,2,3,4	1,2
	Consequences, detection, and remedies of serial correlation	4	1,2,3,4	1,2
	Consequences, detection, and remedies of heteroscedasticity	4	1,2,3,4	1,2
Unit 4	UNIT V: Specification Analysis	6		
	Inclusion of irrelevant variable and omission of relevant variable	3	1,2,3,4	1,2
	Specification tests	3	2,3,4	1,2
Unit 5	UNIT V: Discrete Choice Models	12		
	Uses of dummy variables in regression	3	2,3,4	1,2
	Linear Probability model	3	2,3,4	1,2
	Logit and Logistic Regression	3	2,3,4	1,2
	Probit Model	3	2,3,4	1,2
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	80	70	70	60	65
	Understand					
Level 2	Apply	20	30	30	40	35
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Introduction to Econometrics: A modern approach, Woolridge,J. (2014). 5th ed. Cengage Learning
2. Essentials of Econometrics, Gujarati,D. Porter,D. (2010), 4th ed. MacGrawHill

Other Resources

1. Econometrics by Example, Damodar Gujarati (2014), 2nd ed. Palgrave Macmillan
2. Introduction to Econometrics, Dougherty.C, 4th ed. Oxford University Press

Course Designers

1. Enter Data

Financial Economics

Course Code	ECO 302	Course Category	Core Course (CC)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce students to financial economics
- To strengthen the students' understanding of the financial sector of the economy

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the basics of financial economics	2	80%	70%
Outcome 2	Evaluate the behaviour of investors under different market conditions.	5	70%	60%
Outcome 3	Understand the basics of money and capital markets	2	80%	70%
Outcome 4	Understand Derivative markets	2	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	3	2	2				2	2	3	3	3	3
Outcome 2	3	3	3	3	2	2				2	2	3	2	2	2
Outcome 3	3	2	3	2	2	2				2	2	3	3	3	3
Outcome 4	3	2	3	2	2	2				2	2	3	3	3	3
Course Average	3	3	3	3	2	2				2	2	3	3	3	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	INVESTMENT THEORY AND PORTFOLIO ANALYSIS: DETERMINISTIC CASH FLOW STREAMS	15		
	Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria	3	1	1
	fixed-income securities; bond prices and yields	3	1	1
	interest rate sensitivity and duration; immunization	3	1	1
	the term structure of interest rates; yield curves; spot rates and forward rates	3	1	1
	the term structure of interest rates; yield curves; spot rates and forward rates	3	1	1
Unit 2	SINGLE PERIOD RANDOM CASH FLOWS	15		
	Random asset returns	3	1,2	2
	portfolios of assets	3	1,2	2
	portfolio mean and variance	3	1,2	2
	feasible combinations of mean and variance	3	3	2
	mean-variance portfolio analysis: The Markowitz model and the two-fund theorem	2	3	2
	risk-free assets and the one-fund theorem	1	3	2
Unit 3	CAPITAL ASSET PRICING MODEL	15		
	The capital market line	3	2	2
	the capital asset pricing model; the beta of an asset and of a portfolio	3	2	2
	security market line	3	2	2
	use of the CAPM model in investment analysis and as a pricing formula	6	2	2
Unit 4	OPTIONS AND DERIVATIVES	15		
	Introduction to derivatives and options	2	2,4	2
	forward and futures contracts; options; other derivatives	2	1,2,4	2
	forward and future prices	2	1,2,4	2
	stock index futures	2	1,2,4	2
	interest rate futures	1	1,2,4	2
	the use of futures for hedging	2	1,2,4	2
	duration-based hedging strategies	2	3,4	3
	option markets: call and put options	2	3,4	3
	Total Learning Hours		60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	70%	50%	50%	50%	50%
	Understand					
Level 2	Apply					
	Analyse					
Level 3	Evaluate	30%	50%	50%	50%	50%
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. David G. Luenberger, Investment Science, Oxford University Press, USA, 1997.
2. Hull, John C., Options, Futures and Other Derivatives, Pearson Education, 6th edition, 2005.
3. Thomas E. Copeland, J. Fred Weston and Kuldeep Shastri, Financial Theory and Corporate Policy, Prentice Hall, 4th edition, 2003.

Further Readings

1. Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, 7th edition, 2002.
4. Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, Fundamentals of Corporate Finance. McGraw-Hill, 7th edition, 2005.
5. Burton G. Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company, 2003.
6. William Sharpe, Gordon Alexander and Jeffery Bailey, Investments, Prentice Hall of India, 6th edition, 2003

Other Resources

1. Enter Data

Course Designers

1. Dr. Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, School of Liberal Arts and Social Science

INDIAN ECONOMY

Course Code	ECO 303	Course Category	Core			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)	No	Co-Requisite Course(s)	No	Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- The aim of this course is to analyse significant changes in economic indicators and policy debates in India during the post-Independence period using appropriate analytical frameworks, with an emphasis on paradigm shifts and turning points.
- The reading list will need to be updated annually due to the rapid changes happening in India.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Know the development process in India after independence	2	70%	65%
Outcome 2	Understand the problems and measures in their contextual perspective	2	70%	65%
Outcome 3	Identify and analyse current issues	2	70%	
Outcome 4	Understand the Indian economy and the major trends in economic indicators and policy debates in India in the post-Independence period, with emphasis on paradigm shifts and turning points	3	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	3	1			2			2	3	2	2
Outcome 3	3	3	3	3	2				2			3	3	1	3
Outcome 4	3	3	3	3	2	1			3			2	3	2	2
Outcome 5	3	2	3	3	2				2			2	3	1	3
Course Average	3	3	3	3	2	1			2			2	3	2	2

Course Unitization Plan

Unit No.		Required Learning Hours	CLOs Addressed	References
Unit I	Performance of Indian Economy Since 1947	17		
1	Growth and Structural Changes	2	1	1
2	Features/characteristics of Indian economy	2	1	1
3	Human Development Index Traditional Methodology	1	2	1,2
4	Human Development Index: New Methodology	2	2	1,2
5	Sustainable Development	2	2	1,3
6	Capital Formation	2	2	1,2
7	Demographic Transition	2	2	1,2
8	Economic Planning in India	2	2	1
9	Reforms in Indian Economy	2	2	1
Unit II	Key Issues of Indian Economy	9		
10	Issues and Trends of Unemployment	2	3	2,3
11	Poverty in India	2	3	2,3
12	Problem of Inequality	1	3	2,3
13	Issues of Education	2	3	2,3
14	Gender Issues in India	2	3	2,3
UNIT III	Structural Performance of Agrarian Economy	13		
15	Importance and Features of Indian Agricultural	2	1, 2	1,3
16	Trends in Performance and Productivity	2	1, 2	1,3
17	Agricultural Markets and Institutions- Credit	2	1, 2	1,3
18	Land Reforms	2	1, 2	1,3
19	Green Revolution in Indian Agriculture	2	1, 2	1,3
20	Agricultural Labour	1	1, 2	1,3
21	Food Security	2	1, 2	1,3
22	Public Distribution System	1	1, 2	1,3
UNIT IV	Structural Performance of Industrial Sector in India	10		
23	Trends, Productivity, and Growth of Industries	2	1, 2	1,3
24	Industrial Policy in India	2	1, 2	1,3
25	Industrial Sickness	2	1, 2	1,3
26	Small Scale Industries	2	1, 2	1, 3
27	Foreign Direct Investment in India	2	1, 2	1, 3
UNIT V	Government Policies and Regional Institutions	11		
28	Trends and Performance in Services	2	4	2, 3
29	GATT	2	4	2, 3
20	WTO	2	4	2, 3
31	India Foreign Trade	2	4	2, 3
32	Monetary Policy	2	4	2, 3
33	Fiscal Policy.	1	4	2, 3
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Textbooks

1. Puri, V.K. & Mishra S.K, 2019- Indian Economy. Himalaya Publishing House, New Delhi 2019.
2. Gaurav Datt and Ashwani Mahajan, 2019- Indian Economy. S Chand and Company Limited, New Delhi 2019.
3. Uma Kapila 2019. Indian Economy since independence: A Comprehensive and Critical Analysis of Indian Economy 1947-2019. Academic Foundation, New Delhi 2019

Readings

1. Jean Dreze and Amartya Sen, 2013. An Uncertain Glory: India and its Contradictions, Princeton University Press.
2. Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.
3. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, Economic and Political Weekly, February.
4. Kaushik Basu, 2009, —China and India: Idiosyncratic Paths to High Growth, Economic and Political Weekly, September.
5. Reetika Khera, 2011, —India's Public Distribution System: zUtilization and Impact, Journal of Development Studies.
6. Gaurav Datt and Ashwani Mahajan, 2019- Indian Economy. S Chand and Company Limited, New Delhi 2019.
7. Puri, V.K. & Mishra S.K, 2019- Indian Economy. Himalaya Publishing House, New Delhi 2019.
8. Jalan, Bimal. Indian Economy: Problems and Prospects. Penguin India; New edition, 2004.
9. Kapila, Uma. – Indian Economy since independence: A Comprehensive and Critical Analysis of Indian Economy 1947-2019. Academic Foundation, New Delhi 2019.
10. Dipak Mazumdar and Sandeep Sarkar, 2009, —The Employment Problem in India and the Phenomenon of the _Missing Middle, Indian Journal of Labour Economics.
11. J. Dennis Rajakumar, 2011, —Size and Growth of Private Corporate Sector in Indian Manufacturing, Economic and Political Weekly, April. Ramesh Chand, 2010, —Understanding the Nature and Causes of Food Inflation, Economic and Political Weekly, February.
12. Bishwanath Goldar, 2011, —Organized Manufacturing Employment: Continuing the Debate, Economic and Political Weekly, April.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Dr Ghanshyam Pandey, Assistant Professor, Department of Economics, SRM University AP

BA/BA(H)/BA(Hons with research) V Semester

Summer Internship

Course Code		Course Category	RDIP			
			L	T	P	C
			0	0	4	4
Pre-Requisite Course(s)	Summer Immersion	Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department		Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Identify the key themes and practices relevant to the industry
- Explain the processes and workflows within the organization.
- Apply and connect theoretical knowledge to practical tasks and projects in the workplace.
- Evaluate the effectiveness of different strategies and approaches used by the organization.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Recognize and recall fundamental industry-specific concepts and practices.	1	70	80
Outcome 2	Interpret and describe the organizational processes and workflows	2	70	80
Outcome 3	Apply and connect theoretical knowledge in practical tasks and projects within the internship setting.	3	70	80
Outcome 4	Assess and critique the effectiveness of strategies and methodologies employed by the organization.	4	70	80

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	0	2	1	2	3	3	2	2	2	3	3	3	2	3	3
Outcome 2	0	2	1	2	3	3	2	2	2	3	3	3	2	3	2
Outcome 3	0	2	1	2	3	3	1	2	2	3	3	3	1	3	3
Outcome 4	0	2	1	2	3	3	1	2	2	3	3	3	3	2	2
Average	0	2	1	2	3	3	1	2	2	3	3	3	2	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Contact Hours	CLOs Addressed	References Used
Unit 1	Industry Orientation		1	
	Students engage in activities that help them recognize and recall fundamental industry-specific concepts and practices.			
Unit 2	Process Analysis		2	
	Students interpret and describe the organizational processes and workflows observed during their internship.			
Unit 3	Practical Application		3	
	Students implement theoretical knowledge by completing practical tasks and projects within the internship setting.			
Unit 4	Strategy Evaluation			
	Students assess and critique the effectiveness of strategies and methodologies employed by the organization during their internship.		4	

Learning Assessment

Bloom's Level of Cognitive Task		Progress Report (30%)	Internship Report (40%)	Viva (30%)
Level 1	Remember	30%	25%	25%
	Understand			
Level 2	Apply	50%	50%	25%
	Analyse			
Level 3	Evaluate	20%	25%	50%
	Create			
Total		100%	100%	100%

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

CO-CURRICULAR ACTIVITIES

Course Code	VAC 103	Course Category	VAC		L	T	P	C
					0	0	2	2
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)				
Course Offering Department	SA	Professional / Licensing Standards						

Course Objectives / Course Learning Rationales (CLRs)

1. Develop essential skills, including leadership, communication, and teamwork, among students.
2. Offer opportunities for students to apply academic concepts in practical, real-world scenarios.
3. Promote self-exploration, confidence-building, and social responsibility.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Demonstrate confidence in leading group activities, communicate clearly, and collaborate effectively with diverse teams.	2	80%	75%
Outcome 2	Apply theories to practical tasks by solving problems and adapting concepts to real-life situations through cocurricular activities	2	80%	70%
Outcome 3	Develop new experiences with an open approach through guided reflection to assess personal growth, skills, and learning for holistic development.	3	80%	70%

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments 100%			
		CLA-1 25%	CLA-2 25%	CLA-3 25%	CLA-4 25%
Level 1	Remember				
	Understand				
Level 2	Apply	15%	15%	15%	15%
	Analyse				
Level 3	Evaluate	10%	10%	10%	10%
	Create				
Total		25%	25%	25%	25%

COMMUNITY SERVICE AND SOCIAL RESPONSIBILITY

Course Code	VAC 104	Course Category	VAC				L	T	P	C
							0	0	2	2
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	CEL	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

1. Encourage initiatives that address local needs, foster self-sufficiency, and promote environmental sustainability within the community.
2. Equip participants with a deeper understanding of social issues and a sense of responsibility towards marginalized communities.
3. Inspire active participation in community service programs and foster a culture of giving back among individuals and organizations.
4. Develop and implement programs that contribute to skill development, economic empowerment, and equal opportunities for underprivileged sections of society.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Develop effective strategies for identifying and addressing community needs.	3	80%	80%
Outcome 2	Demonstrate empathy and cultural sensitivity when engaging with diverse community groups.	4	80%	75%
Outcome 3	Implement sustainable solutions and evaluate their impact on social well-being.	5	90%	85%
Outcome 4	Collaborate effectively within teams to design and lead community service projects.	6	90%	80%

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments 50%				End Semester Exam 50%
		CLA-1 20%	Mid-1 20%	CLA-2 20%	CLA-3 20%	
Level 1	Remember	10%	10%			20%
	Understand					
Level 2	Apply		10%	10%		20%
	Analyse					
Level 3	Evaluate				10%	10%
	Create					
Total		10%	20%	10%	10%	50%

Understanding India's Economic Survey and Union Budget

Course Code	SEC 123	Course Category		L	T	P	C
				3	0	0	3
Pre-Requisite Course(s)	No	Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To familiarize students with a basic and comprehensive understanding of the framework, structure, and components of India's Economic Survey and Union Budget, and significance of these documents in shaping the country's economic policies.
- To enable students to critically analyze key economic indicators and policy recommendations presented in the Economic Survey and Union Budget.
- To assess the socio-economic impact of the Economic Survey and Union Budget on various sectors and demographic groups, exploring how these policies influence economic growth and public welfare.
- To cultivate holistic skills by integrating perspectives from economics, public policy, and governance, for students to engage in critical evaluation of India's economic strategies.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To gain knowledge and identify the key sections and components of India's Economic Survey and Union Budget, including significant economic indicators and policy announcements.	1	80%	70%
Outcome 2	Explain various policies and economic strategies outlined in the Economic Survey and Union Budget, demonstrating an understanding of their relevance and impact on India's economy.	2	80%	70%
Outcome 3	To apply economic theories to interpret Economic Survey and Union Budget, assessing the implications of specific policies on economic growth.	3	80%	70%
Outcome 4	To critically evaluate different sections of the Economic Survey and Union Budget, identifying key trends, challenges, and opportunities within India's economic landscape.	4	80%	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	3	1							2	3	3	3
Outcome 2	3	3	3	3	2							2	3	3	3
Outcome 3	3	3	3	3	2		1		2			2	3	3	3
Outcome 4	3	3	3	3	3				2			2	3	3	3
Course Average	3	3	3	3	2	1	1		1			2	3	3	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Introduction to the Concepts	15 hours		
1	Government spending in India	2	1,2	1,3
2	Types of expenditure: Capital and Revenue; Plan and non-plan	3	1,2	3
3	Deficits – Primary, revenue and fiscal	2	1,2	3
4	Receipts: Capital and revenue; tax and non-tax revenue; direct and indirect taxes; GST	2	1,2	3
5	Budget estimates: Actual and revised	2	1,2	2,3
6	Types of budgeting	2	1,2	3
7	A critical perspective - Gender budgeting	2	1,2	3
Unit II	The Economic Survey	16 hours		
8	What is Economic Survey? Definition, Significance, Structure and Components	2	2,3	1
9	Key highlights of economic survey and importance	2	2,3	1
10	Reading Economic Survey Closely: Performance and State of the Economy	2	3,4	1
11	Reading Economic Survey Closely: Macroeconomic overview, Monetary policy and inflation	2	3,4	1
12	Reading Economic Survey Closely: Sectoral Analysis of Agriculture, Industry and Services	2	3,4	1
13	Reading Economic Survey Closely: Environment, Climate Change, Sustainability	2	3,4	1
14	Reading Economic Survey Closely: Social Sector, Employment	2	3,4	1
15	Critical perspectives and debates	2	3,4	1
UNIT III	Union Budget in India	14 hours		
16	Why do we need budget?	2	2,4	2
17	Understand deficits according to the latest Union Budget	2	2,4	2
18	Understanding revenue sources	2	2,4	2
19	Understanding expenditure pattern and locating thrust areas in the latest budget	2	2,4	2
20	Analysis of key areas/sectors with higher/lower shares of expenditure	3	2,4	2
21	Critical perspectives and debates based for inclusive growth and development	3	4,5	2
	Total	45 hours		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		40%		30%		20%		50%	
	Understand										
Level 2	Apply	40%		40%		50%		40%		50%	
	Analyze										
Level 3	Evaluate			20%		20%		40%			
	Create										
Total		100%		100%		100%		100%		100%	

References

- 1.Ministry of Finance. Economic Survey (latest and previous year)
- 2.Ministry of Finance. Union Budget (latest and previous year)
- 3.Bhatia, H.L (2020). Public Finance, 30th edition. Vikas Publishing House.
- 4.Relevant newspaper articles for critical understanding

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Boddu Srujana, Assistant Professor, Department of Economics, SRM University – Andhra Pradesh.

Advanced Econometrics

Course Code	ECO 305	Course Category	CC			
			4	0	0	4
Pre-Requisite Course(s)	ECO 405	Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce students to the basic concepts in time series econometrics
- To enable students to grasp the basics of dynamic and simultaneous models

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply various tests to detect stationarity in time series data	3	70%	65%
Outcome 2	Evaluate the dynamic time series econometric models in literature	5	70%	65%
Outcome 3	Analyse time series data using various forecasting techniques	4	70%	65%
Outcome 4	Understand and apply the conditional heteroscedastic models in vogue.	3	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	3	1			2			2	3	2	2
Outcome 3	3	3	3	3	2				2			3	3	1	3
Outcome 4	3	3	3	3	2	1			3			2	3	2	2
Course Average	3	2	3	3	2				2			2	3	1	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
UNIT I	TIME SERIES ECONOMETRICS – BASIC CONCEPTS	12		
	Introduction to Time Series	2	1	1,2
	Stationary and Non-stationary Time Series	2	1	1,2
	Spurious Regression; Transforming Nonstationary	1	1	1,2
	Unit Root Tests: Dickey Fuller and Augmented Dickey Fuller Tests	3	1	1,2
	Cointegration: Testing for Cointegration, Error Correction Mechanism	3	1	1,2
	Granger Causality Test	1	1	1,2
UNIT II	DYNAMIC ECONOMETRIC MODELS	12		
	Lags in Econometric Models	2	2	2
	Distributed Lag Model	2	2	2
	Autoregressive Lag Model	1	2	2
	Reasons for Lags	3	2	2
	Estimation of Distributed-Lag Model	3	2	2
	The Koyck Approach to Distributed-Lag Model	1	2	2
UNIT III	SIMULTANEOUS EQUATION MODELS	18		
	Nature of Simultaneous-Equations Models	3	3	1
	Simultaneous Equation Bias; Structural Models; Reduced Form Models	3	3	1
	Identification Problem; Rules of Identification	2	3	1
	Tests for Simultaneity and Exogeneity	4	3	1
	Method of Indirect Least Squares	4	3	1
	Method of Two-Stage Least Squares	2	3	1
UNIT IV	TIME SERIES ECONOMETRICS – FORECASTING	11		
	Approaches to Economic Forecasting	2	1,4	3,4
	ARIMA Models	2	1,4	3,4
	The Box-Jenkins Methodology	1	1,4	3,4
	; Vector Autoregression	3	1,4	3,4
	Forecasting with VAR; Testing Causality using VAR.	3	1,4	3,4
UNIT V	VOLATILITY MODELLING	7		
	Introduction to ARCH, GARCH Models-	4	4	2
	Applications- ARCH M- FIGARCH-Properties of GARCH Process	2	4	2
	Fit and Diagnostics-Other Models of Conditional Variance.	1	4	2
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember					
	Understand					
Level 2	Apply	60%	60%	60%	60%	50%
	Analyse					
Level 3	Evaluate	40%	40%	40%	40%	50%
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Gujarati, D. N. (2016). *Econometrics by Example* (2nd ed.). New Delhi: Palgrave.
2. Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data*. Massachusetts: MIT Press.
3. Gujarati, D. N., Porter, D.C., & Gunasekar, S. (2017). *Basic Econometrics*. (5th ed.). New Delhi: McGraw Hill.
4. Studenmund, A. H. (2016). *Using Econometrics: A Practical Guide*. (7th ed.). New Delhi: Pearson

Other Resources

1. Enders, W. (2013). *Applied Econometric Time Series* (3rd ed.). New York: John Wiley & Sons.
2. Greene, W. H. (2003). *Econometric Analysis* (5th ed.). New Delhi: Pearson Education.
3. Hamilton, J. D. (1994). *Time Series Analysis*. Princeton: Princeton University Press.
4. Koutsoyiannis, A. (1973). *Theory of Econometrics*. New York: Harper & Row.
5. Pindyck, R. S., & Rubinfeld, D. L. (1990). *Econometric Models and Econometric Forecasts* (4th ed.). New York: McGraw-Hill.

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.
2. Dr Ravinder Reddy, Professor, School of Management, NIT, Warangal
3. Dr Raja Sethu Durai, Professor, School of Economics, University of Hyderabad

International Economics

Course Code	ECO 307	Course Category	Core				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)	ECO201, ECO 202	Co-Requisite Course(s)	Core	Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Grasp the principles of absolute and comparative advantage, debunking misconceptions surrounding the latter.
- Analyze the standard theory of international trade, exploring gains from trade, offer curves, and equilibrium commodity prices.
- Examine Heckscher-Ohlin Theory, economies of scale, and the impact of trade restrictions, including tariffs and non-tariff barriers.
- Analyze the effects of tariffs, non-tariff barriers, and economic integration, utilizing partial and general equilibrium analyses. Evaluate neo-protectionism, customs unions, and multilateralism within the WTO framework.
- Evaluate principles of balance of payments, foreign exchange markets, and exchange rate determination, including purchasing power parity theory.
- Assess the international monetary system's evolution, IMF roles, and challenges of macroeconomic policy coordination with a focus on floating exchange rates, single currency systems, and the European Monetary Union.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply principles of absolute and comparative advantage to analyze gains from trade, demonstrating analytical skills in understanding equilibrium commodity prices.	3	80	70
Outcome 2	Evaluate the impact of economies of scale, imperfect competition, and technological gaps on international trade, demonstrating critical thinking and analysis.	5	70	70
Outcome 3	Conduct comprehensive analyses of the effects of tariffs, non-tariff barriers, and economic integration, demonstrating analytical and evaluative skills.	3	80	70
Outcome 4	Demonstrate understanding of principles related to balance of payments, foreign exchange markets, and exchange rate determination, incorporating purchasing power parity theory.	1	70	70
Outcome 5	Evaluate the evolution of the international monetary system, roles of the IMF, and challenges in macroeconomic policy coordination, showcasing critical evaluation skills.	5	80	70
Outcome 6	Apply knowledge of policy coordination in the context of floating exchange rates, single currency systems, and economic integration, demonstrating application skills.	3	80	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	2		1	1			2	2	2	2	2	1	3
Outcome 2	2	3	3		1	1			2	2	1	2	2	1	3
Outcome 3	3	2	2		1	1			2	2	2	2	2	1	3
Outcome 4	2	3	3		1	1			2	2	1	2	2	1	3
Outcome 5	3	2	2		1	1			2	2	2	2	2	1	3
Outcome 6	3	3	3		2	1			2	3	3	3	2	1	3
Course Average	3	2	2		1	1			2	2	2	2	2	1	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit 1	Introduction and Essentials	10		
	Overview of the Subject Matter	3	1,2	1
	Understanding Trade Based on Absolute Advantage	4	1	1
	Analysis of Trade Based on Comparative Advantage	3	1	1
Unit 2	The Standard Theory of International Trade, Offer Curves and the Terms of Trade	10		
	Examining the Basis for Trade	4	2	1
	Analyzing Gains from Trade with Increasing Costs	3	2,3	1
	Understanding Trade Based on Differences in Tastes	3	2	1
Unit 3	The Heckscher-Ohlin Theory, Economies of Scale, Imperfect Competition	10		
	Overview of Heckscher-Ohlin Theory and the relevance in Contemporary Times	3	3,4	1
	Factor-Price Equalization and Income Distribution	3	3	1
	Understanding the Impact of Economies of Scale on International Trade	2	3	1
	Intra-Industry Trade: Concepts and Examples and Technological Gap	2		
Unit 4	Trade Restrictions: Tariffs and Nontariff Trade Barriers; and Economic Integration	10		
	Analysis of Tariffs: Partial Equilibrium	3	4	1
	Analysis of Tariffs: General Equilibrium	3	4	1
	Import Quotas and Other Non-tariff Barriers	2		
	Neo- Protectionism, Customs Unions and Multilateralism –WTO	2	4	1
Unit 5	The Balance of Payments, Foreign Markets, and Exchange Rate Determination	10		
	Understanding Balance of Payments and Functions of the Foreign Exchange Markets	4	5,6	1
	Determination of Foreign Exchange Rates and the concept of Purchasing Power Parity	3	6	1
	Understanding the different Foreign Exchange Markets	3	5,6	1
Unit 6	The International Monetary System and Macroeconomic Policy Coordination	10		
	Overview of Bretton Woods System	3	2,6	1
	Role of the IMF	2	6	1
	Policy Coordination with Floating Exchange Rates	2	1,6	1
	The concept of Single Currency and Economic Integration and The European Monetary Union	3	6	1
Total Learning Hosurs			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	40	40	40	50	50
	Understand					
Level 2	Apply	60	60	60	50	50
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Salvatore, D. (2016). International Economics: Trade and Finance. (12th ed.). John Wiley International Student Edition.
2. Other Resources:
3. Bowen, H., Hollander A. & Viaene J. (2012).
4. Applied International Trade Analysis. London: Macmillan Publication.
5. Dornbusch, R. (1980). Open Economy Macroeconomics. New York: Basic Books. International Students Edition.
6. Kapila, U. (2018). Indian Economy: Performance and Policies. (17th ed.). New Delhi: Academic Foundation.
7. Krugman, P., Obstfeld, M. & Melitz, M. (2012). International Economics: Theory and Policy. (9th ed.). New Delhi: Pearson Education.
8. Mankiw, G. N. (2012). Principles of Macroeconomics. (6th ed). New Delhi: Cengage Learning India. Marrewijk, C.V. (2007). International Economics: Theory, Application and Policy. Oxford University Press. Stiglitz, J. (2016). The Euro. and its Threat to the Future of Europe. Penguin.

Other Resources

1. Enter Data

Course Designers

1. Dr. Manzoor Hassan Malik, Assistant Professor, Department of Economics, SRM University AP

Data Analysis using Computer Applications

Course Code	ECO 309	Course Category	Dept Elective (DE)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To understand fundamentals of Data Analysis.
- To introduce to basic software's for Data Analysis.
- To understand fundamental concepts of Time-series Econometrics with practical applications

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Gain a foundational understanding of Data Analysis.	2	70%	65%
Outcome 2	Familiarize with basic software's for Data Analysis.	2	70%	65%
Outcome 3	Gain a foundational knowledge of Time-series Econometrics with practical applications.	2	70%	65%
Outcome 4	Gain a foundational knowledge on statistical Analysis	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lif	PSO 1	PSO 2
Outcome 1	3	3	3	2	1			2	2	1	3	3	3	2
Outcome 2	3	3	3	2	1			2	2	1	3	2	3	2
Outcome 3	3	3	3	2	1			2	2	1	3	3	3	2
Outcome 4	3	3	3	2	1			2	2	1	3	3	3	2
Course Average	3	3	3	2	1			2	2	1	3	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References
Unit I	Introduction to Excel	10 hrs		
1	Excel Worksheet, The Ribbon, Tool Bar, Creating File	02	01	01,03
2	Formatting cells, Introduction to Formula, Formula anatomy	02	01	01,03
3	Maths Function, Basic Statistics, Logical Functions, Data Tabulation	02	01,03	01,03
4	Sorting, Filtering, Graphical representation of data, Column, bar, pie, line, area charts	04	01,03	01,03
Unit II	Statistical Analysis using Advanced Excel	15 hrs		
5	Pivot Tables, Descriptive Statistics, Histogram	02	02	01, 02
6	Data Analysis: ANNOVA	02	02	01, 02
7	F-test, t-test, z-test	03	02	01, 02
8	Correlation	04	02,03	01, 02
9	Covariance and regression	04	02,03	01, 02
Unit III	Introduction to Time-series Analysis using Software's	20 hrs		
10	Introduction to Time-series Data, Creating Workfile, Importing Data	02	01,03	01, 04
11	Editing Data, Saving Workfile, Time-series Analysis, Graphical Plot.	03	01,03	01, 04
12	Seasonal Adjustments, Trend Filtering, Unit Root Test	05	01,03	01, 04
13	Least Squares regression, Test for Heteroscedasticity, Autocorrelation, Multicollinearity	06	01,03	01, 04
14	Causality Test; Test for Cointegration	04	01,03	01, 04
Unit IV	Economics Forecasting Techniques	15 hrs		
15	Estimating ARMA Models; Specification, Selection of Best Model,	05	01	04, 05
16	Forecasting; Estimating VAR System; Specification	05	01, 03	04, 05
17	Selection of Lag length, VAR Stability Check, Graphing Impulse response function	02	01, 03	04, 05
18	Variance Decomposition and Vector Error Correction Mechanism	03	01, 03	04, 05
Total Learning Hours		60 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		90%		40%		80%		70%	
	Understand										
Level 2	Apply	60%		10%		60%		20%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Econometrics by Example, by Damodar Gujarati (Palgrave Macmillan, Basingstoke, 2011), pp. xxviii + 371.
2. David, M. Levine (2017). Statistics for managers, using Microsoft excel. Pearson Education India.
3. Long, J. S., & Freese, J. (2006). Regression models for categorical dependent variables using Stata (Vol. 7). Stata press.
4. Kyle C. Longest (2019). Using Stata for Quantitative Analysis 3rd Edition. Sage Publication.

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Time Series Econometrics

Course Code	ECO 401	Course Category	CC			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)	ECO 205	Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce students to the basic concepts in time series econometrics
- To enable students to grasp the basics of dynamic and simultaneous models

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply various tests to detect stationarity in time series data	3	70%	65%
Outcome 2	Evaluate the dynamic time series econometric models in literature	5	70%	65%
Outcome 3	Analyse time series data using various forecasting techniques	4	70%	65%
Outcome 4	Understand and apply the conditional heteroscedastic models in vogue.	3	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	3	1				2		2	3	2	2
Outcome 3	3	3	3	3	2							3	3	1	3
Outcome 4	3	3	3	3	2	1						2	3	2	2
Course Average	3	2	3	3	2							2	3	1	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
UNIT I	TIME SERIES ECONOMETRICS – BASIC CONCEPTS	12		
	Introduction to Time Series	2	1	1,2
	Stationary and Non-stationary Time Series	2	1	1,2
	Spurious Regression; Transforming Nonstationary	1	1	1,2
	Unit Root Tests: Dickey Fuller and Augmented Dickey Fuller Tests	3	1	1,2
	Cointegration: Testing for Cointegration, Error Correction Mechanism	3	1	1,2
	Granger Causality Test	1	1	1,2
UNIT II	DYNAMIC ECONOMETRIC MODELS	12		
	Lags in Econometric Models	2	2	2
	Distributed Lag Model	2	2	2
	Autoregressive Lag Model	1	2	2
	Reasons for Lags	3	2	2
	Estimation of Distributed-Lag Model	3	2	2
	The Koyck Approach to Distributed-Lag Model	1	2	2
UNIT III	SIMULTANEOUS EQUATION MODELS	18		
	Nature of Simultaneous-Equations Models	3	3	1
	Simultaneous Equation Bias; Structural Models; Reduced Form Models	3	3	1
	Identification Problem; Rules of Identification	2	3	1
	Tests for Simultaneity and Exogeneity	4	3	1
	Method of Indirect Least Squares	4	3	1
	Method of Two-Stage Least Squares	2	3	1
UNIT IV	TIME SERIES ECONOMETRICS – FORECASTING	11		
	Approaches to Economic Forecasting	2	1,4	3,4
	ARIMA Models	2	1,4	3,4
	The Box-Jenkins Methodology	1	1,4	3,4
	; Vector Autoregression	3	1,4	3,4
	Forecasting with VAR; Testing Causality using VAR.	3	1,4	3,4
UNIT V	VOLATILITY MODELLING	7		
	Introduction to ARCH, GARCH Models-	4	4	2
	Applications- ARCH M- FIGARCH-Properties of GARCH Process	2	4	2
	Fit and Diagnostics-Other Models of Conditional Variance.	1	4	2
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember					
	Understand					
Level 2	Apply	60%	60%	60%	60%	50%
	Analyse					
Level 3	Evaluate	40%	40%	40%	40%	50%
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Gujarati, D. N. (2016). *Econometrics by Example* (2nd ed.). New Delhi: Palgrave.
2. Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data*. Massachusetts: MIT Press.
3. Gujarati, D. N., Porter, D.C., & Gunasekar, S. (2017). *Basic Econometrics*. (5th ed.). New Delhi: McGraw Hill.
4. Studenmund, A. H. (2016). *Using Econometrics: A Practical Guide*. (7th ed.). New Delhi: Pearson

Other Resources

1. Enders, W. (2013). *Applied Econometric Time Series* (3rd ed.). New York: John Wiley & Sons.
2. Greene, W. H. (2003). *Econometric Analysis* (5th ed.). New Delhi: Pearson Education.
3. Hamilton, J. D. (1994). *Time Series Analysis*. Princeton: Princeton University Press.
4. Koutsoyiannis, A. (1973). *Theory of Econometrics*. New York: Harper & Row.
5. Pindyck, R. S., & Rubinfeld, D. L. (1990). *Econometric Models and Econometric Forecasts* (4th ed.). New York: McGraw-Hill.

Course Designers

1. Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University AP.

Industrial Organization

Course Code	ECO 402	Course Category	Core Course (CC)	L-T/D-P/Pr-C	4	0	0	4
Total Learning hours				Total Learning Hours				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)				
Course Offering Department	Economics	Professional / Licensing Standards						
Board of Studies Approval Date		Academic Council Approval Date						

Course Objectives:

- To provide students with an understanding of different market structures and their implications for firm behavior and market outcomes
- To develop students' ability to analyze strategies used by firms in competitive and non-competitive markets
- To explore the role of government regulation and antitrust policies in shaping market behavior, promoting competition, and protecting consumer welfare
- To enable students to apply economic models to assess real-world cases in industrial organization, focusing on issues such as mergers, barriers to entry, and technological innovation

Course Outcomes (COs):

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Demonstrate and identify the characteristics of different market structures (e.g., monopoly, oligopoly) and describe how these structures affect firm behaviour and market performance.	2	80%	70%
Outcome 2	Apply and analyze firm strategies such as pricing, product differentiation, and entry/exit decisions in various competitive environments and demonstrate how these strategies impact market dynamics.	3	80%	70%
Outcome 3	Critically evaluate the effects of government regulations and antitrust policies on market competition	5	80%	70%
Outcome 4	Apply theoretical models introduced in lectures to real-world cases, analyzing firm behaviour	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1			2	2	1	2	3	3	2
Outcome 2	3	3	2	2	2			2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2			2	2	1	2	3	3	2
Course Average	3	3	2	2	2			2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1	Introduction	15 hrs		
1	Introduction to Industrial Organization	03		
2	Review of Basic Microeconomic Theory: Technology and Costs	05	01	01, 02
3	Competition versus Monopoly	03	01	01, 02
4	Monopoly Pricing Schemes	04	01	01, 02
Unit 2	Market Structure and Market Power	15 hrs		
8	Concentration Measures and Evidence	05	01,03	02, 03
9	Cost and Non-Cost Determinants of Market Structure	05	01,03	02, 03
10	SCP Paradigm	05	01,03	02, 03
Unit 3	Anticompetitive Behavior and Antitrust Policy	15 hrs		
12	Entry Deterrence	05	02	02, 01
13	Predatory Conduct	05	02	02, 01
14	Price Fixing, Repeated Interaction, and Antitrust Policy	05	02	02, 01
Unit 5	LABOUR AND INDUSTRIAL ORGANIZATION	15 hrs		
21	Role of labour markets in industrial settings, wage-setting practices, labour unions, and bargaining power	04	04	02,03
22	Labour choices and strategies in an industry	04	04	02,03
23	Heterodox critiques of firm behavior and labour relations	03	04	02,03
24	Alternative frameworks: segmented labor markets, the dual labor market theory, and informal labor markets	04	04	02,03
Total Learning hours		60 hrs		

Recommended Resources

1. Belleflamme, P., and Peitz, M. (2015). *Industrial Organization: Markets and Strategies* (2nd ed.). Cambridge: Cambridge University Press
2. Bowles, S., & Gintis, H. (1990). "Contested Exchange: New Microfoundations of the Political Economy of Capitalism," *Politics & Society*, 18(2)
3. Cabral Luis M.B. (2000). *Introduction to Industrial Organization* (1st ed). The MIT Press.
4. Joskow, Paul L., *Transaction Cost Economics, Antitrust Rules and Remedies*. *Journal of Law, Economics, and Organization*, Vol. 18, No. 1, pp. 95-116, 2002
5. Perloff Jeffrey M. and Dennis W. Carlton (2015). *Modern Industrial Organization* (4th ed.). Pearson
6. Tirole Jean (1988). *The Theory of Industrial Organization* (1st ed.). The MIT Press
7. W. Viscusi, J. Vernon, and J. Harrington (2018). *Economics of Regulation and Antitrust*. The MIT Press.
8. Pepall, Richards and Norman, *Industrial Organization: Contemporary Theory and Applications*, 2014, Fifth Edition

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Course Designers:

Dr Vineesh Prakash, Assistant Professor, Department of Economics, SRM University - AP

Boddu Srujana, Assistant Professor, Department of Economics, SRM University - AP

Research Methodology

Course Code	ECO 403	Course Category	Core Course (CC)				L	T	P	C
			4	0	0	4				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To devote methods and statistics that are required to develop skills to undertake research.
- It aims to equip students with research Methodology that deals with the general logic of scientific inquiry, research design, sampling, measurement, and the techniques of certain “structured” and “unstructured” methods of data collection.
- To develop a few complementary designs, measurement, and data collection approaches to bring evidence to bear on the problem.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Describe a research problem	2	70%	70%
Outcome 2	Explain the research process, previous research studies and ethics in social science research.	2	70%	70%
Outcome 3	Demonstrate preparation of a research proposal	2	70%	70%
Outcome 4	Discuss the quality of evidence in published social sciences research.	2	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	3	3	2				3			3	3	3	3
Outcome 2	2	1	3	1	3				3			3	3	3	3
Outcome 3	2	1	3	1	3				3			3	3	3	3
Outcome 4	2	1	3	1	3				3			3	3	3	3
Course Average	2	1	3	2	3				3			3	3	3	3

Course Unitization Plan

Sl. No	Description of Topic	Required Learning Hours	CLOs Addressed	References Used
UNIT I	Research in Social Sciences	5		
1.	What social research is and how it differs from decision support systems; Different types of research studies	2	1,2	1,2
2.	Nature of the research process; Ethics in social sciences research	1	1,2	1,2
3.	The purposes and process of exploratory research, two types and three levels of research decision-related secondary sources	2	2	1,2
UNIT II	Thinking Like a Researcher	6		
4.	The terminology used by professional researchers employing scientific thinking	2	3	3,4
5.	What you need to formulate a solid research hypothesis	2	3	3,4
6.	The need for sound reasoning to enhance business research results	2	3	3,4
UNIT III	The Research Process: An Overview	9		
7.	Research is decision- and dilemma-centered	2	4	2,3
8.	Research question, analysis and direction for the research, value assessments	2	1,4	
9.	Data collection, data analysis, and reporting	3	3,4	2,3
10.	Stages of research design	2	3,4	2,3
UNIT IV	Academic Writing and software Application	10		
11	Literature Review, Descriptive, Persuasive, Expository and Narrative writing	3	4	1,2
12	Weaving together critical thinking, logic and evidence, technicalities of grammar and syntax, formatting, and citations	3	2,3	4,5
13	Software tutorials, practical assignments and exercises, case studies, live projects	4	2,3	4,5
	Total learning hours		30	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	100%		100%		100%		100%		100%	
	Understand										
Level 2	Apply										
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Alasuutari, P., Bickman, L., and Brannen, J. (2009). The Sage Handbook of Social Research Methods. Los Angeles: Sage.
2. Bailey, K.D. (1994). Methods of Social Research. New York: Toronto.
3. Becker, H., and Richards, P. (2007). Writing for Social Scientists. Enskede: TPB.
4. Bhandarkar. (2010). Methodology and Techniques of Social Research. New Delhi: Himalayan Books.
5. Cooper, D. R., and Schindler, P. S. (2014). Business Research Method. New York, NY: McGraw-Hill/Irwin. (Primary Text)

Other Resources

1. Howitt, D., and Cramer, D. (2011). Introduction to Research Methods. Welwyn Garden City: Pearson Education UK.
2. 7. Matthews, B., and Ross, L. (2010). Research Methods. Harlow: Pearson Education.
3. 8. May, T. (2011). Social Research: Issues, Methods and Process. Maidenhead, Berkshire: Open University Press.
4. 9. Neuman, W. (2011). Social Research Methods. 7th Edition. Boston: Allyn and Bacon.
5. 10. Neuman, W. L. (2011). Social Research Methods Qualitative and Quantitative Approaches. Boston: Pearson Education.
6. 11. O'Leary, Z. (2010). Researching Real World Problems. London: Sage.
7. 12. O' Leary, Z. (2017). The Essential Guide to doing Your Research Project. London: Sage.
8. 13. Thomas, C., and Maurice, S. (2013). Managerial Economics (11th Edition)
9. 14. Van Zyl, L., Salkind, N., and Green, S. Research Methodology for the economic and Management Sciences.

Course Designers

1. Erra Kamal Sai Sadharma, Assistant Professor, Department of Economics, SRM University - AP

Dissertation

Course Code	ECO 404	Course Category	Other Courses (P)		L	T	P	C
					0	0	14	14
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)				
Course Offering Department	Economics	Professional / Licensing Standards						

Course Objectives / Course Learning Rationales (CLRs)

- To widen the understanding of doing research.
- To facilitate the ideation of a thought.
- To devise and plan ways to execute an idea.
- To learn how to avoid plagiarism and publish one's contribution in the research community.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Conceptualize an idea	5	75%	70%
Outcome 2	Devise a plan to do the literature survey on the idea	5	75%	70%
Outcome 3	Formulate the mathematical model for the problem.	4	75%	70%
Outcome 4	Assess the relevance and societal impact of the work	5	70%	65%
Outcome 5	Write a technical paper and report the findings.	3	75%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3				2		1	2	3	2	1	3	2	2	3
Outcome 2	3	2	2	3	3	1	1	3	3	3	2	3	2	1	3
Outcome 3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Outcome 4		2				3	3	3			3	3	2	1	3
Outcome 5	3	1	1	3	3			3	3	3		3	3	3	3
Course Average	3	2	2	3	3	2	2	3	3	3	3	3	3	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit 1	Conception of Idea	40		
	Based on interest conceive an idea	30	1,4	1
	Do a feasibility check of the project	10	1,4	1
Unit 2	Submission of Abstract of the idea	70		
	Literature survey of the related works	50	2	1,2,3,4,5
	Write an abstract of the proposed idea	20	2	1
Unit 3	Formulate the Econometric model	50		
	Formulate the econometric model for the considered problem	40	3	1
	Creating timeline for execution of various module of the project.	10	3	1,6
Unit 4	Run the Regression and Publish results	80		
	Execution of the various modules of the project and intermediate report submission.	40	3	1
	Initiation of the process for a possible publication.	40	5	2,3,4,5
Total Learning Hours		240		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								External (50%)	
		Internal									
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember										
	Understand										
Level 2	Apply				70%						30%
	Analyse										
Level 3	Evaluate				30%						70%
	Create										
Total					100%						100%

Recommended Resources

1. As recommended by Advisor pertaining to student research interest.
2. https://owl.purdue.edu/owl/purdue_owl.html
3. <https://www.sciencedirect.com/>
4. www.springer.com
5. <https://onlinelibrary.wiley.com/>
6. Research Methodology

Other Resources

1. Enter Data

Course Designers

1. Dr. Mohana Rao Balaga, Assistant Professor, Department of Economics, SRM University, AP.

Economic Growth

Course Code	ECO 405	Course Category	CC			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)	Growth and Development	Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Develop a comprehensive understanding of advanced growth theories, including human capital, endogenous growth, and the role of technology, and critically assess their applications in diverse economic contexts.
- Understand and critique the frameworks and policies related to growth and development
- Evaluate the implications of globalization on various development parameters such as labour markets, inequality, global value chains, and foreign direct investment, and evaluate policy responses to balance the benefits and challenges of globalization.
- Investigate current issues such as digitalization, the future of work, health crises, and social inclusion, and analyze how these affect economic development strategies and require new policy interventions to foster equitable growth.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Define advanced and key theories and concepts in contemporary economic growth and sustainable development	1	70%	65%
Outcome 2	Interpret the relationships between globalization, policy strategies, and economic development	2	70%	65%
Outcome 3	Apply theoretical models of economic growth to analyze real-world scenarios, such as assessing the effects of financial inclusion or technological adoption on development outcomes in a specific country.	3	70%	65%
Outcome 4	Compare and contrast various policy approaches to economic development and globalization, evaluating their effectiveness in addressing social and economic challenges	4	70%	65%
Outcome 5	Critically assess emerging development issues, such as digitalization, health crises, and the future of work, using evidence-based arguments to propose sustainable and inclusive solutions.	5	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	2	1	1		2			2	3	2	2
Outcome 3	3	3	3	3	2		2		2			2	3	2	2
Outcome 4	3	3	3	3	2	1			3			2	3	2	2
Outcome 5	3	3	3	3	3	1	1		2			3	3	2	2
Average	3	3	3	3	2	1	1		2			2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Understanding Economic Growth	15 hours		
1	The Data of Growth and Development	4	1	1
2	Other “Stylized Facts”	2	1	1
3	Why are some countries being Poor and some are being so Rich?	3	1	1
4	What is the Engine of Economic Growth	3	1	1
5	How do we Understand Growth Miracles?	3	1	1
Unit II	Classic Growth Models	15 hours		
6	Rostow’s Stages of Growth	2	3	2, 3, 8
7	The Harrod-Domar model	2	3	2, 3, 8
8	The Solow model	3	3	2, 3
9	Technology and the Solow Model	4	3	2, 3, 8
10	The Solow Model with Human Capital	4	3	2, 3, 8
UNIT III	Endogenous growth Models	15 hours		
11	The Basic Elements of the Romer Model	3	1, 2	2, 3
12	Growth in the Romer Model	3	1, 2	2, 3
13	A Simple Endogenous Growth Model with technology transfer	3	1, 2	2, 3
14	Steady-State Analysis	3	1, 2	2, 3
15	Understanding Differences in Growth Rates	3	1, 2	2, 3
UNIT IV	Growth experiences of different regions	15 hours		
16	Post-War Reconstruction of Germany and Japan	5	1, 2	1
17	The Asian Economic Miracle	5	1, 2	1
18	The Chinese Growth Miracle	5	1, 2	1
	Total	60 hours		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Enter Data

Other Resources

1. Aghion, P., & Howitt, P. (2009). *The Economics of Growth*. MIT Press
2. Barbier, E. B. (2005). *Natural Resources and Economic Development*. Cambridge University Press
3. Chang, H.-J. (2003). *Globalization, Economic Development and the Role of the State*.
4. Dasgupta, P., & Heal, G. (1979). *Economic Theory and Exhaustible Resources*.
5. Goldsmith, R. W. (1969). *Financial Structure and Development*.
6. Jones, C. I. (2016). *Introduction to Economic Growth (3rd ed.)*. W.W. Norton
7. Krugman, P., & Obstfeld, M. (2017). *International Economics: Theory and Policy. Chapters on globalization and trade*.
8. Sachs, J. D. (2015). *The Age of Sustainable Development*. Columbia University Press
9. Thirlwall, A. P. (2021). *Economics of Development: Theory and Evidence (10th ed.)*. Red Globe Press.

Further readings may be suggested as per the course.

Course Designers

1. Dr Vineesh Prakash, Assistant Professor, Department of Economics, SRM University – AP
2. Boddu Srujana, Assistant Professor, Department of Economics, SRM University - AP

Behavioural Economics

Course Code	ECO 421	Course Category	Departmental Elective			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department		Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To explain the economic decision-making process and role of psychology behind it.
- To elaborate the deviation of the standard economic theoretical predictions from reality, using the framework of behavioural economics.
- To study the theoretical frameworks of Behavioural economics.
- To explain the real-life examples using the Behavioural economics' framework

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To state and explain the role of psychology in decision-making processes studied in economics	2	80	70
Outcome 2	To state and explain the deviation of the standard economic theoretical frameworks from the reality	2	80	70
Outcome 3	To state and explain the theoretical frameworks of Behavioural Economics	2	70	70
Outcome 4	To apply and analyse the frameworks of Behavioural Economics within the context of real-life situations	4	60	60

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2
Outcome 1	3	3	--	--	--	--	--	--	--	--	3	--	--	--
Outcome 2	3	3	--	--	--	--	--	--	--	--	3	--	--	--
Outcome 3	3	3	3	3	--	--	--	--	--	--	3	--	--	2
Outcome 4	3	3	3	3	3	--	--	--	--	--	3	3	2	3
Average	3	3	3	3	3	--	--	--	--	--	3	3	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit 1	Unit I: Introduction to Behavioural Economics	22		
	Origins of Behavioural Economics	2	1,2	3,5
	Decision-making under Neo-classical economic framework- rationality, optimization Role of Intuition, Emotions, Beliefs in decision making	6	1,2	3,5
	Bounded Rationality Judgment under Risk & Uncertainty: Heuristics & Biases	4	1,2,3	1,5
	Heuristics: Representativeness, Substitution, Availability, Affect, Anchoring	6	1,2,3	1,5
	Framing Biases: Cognitive and emotional biases	4	1,2,3	1,5
Unit 2	Unit II: Choice Under Risk & Uncertainty	14		
	Expected Utility Prospect Theory	2	2,3,4	1,2,3
	Risk Concept	2	2,3	1,3
	Understanding Shape of Utility Function	2	2,3,4	1,3
	Decision Weighting, Probabilistic Judgment	4	2,3,4	1,3
	Mental Accounting Framing Mental Accounts Fungibility & Labels Hedonic Editing	4	2,3	1,3
Unit 3	UNIT III: Choice Under Risk & Uncertainty	14		
	Intertemporal Choice, Temporal Choice	2	2,3,4	1,4
	Construal Level Theory	2	2,3,4	1,4
	Valuation of Delayed Consumption Preferences for Sequences of Outcomes	4	2,3,4	1,4
	Hyperbolic Discounting	4	2,3,4	1,4
	Preference Reversal	2	2,3,4	1,4
Unit 4	UNIT IV: Behavioural Game Theory and Social Preferences	10		
	Fairness, Trust Cooperation, Reciprocity	4	2,3,4	2,3
	Strategic Thinking Choice architecture: Nudge, Nudge vs. boost	4	2,3,4	1,2
	Behavioural public policy	2	2,3,4	1,2
Total Learning hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	80	70	60	60	60
	Understand					
Level 2	Apply	20	30	40	40	40
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Erik Angner, "A Course in Behavioural Economics", Palgrave Macmillan
2. M. Altman, Handbook of Contemporary Behavioural Economics: Foundation and
3. Developments (2007), Prentice Hall India
4. E. Cartwright, Behavioural Economics (2011), Routledge
5. Behavioral Economics: Toward a New Economics by Integration with Traditional
6. Economics by Ogaki, Masao, Tanaka, Saori C. Published by Springer, ISBN
7. 978-981-10-6439-5
8. Nick Wilkinson; Matthias Klaes (2012), An Introduction to Behavioral Economics, 2nd
9. Edition, Palgrave Macmillan.

Other Resources

1. D. Kahneman, Thinking Fast and Slow (2011), Allen Lane, Penguin Books
2. World Development Report 2015: Mind, Society, and Behaviour
3. G. Loewenstein, Exotic Preferences: Behavioural Economics and Human Motivation
4. (2007), Oxford University Press
5. Sanjit Dhani, "The Foundations of Behavioural Economic Analysis", Oxford University
6. Press (2016)

Course Designers

1. Enter Data

Labour Economics

Course Code	ECO 422	Course Category	Core Course (CC)				L	T	P	C
			4	0	0	4				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- Comprehend the unique features of the labor market, identify participants, and analyze key terminologies
- Analyze factors influencing demand and supply in the labor market, understand wage determination mechanisms in different market structures, and evaluate the impact of unions on wage rates.
- Analyze the role of labor regulations, evaluate the economic case for such regulations, and understand the influence of trade unions in the Indian context.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Demonstrate a comprehensive understanding of the labor market structure, including the economically active population, workforce participation, and the classification of labor markets.	2	80%	70%
Outcome 2	Apply economic principles to interpret wage differentials, discrimination, and equilibrium conditions in monopsony, perfectly competitive, and monopoly labor markets.	3	80%	70%
Outcome 3	Critically assess the impact of labor market policies, including the ILO Core Labor Standards, on working conditions, social security, and insurance, considering recent trends in India.	5	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1	INTRODUCTION	18 hrs		
1	Unique features of the labour market; Participants in the labour market	03	01	01, 02
2	Labour market terminologies; economically active population	03	01	01, 02
3	Workforce participation; labour force participation rates	03	01	01, 02
4	Unemployment rate; Classification of labour markets	03	01	01,02
5	Positive and normative economics in the context of labour markets	03	01	01, 02
6	Labour markets and Pareto efficiency	01	01	01, 02
7	Causes of labour market failure	02	01	01,02
Unit 2	LABOUR MARKET ANALYSIS	15 hrs		
8	Demand for labour: Determinants of demand for labour	03	01,03	02, 03
9	Elasticity of Derived Demand: Supply of labour: Static Labour	02	01,03	02, 03
10	Leisure Choices; supply curve of labour; indifference curves and budget constraints	02	01,03	02, 03
11	Reservation wage; Labour market equilibrium: wage and employment determination in monopsony	02	01,03	02, 03
12	Perfectly competitive and monopoly labour markets	02	01,03	02, 03
13	Monopoly Union model and its impact on wage rate	02	01,03	02, 03
14	Wage differentials and discrimination	02	01,03	02, 03
Unit 3	EMPLOYMENT AND UNEMPLOYMENT	15 hrs		
15	Concept of Employment and Full Employment	03	02	02, 01
16	The added worker and discouraged worker hypothesis	03	02	02, 01
17	Segmented labour market; job search and vacancy analysis	03	02	02, 01
18	Unemployment causes and consequences; technology and employment	03	02	02, 01
19	Recent trends of employment and unemployment in India	03	02	02, 01
Unit 4	LABOUR REGULATIONS AND LABOUR MARKET POLICIES IN INDIA	12 hrs		
20	Role of regulations in labour markets, Economic case for labour market regulations: its impact	04	02	02,03
21	Trade unions in India; ILO Core Labour Standards	04	02	02,03
22	Recent trends in Working conditions; Social security and Insurance	02	02	02,03
23	Welfare funds-Employment exchanges; Vocational education and training	02	02	02,03
Total Learning hours		60 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Cahuc, P. & Zilberberg, A. (2004). Labour Economics, Massachusetts: MIT Press.
2. Reynolds, L. G., & Masters, S. H. (1997). Labour Economics and Labour Relations (11th ed), New York: Pearson,
3. Smith, S. (1994). Labour Economics, London: Routledge.
4. Ramaswamy, K. V. (2015). Labour, Employment and Economic Growth in India, New Delhi: Cambridge University Press

Other Resources

1. No Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr Manish Kumar
2. Expert Reviewers: Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Health Economics

Course Code	ECO 423	Course Category	Core Course			
			(CC)	L	T	P
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To understand fundamental health economics concepts, linking economic principles to healthcare dynamics.
- To analyse health care dynamics, using the Grossman Model and exploring factors influencing demand and supply.
- To evaluate market structures, failures, and information issues in health economics scenarios.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply economic principles to differentiate healthcare needs and requirements	3	80%	70%
Outcome 2	Analyze shifts in health care demand influenced by time, insurance, and individual behaviours	4	80%	70%
Outcome 3	Critically assess health insurance dynamics, moral hazard, and adverse selection, considering uncertainty in health-related scenarios	5	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and	Modern Tool and ICT Usage	Society and Multicultural	Environment and	Moral, and Ethical	Individual and Teamwork	Communication Skills	Project Management	Self-Directed and Lifelong	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1	INTRODUCTION	15 hrs		
1	The concept of health economics, public goods and health economics	04	01	01, 02
2	The relevance of health economics	04	01	01, 02
3	Health care as economic commodity	04	01	01, 02
4	The nature of health care: need versus requirements	03	01	01,02
Unit 2	DEMAND AND SUPPLY OF HEALTH	15 hrs		
5	The Grossman Model	04	01	02, 03
6	Determinants of health (medicine, education, lifestyle, other behavioural aspects)	05	01	02, 03
7	Shifts in demand for health care	03	01	02, 03
8	The role of time and insurance	03	01	02, 03
Unit 3	MARKET STRUCTURE AND MARKET FAILURE IN HEALTH AND HEALTH CARE	15 hrs		
9	Market structures	04	02	02, 01
10	Market failures	03	02	02, 01
11	Symmetric information and agency relationship	04	02	02, 01
12	Supplier induced demand	04	02	02, 01
Unit 4	HEALTH INSURANCE, MORAL HAZARD AND ADVERSE SELECTION	15 hrs		
13	Uncertainty and insurance	04	03	02, 01
14	The demand for insurance	04	03	02, 01
15	The supply of insurance	04	03	02, 01
16	Moral hazard and adverse selection	03	03	02, 01
Total Learning hours		60 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. . Bhattacharya, J., Hyde, T., Tu, P. (2014). Health economics, Palgrave Macmillan.
2. 2. World Development Report (1993). Investing in Health. The World Bank.
3. 3. Folland, S., Goodman, A. and Stano, M. (2000). The Economics of Health and Health Care. Third Edition. Prentice Hall.
4. 4. Clewar, A and Perkens, D. (1998). Economics of Health Care Management. London: Prentice Hall

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr Manish Kumar
2. Expert Reviewers: Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Theories of Growth

Course Code	ECO 425	Course Category	Core Elective			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- The student will be able to understand the concept of growth.
- To assist students in comprehending the theories and strategies of growth and development.
- Evaluate how economic reasoning can be applied to study relevant problems and policies in economics.
- This course exposes students to some of the key ideas and concepts in the areas of economic growth and human development.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Describe the tools for measuring development			
Outcome 2	Learn hardcore economic prescriptions to development, concerns hitherto relegated to background like education, health, sanitation and infrastructural development, have found a place of pride in explaining the preference of various economies.	2	70%	65%
Outcome 3	To explain development economic growth theories, international trade development theories, and related economic development theories.	2	70%	65%
Outcome 4	Describe the issues and challenges of development	2	70%	
Outcome 5	Identify the theories of development useful for Indian Economy	3	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	2	1	1		2			2	3	2	2
Outcome 3	3	3	3	3	2		2		2			2	3	2	2
Outcome 4	3	3	3	3	2	1			3			2	3	2	2
Outcome 5	3	3	3	3	3	1	1		2			3	3	2	2
Average	3	3	3	3	2	1	1		2			2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Conceptions of Development	11		
1	Alternative measures of development	4	1	1
2	Documenting the international variations in these measures	4	1	1
3	Comparing development trajectories across nations and within them.	3	2	1
Unit II	Theories of Economic Development	11		
4	Adam Smith	2	3	2, 3
5	Ricardo	2	3	2, 3
6	Marx theory of growth	3	3	2, 3
7	Schumpeter theory of growth	2	3	2, 3
8	Rostow stages of growth	2	3	2, 3
UNIT III	Growth Models and Empirics	14		
9	The Harrod-Domar model	3	1, 2	2, 3
10	The Solow model and its variants	3	1, 2	2, 3
11	Fei and ranis' model	2	1, 2	2, 3
12	Lewis model of unlimited supply of labour	3	1, 2	2, 3
13	Evidence on the determinants of growth	3	1, 2	2, 3
UNIT IV	Poverty and Inequality: Definitions, Measures and Mechanisms	15		
14	Inequality axioms	2	1, 2	1
15	A comparison of commonly used inequality measures	3	1, 2	1
16	Connections between inequality and development	2	1, 2	1
17	Poverty measurement;	3	1, 2	1
18	Characteristics of the poor	2		1
19	mechanisms that generate poverty traps and path dependence of growth processes.	3		1
UNIT V	Political Institutions and the Functioning of the State	9		
20	The determinants of democracy	3	4	2
21	alternative institutional trajectories and their relationship with economic performance	3	4	2
22	Within country differences in the functioning of state	3	4	2
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Classical Political Economy

Course Code	ECO 426	Course Category	Departmental Elective				L	T	P	C
							4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To introduce the economic theory, ideas, and postulates of the various schools of thought, ranging from mercantilism to the contemporary period.
- To understand the evolution and limitations of various schools of thought.
- To understand the relevance of each school of thought to the current period.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To articulate and elucidate the concepts underlying diverse schools of thought	2	80	75
Outcome 2	To articulate and elucidate the constraints inherent in diverse streams of thought	2	75	75
Outcome 3	To explicate and implement the development of diverse streams of thought	3	60	60
Outcome 4	To evaluate and implement the concepts of diverse schools of thought in practical situations	3	70	60

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary	Analytical Reasoning and	Critical and Reflective	Scientific Reasoning and	Research Related Skills	Modern Tools and ICT Usage	Environment and	Moral, Multicultural	Individual and Teamwork	Communication Skills	Leadership Readiness	Self-Directed and Lifelong	PSO 1	PSO 2	PSO 3
Outcome 1	3											2			
Outcome 2	3											2			
Outcome 3	3	3	3	3								2			3
Outcome 4	3	3	3		2							2	3		3
Average	3	3	3	3	2							2	3		3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Mercantilism and Classical School	18 hrs		
	Mercantilism; Laissez Faire; Quesnay and the Physiocrats;	06	01	01,02
	Adam Smith: invisible hand-accumulation and distribution of Income-value	04	01	01,02
	Market and competition-institutions; Ricardo-Corn laws and theory of rent;	04	01,02	01,02
	J S Mills: synthesis of the classical economics	04	01,02	01,02
Unit II	Marx's Economics Theory	18 hrs		
	Exploitation and value;	06	02	01, 02
	Wages, trade cycles and Law of movement of capitalist economy	06	02	01, 02
	Monetary aspects of cycles and the crisis	06	02	01, 02
Unit III	Marginal Revolution and Neoclassical Orthodoxy	12 hrs		
	Neoclassical theoretical system;	06	01,02	01, 02
	Neoclassical Orthodoxy- Belle epoque, Alfred Marshall	06	01,02	01, 02
Unit IV	Years of High Theory	12 hrs		
	John Maynard Keynes: The General Theory: J A Schumpeter: equilibrium and development, trade cycle and money	06	01,03	01, 02
	Money Forms: Sraffa-Chamberlin-Joan Robinson: Contribution to the study of Market Forms.	06	01,03	01, 02
Total Learning hours		60 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (10%)	CLA-3 (10%)	
Level 1	Remember	80	70	60	60	60
	Understand					
Level 2	Apply	20	30	40	40	40
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Screpanti, Ernesto, and Stefano Zamagni, 'Introduction', in David Field (ed.), An Outline of the History of Economic Thought, 1st edn (Oxford , 1995; online edn, Oxford Academic, 1 Nov. 2003),
2. Lokanathan V. A History of Economic Thought, 10th Edition Publisher: S. Chand Publishing.

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Law and Economics

Course Code	ECO 428	Course Category	Core Course			
			(CC)	L	T	P
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To integrate economic concepts with legal principles to cultivate a holistic understanding of how economic theory informs legal analysis.
- To explore and compare civil and common legal traditions, examining the evolution of legal rules and their economic implications.
- To develop the ability to apply economic theories to legal concepts, emphasizing property, contracts, torts, and their economic underpinnings

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply economic analysis to legal problems, prioritizing efficiency over distribution in the context of private law	3	80%	70%
Outcome 2	Understand the nature of legal traditions, legal disputes, and the evolution of legal rules within the framework of economic perspectives	2	80%	70%
Outcome 3	Master economic theories related to property, contracts, and torts, gaining insights into the economic dimensions of legal concepts and their practical applications	5	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and	Modern Tool and ICT Usage	Society and Multicultural	Environment and	Moral, and Ethical	Individual and Teamwork	Communication Skills	Project Management	Self-Directed and Lifelong	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1	INTRODUCTION TO LAW AND ECONOMICS	15 hrs		
1	Meaning of Economic Analysis of Law & Some Examples	05	01	1
2	Primacy of Efficiency over Distribution in analyzing Private Law	05	01	1
3	Law and Legal Institutions	05	01	1
Unit 2	AN INTRODUCTION TO LAW AND LEGAL TRADITIONS	14 hrs		
4	The Legal Traditions	04	01,03	1
5	The Civil and Common	04	01,03	1
6	Nature of Legal Dispute	03	01,03	1
7	Evolution of Legal Rules	03	01,03	1
Unit 3	AN ECONOMIC THEORY OF PROPERTY	15 hrs		
8	Legal Concept of Property	03	02	1
9	Bargaining Theory	03	02	1
10	The Origins of Institution of Property: A Thought Experiment	03	02	1
11	An Economic Theory of Property	03	02	1
12	Ownership and Protection of Property	03	02	1
Unit 4		8 hrs		
13	An Economic Theory of Contract	02	02	1
14	Bargain Theory of Contract	02	02	1
15	Economic Theory of Contract	02	02	1
16	Economics of Contract Law	02	02	1
Unit 5		8 hrs		
17	An Introduction to Economic Theory of Tort Law	02	01,03	1
18	Basics of Law of Tort	02	01,03	1
19	Economics of Tortuous Liability	02	01,03	1
20	Economics of Damage Remedy	02	01,03	1
Total Learning hours		60 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Cooter, R., & Ulen, T. (2014). Law and Economics (6th ed.). Harlow: Pearson.

Further Readings:

1. Friedman, D. D. (2001). Law's order: What economics has to do with law and why it matters. Princeton University Press.
2. Posner, R. A. (2014). Economic Analysis of Law. Wolters Kluwer Law & Business.
3. Veljanovski, C. G. (2007). Economic Principles of Law. Cambridge University Press.
4. Posner, R. A. (1981). The Economics of Justice. Cambridge, MA: Harvard University Press

Other Resources

1. No Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr Manish Kumar
2. Expert Reviewers: Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Agricultural Economics

Course Code	ECO 429	Course Category				
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To expose the students to the concept, significance and uses of agricultural production economics.
- To the use of economic tools and concepts in the analysis and evaluation of public policies affecting agriculture, food, natural resources, and the environment.
- To enable the students to understand the theories and strategies of growth and development of agriculture sector.
- This course exposes students to economic principles, with emphasis on their application to the solution of farm, agribusiness, and agricultural industry problems, application to the solution of farm, agribusiness, and agricultural industry problems.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the importance of agriculture sector in overall economy	2		
Outcome 2	Explain Agriculture production and consumption by using economic theory for support.	2	80%	70%
Outcome 3	To explain production economics tools for agricultural decision making	2	80%	70%
Outcome 4	Understanding limited resources available in the economy. Realize the need to exploit and utilize through development and improvement of production techniques.	2	80%	70
Outcome 5	Discuss the impact of regional, national, and global agribusiness policy	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1							2	3	1	2
Outcome 2	3	3	3	3	2	1	2		2			2	1	2	3
Outcome 3	3	2	3	3	2		2		2			3	3	2	2
Outcome 4	3	3	3	2	2	1			3			2	1	2	2
Outcome 5	3	2	3	2	3	1	2		2			3	3	2	2
Average	3	3	3	3	2	1	2		2			2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Introduction	17		
1	Definition, Scope, and Nature	2	1	1
2	Need for a Separate Study of Agricultural Economics	2	1	1
3	Agricultural Linkages with Other Sectors,	2	2	1
4	Role of Agriculture in Economic Development,	2	1	
5	Declining Importance of Agriculture in Economic Development	2	3	2, 3
6	Concept of Production Function	3	2	
7	Input-output and Product Relationship	2	2	
8	Equilibrium of share-tenant farm and efficiency.	2	2	
Unit II	Nature and Type of Risk and Uncertainty	14		
10	Risk and uncertainty in agriculture	3	3	2, 3
11	Nature of supply and demand for agriculture products	4	3	2, 3
12	Instability of agriculture	3	3	2, 3
13	Schultz theory and role of technological change	4	3	
UNIT III	Land reforms and green revolution in India	16		
14	Objectives, progress and assessment of land reforms	4	1, 2	2, 3
15	Nature of emerging agrarian structure	4	1, 2	2, 3
16	Green Revolution in India	4	1, 2	2, 3
17	Overview growth of Agriculture	4	1, 2	2, 3
UNIT IV	Agricultural Issues	13		
18	Farm size and productivity	3	1, 2	1
19	Problems of mechanization	3	1, 2	1
20	Agriculture credits in India	3	1, 2	1
21	WTO and Indian Agriculture.	4	1, 2	1
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Money, Banking and Finance

Course Code	ECO 474	Course Category	Core Course (CC)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce concepts in money and banking.
- Exposes students to the theory and functioning of the monetary and financial sectors.
- It discusses the interest rate concepts as well.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the economic principles underlying the working of financial institutions.	2	70%	70%
Outcome 2	Describe the working of central banks conducting monetary policy.	1	70%	70%
Outcome 3	Apply models on monetary and macroeconomic problems.	3	70%	70%
Outcome 4	Conduct a theoretical analysis of given banking problems.	2	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	3	2	3	1			2		2	3	2	2	3
Outcome 2	3	2	1	2	3	1			2		2	3	2	3	1
Outcome 3	3	2	3	2	3	1			2		2	3	2	3	3
Outcome 4	3	2	1	2	3	1			2		2	3	2	1	1
Average	3	2	2	2	3	1			2		2	3	2	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit I	Money	15		
	Introduction	2	1	1
	Theoretical and empirical approaches to money definition	2	1	1
	Functions	3	1	1
	Different Approaches	4	1	1
	Measurements	2	1	1
	Theories of money supply determination	2	1	1
Unit II	Money Financial Institutions, Markets, Instruments and Financial Innovations	15		
	Role of financial markets and institutions	3	1	1
	The problem of asymmetric information	2	1	1
	Adverse selection and moral hazard financial crises	3	1	1
	Money and capital markets	2	1	1
	organization, structure, and reforms in India,	2	1	1
	financial derivatives, and other innovations	3	1	1
Unit III	Interest Rates	15		
	Introduction of Interest rates	3	2	1,2
	Determination of interest rates	2	2	1,2
	Sources of interest rate differentials;	2	2	1,2
	Theories of term structure of interest rates	2	2	1,2
	Interest rates in India	3	2	1,2
	Comparison of interest rates	3	2	1,2
Unit IV	Banking System and Central Banking and Monetary Policy	15		
	Balance sheet and portfolio management	2	4	1,2
	Indian banking system: Changing role and structure; banking sector reforms	3	4	1,2
	Functions	2	4	1,2
	Balance sheet; goals, targets, indicators, and instruments of monetary control	4	4	1,2
	Monetary management in an open economy;	2	4	1,2
	current monetary policy of India.	2	4	1,2

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		60%		40%		60%		40%	
	Understand										
Level 2	Apply	60%		40%		60%		40%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Mishkin Frederick S (2015), The Economics of Money, Banking and Financial Markets
2. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011

Other Resources

1. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.

BASIC STATISTICS

Course Code	ECO 241	Course Category		L	T	P	C
				3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To familiarize students with the statistical techniques employed in not only economics, but increasingly, all social and pure scientific research.
- Will help students understand descriptive statistics.
- To customize the importance of basic statistics for social science students.
- To enable students to utilize statistical tools for data analysis and interpretation.
- application to the solution of farm, agribusiness, and agricultural industry problems.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Using statistical techniques to solve quantitative, data-based problems, analyse, and infer.	2	70%	65%
Outcome 2	Estimate and comprehend the descriptive statistics	3	70%	65%
Outcome 3	Analyse and interpret correlations and regressions.	4,5	70%	65%
Outcome 4	Skilled in using statistical techniques for quantitative, data-based problems, analysis, and inference.	4,5	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	2	3	3	3	3	2			3			3	3	2	1
Outcome 2	2	3	1	3	3	2			3			3	1	2	3
Outcome 3	2	3	3	3	3	2			3			3	3	3	3
Outcome 4	2	3	1	3	3	2			3			3	3	1	3
Average	2	3	2	3	3	2			3			3	2	2	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit I	Introduction	13		
1	Meaning and Definition of Statistics	2	1	1
2	Function—Importance—Limitations	2	1	1
3	Structure of Data, Frequency Distribution	3	1	1
4	Collection and Tabulation of Statistical Data	2	1	1
5	Presentation of Statistical data	2	1	1
6	Graphs and Diagrams.	2	1	1
Unit II	Measures of Central Tendency	18		
7	Mean, Median, Mode for Ungrouped and Grouped data,	5	2	1
8	Geometric Mean and Harmonic Mean, Graphical Presentation of Data, Line diagram	4	2	1
9	Bar Diagram, Ogive, Histogram,	4	2	1
10	Frequency Polygon Frequency Curves	2	2	1
11	Range, Mean Deviation, Standard Deviation	4		
12	Coefficient of Variation, Quartile Deviation, Coefficient of Quartile Deviation	4	3	1,2
Unit III	Measures of Dispersion	11		
13	Methods of Studying Skewness	3	3	1,2
14	Karl Pearson's Co-efficient of Skewness	4	3	1,2
15	Bowley's Co-efficient of Skewness	4	3	1,2
Unit IV	Correlation	14		
16	Meaning, Correlation: Scattered diagram	2	4	1,2
17	Correlation: Scattered diagram	2	4	1,2
18	Partial and Multiple correlation,	4	4	1,2
19	Coefficients of Correlation, Karl Pearson, and Rank Correlation	4	4	1,2
20	Spearman Rank Correlation Coefficient	2	4	1,2
Unit V	Regression	13		
21	Meaning, Uses—Fitting Regression Line	4	4	1,2
22	Regression Equation	5	4	1,2
23	Relation between Regression Coefficient and Correlation Coefficient	4	4	1,2
	Total	60		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Readings

Textbooks:

1. S.P. Gupta "Statistical Methods", Sultan Chand and Sons, Educational Publishers, New Delhi, 46th Revised Edition, 2021.
2. D.R. Agarwal "Elementary Mathematics and Statistics for Economists", Vrinda Publications (P), New Delhi, Reprint: 2002.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Industrial Economics

Course Code	ECO 427	Course Category	Core Course (CC)			
			L	T	P	C
			4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce to the basics of industrial economics.
- To understand to the behaviour of firms under different market conditions.
- To understand the structure, performance and the decision making process of an industry.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the Behaviour of firms under different market conditions	2	70%	65%
Outcome 2	Identify relationship between industrial structure and performance.	2	70%	65%
Outcome 3	Understand the basics of industrial economics	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Introduction	15		
1	Conceptual Framework	2	1	1
2	History and Scope of Industrial Economics	2	1	1
3	Concept of firm	2	1	1
4	Organisation Patten of firm; Objectives of firm; Ownership and Control of Firm;	1		
5	Location of firm;	1	1	1
6	Theories of location- Weber's Theory, Sargent Florence Theory	1	1	1
Unit II	Theoretical Framework	10		
7	The traditional structure, Conduct and Performance Approach	1	2	1
8	The modern Structure	1	2	1
9	The Welfare basis in Industrial Economics	1	2	1
10	The case against monopoly	1	2	1
11	The Williamson Trade-Off Conditions	2	2	1
UNIT III	Cost Theory and Capacity Utilization of Firms	15		
12	Theory of Cost and Production	1	2,3	1, 2
13	Efficiency and the Size of firms	1	2,3	
14	Effect of firm size on performance indicators	2	2,3	1, 2
15	Return to scale	1	2,3	1, 2
16	Capacity Utilization	1	2,3	1, 2
UNIT IV	Industrial Structure I	10		
17	The Industrial Concentration	1	4	2, 3
18	Its Derivation	1	4	2, 3
19	Characteristics of a Good Measure of Concentration	1	4	2, 3
UNIT V	Industrial Structure II	10		
20	The Herfindahl Index of Concentration	1	5	2,3
21	G-Firm Concentration Ratio	1	5	2,3
22	The Entropy Index and Linda Index	1	5	2,3
23	Competitiveness and other Alternative Theories	1	5	2,3
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		90%		40%		80%		70%	
	Understand										
Level 2	Apply	60%		10%		60%		20%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Industrial Economics and Concentration, Hay and Morris, Publisher: Oxford University Press 1991.
2. Industrial Economics, R. R. Barthwal, Publisher: Wiley Eastern Ltd 2010.
3. Theory of Industrial Economics, Clement G Krouse, Basil Blackwell Ltd 1990
4. Economic Theory of the Industry, Micheal Waterson, Cambridge University Press 1986.

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Economics of Innovation

Course Code	ECO 242	Course Category	Core Course (CC)			
			L	T	P	C
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Obtaining up to date knowledge on Science, Technology, and Innovation Studies
- Understanding the agenda of Economics of Innovation, as well as contemporary views on the interrelations between technological change and economic development.
- Using quality academic texts to develop and support argumentation.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Knowledge of the contemporary multifactor perspective on innovation	2	70%	65%
Outcome 2	Knowledge of the core macroeconomic dimensions of innovation and its link with economic development	2	70%	65%
Outcome 3	Knowledge of the theoretical underpinning of innovation policymaking.	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and	Modern Tool and ICT Usage	Society and Multicultural	Environment and	Moral, and Ethical	Individual and Teamwork	Communication Skills	Project Management	Self-Directed and Lifelong	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit I	Introduction	10	1	
1	Science, technology and innovation in the economic analysis	4	1	1, 2
2	Technology upgrading and economic catch-up / Middle income trap	3	1	1,2
3	Nature of innovation	3	1	1,2
4	International innovation	5	1	1, 2
Unit II	Innovation and development	15		
5	Innovation and the agenda of development studies	2	2	1, 3
6	Agents and process of innovation	4	2	1, 3
7	Genesis of innovation concept	4	2	1, 3
8	Innovation and Intellectual property rights	3	2	1, 3
UNIT III	Innovation and market characteristics	10		
9	Innovation, firm and market characteristics	5	2,3	1, 2
10	R&D organisations and universities in the innovation process	5	2,3	
11	Linkages, collaborative networks and open innovation	5	2,3	1, 2
UNIT IV	Measurement of innovation	10		
12	Measuring economic effects of R&D and innovation	5	4	2, 3
13	Dissemination of innovations	5	4	2, 3
14	Innovation, economic growth, economic convergence	5	4	2, 3
Total Learning hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		90%		40%		80%		70%	
	Understand										
Level 2	Apply	60%		10%		60%		20%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Fagerberg, J. The Oxford Handbook of Innovation Publisher: Oxford University Press, 2006.
2. Rosenberg, N., & Hall, B. H. (2010). Handbook of the Economics of Innovation (Vol. 1st ed). Amsterdam: North Holland.
3. Greenhalgh, C., & Rogers, M. (2010). Innovation, Intellectual Property, and Economic Growth. Princeton, N.J.: Princeton University Press.

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Economics of Corruption

Course Code	ECO 430	Course Category	Core Course (CC)	L	T	P	C
				4	0	0	4
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To introduce the basic concepts of economics of corruption.
- To understand how corruption act as a constraint on economic growth.
- To understand the causes and consequences of corruption.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the concepts of economics of corruption.	2	70%	65%
Outcome 2	Establish a relationship between corruption and economic growth.	2	70%	65%
Outcome 3	Identify the overall implication of corruption	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	3	3	2	1		2				2	3	2	2
Outcome 3	3	3	3	2	2			2				2	3	3	2
Course Average	3	3	3	3	2	1		2				2	3	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning Hours	CLOs Addressed	References Used
Unit I	Introduction and Essentials	15	1	
1	Rent-Seeking	4	1	1, 2
2	The Concept of Corruption	3	1	1,2
3	Definitions	3	1	1,2
4	Market Failure and Corruption	5	1	1, 2
Unit II	Corruption, Poor Governance and Institutional Structure	15		
5	Causes and Consequences of Corruption	2	2	1, 3
6	What do we know from a cross-section of countries?	4	2	1, 3
7	Democratic Institutions and Corruption	4	2	1, 3
8	Incentives and Constraints in politics, Bargaining for Bribes	3	2	1, 3
9	The Role of Institutions	2	2	1,3
UNIT III	Corruption and the Private Sector	15		
10	The Privatization of Rent Generating Industries and Corruption	5	2,3	1, 2
11	Corruption in Private sector	5	2,3	
12	Why private sector is likely to lead the next stage in the global fight against corruption	5	2,3	1, 2
UNIT IV	Corruption and Competition	15		
13	Fair Market as an Anti-Corruption Device	5	4	2, 3
14	Measurement of Corruption	5	4	2, 3
15	Corruption perception index and Estimation	5	4	2, 3
Total Learning Hours			60	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		90%		40%		80%		70%	
	Understand										
Level 2	Apply	60%		10%		60%		20%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Economics of corruption, JEAN CARTIER-BRESSON, Publisher: OECD Publications and Information Centre 2000.
2. International Handbook on the Economics of Corruption, Susan Rose-Ackerman, Henry R. Luce, Publisher: Edward Elgar Publishing, 2011.
3. Economics of Corruption, Arvind K. Jain, Springer-Verlag New York Inc 1998.

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Introduction to Financial Economics

Course Code	ECO 243	Course Category	OE				L	T	P	C
							3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To introduce students to financial economics
- To strengthen their understanding of the financial sector of the economy

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understand the basics of financial economics	2	80%	70%
Outcome 2	Evaluate the behaviour of investors under different market conditions.	5	70%	60%
Outcome 3	Understand the basics of money and capital markets	2	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	3	2	2				2	2	3	3	3	3
Outcome 2	3	3	3	3	2	2				2	2	3	2	2	2
Outcome 3	3	2	3	2	2	2				2	2	3	3	3	3
Average	3	3	3	3	2	2				2	2	3	3	3	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit 1	INTRODUCTION TO FINANCIAL MARKETS	7		
	What is finance?	1	1	1
	types of financial markets	2	1	1
	financial assets and their types	2	1	1
	returns on assets; types of returns; fixed and random asset returns	2	1	1
Unit 2	INTEREST RATES	9		
	Basic theory of interest	2	1,2	2
	discounting and present value	1	1,2	2
	evaluating interest rates	1	1,2	2
	fixed-income securities; bond prices and yields	2	3	2
	the term structure of interest rates; yield curves	2	3	2
	spot rates and forward rates	1	3	2
Unit 3	ANALYSIS OF RETURNS ON ASSETS	12		
	Risk-free returns	1	2	2
	portfolios of assets	1	2	2
	portfolio mean and variance; feasible combinations of mean and variance	5	2	2
	mean-variance portfolio analysis: The Markowitz model; two-fund theorem.	5	2	2
Unit 4	CAPITAL ASSET PRICING MODEL	9		
	The capital market line	1	2	2
	the capital asset pricing model; the beta of an asset and of a portfolio	3	1,2	2
	security market line	3	1,2	2
	applications of CAPM.	2	1,2	2
Unit 5	THE DERIVATIVE MARKET	9		
	Introduction to derivatives and options;	2	3	3
	forward and futures contracts; forward and future prices	1	3	3
	types of futures; expiration of forward and futures	1	3	3
	hedging; option markets; call and put options	2	3	3
	Swaps	2	3	3
	introduction to pricing of options – Black-Scholes-Merton formula.	1	3	3
Total Learning hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	70%	50%	50%	50%	50%
	Understand					
Level 2	Apply					
	Analyse					
Level 3	Evaluate	30%	50%	50%	50%	50%
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. F. S. Mishkin and S. G. Eakins, Financial Markets and Institutions, Pearson Education, 6th edition, 2009
2. David G. Luenberger, Investment Science, Oxford University Press, USA, 1997.
3. John C. Hull, Options, Futures and Other Derivatives, Pearson Education, 6th edition, 2005

Other Resources

1. Enter Data

Course Designers

1. Dr. Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, School of Liberal Arts and Social Sciences

Fundamentals of Time-Series

Course Code	ECO 244	Course Category	Open Elective (OE)				L	T	P	C
			3	0	0	3				
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To understand fundamental concepts of time-series models with practical applications.
- To introduce the basics of Cointegration and Error-Correction Models.
- To introduce the basics of Box–Jenkins (BJ) Methodology.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Apply various Time-series models.	2	70%	65%
Outcome 2	Apply various Cointegration and Error-Correction Models.	2	70%	65%
Outcome 3	Gain working knowledge of Box–Jenkins (BJ) Methodology.	2	70%	65%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit I	Introduction	12 hrs		
1	Components of Time series	03	01	01,02
2	Determination and Elimination of Trends	03	01	01,02
3	Measurement of Seasonality	03	01,03	01,02
4	Cyclical and Random Components	03	01,03	01,02
Unit II	Stationary Time-series Models	15 hrs		
5	Stationarity	02	02	01, 02
6	Autocorrelation Function	02	02	01, 02
7	Partial Autocorrelation Function	02	02	01, 02
8	Test of Stationarity	03	02,03	01, 02
9	AR, MA, and ARIMA Modelling of Time Series Data	03	02,03	01, 02
10	The Box–Jenkins (BJ) Methodology	03	02.03	
Unit III	Cointegration and Error-Correction Models	18 hrs		
11	Linear Combination of Integrated Variables	03	01,03	01, 02
12	Cointegration and Common Trends	04	01,03	01, 02
13	Testing of Cointegration: The Engle Granger Methodology	03	01,03	01, 02
14	Johansen Methodology	04	01,03	01, 02
15	Error-Correction and ADL Tests	04	01,03	01, 02
Total Learning hours		45 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (15%)		Mid-1 (15%)		CLA-2 (10%)		CLA-3 (10%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		90%		40%		80%		70%	
	Understand										
Level 2	Apply	60%		10%		60%		20%		30%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Gujarati, D.N. (2004) Basic Econometrics. 4th Edition, McGraw-Hill Companies.
2. Enders, W. (2014) Applied Econometric Time Series. 4th Edition. John Wiley, New York

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. J Vineesh Prakash
2. Expert Reviewers : Dr Raja Durai (School of Economics)
3. Prof. Maria Saleth (MIDS, Chennai)

Central Banks and Monetary Policy

Course Code	ECO 245	Course Category	Core Elective				L	T	P	C
							3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To introduce students to Central Banks and their functions.
- To highlight the importance of Monetary Policy and study in detail.
- To study and examine the interconnection between Central Banks, Monetary Policy and Financial Markets

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To state and explain the importance of Central Banks, their functions, and the tools	2	70	70
Outcome 2	To study and explain Monetary Policy in detail, evaluate the current Monetary Policy, and application of Monetary policies to problems	4	70	70
Outcome 3	To analyse the relation between Central banks, Monetary Policy and Financial Markets	3	70	70
Outcome 4	Application of appropriate policy to hypothetical situations/problems	3	70	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3											3			
Outcome 2	3											3			
Outcome 3	3	3	3									3	3	3	3
Outcome 4	3	3	3	2	2							3	3	3	3
Cover Average	3	3	3	2	2							3	3	3	3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit 1	UNIT I: Introduction to Monetary Policy	12		
	Introduction to money and the financial system	4	1,2	1
	The role of money in the economy	4	1,2	1
	The role of Central Banks, structure of Central Banks, Central Bank balance sheet	4	1,2	1,2
Unit 2	UNIT II: Conducting Monetary Policy	16		
	The monetary base and money supply, the money multiplier, Monetary policy objectives	4	1,2	1,2,3
	Quantity theory of money, demand for money	4	1,2	1,2
	Output and inflation in the long run	4	1,2,3	1
	Aggregate demand, aggregate supply, and monetary policy	4	1,2,3	1
Unit 3	UNIT III: Exchange rate and Monetary Policy Transmission	12		
	Exchange rate management by the Central Bank, exchange rate regimes: fixed, flexible, managed, the costs, benefits, and risks of fixed exchange rates	6	1,2,3	1
	Sources of fluctuations in output and inflation, monetary policy transmission mechanism	6	1,2,3,4	1,2
Unit 4	UNIT IV: Challenges of Monetary Policy and Unconventional Monetary Policy	5		
	Challenges of conducting monetary policy, influence of the 2008 crisis on monetary policy	2	3,4	1
	Introduction to unconventional monetary policy	3	3,4	1
Total Learning hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	75	75	70	70	70
	Understand					
Level 2	Apply	25	25	30	30	30
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Cecchetti, S. and Schoenholtz (2017) "Money, Banking and Financial Markets", McGraw-Hill Education International Edition, Fifth Edition
2. Ritter, L., W. Silber, and G. Udell (2014). Principles of Money, Banking, and Financial Markets. 12th edition, Pearson, New York, 2014
3. Svensson, L.E.O. (1999). "Inflation targeting as a monetary policy rule," Journal of Monetary Economics, Elsevier, vol. 43(3), pages 607-654, June.

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Evolution of Money and Banking

Course Code	ECO 246	Course Category	Core Course (CC)			
			L	T	P	C
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To introduce concepts in money and banking.
- Exposes students to the theory and functioning of the monetary and financial sectors.
- It discuss the interest rate concepts as well.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Discuss the economic principles underlying the working of financial institutions.	2	70%	70%
Outcome 2	Describe the working of central banks conducting monetary policy.	1	70%	70%
Outcome 3	Apply models on monetary and macroeconomic problems.	3	70%	70%
Outcome 4	Conduct a theoretical analysis of given baking problems.	2	70%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	2	3	2	3	1			2		2	3	2	2	3
Outcome 2	3	2	1	2	3	1			2		2	3	2	3	1
Outcome 3	3	2	3	2	3	1			2		2	3	2	3	3
Outcome 4	3	2	1	2	3	1			2		2	3	2	1	1
Course Average	3	2	2	2	3	1			2		2	3	2	2	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
Unit I	Money	15		
	Introduction	2	1	1
	Theoretical and empirical approaches to money definition	2	1	1
	Functions	3	1	1
	Different Approaches	4	1	1
	Measurements	2	1	1
	Theories of money supply determination	2	1	1
Unit II	Money Financial Institutions, Markets, Instruments and Financial Innovations	15		
	Role of financial markets and institutions	3	1	1
	The problem of asymmetric information	2	1	1
	Adverse selection and moral hazard financial crises	3	1	1
	Money and capital markets	2	1	1
	organization, structure, and reforms in India,	2	1	1
	financial derivatives, and other innovations	3	1	1
Unit III	Banking System and Central Banking and Monetary Policy	15		
	Balance sheet and portfolio management	1	4	1,2
	Indian banking system: Changing role and structure; banking sector reforms	4	4	1,2
	Functions	2	4	1,2
	Balance sheet; goals, targets, indicators, and instruments of monetary control	4	4	1,2
	Monetary management in an open economy;	2	4	1,2
	current monetary policy of India.	2	4	1,2

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	40%		60%		40%		60%		40%	
	Understand										
Level 2	Apply	60%		40%		60%		40%		60%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Recommended Resources

1. Mishkin Frederick S (2015), The Economics of Money, Banking and Financial Markets
2. L. M. Bhole and J. Mahukud, Financial Institutions and Markets, Tata McGraw Hill, 5th edition, 2011

Other Resources

1. R.B.I. Bulletin, Annual Report and Report on Currency and Finance (latest).

Course Designers

1. Dr Kamal Sai Sadharma Erra, Assistant Professor, Department of Economics, SRM University- AP.

Environmental Economics

Course Code	ECO 247	Course Category	Core			
			L	T	P	C
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)	Departmental Elective	Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To understand the economic perspectives on the challenging environmental issues.
- To understand human economy and environmental linkages.
- To understand the public goods, externalities, and market failure.
- To examine environmental policy measures and introduction to environmental valuation.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To state and explain the economic perspectives on the challenging environmental issues, linkages, policy measures	2	70	70
Outcome 2	To apply the economic perspectives to real life situations	3	60	60
Outcome 3	To identify and analyse real-life examples as externalities and market failure	4	60	60
Outcome 4	To solve for environmental valuation	3	70	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3						3	1					1		
Outcome 2	3	3	3			1	3	1	2			2	3		3
Outcome 3	3	3	3			1	3	1	2			2	3		3
Outcome 4	3	3					3						2		
Course Average	3	3	3			1	3	1	2			2	2		3

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References Used
UNIT I	Introduction	4		
	Nature and scope, overview of environmental issues, concept of ecological economics	2	1	1,4
	human economy and environmental linkages, national income and environmental accounting, economic perspectives on the environment	2	1	1,4
UNIT II	Public goods and Externalities	9		
	Environmental externalities, market inefficiencies	3	1	1,4
	resource allocation, common property, tragedy of commons and public goods,	3	1	1
	Intertemporal allocation, good vs bad and introducing property rights issue	3	1	1
UNIT III	Environmental Policy and Valuation	20		
	Theory of environmental policy, Cost benefit analysis, environmental valuation methods	4	1,3	1,2
	Stated preference, revealed preference and production function approach	4	1,2	1,2
	Environmental regulation, Command and Control versus Economic instruments,	4	1,2	1,2
	Coase theorem, Pigouvian tax	4	1,2	1,2
	Global managing of renewable energy resources, energy and environment interaction, trade, and environmental valuation.	4	1,3	2,3
UNIT IV	Sustainable Development and Global climate change	12		
	Introduction to SDGs, Weak vs Strong sustainability	3	1,4	2
	Economics of global climate change, sustainable development metrics	3	1,4	2
	Environmental laws and institutions	2	4	1
	Environment and its impact on biosphere	2	4	1
	Environmental institutions, and gross root movements	2	4	1
Total Learning hours			45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	CLA-3 (15%)	
Level 1	Remember	80%	70%	70%	60%	60%
	Understand					
Level 2	Apply	20%	30%	30%	40%	40%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Charles Kolstad, Intermediate Environmental Economics, Oxford University Press, 2nd edition, 2010.
2. A course in environmental economics: Theory, policy and practice, Phaneuf and Requate, Cambridge University Press
3. Environmental Economics: An Introduction, Barry C. Field and Martha K. Field, McGraw Hill
4. Robert N. Stavins (ed.), Economics of the Environment: Selected Readings, W.W. Norton, 5th edition, 2005

Other Readings

1. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003.
2. Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey,|| Journal of Economic Literature, Volume 30:675-740.

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Contemporary Economic Issues

Course Code	ECO 248	Course Category	Core Course			
			(CC)	L	T	P
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- To enhance students' analytical skills to interpret and analyze the Economic Survey and Union Budget effectively
- To provide a comprehensive understanding of fiscal concepts, including deficits, receipts, and taxation, emphasizing the impact on the economy
- To enable students to apply insights from the Economic Survey to analyze current and past policy emphasis in the Indian economic context

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Interpret and analyse the Economic Survey and Union Budget, demonstrating a refined ability to extract relevant information	4	80%	70%
Outcome 2	Apply fiscal concepts, such as deficits, receipts, and taxation, to assess their impact on the economy, fostering a practical understanding	3	80%	70%
Outcome 3	Apply insights from the Economic Survey to critically analyse and understand current and past policy emphasis, particularly in the context of fiscal and revenue deficits	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1		13 hrs		
1	Concepts- Fiscal policy, areas of government spending in India	02	01	03, 02
2	Capital and revenue expenditure, plan and non-plan expenditures	02	01	03, 02
3	Deficits (fiscal, primary, revenue), impact of fiscal deficits on the economy	02	01	03, 02
4	Capital receipts, revenue receipts, tax and non-tax revenue	02	01	03,02
5	Direct and indirect taxes	02	01	03, 02
6	Need for rationalization of tax structure	02	01	03, 02
7	Goods and Services Tax (GST)	01	01	03,02
Unit 2		8 hrs		
8	The Economic survey	02	02	02, 05
9	Analysis of current and past policy emphasis	06	02	02, 05
Unit 3		12 hrs		
10	The union Budget-Need for the budget	02	03	02, 07
11	Understanding the process of budget making in India	02	03	02, 07
12	Analysis of fiscal and revenue Deficits	02	03	02, 07
13	Analysis of sources of revenue and expected growth in revenue	02	03	02, 07
14	Tax simplification, improvement in administration	02	03	02, 07
15	Expansion of tax net and other measures to improve revenue receipts	02		
Unit 4		12 hrs		
16	Current Issues in the Economy	03	03	02,05
17	Contemporary Issues in Different sectors	03	03	02,05
18	Agriculture, Manufacturing and Service Sector	03	03	02, 05
19	Monetary Issues	03	03	02, 05
Total Learning hours		45 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Centre for Budget and Governance Accountability. Recent reports.
2. Chakraborty, P. (2015). Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (ed.): Macroeconomics. Oxford University Press.
3. Dasgupta, D., De, S. (2012). Fiscal deficit. In The new Oxford companion to economics in India. Oxford University Press.
4. Kapila, U. (2016). Fiscal and budgetary developments in Indian economy since independence. Academic Foundation.
5. Ministry of Finance. Economic survey (latest).
6. Ministry of Finance. Finance Commission report (latest).
7. Ministry of Finance. Union Budget

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr Manish Kumar
2. Expert Reviewers: Dr Raja Durai (School of Economics)
3. Pro. f. Maria Saleth (MIDS, Chennai)

The Art and Science of Economic Policy

Course Code	ECO 249	Course Category		L	T	P	C
				3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To understand the fundamental principles and concepts of economic policy.
- To analyze the role of economic policy in shaping the macroeconomic environment.
- To evaluate the impact of economic policies on various sectors of the economy.
- To develop critical thinking skills in assessing the effectiveness of economic policies.
- To apply theoretical frameworks to real-world economic policy issues

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Demonstrate a comprehensive understanding of the fundamental principles and concepts of economic policy.	2	80%	70
Outcome 2	Analyze and evaluate the impact of macroeconomic policies on the overall economic environment.	2	80%	70%
Outcome 3	Examine the tools and implementation of monetary and fiscal policies and assess their effectiveness in achieving economic goals.	2	80%	70%
Outcome 4	Evaluate the role of exchange rate policies and their implications on international trade and economic stability.	2	80%	70
Outcome 5	Critically assess the impact of industrial, agricultural, and trade policies on specific sectors of the economy.	2	80%	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	3	2	1							2	3	1	2
Outcome 2	3	3	2	3	3	1			2			2	2	2	2
Outcome 3	3	3	3	3	2				2			3	3	1	3
Outcome 4	2	3	3	3	2	1						2	2	2	2
Outcome 5	2	2	2	2	2				2			2	2	1	2
Average	3	3	3	3	2	1			2			2	2	2	2

Course Unitization Plan

Unit No.		Required Learning hours	CLOs Addressed	References
Unit I	Introduction to Economic Policy	08		
1	Definition and scope of economic policy	2	1,2	1
2	Historical evolution of economic policy	2	1,2	1
3	Objectives and goals of economic policy	2	1,2	1
4	Role of government in economic policy	2	1,2	1
Unit II	Macroeconomic Policy	10		
5	Monetary policy: objectives, tools, and implementation	4	2	3,4,5,6
6	Fiscal policy: theories and practices, Exchange rate policy and its implications	3	2	3,4,5,6
7	Inflation targeting and its challenges	3	2	3,4,5,6
UNIT III	Sectoral Policies	08		
08	Industrial policy and its impact	2	1, 3	12,13,14
09	Agricultural policy and rural development	2	1, 3	09,10,11
10	Trade policy and globalization	2	1, 3	7,8
11	Environmental and sustainable development policies	2	1, 3	2
UNIT IV	Social and Welfare Policies	10		
12	Education and health policies	2	4	1,2,3
13	Poverty alleviation programs	3	4	1,2,3
14	Social security and inclusive growth	3	4	1,2,3
15	Gender-sensitive economic policies	2	4	1,2,3
Unit V	Evaluation of Economic Policies	09		
17	Criteria for evaluating economic policies	3	5	1,2,3
18	Case studies on successful and unsuccessful policies	3	5	1,2,3
19	Policy challenges and lessons learned	3	5	1,2,3
	Total	45		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

TEXTBOOKS/REFERENCE

1. Mankiw, N. G. (2015). Principles of Economics.
2. Stiglitz, J. E., & Walsh, C. E. (2016). Economics (4th ed.).
3. Dornbusch, R., Fischer, S., & Startz, R. (2011). Macroeconomics.
4. Arvind Subramanian and Josh Felman (2021) India's Stalled Rise-How the State Has Stifled Growth, published in foreign affairs on 14.12. 2021
5. Chatterjee, Shoumitro, and Arvind Subramanian. India's inward (re) turn: Is it Warranted? Will it Work? Ashoka Center for Economic Policy, Policy Paper 01 (2020).
6. Mohan, Rakesh, and Partha Ray. Indian financial sector: Structure, trends and turns. International Monetary Fund, 2017.
7. Trade Policy Review (prepared by secretariat/govt, WTO 2020) chapter 2: Trade and Investment Regimes.
8. Harsh vardhan Singh - Trade Policy Reforms since 1991, working paper 02, Brookings India., (excluding annexures starting from pg. 47 & onwards).
9. Dev, M. (2018) Transformation of Indian Agriculture? Growth, Inclusiveness and Sustainability. Working paper 2018-026, Indira Gandhi Institute of Development Research, Mumbai.
10. Ramesh Chand, Raka Saxena, Simmi Rana (2015) Estimates and Analysis of Farm Income in India, 1983-84 to 2011-12, Economic & Political Weekly May 30, 2015, Vol. 1 No 22
11. Acharya, S., & Mehrotra, S. (2020). The Agricultural Market Reforms: Is there a trade-off between efficiency and equality? working paper series, Institute of human development.
12. Nagaraj, R. (2017). Economic Reforms and Manufacturing Sector Growth. Economic and Political Weekly.
13. Chakraborty J. Nagaraj, R. (2020). Has India Deindustrialised Prematurely? A Disaggregated Analysis. Economic and Political Weekly.
14. Mukherjee, Deeparghya (2021) Is India Moving Up the Global Value Chain? A Sectoral Study of Indian Exports. Economic and Political Weekly, 56(20), 12-15.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Entrepreneurship in Emerging Economies

Course Code	ECO 250	Course Category				
			L	T	P	C
			3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)		
Course Offering Department	Economics	Professional / Licensing Standards				

Course Objectives / Course Learning Rationales (CLRs)

- Impart the essential lessons in entrepreneurship relevant for twenty-first century and emerging economies.
- Understand the context and importance of emerging economies and role of entrepreneurship in these economies.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Understanding of the world economy in general and emerging economy in particular	3	80%	70%
Outcome 2	Importance of entrepreneurship in modern economy	3	80%	70%
Outcome 3	Entrepreneurship in action, concepts, and examples	2	80%	70%
Outcome 4	Relevance of entrepreneurship tailor made for emerging economies	3	80%	70%

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Engineering Knowledge	Problem Analysis	Design and Development	Analysis, Design and Research	Modern Tool and ICT Usage	Society and Multicultural Skills	Environment and Sustainability	Moral, and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Project Management and Finance	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 2	3	3	2	2	1				2	2	1	2	3	3	2
Outcome 3	3	3	2	2	2				2	2	1	2	3	3	2
Outcome 4	3	3	2	2	2				2	2	1	2	3	3	2
Course Average	3	3	2	2	2				2	2	1	2	3	3	2

Course Unitization Plan

Unit No.	Unit Name	Required Learning hours	CLOs Addressed	References
Unit 1	Introduction	08 hrs		
1	World of entrepreneurs	02	01	01, 02, 03
2	Working definition of entrepreneurship	02	01	01, 02, 03
3	What makes entrepreneurs so important and valuable?	02	01	01, 02, 03
4	Entrepreneurship in the emerging economies	02	01	01, 02, 03
Unit 2	Opportunities, Mindset, and Idea Generation	12 hrs		
5	Recognizing and shaping opportunities	03	01	01, 02, 03
6	The Timmons Model	03	01	01, 02, 03
7	Entrepreneurial Mindset	02	01	01, 02, 03
8	Overcoming Fear and dilemmas	02	01	01, 02, 03
9	Brainstorming Ideas	02	01	01, 02, 03
Unit 3	Validation and Lean Startup	15 hrs		
10	Validating ideas	02	02	01, 02, 03
11	Bootstrapping	04	02	01, 02, 03
12	Tips and lessons from entrepreneurs	05	02	01, 02, 03
13	Case studies	04	02	01, 02, 03
Unit 4	Environment and effectuation	10 hrs		
14	Business environment in emerging economies	02	03	01, 02, 03
15	Supply and demand situation	02	03	01, 02, 03
16	Business plan	03	03	01, 02, 03
17	Effectuation	03	03	01, 02, 03
Total Learning hours		45 hrs		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (60%)				End Semester Assessments (40%)
		CLA-1 (15%)	Mid-1 (15%)	CLA-2 (15%)	CLA-3 (15%)	
Level 1	Remember	40%	40%	40%	40%	40%
	Understand					
Level 2	Apply	60%	60%	60%	60%	60%
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Learning Assessment (Macro) - Theory

Question Difficulty	Bloom's Level of Cognitive Task	Continuous Learning Assessments (50%)			End Semester Exam (50%)
		Experiments (20%)	Record / Observation Note (10%)	Viva + Model (20%)	
Level 1	Remember				
	Understand				
Level 2	Apply				
	Analyse				
Level 3	Evaluate				
	Create				
Total		100%	100%	100%	100%

Recommended Resources

1. Timmons, J. A. (2010), New Venture Craction: Entrepreneurship for 21st Century, McGraw Hill.
2. 2. Cohen, D. and Feld, B. (2019). Do More Faster, Wiley.
3. 3. Thiel, P. (2014), Zero to One, Crown Business

Other Resources

1. Enter Data

Course Designers

1. Internal (Institutional) Subject Matter Experts: Dr. Manish Kumar
2. Expert Reviewers from Institutes of National Importance / Institutes of International Repute
3. Dr. Raja Durai, School of Economics
4. Prof J Maria Saleth, MIDS, Chennai

UNDERSTANDING OF MARKETS AND ECONOMY

Course Code	ECO 251	Course Category		L	T	P	C
				3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To educate students on the fundamental concepts of an economy.
- The aim is to introduce the concept of individual decision making and consumer behaviour.
- To understand the organization of an economy.
- What is the value of the agricultural sector to the Indian economy?
- To acquire knowledge of the fundamental principles of money and banking in India.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Analyze real-life situations by thinking rationally and demonstrating how economic concepts can be applied.	2	80%	70%
Outcome 2	In the given situation, students will be able to comprehend how consumers maximize their satisfaction.	2	80%	70%
Outcome 3	It will help to understand the categories of all activities in three sectors of the economy and their importance.	3	80%	70%
Outcome 4	Familiarize students with the functioning of money and the functioning of the banking sectors in an economy.	2	80%	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)													
	Scientific and Disciplinary	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Life Long Learning	PSO 1	PSO 2
Outcome 1	3	3	3	2	1						2	3	1	2
Outcome 2	3	3	3	3	3	1		2			2	3	2	2
Outcome 3	3	3	3	3	2			2			3	3	1	3
Outcome 4	3	3	3	3	2	1		3			2	3	2	2
Outcome 5	3	2	3	3	2			2			2	3	1	3
Course Average	3	3	3	3	2	1		2			2	3	2	2

Course Unitization Plan

Unit No.		Required Learning hours	CLOs Addressed	References
Unit I	Introduction	10		
1	Introduction to Economics	2	1,2	1
2	Central Problem of Economics	3	1,2	1
3	Trade-off, Opportunity Cost	3	1,2	1
4	Circular Flow of Income	2	1,2	1
Unit II	Market	08		
5	Households, Corporates and Government	2	2	1
6	Law of Demand	2	2	1
7	Law of Supply	2	2	1
8	Market Equilibrium	2	2	1
UNIT III	Economy	10		
09	Composition of an economy	2	1, 3	4,5
10	Five years planning	1	1, 3	4,5
11	Economic reforms	1	1, 3	4,5
12	Public sector and disinvestment	2	1, 3	4,5
13	Labour reforms	2	1, 3	4,5
14	Industrial Sickness and Remedial Measures	2	1, 3	4,5
UNIT IV	Agrarian Economy	11		
15	Nature and Characteristics	1	4	4,5
16	Cropping Patterns	1	4	4,5
17	Inputs and Output	1	4	4,5
18	Land Reforms	1	4	4,5
19	Green Revolution	1	4	4,5
20	Agricultural Investment	1	4	4,5
21	Agricultural Prices and Subsidies	1	4	4,5
22	Food Security in India	1	4	4,5
23	Agricultural Labour	1	4	4,5
24	WTO and Indian	1	4	4,5
25	Recent Agricultural Policies	1	4	4,5
Unit V	Money and Banking	6		
26	Indian Banking Sector and Inflation	2	5	4,5
27	Commercial Banking in India	1	5	4,5
28	Reserve Bank of India	1	5	4,5
29	Money and capital market	1	5	4,5
30	Price trends in India	1	5	4,5
	Total Learning Hours	45		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

TEXTBOOKS/REFERENCE

- N. Gregory Mankiw (2015), Principles of Economics, 7th Edition, Cengage Learning India.
- Karl E. Case, Ray C. Fair and E. Oster Sharon (2017), Principles of Economics, 12th Edition, Pearson Education.
- Robert S. Pindyk and D.L. Rubinfeld, (2017), Microeconomics, 8th Edition, Pearson Education.
- V.K Puri and S.K Misra (2022), Indian Economy, 39th Revised Edition, Himalaya Publishing House.
- Ramesh Singh (2022), Indian Economy, 14th Edition, McGraw Hill India.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Economic Development of India

Course Code	ECO 252	Course Category		L	T	P	C
				3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)			
Course Offering Department	Economics	Professional / Licensing Standards					

Course Objectives / Course Learning Rationales (CLRs)

- To educate students about the development process of India.
- The aim of this course is to analyse significant changes in economic indicators and policy debates in India during the post-Independence period using appropriate analytical frameworks, with an emphasis on paradigm shifts and turning points.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	Analyze real-life situations by thinking rationally and demonstrating how economic concepts can be applied.	1	-	-
Outcome 2	In the given situation, students will be able to comprehend how consumers maximize their satisfaction.	2	80%	70%
Outcome 3	It will help to understand the categories of all activities in three sectors of the economy and their importance.	2	80%	70%
Outcome 4	Familiarize students with the functioning of money and the functioning of the banking sectors in an economy.	2	80%	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3						3	1					1		
Outcome 2	3	3	3			1	3	1	2			2	3		3
Outcome 3	3	3	3			1	3	1	2			2	3		3
Outcome 4	3	3					3						2		
Course Average	3	3	3			1	3	1	2			2	2		3

Course Unitization Plan

Unit No.		Required Learning hours	CLOs Addressed	References
Unit I	Introduction	9		
1	Economic background of India before independence	3	1	1
2	The journey of India after independence,	3	1	1
3	Success or failure of economic plan or policies	3	2	1
Unit II	Before Liberalization	8		
4	Plan period, focus areas	2	2	2, 3
5	Sectoral performance	1	2	2, 3
6	Economic growth and development indicators	2	2	2, 3
7	Food security	1	2	2, 3
8	Inflation and unemployment,	1	2	2, 3
9	Challenges and lessons	1	2	
UNIT III	After Liberalization	8		
10	Situation leading to liberalization	1	2	2, 3
11	Reform measures	2	2	2, 3
12	Fiscal and monetary policy,	1	2	2, 3
13	Impact on economic growth and development	1	2	2, 3
14	Cost and benefits of liberalization,	1	2	2, 3
15	Infrastructure, institutional changes	1	2	
16	Joining of WTO	1	2	
UNIT IV	India after Global Financial Crisis	20		
17	Major changes in contemporary India and the world	2	1, 2	1,4
18	Policy and reforms	3	1, 2	1,4
19	Structural changes	2	1, 2	1,4
20	Industrial policy,	3	1, 2	1,4
21	Trade openness,	2	1, 2	1,4
22	Poverty and inequality	3	1, 2	1,4
23	Productivity and innovation,	2	1, 2	1,4
24	comparison, and place in global economy.	3	1, 2	1,4
	Total Learning Hours	45		

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)								End Semester Exam (50%)	
		CLA-1 (10%)		Mid-1 (15%)		CLA-2 (10%)		Mid-2 (15%)			
		Th	Prac	Th	Prac	Th	Prac	Th	Prac	Th	Prac
Level 1	Remember	60%		60%		40%		40%		50%	
	Understand										
Level 2	Apply	40%		40%		60%		60%		50%	
	Analyse										
Level 3	Evaluate										
	Create										
Total		100%		100%		100%		100%		100%	

Readings

- Joshi, V. & Littlr, I., M., D. (1996). India's economic reforms: 1991-2001, Oxford University Press.
- Rakshit, M. (2011). Macroeconomics of Post Reform India, Oxford University Press.
- V.K Puri and S.K Misra (2022), Indian Economy, 39 th Revised Edition, Himalaya Publishing House.
- Ramesh Singh (2022), Indian Economy, 14 th Edition, McGraw Hill India.

Recommended Resources

1. Enter Data

Other Resources

1. Enter Data

Course Designers

1. Enter Data

Trade and Globalization

Course Code	ECO 253	Course Category	Core				L	T	P	C
							3	0	0	3
Pre-Requisite Course(s)		Co-Requisite Course(s)		Progressive Course(s)						
Course Offering Department	Economics	Professional / Licensing Standards								

Course Objectives / Course Learning Rationales (CLRs)

- To understand the need and scope of Game Theory.
- To understand the fundamental concepts underlying static and dynamic games.
- Application of the concepts of Game Theory to real-life situations.

Course Outcomes / Course Learning Outcomes (CLOs)

	At the end of the course the learner will be able to	Bloom's Level	Expected Proficiency Percentage	Expected Attainment Percentage
Outcome 1	To state and explain the basics of trade policy and the economic effects of various trade policy instruments.	2	70	70
Outcome 2	Analyse trade-related issues using economic and trade theoretical models.	4	70	70
Outcome 3	To state and explain the relevance of trade theories to globalisation	2	70	70
Outcome 4	Application of trade and globalisation theories to real-life situations	4	70	70

Course Articulation Matrix (CLO) to Program Learning Outcomes (PLO)

CLOs	Program Learning Outcomes (PLO)														
	Scientific and Disciplinary Knowledge	Analytical Reasoning and Problem Solving	Critical and Reflective Thinking	Scientific Reasoning and Design Thinking	Research Related Skills	Modern Tools and ICT Usage	Environment and Sustainability	Moral, Multicultural and Ethical Awareness	Individual and Teamwork Skills	Communication Skills	Leadership Readiness Skills	Self-Directed and Lifelong Learning	PSO 1	PSO 2	PSO 3
Outcome 1	3											2			
Outcome 2	3	3										2	3	3	2
Outcome 3	3											2			2
Outcome 4	3	3							3			2	3	3	
Course Average	3	3							3			2	3	3	2

Course Unitization Plan

Unit No	Unit Name	Learning hours	CLO's Addressed	Reference
UNIT I	Trade Theories	16		
	Contemporary trade theories.	4	1	1,2
	Technology, factor abundance, comparative advantage, competitive advantage	4	1	1,2
	Partial and general equilibrium analysis, trade policy, intra-industry trade	4	1,2	1,2
	Foreign direct investments, gravity, international firms and international interactions	4	1,2	1,2
UNIT II	Understanding Globalization	6		
	The concept of 'globalization', Is globalization new?	2	2	2,3
	Historical perspectives and evolution And the dimensions of globalization	4	1	2,3
UNIT III	The Globalization of Trade	12		
	The economic theory of trade integration	2	2,3	2,4
	The distributional consequences of trade: inequality and power	2	2,3,4	2,3,4
	The political consequences of trade: efficiency vs. compensation	2	3,4	3,4
	Trade and development strategies: import substitution vs. export promotion	2	3,4	3,4
UNIT IV	The Globalization of Financial Flows and Development	11		
	The logic of financial globalization: motives for liberalizing	3	3,4	3,4
	The domestic economic consequences of financial integration	2	3,4	3,4
	World development patterns: divergence and convergence	2	3,4	3,4
	The political economy of aid: the donors. Who gives aid and why?	2	4	3,4
	The political economy of aid: the recipients.	2	3,4	3,4
	Total Learning Hours		45	

Learning Assessment

Bloom's Level of Cognitive Task		Continuous Learning Assessments (50%)				End Semester Exam (50%)
		CLA-1 (10%)	Mid-1 (15%)	CLA-2 (10%)	Mid-2 (15%)	
Level 1	Remember	80	70	70	60	60
	Understand					
Level 2	Apply	20	30	30	40	40
	Analyse					
Level 3	Evaluate					
	Create					
Total		100%	100%	100%	100%	100%

Recommended Resources

1. Caves, R. E., Frankel, J. A., & Jones, R. W. (1993). World Trade and Payments: An Introduction (ed.).
2. Krugman, P. R. (2018). International trade: Theory and policy. Pearson.
3. Campbell, Patricia J., Aran McKinnon, and Christy R: Stevens. 2010. An Introduction
4. to Global Studies. Wiley-Blackwell.
5. Ritzer, George. 2010. Globalization: A Basic Text. Wiley-Blackwell.

Other Resources

1. Enter Data

Course Designers

Enter Data