

**(Abstract)**

FYIMP in Social Science with specialization in Economics -offered by the Dept.of Economics , Dr. Janaki Ammal Campus, Palayad - Scheme & Syllabus - Approved and Implemented w.e.f. 2025 Admission -Orders- issued

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**ACADEMIC C SECTION**

ACAD C/ACAD C1/18162/2025 (I)

Dated: 08.01.2026

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Read:-1. U. O No ACAD D/ACAD D5/23315/2023 (I) dated 22.02.2025  
2. Circular No. ACAD C/ACAD C3/12564/2023 dated 05.03.2025  
3. E mail dated 28.04.2025 from the Head, Dept. of Economics  
4. E mail dated 18.08.2025 from the Dean , Faculty of Humanities.  
5. E mail dated 08.10.2025 from the Head, Dept. of Economics  
6. E mail dated 02.12.2025 from the Dean , Faculty of Humanities  
7. Orders of Vice Chancellor in file of even no, dated 28.10.2025  
8. Minutes of the meeting of Standing Committee of Academic Council held on 05.12.2025 .

**ORDER**

1. The proposal to start the **Five Year Integrated Master's Programme in Social Science with specialization in Economics** at the Department of Economics, Dr. Janaki Ammal Campus, Palayad, Kannur University, **with effect from the 2025 admission**, was approved, vide the paper read as item (1) above.
2. Subsequently, directions were issued to the Heads of the Departments concerned, vide the paper read as item (2) above, to submit the **entire syllabus (all semesters)** of the FYIMP in Social Science with specialization in Economics to be offered by their Department **with effect from the academic year 2025-26**, along with the minutes of the Department Council.
3. Accordingly, the Head, Department of Economics, vide the paper read as item (3) above, submitted the **scheme and syllabus** of the FYIMP in Social Science with specialization in Economics, along with the minutes of the meeting of the Department Council, for approval and implementation **with effect from the academic year 2025-26**.
4. The scheme and syllabus of the above programme were forwarded to the Dean, Faculty of Humanities, for verification, and the Dean, vide the paper read as item (4) above, furnished his observations/remarks on the same.
5. Subsequently, the observations/remarks of the Dean, Faculty of Humanities, were forwarded to the Head, Department of Economics, and the Head, Department of Economics, vide the paper read as item (5) above, submitted the **revised scheme and syllabus** of the FYIM Programme in Social Science with specialization in Economics, after incorporating the





comments and suggestions of the Dean, for approval and implementation **with effect from 2025 admission.**

6. The revised scheme and syllabus of the FYIM Programme in Social Science with specialization in Economics were thereafter forwarded to the Dean, Faculty of Humanities, as highlighted, and the Dean **agreed with the syllabus**, vide the paper read as (6) above.
7. Considering the matter, the Vice-Chancellor ordered to place the scheme and syllabus before the **Standing Committee of the Academic Council** for consideration.
8. The Standing Committee of the Academic Council, vide the paper read as (8) above, considered the scheme and syllabus of the **Five Year Integrated Programme in Social Science with specialization in Economics** to be implemented **with effect from the 2025 admission**, and recommended approval of the same.
9. The Vice-Chancellor, after considering the recommendations of the Standing Committee of the Academic Council and in exercise of the powers of the Academic Council conferred under Section 11(1), Chapter III of the Kannur University Act, 1996, and all other enabling provisions read together, approved the scheme and syllabus of the Five Year Integrated Programme in Social Science with specialization in Economics for implementation at the Department of Economics, Dr. Janaki Ammal Campus, Palayad, Kannur University, with effect from the 2025 admission.
10. The scheme and syllabus of the Five Year Integrated Programme in Social Science with specialization in Economics at the Department of Economics, Dr. Janaki Ammal Campus, Palayad, Kannur University, implemented with effect from the 2025 admission, are attached with this U.O. and uploaded on the University website.(www.kannuruniv.ac.in).

Orders are issued accordingly.



Sd/-

Jisha K P

Assistant Registrar II

For REGISTRAR

To: 1. Head, Dept.of Economics, Dr. Janaki Ammal Campus, Palayad  
2. The Controller of Examinations (Through PA)  
3.Nodal Officer, FYIMP

Copy To: 1. PS to VC, PA to R, PA to CE  
2. JR II (Exam)  
3. AR/DR Academic  
4. EP IV/EG I/EXC I Sections (Exam)  
5. IT Cell (to publish in the website)  
6. Computer Programmer  
7. SF/DF/FC



Forwarded / By Order

SECTION OFFICER



# **KANNUR UNIVERSITY**



## **FIVE YEAR INTEGRATED MASTERS PROGRAMME IN SOCIAL SCIENCE WITH SPECIALIZATION IN ECONOMICS**

(Under Choice Based Credit Semester System)

Based on

Kannur University Five Year Integrated Masters Programme Regulations  
2025-26 Academic Sessions Onwards

**DEPARTMENT OF ECONOMICS**  
**School of Development Studies**  
**Dr. JANAKI AMMAL CAMPUS**  
**PALAYAD, 670661**

## **ABOUT THE DEPARTMENT**

The Department of Economics (initially constituted under the title Department of Applied Economics) under the School of Development Studies was established in the year 2001, is recognized as a center of excellence in the field of higher education in Economics. The department offers an active and stimulating research environment for postgraduate and research students. The department is manpowered with faculty members who are charged with multi-disciplinary background required for enabling the students to acquire skills in various branches of Economics. Currently the department has four faculty members. The department is also enriched by the expertise lectures offered by distinguished professors from various nationally reputed institutions.

At present, department offers two academic programmes.

1. M.A in Economics
2. Ph. D in Economics

The department has released 17 batches of M.A Applied Economics students, 4 batches of M.A Economics students and few Ph. D degree holders and most of them have secured good and covetable placement in public and private sector establishments. The Department of Economics is proactively engaging multiple and multi-dimensional research projects that cover social and village welfare, health care, education, water and energy management, and conservation, among others. The Department of Economics, since its inception has been organizing national seminars annually and also conducts workshops, discussions, and symposiums with the active participation of faculty and students involving academicians and experts in the concerned areas. Theses academic discussions and discourses will enable the department to nurture and emerge as the most reputed post graduate study and research centre in India.

## **SCOPE**

The Five-Year Integrated Masters Programme in Social Science with Specialization in Economics represents a forward-looking initiative in Kannur University based on NEP 2020, embodying its goals of multidisciplinary, flexible, and inclusive education. It aims to produce socially conscious, critically aware, and research-oriented individuals who can tackle complex societal challenges and contribute meaningfully to India's economic growth and development. The NEP 2020 emphasizes the importance of integrating the arts, humanities, and social sciences into the broader educational framework to foster critical thinking, creativity, and a deeper understanding of social and economic issues.

Social sciences play a pivotal role in understanding and addressing complex social challenges such as economic inequality, public policy and governance, globalization, and climate change. Graduates from this programme will be equipped to contribute meaningfully to policymaking, governance, international relations, and other fields that require a deep understanding of societal issues. It also prepares students for competitive exams like the UPSC, which heavily emphasize social science knowledge. Social science graduates trained through an integrated programme are better positioned to contribute to India's developmental goals, such as achieving Sustainable Development Goals (SDGs) and addressing emerging economic and social issues, thus fostering nation-building.

**Program Outcomes (POs):**

POs contribute to the continuous improvement of academic programs and provide a roadmap for students to develop into well-rounded, competent professionals within their chosen fields.

**PO1: Critical Thinking and Problem-Solving**-Apply critical thinking skills to analyze information and develop effective problem-solving strategies for tackling complex challenges.

**PO2: Effective Communication and Social Interaction**-Proficiently express ideas and engage in collaborative practices, fostering effective interpersonal connections.

**PO3: Holistic Understanding**-Demonstrate a multidisciplinary approach by integrating knowledge across various domains for a comprehensive understanding of complex issues.

**PO4: Citizenship and Leadership**-Exhibit a sense of responsibility, actively contribute to the community, and showcase leadership qualities to shape a just and inclusive society.

**PO5: Global Perspective**-Develop a broad awareness of global issues and an understanding of diverse perspectives, preparing for active participation in a globalized world.

**PO6: Ethics, Integrity and Environmental Sustainability**-Uphold high ethical standards in academic and professional endeavors, demonstrating integrity and ethical decision-making. Also acquire an understanding of environmental issues and sustainable practices, promoting responsibility towards ecological well-being.

**PO7: Lifelong Learning and Adaptability**-Cultivate a commitment to continuous self-directed learning, adapting to evolving challenges, and acquiring knowledge throughout life.

**Program Specific Outcomes (PSOs):**

A Five year Integrated M.A. course in Social Science provides a multidisciplinary and research-oriented education that fosters critical thinking and problem-solving skills. By engaging with complex societal issues through diverse perspectives, students learn to analyze, evaluate, and propose innovative solutions to real-world challenges. Below are the key ways by which the program can achieve its specific objectives,

**1. Interdisciplinary Curriculum and Holistic Understanding**

Integration of Disciplines: Social science covers fields such as sociology, political science, history, economics, psychology, and anthropology. The integration of these disciplines helps students explore societal problems from multiple perspectives, encouraging them to connect the dots between various fields of knowledge. This holistic approach trains students to think critically and address problems comprehensively rather than in isolation.

**2. Critical Thinking and Problem Solving**

This course involves training in statistical tools, qualitative methods, and research methodologies, equipping students with skills to analyze and interpret complex data. Students are trained to critically evaluate existing policies, theories, and practices, identifying their strengths and weaknesses. By questioning preconceived notions and biases, students develop the ability to approach problems with an open and analytical mindset. The program encourages students to undertake projects and dissertations, where they identify societal problems, review literature, and propose evidence-based solutions.

### **3. Global Perspectives**

Integrated M.A. programs often include fieldwork, internships, or community engagement projects that expose students to real-world challenges, such as public health crises or education inequalities. This course creates wide Exposure to real-world scenarios, such as public policy analysis or urban development issues, hones analytical thinking and decision-making. Applying theoretical knowledge to solve practical problems helps students develop actionable insights and creative solutions to global issues.

### **4. Effective Communication and Social Interaction**

**Understanding Interconnections:** Social problems are rarely isolated; they are interconnected with broader systems such as governance, economy, and culture. The integrated course encourages students to think systemically, understanding how various factors interact and influence each other. System thinking helps students design solutions that address root causes rather than symptoms of societal challenges.

### **5. Fostering Ethical Reasoning and environmental sustainability**

This course includes discussions on ethics, human rights, and justice, enabling students to approach problems with a strong moral compass. Critical thinking on various social issues also involves assessing the long-term implications of proposed solutions, ensuring they are sustainable and equitable. Students participate in debates, discussions, and seminars on contemporary issues such as climate change, gender inequality, and globalization. These activities sharpen their ability to present arguments, critique opposing viewpoints, and engage in constructive dialogue.

### **6. Leadership and Collaborative Learning**

Group projects and collaborations encourage students to share ideas, challenge each other's assumptions, and work collectively to find innovative solutions. Working with peers from varied backgrounds enhances their ability to approach problems through different lenses.

### **7. Encouragement of Lifelong Learning**

The integrated course instills a mindset of continuous learning and adaptability, crucial for solving emerging challenges in an ever-changing world. Students are encouraged to independently seek out knowledge, question traditional narratives, and explore alternative perspectives.

## Course Structure for Pathways 1-5

1. Three year UG Degree in Social Science with specialization in Economics ( BA in Social Science with major in Economics)
2. Four Year UG Degree in Social Science with honours in Economics/ honours degree in Economics with research ( FYUG in Social Science-honours in Economics/ honours in Economics with research)
3. Five Year Integrated Master's Degree in Social Science with honours in Economics or honours in Economics with research ( FYIMP in Social Science- honours in Economics/ honours in Economics with research)

### FIVE YEAR INTEGRATED MASTERS PROGRAMME IN SOCIAL SCIENCE WITH SPECIALISATION IN ECONOMICS

(KU-FYIMP IN SS with Specialization in ECONOMICS)

#### DETAILS OF COURSES OFFERED

SEMESTER	COURSE CODE	COURSE NAME	MARKS			CREDITS
			CA	ESA	TOTAL	
I		AEC 1	50	50	100	3
		AEC 2	50	50	100	3
		MDC 1	50	50	100	3
	KU01DSCECO101	Introduction to Economics	50	50	100	4
		Minor – B 1	50	50	100	4
		Minor- C 1	50	50	100	4
	6 courses		300	300	600	21
II		AEC 3	50	50	100	3
		MDC 2	50	50	100	3
	KU02DSCECO102	Fundamentals of Economic Development	50	50	100	4
	KU02DSCECO103	Basic Mathematical and Statistical Methods	50	50	100	4
		Minor- B 2	50	50	100	4
		Minor- C 2	50	50	100	4
	6 courses		300	300	600	22
III	KU03DSCECO201	Introduction to Micro Economics	50	50	100	4

	<b>KU03DSCECO202</b>	Introduction to Macro Economics	50	50	100	4
	<b>KU03DSCECO203</b>	Introduction to Indian Economy	50	50	100	4
	<b>KU03DSCECO204</b>	Quantitative Techniques for Data Analysis	50	50	100	4
		<b>MDC-3</b>	50	50	100	3
		<b>VAC-1</b>	50	50	100	3
	<b>6 courses</b>		300	300	600	22
<b>IV</b>	<b>KU04DSCECO205</b>	Advanced Micro Economics	50	50	100	4
	<b>KU04DSCECO206</b>	Advanced Macro Economics	50	50	100	4
	<b>KU04DSCECO207</b>	Environmental Economics	50	50	100	4
	<b>KU04DSCECO208</b>	Public Finance	50	50	100	4
		<b>SEC-1</b>	50	50	100	3
		<b>VAC-2</b>	50	50	100	3
	<b>6 courses</b>		300	300	600	22
<b>V</b>	<b>KU05DSCECO301</b>	International Economics	50	50	100	4
	<b>KU05DSCECO302</b>	Economics of growth and Development	50	50	100	4
	<b>KU05DSCECO303</b>	Mathematical Economics	50	50	100	4
	<b>KU05DSCECO304</b>	Financial Institutions and Markets	50	50	100	4
		<b>DSE -1</b>	50	50	100	4
		<b>SEC-2</b>	50	50	100	3
	<b>6 course</b>		300	300	600	23
<b>VI</b>	<b>KU06DSCECO305</b>	Political Economy	50	50	100	4
	<b>KU06DSCECO306</b>	Basic Econometrics	50	50	100	4
	<b>KU06RPHECO307</b>	Fieldwork and Dissertation	50	50	100	4
		<b>DSE -2</b>	50	50	100	4
		<b>SEC-3</b>	50	50	100	3
	<b>KU06INTECO308</b>	<b>INTERNSHIP</b>	50	50	100	4
	<b>5 course + Internship</b>		300	300	600	23
		Total ( 1-3 years)	1800	1800	3600	133
Total Credit -133						
Three year UG Degree in Social Science ( BA in Social Science) with Major in Economics is awarded to Students Exiting after 3 years						



VII	KU07DSCECO401	Research Methodology	50	50	100	4
	KU07DSCECO402	Labour Economics	50	50	100	4
	KU07DSCECO403	Behavioural Economics	50	50	100	4
	KU07DSCECO404	Population Studies	50	50	100	4
		DSE -3	50	50	100	4
		MOOC -1	50	50	100	4
	6 course		300	300	600	24
VIII	KU08DSCECO405	Gender Economics	50	50	100	4
		MOOC-2	50	50	100	4
	KU08RPHECO406	Project/Dissertation	150	150	300	12
	For honours degree	DSE-4	50	50	100	4
		DSE-5	50	50	100	4
		DSE-6	50	50	100	4
	2 courses+ project or 5 courses		250	250	500	20
		Total (1-4 year)	2350	2350	4700	177
Four Year UG Degree in Social Science ( FYUG in Social Science with major in Economics (honours degree/honours degree with research) is awarded to Students Exiting after 4 years						
IX	KU09DSCECO501	Advanced Econometrics	50	50	100	4
	KU09DSCECO502	Operations Research for Economic Analysis	50	50	100	4
	KU09DSCECO503	Ethics in Social Science Research	50	50	100	4
	KU09DSCECO504	Pedagogy in Teaching Social Science	50	50	100	4
	KU09DSCECO505	Academic Writing in Social Science	50	50	100	4
	KU09INTECO501	One 4 credit Internship in lie of one DSC and /or	50	50	100	4
	5 course or 4 course + internship	one 4 credit MOOC/online /blended course in lieu of one DSC	250	250	500	20
X	KU10RPHECO501	Capstone Research Project	250	250	500	20
	KU10DSCECO506	Local Self Government and Administration	50	50	100	4
	KU10DSCECO507	Education and Knowledge Economy	50	50	100	4
	KU10DSCECO508	Public policy and Economic Development	50	50	100	4
	KU10DSCECO509	GIS and Remote sensing in Social Science Research	50	50	100	4
	KU10DSCECO510	Culture Media and Development	50	50	100	4
			250	250	500	20

		Total Credit (1-5 year)	2850	2850	5700	217
Five Year Integrated Master's Degree in Social Science ( FYIMP in Social Science with major in Economics-(honours degree in Economics/ honours degree in Economics with research) is awarded to Students Exiting after 5 years						

Semester	LISTS OF DISCIPLINE SPECIFIC ELECTIVE COURSES					
<b>V</b>	<b>KU05DSEECO301</b>	Economics of Health	50	50	100	4
	<b>KU05DSEECO302</b>	Economics of Tourism	50	50	100	4
	<b>KU05DSEECO303</b>	Managerial Economics	50	50	100	4
	<b>KU05DSEECO304</b>	Personal Finance	50	50	100	4
<b>VI</b>	<b>KU06DSEECO305</b>	Climate and Disaster Management	50	50	100	4
	<b>KU06DSEECO306</b>	Development Issues in Kerala	50	50	100	4
	<b>KU06DSEECO307</b>	Data Analysis with Spread sheet	50	50	100	4
	<b>KU06DSEECO308</b>	Intellectual Property Rights	50	50	100	4
	<b>KU06DSEECO309</b>	Hospital Economics	50	50	100	4
<b>VII</b>	<b>KU07DSEECO401</b>	Digital Marketing	50	50	100	4
	<b>KU07DSEECO402</b>	Industrial Economics	50	50	100	4
	<b>KU07DSEECO403</b>	Stock Market Analysis	50	50	100	4
	<b>KU07DSEECO404</b>	Project Formulation and Evaluation	50	50	100	4
	<b>KU07DSEECO405</b>	Economics of Care and Ageing	50	50	100	4
<b>VIII</b>	<b>KU08DSEECO406</b>	Agricultural Economics	50	50	100	4
	<b>KU08DSEECO407</b>	Organisational Psychology and Consumer Behaviour	50	50	100	4
	<b>KU08DSEECO408</b>	Migration and Development	50	50	100	4
	<b>KU08DSEECO409</b>	Logistics and Supply chain Management	50	50	100	4
	<b>KU08DSEECO410</b>	Institutional Economics	50	50	100	4
	<b>KU08DSEECO411</b>	Philosophy of Social Science Research	50	50	100	4
	<b>KU08DSEECO412</b>	Economics of Crimes and Corruption	50	50	100	4
	<b>KU08DSEECO413</b>	Energy Economics	50	50	100	4
	<b>KU08DSEECO414</b>	Transport Economics	50	50	100	4
	<b>KU08DSEECO415</b>	Goods and Service Tax	50	50	100	4

Semester	LISTS OF MDC/ SEC/ VAC					
	MULTI DISCIPLINARY COURSES					
<b>I</b>	<b>KU01MDCECO101</b>	Economics of Tourism and Development	50	50	100	3
	<b>KU01MDCECO102</b>	Health Economics	50	50	100	3
	<b>KU01MDCECO103</b>	Economics of Natural Resources	50	50	100	3
<b>II</b>	<b>KU02MDCECO104</b>	Current Issues of Global Economy	50	50	100	3
	<b>KU02MDCECO105</b>	Economic Journalism	50	50	100	3
	<b>KU02MDCECO106</b>	Urban and Rural Economy	50	50	100	3
	<b>KU02MDCECO107</b>	Basic Mathematical and Statistical Methods	50	50	100	3
<b>III</b>	<b>KU03MDCECO201</b>	Kerala Studies	50	50	100	3
	<b>KU03MDCECO202</b>	Nutrition Economics	50	50	100	3
	<b>KU03MDCECO203</b>	Optimisation Techniques	50	50	100	3
Semester	SKILL ENHANCEMENT COURSES					
<b>IV</b>	<b>KU04SECECO201</b>	Corporate Social Responsibility	50	50	100	3
	<b>KU04SECECO202</b>	Entrepreneurship Development	50	50	100	3
<b>V</b>	<b>KU05SECECO301</b>	Money Banking and Fintech	50	50	100	3
	<b>KU06SECECO302</b>	Economics for Competitive Examination	50	50	100	3
<b>VI</b>	<b>KU06SECECO303</b>	Disaster Management	50	50	100	3
	<b>KU06SECECO304</b>	Econometrics for Social Science	50	50	100	3
Semester	VALUE ADDED COURSES					
<b>III</b>	<b>KU03VACECO201</b>	AI in Daily Life	50	50	100	3
	<b>KU03VACECO202</b>	Database on the Indian Economy	50	50	100	3
<b>IV</b>	<b>KU04VACECO203</b>	Public Speaking	50	50	100	3
	<b>KU04VACECO204</b>	Economics of Startup and Entrepreneurship	50	50	100	3

For FYIMP, the 40 credits in 5<sup>th</sup> year can also be obtained with coursework alone or research alone.

**DURATION:** 5 Years (10 Semester)

**ELIGIBILITY:**

Admission is offered to students who have completed and passed higher secondary 12<sup>th</sup> standard education in any stream from the state/central higher secondary board and any other equivalent government-approved board of examinations in India or abroad with a minimum of 50% mark (As per university regulations).

**Admission Procedure** - Based on Kannur University Regulation



**COURSE DETAILS:**

A student must register for the required number of courses at the beginning of each semester.

No students shall register for more than 24 credits and less than 16 credits per semester. This program offers three exit options to the students to get their degree in Social Science with major in Economics

**Exit Options**

- A total of 133 credits with three years shall be the minimum for successful completion of the BA in Social Science Degree (For Exit with UG = 133), for specialisation in Economics a minimum of 68 credit is required in Economics Discipline.
- A total of 177 credits with four year shall be the minimum for successful completion of the BA Social Science Honours Degree with Major in Economics /Research (For Exit with UG Honours/Honours with Research the total credit =177). For specialisation in Economics a minimum of 88 credits is required in Economics Discipline.
- A total of 217 credits with five year shall be the minimum for successful completion of the MA in Social Science Degree with specialisation in Economics.

**ASSESSMENT AND EVALUATION** – Based on FYIMP regulation of Kannur University

**KU01DSCECO101**  
**INTRODUCTION TO ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	DSC	100-199	KU01DSCECO101	4	75

Learning Approach (Hours/ Week)		Marks Distribution (%)			Duration of ESE (Hours)
Lecture	Practical/ Tutorial	CE	ESE	Total	
3	1	50	50	100	2

**Course Description:**

This is designed to provide non-economic students with a foundational understanding of economic principles and their relevance in daily life. This course offers a comprehensive exploration of fundamental economic concepts, aiming to equip learners with the necessary tools to navigate economic issues in their personal and professional spheres. From understanding price determination and inflation to exploring personal finance, global trade dynamics, and social issues such as income

inequality and poverty alleviation, students will gain practical insights into economics. By the end of the course, participants will have developed a basic understanding of economic phenomena, enabling them to make informed decisions and engage meaningfully with economic issues in their everyday lives.

**Course Prerequisite: NIL**

**Course Outcomes: At the end of the Course, the student will be able to**

CO No.	Expected Outcome	Learning Domains
1	Gain a foundational understanding of economic principles to interpret and engage with economic issues in everyday life.	R, U, E
2	Apply economic concepts to make informed decisions regarding personal finance and investments.	U, A, An
3	Develop awareness of global economic dynamics and their implications for individual economies and societies.	U, A
4	Enhance critical thinking skills to analyze and address social and economic challenges such as inequality, discrimination, poverty, and corruption.	U, An, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

**Hours 15**

##### **Module I A basic understanding of Economics**

- 1.1 What is economics? Definition and scope of economics; Importance of learning economics in daily life
- 1.2 Role of economics in decision-making and understanding societal systems
- 1.3 Price determination - Factors influencing prices and reasons for price fluctuations

- 1.4 Per-capita GDP; Understanding Inflation - Meaning of inflation and how it is measured in India; Economic cycles - Understanding the phases of economic cycles, and their causes

**Suggested Readings specific to the Module I**

- 1.1 Officer, L. H. 2009. Everyday Economics: Honest Answers to Tough Questions. Palgrave Macmillan
- 1.2 Krugman, P., and Wells, R. 2020. Economics (6th ed.). Worth Publishers.
- 1.3 Mankiw, N.G. 2020. Principles of Economics (9<sup>th</sup> ed). Cengage Learning
- 1.4 Khan, M. Y. 2011. Indian Financial System, Tata McGraw Hill, 7th edition.

**Module II      Economics of Finance: both personal and national      Hours 15**

- 2.1 Personal budget; Income. expenditure, saving, and investment (concepts)
- 2.2 Alternatives to savings accounts and considerations for investment decisions
- 2.3 Government budget; Taxes, subsidies and fiscal deficit, Components of Government budget, Reasons behind heavy taxation on specific goods (eg: Taxation on alcohol and tobacco)
- 2.4 Stock market mechanics: Bulls and bears, Functioning of stock markets and the impact of market trends on investments

**Suggested Readings specific to the Module II**

- 2.1 Samuelson, P.A. and Nordhaus, W.D. 2010. Microeconomics, Nineteenth Edition, McGraw Hills Irwin.
- 2.2 Muraleedharan, D. 2014. Modern Banking: Theory and Practice. New Delhi: PHI Learning Pvt. Ltd.
- 2.3 Shekhar, K. C. and Lekshmy Shekhar. 2013. Banking Theory and Practice, Vikas Publishing House Pvt Ltd, Noida, 21st edition
- 2.4 Nadar, Narayana E. 2016. Money and Banking. New Delhi: PHI Learning Private Ltd.

**Module III      Economic systems and globalization      Hours 15**

- 3.1 Economic systems and globalization
- 3.2 Capitalism vs. Socialism; Contrasting features and implications of different economic systems, Balancing between state regulation and free market dynamics
- 3.3 Nationalization: Effects of Government ownership on economic growth
- 3.4 Trade: Imports, and exports, Free trade: controversies surrounding unrestricted trade policies

**Suggested Readings specific to the Module III**



- 3.1 Thirlwall, A.P. 1994. Growth and Development with Special Reference to Developing Countries. New Delhi: Palgrave McMillian.
- 3.2 Thirlwall, A.P. 1994. Growth and Development with Special Reference to Developing Countries. New Delhi: Palgrave McMillian.
- 3.3 Krugman, P., and Wells, R. 2020. Economics (6th ed.). Worth Publishers.
- 3.4 List Stonier, A.W. and Hague, D.C. 1980. A Textbook of Economic Theory, London: Longman Group

#### **Module IV Economics of social issues**

**Hours 15**

- 4.1 Inequality: Inequality in income distribution, Disproportionate earnings: Analysis of income inequality and its relation to societal contributions
  - 4.2 Discrimination in the job market: Examination of gender and minority discrimination in employment, Gender pay gap
  - 4.3 Poverty: Feasibility and strategies for poverty alleviation
  - 4.4 Unemployment: Types of unemployment, Definition and implications of an acceptable level of unemployment.
- Corruption: An economic perspective

#### **Suggested Readings specific to the Module IV**

- 4.1 Debraj Ray. 1998. Development Economics. New Oxford University Press.
- 4.2 Panzar, J. C., and Willig, R. D. 1981. Economies of scope. The American Economic Review, 71(2), 268-272.
- 4.3 Todaro, Michael P. and Stephen C. Smith. 2020. Economic Development. New Delhi Pearson Education.
- 4.4 Rose - Ackerman. S. 1999. Corruption and Government: Causes, Consequences, and Reform. Cambridge University Press

#### **Module V Teacher Specific Module**

**Hours 15**

- 5.1 This module includes interactive sessions that facilitate deep learning and critical thinking among students. Integrating case studies, group discussions, and real-world examples can enhance students' understanding and appreciation of the complex dynamics of economic development.

#### **Core Compulsory Readings (Books, Journals, E-sources, Websites/weblinks)**

1. Pindyck R. S., Rubinfeld, D. L., and Mehtha P L. Microeconomics. Pearson Education. Latest Edition
2. Mankiw, N.G. 2020. Principles of Economics (9<sup>th</sup> ed). Cengage Learning
3. Musgrave, R. A., & Musgrave, P. B. 1989. Public Finance in Theory and Practise (5<sup>th</sup>ed.).McGraw – Hill.

#### **Core Suggested Readings (Books, Journals, E-sources, Websites/weblinks)**

1. Friedman, D. D. 1997. Hidden Order: The Economics of Everyday Life. Harper Collins.
2. Heyne, P. T. 1983. The Economic Way of Thinking (4th ed.). Science Research Associates.
3. McConnell, C. R., Brue, S. L., & Flynn, S. M. 2018. Economics: Principles, Problems, and Policies (21<sup>st</sup> ed.). McGraw – Hill Education.
4. Krugman, P., and Wells, R. 2021. Economics (5<sup>th</sup> ed). Worth Publishers.
5. Rosen, H. S. 1992. Public Finance (3<sup>rd</sup>). Irwin.
6. Tylor, P. E. 1970. The Economics of Public Finance (3<sup>rd</sup>ed).The Macmillan Company.

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### Mode of Transaction

Hybrid Classes

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper- 1	20
b)	Assignment/ Book/ Article Review/Field Report	10
c)	Seminar	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. Write a note on the role of economics in decision making?
2. Explain the principles of economics?
3. Demonstrate the types of unemployment?
4. Write a note on income and inequality?

5. Analyse the development issues of various societies?

6. Write a note on the free market dynamics?

**Employability for the Course/Programme**

- Employability as economists in various institutions of Planning and Development
- Banking Sector, Debarment of Economics and Statistics, Labour Department, Ministry of Finance, RBI, Data Analyst, Research Officer, teaching, etc.

**KU02DSCECO102**  
**Fundamentals of Economic Development**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	DSC	100-199	KU02DSCECO102	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

**Course Description:**

This course provides a comprehensive overview of economic development theories and practices with a focus on developing countries, particularly India. It examines the meaning, measurement, and determinants of economic development, explores the role of human resources in development, introduces concepts of sustainable development, and analyzes India's development experience from pre-independence to contemporary issues.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Students will be able to define economic development and differentiate it from economic growth	R, U



2	Analyze the determinants of economic growth and development using theoretical frameworks and empirical evidence.	R, U
3	Evaluate the role of human resources, including education, health, and gender, in economic development	R, U
4	Understand the concept of sustainable development and its application in policy-making.	R, U
5	Critically assess India's development experience, including the successes, challenges, and implications for future policy	R, U

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

Hours 10

##### Module I Economic Development- Meaning and Measurement

- 1.1 Meaning of economic development
- 1.2 Distinction between Growth and Development
- 1.3 Determinants of Growth and Development
- 1.4 Measurement of Growth and Development – GNP Per capita, PQLI, HDI, Gender Development Index, Gender Empowerment Index, Global Hunger Index

##### Suggested Readings specific to the Module I

- 1.1 Aghion, P., and Howitt, P. 2009. The Economics of Growth. The MIT Press
- 1.2 Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge University Press.
- 1.3 Bruton, H. J. 1997. Principles of Economics. Addison Wesley Longman.
- 1.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw Hill Education.

##### Module II Human Resource and Economic Development

Hours 15

- 2.1 Human Resource and Development, Manpower planning

- 2.2 Concept of intellectual capital and its size, Role of education and health in economic development
- 2.3 Gender and development, Women in the labour force
- 2.4 Theory of demographic transition, Ageing and younging issues

**Suggested Readings specific to the Module II**

- 2.1 Aghion, P., and Howitt, P. 2009. The Economics of Growth. The MIT Press
- 2.2 Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge University Press.
- 2.3 Bruton, H. J. 1997. Principles of Economics. Addison Wesley Longman.
- 2.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw Hill Education.

**Module III Introduction to Sustainable Development**

**Hours 15**

- 3.1 Definition and concept of sustainable development, Objectives of Sustainable development, Three pillars of sustainable development
- 3.2 Dimensions of sustainable development-social, economic and environmental
- 3.3 The Millennium Development Goals
- 3.4 Tools for Sustainable growth

**Suggested Readings specific to the Module III**

- 3.1 Aghion, P., and Howitt, P. 2009. The Economics of Growth. The MIT Press
- 3.2 Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge University Press.
- 3.3 Bruton, H. J. 1997. Principles of Economics. Addison Wesley Longman.
- 3.4 Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw Hill Education.

**Module IV Indian Development Experience**

**Hours 10**

- 4.1 Pre-Independence Economy and Development Challenges
- 4.2 Planning for Development: The Five-Year Plans
- 4.3 Sectoral Development Policies (Green Revolution and agricultural transformation-Industrial policy and public sector undertakings)
- 4.4 Economic Reforms and Liberalization, Contemporary Development Issues

**Suggested Readings specific to the Module IV**

- 4.1 Ghatak, S. 2003. Introduction to Development Economics. 4<sup>th</sup> Ed. New Delhi:

Routledge.

- 4.2 Higgins, B. 1968. Economic Development: Problems, Principles, and Policies (Rev. Ed.). New York: W.W. Norton and Co.
- 4.3 Meier, G. M. 2001. Leading Issues in Economic Development. Oxford: Oxford University Press.
- 4.4 Nafziger, E. W. 2006. Economic Development (4<sup>th</sup> Ed.). Cambridge: Cambridge University Press

**Module V** Teacher Specific Module

**Hours 10**

- 5.1 This module includes interactive sessions that facilitate deep learning and critical thinking among students. Integrating case studies, group discussions, and real-world examples can enhance students' understanding and appreciation of the complex dynamics of economic development.

**Core Compulsory Readings** (Books, Journals, E-sources, Websites/weblinks)

1. Todaro and Smith, 2020. Economic Development. New Delhi: Pearson Education.
2. Ray, Debraj. 1998. Development Economics. New Delhi: Oxford University Press.
3. Thirlwall, A.P. 2017. Growth and Development with Special Reference to Developing Countries. New Delhi: Palgrave McMillian.
4. Perkins, Radelet and Lindauer. 2012. Economics of Development. 7<sup>th</sup> Ed. New York: W.W Norton & Co.
5. Uma Kapila. 2018. Indian Economy: Performance and Policies. New Delhi: Academic Foundation.
6. Agarwal, A. N. 1976. Indian Economy – Nature, Problems and Progress. New Delhi: Vikas Publishing House.
7. K L Gupta and Harvinder Kaur. 2004. New Indian Economy and Reforms. New Delhi: Deep and Deep Publications.

**Core Suggested Readings** (Books, Journals, E-sources, Websites/weblinks)

1. Aghion, P., and Howitt, P. 2009. The Economics of Growth. United States: The MIT Press
2. Bhagwati, J. 1971. The Economics of Underdeveloped Countries. Cambridge: Cambridge University Press.
3. Bruton, H. J. 1997. Principles of Economics. UK: Addison Wesley Longman.
4. Clunies – Ross, A., Forsyth, D., and Haq, M. 1994. Development Economics. New Delhi: McGraw -Hill Education.
5. Ghatak, S. 2003. Introduction to Development Economics. 4<sup>th</sup> Ed. New Delhi: Routledge.
8. Higgins, B. 1968. Economic Development: Problems, Principles, and Policies. (Rev. ed.). New York: W.W Norton & Co.
6. Meier, G. M. 2001. Leading Issues in Economic Development. Oxford: Oxford University Press.
7. Nafziger, E. W. 2006. Economic Development. 4<sup>th</sup> Ed. Cambridge: Cambridge University Press.

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecturing, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Hybrid Classes

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper- 1	20
b)	Assignment/ Book/ Article Review	10
c)	Seminar	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. How to measure economic development?
2. Analyse the determinants of economic growth and development?
3. Examine India's development experience?
4. Critically evaluate the theories and policies related to the economic development?
5. Demonstrate the role of education, health, gender, and demographic transition in the economic development?
6. Write a note on sectoral development policies and economic reforms?

**Employability for the Course/Programme**

- Employability as economists in various institutions of Planning and Development
- Banking Sector, Department of Economics and Statistics, Labour Department, Ministry of Finance, RBI, Data Analyst, Research Officer, teaching, etc.

**KU02DSCECO103: BASIC MATHEMATICAL AND STATISTICAL METHODS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	DSC	100-199	KU02DSCECO103	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	1	0	50	50	100	2

**Course Description:**

*This course aims to equip students with the essential mathematical and statistical tools and techniques for understanding and analysing economic phenomena. The course familiarizes with uses of mathematics and statistics in economics. The course explores the concepts of data, variables and different types of surveys. The course covers topics such as measures of central tendencies and dispersion. Moreover, the course explores the topics of sets, relations and functions.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Describe the uses and limitations of mathematics and statistics in economics	R
2	Understand the fundamental mathematical and statistical concepts	U
3	Describe the measures of central tendency and variability	R, U
4	Apply the relevant formula for finding central tendency and variability and evaluate data.	U, A
5	Describe the functional association in mathematical form and present it in graphical form.	R, A

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

**Mapping of Course Outcomes to PSOs**

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

CO 3		✓				✓
CO 4	✓	✓	✓		✓	✓
CO 5	✓	✓				✓

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTORY STATISTICS</b>		<b>15</b>
	1	Meaning and definition of statistics- Descriptive and inferential statistics- Functions and Limitations.	5
	2	Quantitative variable- Continuous and discrete variables- Qualitative variable- Measurement of Variables	5
	3	Data-Types of data- Primary and secondary data with their merits and demerits- Techniques of primary data collection- Sources of secondary data.	3
	4	Population- sample- Sample size- Census vs sample surveys- Need for sampling	2
2	<b>SUMMARISING AND DESCRIBING DATA</b>		<b>20</b>
	1	Frequency distribution - Procedure for construction frequency distribution- Relative frequency distribution - Cumulative frequency distribution - Constructing discrete and continuous frequency distribution.	4
	2	Graphic and diagrammatic presentation of data - Bar diagram, Pareto chart, pie chart, histogram, frequency polygon and ogives.	4
	3	Meaning and definition of central tendency/average- arithmetic mean, median and mode- uses and application- Geometric and harmonic mean-Partition values: Quartiles, deciles and percentiles.	7
	4	Meaning and definition of dispersion- measures of range, quartile deviation, mean deviation and standard deviation- Variance- Lorenz curve and Gini coefficient.	5
3	<b>MATHEMATICS AND ECONOMICS</b>		<b>15</b>
	1	Importance of mathematics in economics-Mathematical economics and non-mathematical economics- Limitations of mathematical economics.	5
	2	Variables, constants and parameters- Equations and identities.	5
	3	Introduction to algebra: Types of numbers- Basic operations on numbers- Representation -Evaluation- Simplification (Addition, subtraction, multiplication, factorisation and division) –Solving linear and quadratic equations.	5
4	<b>FUNCTIONS AND GRAPHS</b>		<b>15</b>



	1	Meaning and representation of set- Types and operations on set- Venn diagram- Ordered pairs- Cartesian product of two sets.	4
	2	Relations and functions- Domain and range- Evaluating functions- Odd, even, single variable, multi-variable, increasing, decreasing, monotonic, convex and concave functions - Linear, quadratic, cubic, rational, exponential and logarithmic function and their graphs.	6
	3	Economic functions- Demand, supply, utility, production, cost, revenue, profit and consumption.	2
	4	Applications of functional equations- Equilibrium, determining cost, revenue and profit.	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Skewness and Kurtosis		
	This module would be preferably based on the theoretical understanding and works on Skewness and Kurtosis		10

#### Essential Readings:

1. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2018). Statistics for business & economics. Cengage.
2. Bradley, T., & Patton, P. (2002). *Essential mathematics for economics and business*. John Wiley & Sons.
3. Chiang, A. C., & Wainwright, K. (2013). *Fundamental methods of mathematical economics*. McGraw Hill.
4. Gupta, S. C., & Kapoor, V. K. (2020). Fundamentals of mathematical statistics. Sultan Chand & Sons.
5. Hooda, R. P. (2013). *Statistics for business and economics*. Vikas Publishing House.
6. Rosser, M., & Lis, P. (2016). *Basic mathematics for economists*. Routledge.
7. Sydsaeter, K., & Hammond, P. (2016). *Essential mathematics for economic analysis*. Pearson.
8. Whitte, R. S., & Whitte, J. S. (2017). Statistics. Wiley.

#### Suggested Readings:

1. Baruah, S. (2011). Basic mathematics & its application in economics. Macmillan.
2. Doane, D. P., & Seward, L. E. (2022). Applied statistics in business and economics. McGraw Hill.
3. Freedman, D., Pisani, R., & Purves, R. (2007). Statistics. W.W. Norton & Company.
4. Gupta, S. C., & Kapoor, V. K. (2018). Fundamentals of applied statistics. Sultan Chand & Sons.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
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End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Book/ Article Review	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. What are the four levels of measurement in statistics and how do they differ in terms of their characteristics and applications?
2. What are the different types of economic data, and how are they classified based on their nature and sources?
3. What is mathematical economics, and how does it differ from traditional economic analysis?
4. What are the key mathematical techniques used in economic modeling and analysis?

#### Employability for the Course/Programme

- Employability as economists in various institutions of Planning and Development, Banking Sector, Department of Economics and Statistics, Labour Department, Ministry of Finance, RBI, Data Analyst, Research Officer, teaching, etc.

#### KU03DSCECO201: INTRODUCTION TO MICRO ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC	200-299	KU03DSCECO201	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*This course sets foundation for studying the advanced microeconomics in the forthcoming semester. The course enables the students to get grip in the microeconomic theory via making the conceptual foundations clear. The course starts with an introduction to microeconomic analysis exploring the basic concepts for better understanding of more advanced theories and moves on to concepts of demand and supply and provides foundations for consumer behaviour analysis at the intermediate level. In brief the course widens the conceptual tool box of an undergraduate student of economics so as to better experience more advanced learning of microeconomics in the forthcoming semester.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
CO1	Learn the foundational concepts in microeconomics like trade-offs and opportunity cost, nominal and real prices and the so forth for better theoretical understanding	R, U
CO2	Understand the basic concepts of demand and supply for analysing market dynamics	R, U
CO3	Understand the basic concepts of production, cost and revenue for learning the subject in the subsequent semesters	R, U
CO4	Learn the concepts for analysing factor markets and welfare related concepts for better learning microeconomics at the intermediate and advanced levels	R, U
CO5	Extend the foundational theoretical tool box of microeconomics for subsequent learning at the intermediate and advanced levels	R, U

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

**Mapping of Course Outcomes to PSOs**

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

CO 5	✓						
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## COURSE CONTENTS

### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO MICROECONOMICS</b>		<b>10</b>
	1	Why study Microeconomics?	1
	2	Trinity problems of economic organization	2
		a) What, how and for whom to produce?	
	3	The themes of Microeconomics	3
		a) Trade-offs and opportunity cost with Production Possibility Curve	
		b) Prices and markets	
		c) Theories and models	
	4	Positive and normative analysis	2
	5	Competitive and non-competitive markets	2
2	<b>BASICS OF DEMAND AND SUPPLY</b>		<b>15</b>
	1	Demand law	4
		a) Demand schedule and demand curve	
		b) Forces behind the downward sloping demand curve	
		c) From individual to market demand curve	
		d) Inverse demand function	
	2	Movement along the demand curve and shift in demand curve	1
	3	Supply law	3
		a) Supply schedule and supply curve	
		b) Forces behind the upward sloping supply curve	
	4	Market equilibrium mechanism	2
		a) Changes in market equilibrium	
	5	Elasticity of demand and supply	
		a) Price, income and cross elasticity	

		b) Degrees of price elasticity	4
		c) Point vs arc elasticity	
		d) Elasticity of supply – degrees of supply elasticity	
	6	Effects of government intervention on market – price controls and price support	1
3	<b>FOUNDATIONS OF PRODUCTION, COST AND REVENUE</b>		<b>15</b>
	1	Production function	3
		a) Total, Marginal and Average Product	
	2	Concepts of cost	6
		a) Fixed, variable and total cost	
		b) Average and marginal cost: relationship between average and marginal cost	
		c) Average Fixed Cost and Average Variable Cost	
		d) Fixed cost vs sunk cost	
		e) Economic cost vs accounting cost	
	3	Link between production and cost – increasing marginal product and decreasing marginal cost	2
	4	Revenue concepts	4
		a) Total, Average and Marginal Revenue	
		b) AR, MR and Price elasticity	
		c) AR as demand curve	
4	<b>FACTOR MARKET AND WELFARE FOUNDATIONS</b>		<b>10</b>
	1	Factor Market	1
		a) factor income vs personal income	
	2	Concepts for analysing factor Market	2
		a) Marginal Physical Product, Value of Marginal Product, Marginal Revenue Product	
		b) Average Factor Cost and Marginal Factor Cost	
		c) MRP curve as factor demand curve	
	3	Factor Price concepts	2
		a) Economic rent and quasi rent, nominal interest and real interest, nominal wages and real wages, concept of profit	

	4	Consumer surplus: concept and illustration with demand curve	3
	5	Producer Surplus: concept and illustration with supply curve	2
5	Teacher Specific Module		10
	Directions: Works based on hypothetical tables from Schaum's Outlines		
	This module would be set as a work-based module preferably keeping Schaum's outlines as basic reference. The content may be based on the theoretical modules from 1 to 4 already in the syllabus or any other topic so as to give better conceptual foundations in Microeconomic theory		

#### Essential Readings:

1. Pindyck R. S., Rubinfeld, D. L., & Mehtha P L. *Microeconomics*. Pearson Education. Latest Edition
2. Samuelson. P. A and Nordhaus. W. D (2010) *Microeconomics*, Nineteenth Edition, McGraw Hills Irwin
3. Salvatore. D, Schaum's Outlines, Basic Microeconomics, McGraw Hill Publications, Latest Edition

#### Suggested Readings:

1. Mankiw. G, Principles of Microeconomics, Cengage-MindTap, Latest Edition
2. Salvatore. D, Principles of Microeconomics, Oxford International, Latest Edition

#### Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10



c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Discuss the types of cost.
2. Why the demand curve is downward sloping curve?
3. Discuss the types of production function.

#### KU03DSCECO202: INTRODUCTION TO MACRO ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC	200-299	KU03DSCECO202	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

*This course provides a comprehensive understanding of the fundamental principles of macroeconomics. It explores how economies operate at the aggregate level, focusing on key concepts such as national income, inflation, unemployment, and economic growth. The course examines the role of government policies in managing economic fluctuations and promoting long-term growth.*

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain how macroeconomics has evolved as a major discipline	R
2	Apply macroeconomic modes to analyse national and global economic issues.	A

3	Understand the relationships between different macroeconomic variables and concepts and the differences between microeconomics and macroeconomics	U, E
4	Evaluate the basic concepts of macroeconomics and compute its performance	U, E
5	Understand the changes in macroeconomic variables from Keynesian and classical perspective and make interpretation	R,

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO MACROECONOMICS</b>		<b>7</b>
	1	Subject matter of Macroeconomics: Its Origin, Development and Current State	1
	2	Measuring Economic Activity: Income, Expenditure, and the Circular Flow – Rules for Computing GDP – Real v/s Nominal GDP – GDP Deflator – The Components of Expenditure – Measures of National Income.	2
	3	Measuring The Cost of Living: CPI – CPI v/s GDP Deflator / Measuring inflation with CPI – PPI	2
	4	Measuring Unemployment: Labour Force – Unemployment Rate – Labour Force Participation Rate.	2
2	<b>CLASSICAL MACROECONOMICS</b>		<b>20</b>
	1	Classical Production Function, Employment: Labour Demand – Labour Supply	4
	2	Equilibrium Output and Employment	4
	3	Theory of Money: The Quantity Theory of Money – Cambridge Approach – The Demand for Money – The Supply of Money.	7

	4	Theory of Interest Rate: Interest Rate Determination in the Classical System. Policy Implications: Fiscal Policy – Monetary Policy	5
3	<b>KEYNESIAN MACROECONOMICS</b>		<b>8</b>
	1	The Simple Keynesian Model – The Components of Aggregate Demand – Determination and Changes in Equilibrium Income – Exports and Imports in the Simple Keynesian Model	3
	2	Money in the Keynesian System, Keynesian Theory of Interest Rate, Theory of Money Demand.	1
	3	The ISLM Model: Money Market Equilibrium – Product Market Equilibrium – Combined ISLM Model	4
4	<b>MONEY MARKET ANALYSIS</b>		<b>15</b>
	1	Money: Definition – Types – Functions – Significance	4
	2	The Sources of Money Supply: High Powered Money – The Deposit Multiplier – Credit Multiplier.	6
	3	Measures of Money Supply: $M_0 - M_1 - M_2 - M_3$	2
	4	The Theory of Money Supply - The Money Multiplier.	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Exercises from ISLM Model		
	This module would be preferably based on the mathematical understanding and works on ISLM model		10

#### Essential Readings:

1. Brian Snowdon and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar
2. Dwivedi, D.N. (2006) Macro Economics – Theory & Policy, Tata McGraw Hill Publishing Company Microeconomics Theory & Application Pearson.
3. Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP  
Gregory Mankiw. Macroeconomics, 5th Edition, Worth Publishers, 2002.
4. Neoclassical Controversies. London: The Macmillan Press Ltd.
5. Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition. Pearson
6. Rosalind Levasic and Alexander Rebmman. Macro Economics: An Introduction to Keynesian
7. Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 13th Edition, 2018.
8. Soumen Sikdar: Principles of Macroeconomics, OUP India
9. <https://mru.org/principles-economics-macroeconomics-0>

### Suggested Readings:

1. Brian Snowdon and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar
2. Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP
3. Gregory Mankiw. Macroeconomics, 5th Edition, Worth Publishers, 2002. 28 Rosalind Levasic and Alexander Rebmann. Macro Economics: An Introduction to Keynesian Neoclassical Controversies. London: The Macmillan Press Ltd.
4. Mohanty, D. (2011). How does the Reserve Bank of India Conduct its Monetary Policy? Reserve Bank of India Bulletin. Available at <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/06SPBL100811.pdf>
5. Pearson Soumen Sikdar: Principles of Macroeconomics, OUP India
6. Phelps, E. S. (2008). MACROECONOMICS FOR A MODERN ECONOMY. The American Economist, 52(1), 3–22
7. Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition.
8. Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 2018. McGraw Hill
9. <http://www.jstor.org/stable/40657692>

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
Total		100

### Sample Questions to test Outcomes

1. Explain the concept of GVA
2. Examine the classical theories of money and interest rate
3. Derive autonomous expenditure multiplier and autonomous expenditure in simple Keynesian closed economy model.

4. Construct IS and LM schedules and bring the product and money market equilibrium
5. What are the major sources of money supply? How do the banks create and supply money

### KU03DSCECO203: INTRODUCTION TO INDIAN ECONOMY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC	200-299	KU03DSCECO203	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

#### Course Description:

*The course aims to provide a better orientation and a deeper understanding about the development issues of Indian economy. It specifically targets to focus on issues like poverty, unemployment, inequality and regional economic integration and problems connected with agriculture industry, foreign trade and balance of payment. The course also aims to impart a detailed profile about the government policy pertains to Agriculture, industry an inclusive growth and development, etc.*

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To understand the concept of growth and development of Indian economy.	R
2	To learn a deeper knowledge of development issues of Indian economy such as Poverty, Unemployment and Inequality	U
3	To acquire In-depth knowledge about the sectoral contributions of agriculture, industry and service sector in India.	R, U
4	To learn more about the relation of the India with global economy and economic development in the Indian context.	U, A
5	Will gain Conceptual clarity on various dimensions of economic growth and development	R, A

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

#### Mapping of Course Outcomes to PSOs

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

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>ECONOMIC GROWTH AND DEVELOPMENT</b>		<b>7</b>
	1	Growth Vs Development: Concept	2
	2	Poverty, Unemployment and inequality- Concepts and measurements	1
	3	Sustainable Development	2
	4	Structural changes in Indian Economy since Independence Demographic Changes: Trends and pattern - demographic dividend	2
2	<b>SUMMARISING AND DESCRIBING DATA</b>		<b>20</b>
	1	Agriculture and Industry –changing interrelations Terms of trade between Industry and Agriculture	4
	2	New agricultural policies and agrarian crisis Revolution in agriculture	4
	3	Food Security National Food Security Mission	7
	4	Growth and Pattern of industrial development Industrial policies	5
3	<b>SERVICE SECTOR</b>		<b>8</b>
	1	An overview of Service Sector in India Growth and contribution- Infrastructure -Transport - Energy – Telecommunication	2
	2	Technologies– Information Technology Research and Development Health and Education - Recent developments	1
	3	NITI Aayog, Inclusive growth, Micro finance	3
	4	Gig economy, MGNREGA, NRHM-Ayushman Bharath	2
4	<b>GLOBAL TRADE, FOREIGN TRADE POLICY AND ECONOMIC INTEGRATION</b>		<b>15</b>
	1	India & Global Economy, India's share in global trade	4
	2	BOP position and problems of India, Capital Account Convertibility, Balance of Trade (Export and Import)	6
	3	Foreign Trade policy, Recent policy changes	2



	4	Impact on Domestic Money Supply, Impact of Demonetization on Indian economy, Regional economic integration and Indian Economy.	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>

#### Essential Readings:

1. Bajpai, A.D.N.; Choubey, S.K.; Pendse, N.G.; and Shrivastava, S. K. (2007). Emerging Trends in Indian Economy. New Delhi: Atlantic Publishers & Distributors.
2. Bandyopadhyay, Tamal. (2017). From Lahman to Demonetization: A Decade of Disruptions. Reforms and Misadventures. Penguin Books India Pvt. Ltd.
3. Basu, Kaushik. 2004. India's emerging economy. New Delhi: OUP.
4. Bhattacharya, D. N. (2012). Indian Economic Development: contemporary issues. New Delhi: Regal Publications.
5. Dutt, Ruddar and Sundaram. (2016). Indian Economy. New Delhi: S Chand and Company.
6. Jagdish, Bhagavathi. (1993). India in Transition. New Delhi: OUP.
7. Jalan, Bimal. (2000). India's Economic Policy Preparing for the 21st Century. 1996. New Delhi: Penguin.
8. Jalan, Bimal: (1992). Indian Economic Crisis: The Way Ahead. New Delhi: OUP.
9. Kapila, Uma. (2018). Indian Economy Since Independence: A Comprehensive And Critical Analysis of India's Economy 1947-2018. Academic Foundation.
10. Puri, V. K.; Misra, S. K.; and Garg Bharat. (2022). Indian Economy. New Delhi: Himalaya Publishing House.
11. Reddy, C. Ram Manohar. (2017). Demonitization and Black Money. Orient Black Swan Publication.
12. Robert, E. B. Lucas, and Gustav F Papanek. (1989). Indian Economy: Recent Developments and Future Prospects. New Delhi: OUP.
13. Sen, Amartya. (1982). Poverty and Famines: An Essay on Entitlement and Deprivation. New Delhi: Oxford University Press.
14. Tarapore, S. S. (2000 and 2006). Issues in Financial Sector Reforms. New Delhi: UBS Publishers and Distributors Ltd.
15. Thirlwall, A P. (1999). Growth and Development. 6th Edition. Macmillan Press Ltd.
16. Vijay Joshi and IMD Little. (2018). India's Economic Reforms 1991 and 2001. New Delhi: OUP.

**Suggested Readings:**

1. Basu, Kaushik. (2004). India's emerging economy. New Delhi: OUP.
2. Mohan, Manusinghe. (2009). Sustainable development in Practice, Cambridge University Press
3. Nayyar, Deepak. (2008). Liberalization and Development: Collected Essays. New Delhi: OUP.
4. Patnaik, Prabhat. (1988). Time, Inflation And Growth: Some Macroeconomic Themes In An Indian Perspective (R.C. Dutt Lectures On Political Economy, 1984). New Delhi: Orient Longman.
5. RBI (website: rbi.org). Database on Indian Economy
6. Ruddar Dutt and Sundaram. (2016). Indian Economy. New Delhi: S Chand and Company.
7. Sen, Amartya. (1973). On economic inequality. Oxford: Clarendon Press.
8. Stanton, C. T., Thomas, C. (2019). Missing Trade in Tasks: Employer Outsourcing in the Gig Economy Harvard Business School Working Paper.
9. The Standard of Living: Tanner Lectures – CUP. (1987 and 2002). India Development and Participation. New Delhi: OU

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Direct class room teaching

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
Total		100

**Sample Questions to test Outcomes**

1. Examine the recent trends the measurement of inequality in India.

2. How poverty and unemployment act as a hurdle in the way of development of Indian economy?
3. Assess the contribution of service sector towards the development of India in the current era.
4. Examine the recent policy changes in foreign trade.
5. Discuss the impact of domestic money supply in India.

#### KU03DSCECO204: QUANTITATIVE TECHNIQUES FOR DATA ANALYSIS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	DSC	200-299	<b>KU03DSCECO204</b>	4	90

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	2	0	50	50	100	2

#### Course Description

The course is divided into four modules which are designed to provide knowledge, statistical and mathematical skills with respect to: matrix algebra, summary measures of central tendency and variation/dispersion; summary measures of correlations/association; probability and distributions. This course enables the students to develop the analytical and empirical skills related to various statistical tests necessary to conduct research.

**Course Prerequisite: NIL**

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand various types of mathematical models, methods and statistical tools for economic data analysis	R, U
2	Understand basics of sampling, probability theory and theory of estimation	R,U
3	Evaluate data and apply suitable quantitative techniques on various theoretical distribution	U, A, E
4	Creating and testing statistical hypothesis with various statistical tests	A, C
5	Analyse secondary data using statistical and mathematical techniques	R, A

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Matrices</b>		<b>30</b>
	1	Types of Matrices, Basic operations, Addition, Subtraction and Multiplication of matrices	6
	2	Determinant of matrices-Inverse matrices-Rank of a matrix	6
	3	Solving Linear equations with the inverse	6
	4	Cramer's rule for matrix solutions	6
	5	Solution of simultaneous equations using Cramer's Rule.	
2	<b>Probability theory</b>		<b>30</b>
	1	Concept of probability- Different approaches to probability	5
	2	Theorems of Probability: Addition and Multiplication Theorem	5
	3	Conditional Probability –Bayes' theorem	5
	4	Random variables and Probability distribution, Mathematical expectation	4
	5	Probability Distributions: Discrete and Continuous Distributions	3
3	<b>Population and Sample</b>		<b>10</b>
	1	Population- sampling and sample designs	2
	2	Theoretical basis of sampling-methods of sampling- Statistic	2
	3	Sampling Distribution and standard Error	2
	4	Central limit theorem-Distribution of Sample mean	2
	5	Theory of Estimation: Point estimation and Interval Estimation- Properties of good estimator.	2
4	<b>Testing of hypotheses</b>		<b>15</b>
	1	Types of hypotheses - Null and alternative hypothesis- Type I and	3

		Type II errors – Critical region –Level of significance-Power of test	
	2	Procedure of testing of hypothesis	3
	3	Test of goodness of fit -Tests of significance for attributes	4
	4	Analysis of Variance techniques- F test and ANOVA –One-way and Two way classification	5
5	<b>TEACHER SPECIFIC MODULE</b>		<b>5</b>
	<i>Directions:</i> Estimation and testing		
	This module would be preferably based on the application of quantitative techniques on economic data		5

### Essential Readings:

1. Agarwal, Bharadwaj and Gupta. 1996. *Quantitative techniques in Economics*. Kalyani Publications.
2. Ajay.S. Gaur and Sanjay.S.Gaur. 2009. *Statistical Methods for Practice and Research*. Response Books.
3. Alpha C. Chiang and Kevin Wainwright. 2017. *Fundamental Methods of Mathematical Economics*. McGrawHill education.4<sup>th</sup> edition
4. Bowers David.1984 *Statistics for Economics*. Macmillan.
5. Damodar Gujarathi.2008. *Basic Econometrics*.5th edition.
6. David A Harville. 2001. *Matrix Algebra -Exercises and Solutions*, Springer, New York
7. Gupta.S.C.2000. *Fundamentals of Applied Statistics*. New Delhi: S.Chand.
8. Gupta.S.P. 2012 *Statistical Methods*. New Delhi: Sulthan Chand and Sons.
9. McClave James T, P.George Benson and Terry Sincich. 2000. *Statistics for Business and Economics*. Prentice Hall.
10. Murray R Spigel. 1998.Probability *Theory*.Schaums Outline Series. Mcgraw hill
11. Murray R Spigel.1975. Theory and problems of Probability and Statistics Schaums Outline Series.Mcgraw hill
12. Speigal.M. R and Stephan L.J. 2008. *Theory and Problems of Statistics, 4<sup>th</sup> edition*Schaum's Outline Series McGraw Hill
13. Speigal.M. R. 2000. *Theory and problems of Statistics*. London: McGraw Hill.
14. Taro Yamane 1962 *Mathematics for Economists- An Elementary Survey*, Prenticehall
15. Willaim.G. Kochran.2007. *Sampling Techniques*.Wiley India.

### Suggested Readings:

1. A.H. Smith and W. A. Albrecht.1966 *Fundamental Concepts of Analysis*, Prentice Hall.
2. Ajay.S.Gaur and Sanjay.S.Gaur. 2009. Statistical Methods for Practice and Research. Response books.
3. C.P.Simon and L.E. Blume.1994 *Mathematics for Economists*.WW Norton & Company

4. Conover WJ. Practical Nonparametric Statistics, 1998 3rd edition, New York: John Wiley and Sons.
5. D N Elhance, 2018 *Fundamentals of Statistics*, Kitab Mahal, New Delhi, revised edition
6. Kothari.C.R.2013. *Quantitative techniques*. New Delhi: Vikas publishing house. third edition
7. Monga,G.S. 2003. *Mathematics and Statistics for Economists*. New Delhi: Vikas Publications.
8. Ralph B. D'Agostino and Michael A. Stephens, 1986 Goodness-of-fit techniques (eds). Marcel Dekker Inc.
9. Siegel and Castellan. 1988. "Nonparametric Statistics for the Behavioral Sciences," 2nd edition, New York: McGraw-Hill.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Report/Data Analysis	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. State any two important properties of determinant of a matrix
2. Distinguish between point and interval estimation
3. Define an impossible event
4. Explain central limit theorem

**KU04DSCECO205: ADVANCED MICRO ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC	200-299	KU04DSCECO205	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*The course is divided into four modules which cover recent developments of the theory of consumer behaviour, theory of production, theory of firm and institutions, product pricing and welfare economics. The course is proposed to give a decent understanding and base to the students in applying the ideas and techniques for microeconomics in the practical field. The expansive destinations of the course is to prepare the students themselves in a complete way with the different parts of the conventional Microeconomic hypothesis just as the most recent improvements in this field and the utilizations of speculations in investigating current monetary issues and to build up the capacity to orchestrate information . To familiarize the students in dynamic with regards to advertise association, intricacy, vulnerability and instructive asymmetry; give experiences into advancements in the regions of general balance and government assistance financial matters.*

**Course Prerequisite: NIL****Course Outcomes:**

CO. No.	Expected Outcome	Learning Domains
CO1	Distinguish between traditional and modern business firms	R, U
CO2	Discuss the demand function, consumer surplus, profit functions and cost functions	R, U
CO3	Analyse utility maximization, profit maximization and cost minimization behaviour	An
CO4	Get an interest in the application of economics for business	A

	decision, planning and forecasting, test the significance of game theory	
CO5	Application of collusive and non-collusive behaviour in oligopoly market	A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>THEORY OF CONSUMER CHOICE: I</b>		<b>15</b>
	1	Risk and uncertainty in demand choices – measuring risk	3
	2	Attitudes towards risk	2
	3	Neumann-Morgenstern method of constructing utility index	3
	4	Friedman-Savage hypothesis	3
	5	Trade- off between risk and return	2
	6	State preference theory	2
<b>2</b>	<b>THEORY OF CONSUMER CHOICE: II</b>		<b>15</b>
	1	Recent developments in the theory of market demand: Attribute theory of demand	3
	2	Inter temporal choice of consumption	2



	3	Pragmatic approach to demand analysis – constant elasticity demand function –linear expenditure system	5
	4	Distributed lag models of demand	5
3	<b>Extension of the traditional theory of the firm</b>		<b>15</b>
	1	Baumol's theory of sales revenue maximization	1
	2	Marris' model of the managerial enterprise	1
	3	Williamson's model of managerial discretion	1
	4	Behavioural model of Cyert and March	1
	5	Theory of games	2
	6	Decision theory	4
	<b>Theory of product pricing:</b>		
	7	Basic assumptions underlying the traditional theory of pricing	1
	8	Hall and Hitch report and the 'full cost' pricing principle	1
	9	Bain's limit-pricing theory	1
	10	Model of Sylos- Labini	1
	11	Franco Modigliani limit pricing model	1
4	<b>Theory of distribution</b>		<b>15</b>
	1	Neoclassical approach to distribution- Marginal productivity theory	1
	2	Keynesian or Neo Keynesian theories of distribution or Alternative distribution theories	3
	3	Classical theories of distribution	2
	4	Modern theory of distribution or post Keynesian theory of distribution	1
		<b>General equilibrium and Welfare Economics</b>	
	5	Walrasian general equilibrium	1
	6	Two-factor, two-commodity, two-consumer general equilibrium model	1
	7	Existence, uniqueness and stability of general equilibrium	1
	8	Brouwer's fixed point theorem	1

	9	Criteria's of old social welfare economics	2
	10	Point of constrained bliss-theory of second best	1
	11	New welfare economics- compensation criteria	1

#### Essential Readings:

1. Dominick Salvatore. 2003. *Microeconomics: Theory and Applications*. Oxford University Press.
2. Koutsiyannis, A (2013), *Modern Microeconomics*, Macmillan Press, London
3. James M. Henderson and Richard E. Quandt. 2003. *Microeconomic Theory: A Mathematical Approach*. New Delhi: Tata McGraw-Hill Publishing Co. Ltd.
4. Robert S. Pindyck and Daniel L. Rubinfeld. 2003. *Microeconomics*. Prentice Hall of India.
5. Robert Y. Awh. 1976. *Microeconomics: Theory and Applications*. John Wiley and Sons.
6. Hal R. Varian. 2000. *Intermediate Microeconomics: A Modern Approach*. New Delhi: Affiliated East West Press.
7. David M. Kreps. 2004. *Microeconomics for Managers*. London: W.W. Norton & Co.
8. William J. Baumol. 2000. *Economic Theory and Operations Analysis*. Prentice Hall of India Pvt.Ltd.
9. Koutsoyiannis A. 1979. *Modern Microeconomics*, Mac Millan.
10. G. C. Da Costa. 1992. *Value and Distribution in Neoclassical and Classical Systems*. Himalaya Publishing House, Second Edition.

#### Suggested Readings:

1. Hal R. Varian. 2000. *Intermediate Microeconomics: A Modern Approach*. New Delhi: Affiliated East West Press.
2. Robert H. Frank. 2000. *Microeconomics and Behaviour*. Irwin Mc. Graw Hill.
3. Edwin Mansfield & Gary Yohe. 2004. *Microeconomics*. W.W.Norton & Co.
4. John P. Gould, Edward P. Lazear. 2003. *Microeconomic Theory*. Richard D. Irwin Inc.
5. J.K Sharma. 1997. *Operations Research- Theory and Applications*.

#### Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

#### Mode of Transaction

Hybrid Classroom

Evaluation Type	Marks
43	

**Rubrics:**

End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Assessment****Sample Questions to test Outcomes**

1. Discuss the assumptions of traditional theory of the firm.
2. Discuss the modern theory of cost function.
3. Analyze the Williamson model of managerial discretion theory.
4. Discuss the application of game theory in economic analysis.
5. Evaluate the collusive models of oligopoly.

**KU04DSCECO206: ADVANCED MACROECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC	200-299	KU04DSCECO206	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*This course provides an in-depth exploration of macroeconomic theory and its applications. It covers advanced topics in economic growth, business cycles, monetary and fiscal policy. The course focuses on theoretical foundations equipping students to critically evaluate macroeconomic policies and cotemporary economic issues.*

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Evaluate the Impact of global events and policies on domestic economic performance.	U
2	Develop the ability to interpret macroeconomic data and critically analyse monetary and fiscal policies	U,A
3	Analyse macroeconomic phenomena with in a global context, understanding the interconnectedness of national economy	U, E
4	Communicate complex macroeconomic concepts effectively through presentations, reports and policy briefs.	U, E, A
5	Evaluate the ethical implications of macroeconomic policies regarding income inequality, unemployment and economic justice.	R,U

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS****Contents for Classroom Transaction:**

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	<b>MACRO ECONOMIC THEORY AFTER KEYNES</b>		<b>7</b>
	1	The Monetarist School: Monetarist Propositions – Reformulation of Quantity Theory of Money – Fiscal and Monetary policy – Natural rate theory – Philips Curve.	2
	2	New Classical Economics: The New Classical Position – A Broader View – The Keynesian Countercritique.	1
	3	Real Business Cycle School: Real Business Cycle models – Central Features – Positive and Negative Technical Shocks – Macroeconomic Policy in RBC.	2
	4	New Keynesian Economics: Sticky Price models – Efficiency Wage Model – Insider Outsider Model – Hysteresis	2

2	<b>THEORIES OF CONSUMPTION, INVESTMENT, ECONOMIC GROWTH AND BUSINESS CYCLE</b>		<b>20</b>
	1	Theories of Consumption: Absolute Income Hypothesis – Relative Income Hypothesis – Permanent Income Hypothesis – Life Cycle Theory of Consumption – Random Walk Theory.	4
	2	Theories of Investment: The Marginal Efficiency of Investment – The Demand for Capital – The Theory of Capital Accumulation – The Accelerator Theory of Investment – Rental Cost of Capital and Investment – Stock Market and Investment – The Tobin's Q model	4
	3	Theories of Economic Growth: Harrod – Domar Model – The Neoclassical Theory of Growth – Endogenous Growth Theory.	7
	4	Business Cycle Theories: Phases of Business Cycle – Theories of Business Cycle – Policy Measures to Control Business Cycle.	5
3	<b>INFLATION AND UNEMPLOYMENT AND POLICY MEASURES</b>		<b>8</b>
	1	Inflation: Meaning – Types – Effects - Classical and Neoclassical Theories of Inflation – Keynesian Theory of Inflation – Monetarist Views – Modern Theories – Measures to Control inflation.	3
	2	Unemployment: Meaning – Types – and Measurement of Unemployment	1
	3	Monetary Policy: Meaning – Scope – Instruments – Limitations – Effectiveness – Monetary Policy in India Fiscal Policy: Meaning – Scope – Instruments – Types – Limitations – Effectiveness.	4
4	<b>OPEN ECONOMY MACROECONOMICS</b>		<b>15</b>
	1	International Monetary Aspects: The Foreign Exchange Market – Determination of Flexible and Fixed Exchange Rate.	4
	2	Balance Of Payments: Meaning – Balance of Payments Accounts – India's BOP – BOP disequilibrium – Classical Approach – Mundell Fleming Model – Monetary Approach	6
	3	Open Economy Monetary and Fiscal policy: The Mundell Fleming Model -Imperfect Capital Mobility Monetary and Fiscal Policy – Perfect Capital Mobility Monetary and Fiscal Policy	2
	4	International Monetary System: The Gold Standard – The Bretton Woods System – IMF	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Reflections on Present Monetary Order		
	This module would be discussions and reflections on current monetary order		10

#### Essential Readings:

- Brian Snowden and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar

7. Dwivedi, D.N. (2006) Macro Economics – Theory & Policy, Tata McGraw Hill Publishing Company Microeconomics Theory & Application Pearson.
8. Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP
9. Gregory Mankiw. Macroeconomics, 5th Edition, Worth Publishers, 2002.
10. Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition. Pearson
11. Rosalind Levasic and Alexander Rebmann. Macro Economics: An Introduction to Keynesian Neoclassical Controversies. London: The Macmillan Press Ltd.
10. Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 13th Edition, 2018.
11. Soumen Sikdar: Principles of Macroeconomics, OUP India
12. <https://mru.org/principles-economics-macroeconomics-0>

#### **Suggested Readings:**

10. Brian Snowdon and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar
11. Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP
12. Mohanty, D. (2011). How does the Reserve Bank of India Conduct its Monetary Policy? Reserve Bank of India Bulletin. Available at
13. Pearson Soumen Sikdar: Principles of Macroeconomics, OUP India
14. Phelps, E. S. (2008). MACROECONOMICS FOR A MODERN ECONOMY. The American Economist, 52(1), 3–22
15. Rosalind Levasic and Alexander Rebmann. Macro Economics: An Introduction to Keynesian Neoclassical Controversies. London: The Macmillan Press Ltd.
16. <http://www.jstor.org/stable/40657692>
17. <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/06SPBL100811.pdf>

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20

<b>Total</b>	<b>100</b>
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### Sample Questions to test Outcomes

1. Explain the key assumptions and predictions of the Solow Growth Model. How does technological progress affect long-term growth in this model?
2. Compare and contrast the Real Business Cycle (RBC) theory with the New Keynesian model in explaining economic fluctuations.
3. Discuss the role of fiscal policy in stabilizing the economy.
4. Using the Life-Cycle and Permanent Income Hypotheses, explain how consumers make intertemporal consumption decisions.
5. Describe the transmission mechanism of monetary policy in the New Keynesian framework. How do price and wage rigidities influence the effectiveness of monetary interventions?

### KU04DSCECO207: ENVIRONMENTAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC	200-299	KU04DSCECO207	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description:

*The course is divided into four modules which cover introducing environmental economics and environmental impacts of development, sustainable development, and economics of natural resources, environmental protection and policy. To provide the student better perception about environment and its significance in the development process through environment economy inter-linkage mechanism. Familiarise the students with concepts, tools and policy instruments used in economics to address the environmental concerns. To study how the environmental impacts of development project can be reduced through the practices of sustainable development. To study the various instruments for environmental protection programme that can augment environmental quality at the local, national and international level. To examine the role of various state and non-state agencies in environmental protection leading to quality environment. To provide the students with a basic skills and knowledge in the natural resource management of a country. To study the methods and techniques of valuation of environmental cost and benefit of developmental programme.*

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
CO1	Attain deeper understanding of economy and environment linkages and also about the major environmental impacts of development.	U
CO2	Learn in depth about Economics of externality of environmental goods.	U
CO3	Gain better knowledge about environmental impacts of development and best practices of sustainable development	An
CO4	Gain a deeper understating about the economics of natural resource management in reducing the intensity environmental problems.	U
CO5	Gain command over the environmental valuation techniques pertains to cost and benefit of a developmental project.	A, An, E

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>Introducing environmental economics and environmental impacts of development:</b>		<b>15</b>
	1	The Economy and environment	2
	2	Inter linkages between the economy and environment	3
	3	Environmental problems-pollution of air, water and land	3
	4	Environmental problem as an economic problem	1
	5	Externality	1



	6	Market failure and environmental goods	1
	7	Approaches and causes of market failure	2
	8	Market failure and externality	2
<b>2</b>	<b>Sustainable development</b>		<b>10</b>
	1	Definition- sustainable development	1
	2	Different approaches to sustainability—Hart wick, Solow, safe minimum Standard-Daly's operational principle	4
	3	Measurement of sustainability	3
	4	Environmental accounting	2
<b>3</b>	<b>Economics of Natural Resources</b>		<b>20</b>
	1	Resource taxonomy	1
	2	managing renewable and non-renewable resources	2
	3	Water resources in India-issues and concerns	1
	4	water ethics	1
	5	Biodiversity-magnitude and levels	2
	6	value of bio diversity and threats to biodiversity	1
	7	Environment Impact Assessment (EIA)	3
	8	Environmental Planning and Management	3
	9	Cost benefit analysis and environment	3
	10	Environmental valuation- methods	3
<b>4</b>	<b>Environmental protection and policy:</b>		<b>15</b>
	1	Instruments for environmental protection	3
	2	Command and control	2
	3	Market based new tools-education, information and voluntary measures	2
	4	Direct economic instruments-pollution fee and polluter pay principle, deposit refund system, taxes and subsidies	2
	5	Climate change, carbon tax and carbon emission trading	3
	8	Role of various sectors in environmental Protection-Government, public, private, cooperative, NGO's etc.	3

**Essential Readings:**

1. Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
2. Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
3. Charles, D Kolstad. 2000. *Environmental Economics*. Oxford University Press.
4. Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*. Newyork: Palgrave
5. Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.
6. Misra, SP, and Pandey, S N. 2009.*Essential Environmental Studies*. Ane Book Pvt.Ltd
7. K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)
8. Manusinghe Mohan(2009)Sustainable Development in practice, Cambridge University Press,cambridge
9. Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
10. Russel, S, Clifford. 2001. *Applying Economics to environment*. Oxford University Press.
11. Aravindkumar. 2004. Environment and Health. New Delhi :APH Publishing Company.
12. Saxeena, H M. 2006. Environmental Studies. Rawat Publications.

**Suggested Readings:**

1. Barbier, Edward B.1998*The Economics of Environment and Development*. Selected Essays, Edward Elgar, Cheltenham
2. Tom, Tietenberg.2011*Environmental and Natural Resource Economics*. New York: HarperCollins Publishers.
3. Ian, Goldin, and L,1995Alan Winters.*The Economics of Sustainable Development*, New York: Cambridge University Press .
4. Sterner, and Coria. 2011. *Policy Instruments for Environmental and Resource Management*. Francis and Taylor.
5. David, Pearce, and Dominic,1994.Moran.*The Economic Value of Biodiversity*, London: Earth Scan Publications Ltd.
6. Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
7. K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)
8. Phaneuf and Requate: 2017.A Course in Environmental Economics: Theory, Policy and Practice, Cambridge University Press

9. Freeman, Herriges and Kling: 2014. The Measurement of Environmental and Resource Values: Theory and Methods, 3rd ed. RFF Press/Routledge

**Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)**

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Discuss the inter linkage between economy, environment and ecology.
2. Explain the types of externality.
3. Analyze the rules of sustainable development.
4. Evaluate the managing renewable and nonrenewable resources.
5. Critically evaluate the environmental valuation techniques.

**KU04DSCECO208: PUBLIC FINANCE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	DSC	200-299	KU04DSCECO208	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

**Course Description:**

*This course aims to equip students with the essential understanding on the public finance. The course familiarizes with the concepts and theories of public finance.*

**Course Prerequisite: NIL****Course Outcomes:**

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

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

**Mapping of Course Outcomes to PSOs**

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

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO PUBLIC FINANCE</b>		<b>7</b>
	1	Public Finance: Meaning, definitions, Scope and Significance	2
	2	Public Finance and Private Finance: Meaning, and Distinction	1
	3	Public good and private good: Meaning, Characteristics, and Distinction, Principle of Maximum Social Advantage, Market Failures: Meaning, causes-role of externalities	2
	4	Market failure and role of government; Corrective actions	2
2	<b>PUBLIC REVENUE AND PUBLIC EXPENDITURE</b>		<b>20</b>
	1	Meaning and sources of revenue; Taxation – Canons of taxation, Characteristics of a sound tax system	4
	2	Impact, Incidence- Division of Tax burden, Shifting of tax, Economic Effects of tax on production, distribution and other effects, Progressive and Regressive, Proportional Tax	4
	3	Direct and Indirect Taxes – Merits and Demerits, Taxable Capacity: Meaning and determinants.	7
	4	Public Expenditure; Meaning, classification, principles, Types & Canons, Reasons for the growth of public expenditure, Wagner's law of increasing state activities, Peacock-Wiseman hypotheses, Effects of public expenditure: Production, Distribution & Other effects	5
3	<b>PUBLIC DEBT</b>		<b>8</b>
	1	Public Debt: Meaning, Purpose, Types & Effects	2
	2	Sources of Public Borrowing; Burden of Public Debt-Classical/Ricardian views, Keynesian and post-Keynesian views	1
	3	Intergenerational equity of public debt	2
	4	Causes of the Rise in Public Debt; Methods of debt redemption; Debt management.	5
4	<b>PUBLIC BUDGET, FISCAL POLICY AND FISCAL DEFICIT</b>		<b>15</b>
	1	Budget: Meaning, Process and Types of budget	4
	2	Economic and functional classification of the budget	6

	3	Balanced and unbalanced budget, Types of Budget Deficits; Fiscal Policy: Meaning, objectives and Tools; Fiscal deficit, Deficit Financing: Meaning, Advantages and Disadvantages	2
	4	Local Finance: Meaning and problems of local finance - Functions and Resources of local bodies -Municipalities and Municipal Corporation.	3
<b>5</b>	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>

#### Essential Readings:

1. Bhatia, H. L. (2018). Public Finance. New Delhi: Vikas Publishing House.
2. Hindriks, J. and G. Myles. (2006). Intermediate Public Economics. Massachusetts: MIT Press.
3. Lekhi R. K., Joginder Singh. (2018). Public Finance. New Delhi: Kalyani Publication.
4. Musgrave, R.A. (1989). The Theory of Public Finance. New Delhi: McGraw Hill
5. Musgrave, R.A. and P.B. Musgrave (1989). Public Finance in Theory and Practice, New Delhi: McGrawHill.
6. Tyagi, B.P. (2014). Public Finance. Meerut: Jaya Prakash Nath and Co.

#### Suggested Readings:

1. Government of India. Ch.2, Report of 15th Finance Commission, (Pg. 16-19).
2. Government of India, Ministry of Finance, Department of Economic Affairs, Budget Division. (November, 2022). Budget Manual.
3. Government of India, Report of 15th Finance Commission.
4. Gruber, Jonathan. (2019). Public Finance and Public Policy, 6th Edition. New York: Worth Publishers
5. Harvey S. Rosen and Ted Gayer (2012) Public Finance, 8th Edition. New York: McGrawHill  
<https://doi.org/10.1787/a944b17e-en>.Reference Distribution
6. Kaplow, Louis. (2008). The Theory of Taxation and Public Economics. STU-Student edition. Princeton: Princeton University Press.
7. Karnam, Gayithri, Public Expenditure in India: Policies and Development Outcomes (Oxford, 2022; online edn. Oxford Academic, 19 May 2022).  
<https://doi.org/10.1093/oso/9780192857569.001.0001>.
8. Kim, J. and Dougherty S. (eds.). (2020). Local Public Finance and Capacity Building in Asia: Issues and Challenges, OECD Fiscal Federalism Studies, OECD Publishing, Paris,
9. Lekhi R.K., Joginder Singh. (2022). Public Finance. New Delhi: Kalyani Publication.
10. Ministry of Finance, Department of Economic Affairs, Budget Division. (2021-22). New Delhi: Status Paper on Government Debt.
11. Musgrave, R. A., Musgrave, P. B., & Bird, R. M. (1989). Public Finance in Theory and Practice (Vol. 5). New York: McGraw-Hill.
12. Rao, M. Govinda. (2017).Central transfers to states in India: rewarding performance while ensuring equity.Final report submitted to NITI Aayog.
13. Reddy Y. V and Reddy G. V. (2019). Indian Fiscal Federalism. New Delhi: Oxford

14. Stiglitz, J. and Rosengard, J. (2015) Economics of the Public Sector, 4th edition, W. W Norton & Company.

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Direct class room teaching

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper 1	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Explain the Public Finance and Private Finance.
2. Discuss the Public good and private good.
3. Evaluate the Economic Effects of tax on production.
4. What are the reasons of fiscal deficit in India?
5. Distinguish between the balanced and unbalanced budget.

**KU05DSCECO301: INTERNATIONAL ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSC	300-399	KU05DSCECO301	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*The international economics course provides an overview of the theoretical and empirical dimensions of the trade, capital and labour flows in the contemporary open economy. The course focuses on traditional and modern trade theories as well as the various trade policies, its instruments and its welfare implications. The evolution of the various institutions shaping global trade and capital will also be dealt in detail. Emphasis is also given to analyse the Balance of Payment scenario of India. The contemporary issues of the global economy and its implications will also be evaluated.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Explain the traditional and modern theories of trade	U, R
2	Evaluate the various trade policies, its instruments and implications	U, E
3	Analyse the Balance of Payments of India to explain the empirical dimensions of international trade and capital flows	U, An
4	Justify the role and functions of exchange rate markets in a world of perfect capital mobility and its implications for monetary policy	U, E, A
5	Evaluate the issues of the contemporary global economy	U, E

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS****Contents for Classroom Transaction:**



<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>		<b>INTRODUCTION TO INTERNATIONAL ECONOMICS</b>	<b>7</b>
	1	The Subject Matter of International Economics – The Gravity Model – Current International Problems.	2
	2	International Trade Theory: The Mercantilist's View on Trade – Absolute Advantage Theory – Comparative Advantage Theory – Opportunity Cost Theory – The Basis and Gains from Trade under Constant Opportunity Cost.	1
	3	The Standard Theory of International Trade: Production Possibility Frontier with Increasing Cost – Community Indifference Curve – Equilibrium in Isolation – The basis and Gains from Trade with increasing opportunity cost – Trade based on differences on tastes.	2
	4	Demand and Supply, Offer Curves and Terms of Trade: Partial Equilibrium Analysis – offer Curves – General Equilibrium Analysis - The Terms of Trade.	2
<b>2</b>		<b>FACTOR ENDOWMENTS AND H-O THEORY, ECONOMIES OF SCALE, IMPERFECT COMPETITION AND INTERNATIONAL TRADE</b>	<b>20</b>
	1	Factor Intensity – Factor Abundance – Factor Endowments and Heckscher -Ohlin Theory – Factor Price Equalisation Theorem – Leontief Paradox – Factor Intensity Reversal.	5
	2	New Trade Theories – Economies of Scale and International Trade – Imperfect Competition and International Trade.	5
	3	Intra Industry Trade – Trade based on Dynamic Technological Differences – Costs of transportation-Environmental Standards and International Trade	10
<b>3</b>		<b>ECONOMIC GROWTH AND INTERNATIONAL TRADE POLICY</b>	<b>8</b>
	1	Growth of Factors of Production – Rybczynski Theorem - technical Progress – Growth and Trade in Small and Large Countries.	2
	2	International Trade Policies: Tariffs – Partial Equilibrium Analysis – The Theory of Tariff Structure – Thae rate of Effective Protection – General Equilibrium Analysis of Tariff in Small and Large Country – The Stolper Samuelson Theorem – The Optimum Tariff.	1
	3	Import Quota - Voluntary Export Restraints – Technical Administrative and Other Regulations – International Cartels - Dumping – Subsidies – Arguments for protection.	3
	4	History of Trade Policy: The Trade Agreements act – GATT – Kennedy Round – Tokyo Round – Uruguay Round – Doha Round	2
<b>4</b>		<b>ECONOMIC DEVELOPMENT, RESOURCE MOVEMENTS, BALANCE OF PAYMENTS AND EXCHANGE RATE</b>	<b>15</b>
	1	Customs Union and Free Trade Areas -Trade Creating and Diverting Customs Union – Theory of Second Best – Benefits – EU – European	3

		Trade Association – NAFTA.	
	2	International Trade and Economic Development: Trade as Engine of Growth – Endogenous Growth Theory – TOT and Economic Development – Current Problems facing Developing Countries.	3
	3	Resource Movements and Multi National Corporations: International Capital Flows – FDI – FPI - MNCs – International Labour Migration	2
	4	Balance of Payments, Foreign Exchange Markets – Foreign Exchange Rate – Spot and Forward Exchange Rate – Currency Swaps – Futures and Options – Foreign Exchange Risks – Interest Rate Arbitrage – Euro Currency and Offshore Financial Market.	3
	5	Exchange Rate Determination: Purchasing Power Parity Theory – Monetary approach to BOP and Exchange Rates – Portfolio Balance Model and Exchange Rate.	4
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Analysis of Indias BOP		
	This module provides an in-depth analysis of India's Balance of Payments (BOP), focusing on its components, trends, and underlying factors.		10

#### Essential Readings:

1. Dominic Salvatore. 2013. International Economics. John Wiley& Sons, New York.
2. Paul. R. Krugman, Maurice Obstfeld& Marc Melitz. 2015. International Economics. Pearson.
3. Robert C Feenstra& Alan M Taylor. 2008. International Economics. 2ndEdition, Worth Publishers, New York.
4. Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 13th Edition, 2018
5. <https://mru.org/teacher-resources/courses/international-trade>

#### Suggested Readings:

1. Sunanda Sen. 2010. International Trade Theory and Policy: A Review of the Literature. Levy Economics Institute of Bard College Working Paper No 635. URL:
2. B O Sodersten and Geoffrey Reed. 2003.International Economics. London: Macmillan. Edition, 2018
3. Robert C Feenstra& Alan M Taylor. 2008. International Economics. 2nd Edition, Worth Publishers, New York.
4. Robert M Dunn & John H Mutti. 2004. International Economics. Routledge

5. Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 13th
6. Yarbrough, B.V. and Yarbrough, R.M. (2006) The World Economy: Trade and Finance, 7th ed., Thomson South-Western: Mason OH
7. [http://www.levyinstitute.org/pubs/wp\\_635.pdf](http://www.levyinstitute.org/pubs/wp_635.pdf)

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. Examine Comparative cost advantage theory in the light of opportunity costs
2. Evaluate why H-O theorem or the factor-price equalization theorem doesn't hold good, when factor-intensity reversal is present
3. Discuss the macroeconomic dilemmas in an open economy
4. Examine monetary and fiscal policy impacts in flexible exchange rate systems under
5. perfect and imperfect capital mobility
6. Analyse the trends in India's current account in the recent periods
7. Analyse the reasons and implications of the global financial crisis of 2007

### KU05DSCECO302: ECONOMICS OF GROWTH AND DEVELOPMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSC	300-399	KU05DSCECO302	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

The course is divided into four modules which covers concept, measurement and indicators of economic growth and development, important theories on economic growth and development, role of agriculture, industry and technology in economic development, international aspects of economic development, planning experiences of India and Kerala and financial inclusion and economic development.

**Course Prerequisite:** NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand various theories of development	R , U
2	Examine how different sectors (agriculture, industry and service sectors) functioning and its impact on the economy.	U,E
3	Critically evaluate the role of capital and technological advancement	A, E
4	Evaluate the international developments and planning for development	A, E, C

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

#### Mapping of Course Outcomes to PSOs

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

## COURSE CONTENTS

### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Growth and development – Basic concepts</b>		<b>15</b>
	1	Subject matter - Historical Records- Kuznet's characteristics	5
	2	Concepts and measurement of economic growth and development	3
	3	Indicators of Development	2
	4	Problems of Development	2
	5	New approaches to development	3
2	<b>Theories of growth and development</b>		<b>20</b>
	1	Classical Theories	4
	2	Cambridge Growth models	4
	3	Neo- Classical Growth models	7
	4	Endogenous Growth models	2
	5	Partial theories of growth and development	8
	6	Dual Economy models	3
	7	Theories of Migration	2
3	<b>Agriculture, Industry, Capital and Technology in development</b>		<b>10</b>
	1	Agricultural policy in Developing countries- Globalisation and agriculture	2
	2	Role of Industrialization in Development – policies for Industrialisation	1
	3	Capital and Development- stages and sources of capital formation	5
	4	Choice of techniques – role of Intermediate technology- Issues related to transfer of technology	2
4	<b>International Aspects of Development and Planning</b>		<b>15</b>
	1	Role of foreign trade and foreign capital in the Development process	4
	2	International Agencies and development	6
	3	Indian Planning Experiences- NITI Aayog	2
	4	Decentralized planning experience	3

### Essential Readings:

1. A.P. Thirwall. 2003. *Growth and Development with Special Reference to Development Economics*. Palgrave.
2. Agalwal and S.P. Singh (Ed). 1985. *The Economics of Underdevelopment*. Delhi: OUP, Delhi.
3. Bakul H Dholakya and Raveendra H Dholakya. 1998. *Theory of Economic Growth and Technical Progress- An Introduction*. Delhi: MacMillan.

4. D.Nayyar (Ed). 1994. *Industrial Growth and stagnation: The debate in India*. Oxford University Press.
5. Debraj Ray. 2001. *Economics of Development*. New Delhi: Oxford University Press.
6. Gerald M Meier and James E Rensch (Ed).2005 *Leading Issues in Economic Development*.8<sup>th</sup> Edition.
7. Gunnar Myrdal.1968. *Asian Drama: An Inquiry In to the Poverty of Nations*. II Vol. New York: Pantheon.
8. Hentry Wan (JR).1971. *Economic Growth*. penguin books.
9. J R. Hicks. 1965.*Capital and Growth*. New Delhi: OUP.
10. J. Bhagwati and Padma Desai. 1970.*Planning for Industrialisation*. Oxford University Press.
11. Michael P. Todaro, and Stephen C. Smith. 2004. *Economic Development*, 8th Edition.
12. Sukhomoy Chakraborty. 1998. *Development Planning –Indian Experience*. Delhi: OUP.
13. UNDP.*Human Development Reports for various years*.
14. *World Bank Development Reports for various years*.

#### Suggested Readings:

1. Amartya Sen. 1999. *Development as Freedom*. New Delhi: Oxford University Press.
2. Dreze Jean and Sen Amartya. 1993.*Hunger and public Action*. Delhi: OUP.
3. H L Ahuja. 2016. *Development Economics*. Edited by S.Chand.
4. Hywd G Jones. 1976. *An Introduction to Modern Theory of Economic Growth*. McGraw Hill
5. J.N. Bhagwati (Ed). 1985. *Dependence and Interdependence- Essays in Development Economics*. Vol-1&2,. Bombay: OUP.
6. M.P.Todaro and S.C. Smith . 2005. *Economic development*. 8th Edition. Person Education. Delhi
7. Michel P Todaro. 1923. *Economics for Developing World*. London: Longman.
8. Vandana Desai and Robert B Potter. 2008. *The Companion to development studies-II* edn. A hodder viva edn,. New Delhi: Viva books Pvt Ltd
9. Yujiro Hayami and Yoshihisa Godo. 2005. *Development Economics* (3rd Edn). New Delhi: Oxford University Press.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Book/ Article Review /Assignment	10

c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Explain the Myrdal's strategies on economic development
2. Evaluate the decentralized planning experiences in Kerala.
3. Discuss the developments of micro credit in India.
4. Evaluate Marxian theory of economic development
5. Examine the salient features of modern economic growth
6. Discuss the role of international organizations in the development of third world countries.
7. Evaluate the effects of Globalisation and recent policy changes on Indian agriculture sector
8. Explain the role of technology on India's developmental experience during covid-19 period

#### KU05DSCECO303 : MATHEMATICAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSC	300-399	<b>KU05DSCECO303</b>	4	90

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	2	0	50	50	100	2

#### Course Description

This course helps to develop a mathematical base to economic students in applying various theories and issues of economics in the practical field. This course gives a consolidate knowledge of various mathematical formulation of theories related to micro, macro and behavioral economics

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand various types of mathematical models , methods and	R, U

	mathematical tools for economic data analysis	
2	Understand basics of demand functions, production functions and other macro-economic models	R,U
3	Creation and derivation of mathematical models related to market and behavioral economics	U, A, E
4	Developing and analyzing mathematical models for economic theory	A, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Basic concepts</b>		<b>30</b>
	1	set theory	7
	2	mathematical relations and functions	7
	3	Use of graphs and diagrams	6
	4	Differential and Integral Calculus- basics	10
2	<b>Theory of Demand</b>		<b>30</b>
	1	Maximization of utility and types of utility functions	8
	2	Demand functions - Elasticity - Properties of demand functions	8
	3	Slutsky equation	3
	4	Linear expenditure systems	3
	5	The problem of choice involving risk	8
3	<b>Theory of Production</b>		<b>15</b>
	1	Production function Cob-Douglas production function	5
	2	CES production function - VES production function	4
	3	Cost function	2
	4	Derivation of cost as a function of output	2
	5	Input demand function	2



4	<b>Mathematical models related to Market and Behavioral Economics</b>		<b>15</b>
	1	Market - Perfect Competition- Monopoly and applications	5
	2	Oligopoly-duopoly market models	5
	3	Theory of games	3
	4	Behavioral economics-concepts and theories	2

#### Essential Readings:

1. Allen R.G.D. 1956. *Mathematical Economics*. MacMillan Co. Ltd.
2. Allen R.G.D. 1967. *Macroeconomic Theory*. MacMillan Co. Ltd.
3. Allen, R.G.D. (1974), *Mathematical Analysis for Economists*, Macmillan Press, New Delhi.
4. Birchenhall.C. and Grout.P. 1984. *Mathematics for Modern Economics*. Philip Alien. Oxford: Harness and Noble Books.
5. Cunningham, Lawrence A. 2002. *Behavioral Finance and Investor Governance*. Washington & Lee Law Review.
6. David. F. Heithfield and Soren Wibe. 1987. *Introduction to Cost and Production Function*, Macmillan Education Ltd.
7. Eugene Silberberg. 1990. *The Structure of Economics a Mathematical Analysis* (Second Edition). Mc Graw Hill International (ed).
8. J.M. Henderson and R.E. Quandt. 1980. *Microeconomic Theory a Mathematical Approach*. Me. Graw Hill International Ltd.
9. Sydsaeter, Knut and Peter Hammond. 2002. *Essential Mathematics for Economic Analysis*. England : Prentice Hall: Harlow.
10. Yamane, Taro (1975), *Mathematics for Economists*, PHI, New Delhi.

#### Suggested Readings:

1. A.H. Smith and W. A. Albrecht. 1966 *Fundamental Concepts of Analysis*, Prentice Hall.
2. Adam Ostaszewski and Kenneth Binmore, 1993. *Mathematics in Economics: Models and Methods*
3. Akira Takayama. 1993. *Analytical Methods in Economics*.
4. Alpha C . Chiang- Kevin Wainwright. 2005. *Fundamental Methods of Mathematical Economics*.
5. Amitabh Kundu, et. Al. 1976. *Input Output framework and Economic Analysis*. New Delhi: Centre for the study of Regional Development.
6. C.P. Simon and L.E. Blume. 1994 *Mathematics for Economists*. WW Norton & Company
7. Core Suggested Readings (Books, Journals, E-sources Websites/ weblinks)
8. Diamond, Peter; Vartiainen, Hannu (2012). *Behavioral Economics and Its Applications*. Princeton University Press.
9. Edward T. Dowling, 2011. *Introduction to Mathematical Economics*. Schaum's Outline.
10. Handry, A.T. (1999), *Operations Research*, PHI, New Delhi.
11. Hens, Thorsten; Bachmann, Kremena (2008). *Behavioural Finance for Private Banking*. Wiley Finance Series.
12. Hogarth, R. M.; Reder, M. W. (1987). Rational Choice: The Contrast between Economics and Psychology. Chicago: University of Chicago Press.

13. Kahneman, Daniel; Tversky, Amos (1979). "*Prospect Theory: An Analysis of Decision under Risk*". *Econometrica*.
14. Krishna K.L. (ed.). 1997. *Econometric Applications in India*. New Delhi: Oxford University Press.
15. Lawrence E. Blume, Carl P. Simon .1994. *Mathematics for Economists*.
16. Layard, P.R.G. and Walters, A.W.(1978), *Microeconomic Theory*, McGrawHill, London.
17. Michael D.Intriligator. 1971. *Mathematical Optimization and Economic Theory*.
18. Michael Hoy. 2011. *Student's Solution Manual for Mathematics for Economics*.
19. Monga, G.S. 2003. *Mathematics and Statistics for Economists*. New Delhi : Vikas Publications.
20. Shleifer, Andrei (1999). *Inefficient Markets: An Introduction to Behavioral Finance*. New York: Oxford University Press.
21. Stigler, G.(1996), *Theory of Price*, PHI, New Delhi.
22. Thaler, Richard H (2016). "*Behavioral Economics: Past, Present, and Future*". *American Economic Review*.
23. Thaler, Richard H.; Mullainathan, Sendhil (2008). "*Behavioral Economics*". In David R. Henderson (ed.). *Concise Encyclopedia of Economics* (2nd ed.).
24. Varian, H.R. (2000), *Microeconomic Analysis*, W.W. Norton, New York

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Derive cost as a function of output.
2. Find the indefinite integral of the following  

$$\int (6x - 8) / (3x^2 - 8x + 5) dx$$

$$\int dx / (3 - 5x)$$
3. Find AC, MC, ATC, AFC of the cost function  $C = 5q + q^2 + 10$ .
4. Derive Slutsky equation

5. Distinguish between multiple plant and multi product monopoly

**KU05DSCECO304: FINANCIAL INSTITUTIONS AND MARKETS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSC	300-399	KU05DSCECO304	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

**Course Description:**

*The course aims at providing adequate exposure to the basic concepts and the working of the financial markets nationally and globally. It highlights the organisation, structure, and role of financial markets and institutions. The course will cover basic economic theories related to banking and finance markets. Financial and banking sector reforms and monetary policy with special reference to India are also covered. The course aims to develop the learning skills of the students in a way that they can apply their knowledge not only at the academic level but also at the managerial and leadership level in the field of financial sector.*

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	The students will be equipped with theoretical as well as practical aspects of the structure and working of financial system.	R
2	To understand how central banks conduct monetary policy.	U, An
3	The course is expected to expand the skill set of the students for higher studies and employment in finance.	R, U, An
4	The students will be aware of the innovations and the related trends in the field of banking and finance with special reference to instruments like derivatives.	U, An
5	To get a real-world experience with the financial market.	R, A

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1		<b>INTRODUCTION TO INDIAN FINANCIAL SYSTEM</b>	<b>7</b>
	1	Financial system, meaning, structure, and nature.	2
	2	Financial markets, meaning, classification	1
	3	Financial institutions, types, financial instruments, characteristics	2
	4	Financial services, Role of financial system in economic development	2
2		<b>FINANCIAL MARKET AND INSTRUMENT</b>	<b>20</b>
	1	Money market, meaning, features, functions or importance	4
		Components, Call money market, commercial bill market, acceptance market, treasury bill market Money market instruments, Treasury bill, Commercial bills, Commercial papers, Certificate of Deposits	4
	2	Capital market, objectives, functions, importance, structure, primary and secondary market	7
	3	Stock Exchange, meaning and functions, Stock Exchanges in India. Stock Market Index SENSEX, NIFTY	5
	4	Financial derivatives: Derivative instrument, meaning and types (forwards, futures, options, swaps)	
3		<b>FINANCIAL SERVICES</b>	<b>8</b>
	1	Financial Services, meaning, nature and scope	2
	2	Merchant banking, Meaning, objectives and functions, Mutual funds, Meaning, objectives	1
	3	Types of schemes, Credit rating, Meaning, functions and major agencies (CRISIL, ICRA, CARE)	5
	4	Types Factoring, Meaning, objectives and mechanism, Venture Capital, meaning, features, funding pattern	
4		<b>BANKING AND NON-BANKING INSTITUTIONS</b>	<b>15</b>
	1	Commercial Banks a) Definition and functions	4

	2	Development Banks a) Meaning and functions b) Major development banks in India (IDBI, SIDBI, NABARD)	6
	3	Non-banking Financial Institutions a) Meaning and types b) Difference between banking and non-banking institutions	2
	4	Recent innovations in Indian banking sector a) ATM, CDM, E-Banking, UPI, Credit card, Debit card, Smart card, Core banking, ECS, NEFT, RTGS, IMPS. b) An overview of banking sector reforms in India (Narasimham and Verma Committee)	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>

#### Essential Readings:

1. Bharati, Pallale V. (2012). Indian Financial system. New Delhi: Pearson.
2. Chakravarty, Rajesh. (2009). The financial sector in India. New Delhi: Oxford University Press.
3. Ghan, M.Y. (2008). Indian Financial system. New Delhi: McGraw Hill Company.
4. Guruswamy, S. (2009). Financial Institutions and markets. UK: Tata McGraw Hill.
5. Khan, M. Y. (2011). Indian Financial System. New Delhi: Tata McGraw Hill, 7th edition.
6. Kohn, Meir. (2007). Financial institutions and Markets. UK: Tata Mc GRaw Hill.
7. Muraleedharan, D. (2014). Modern Banking: Theory and Practice. New Delhi: PHI Learning Pvt. Ltd.
8. Nadar, Narayana E. (2016). Money and Banking. New Delhi: PHI Learning Private Ltd.
9. Shekhar, K.C. and Shekhar, Lekshmy. (2013). Banking Theory and Practice. New Delhi: Vikas Publishing House Pvt Ltd, Noida, 21st edition.

#### Suggested Readings:

1. Basu, S. K. (1980)-Banking Theory and Practice, Macmillan.
2. Bhole, L. M. (2004). Financial Institutions and Markets: Structure, Growth and Innovations. New Delhi: Tata McGraw-Hill Education.
3. Sayers, R.S. (1985). Modern Banking. New Delhi: OUP.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Assessment Rubrics:

Evaluation Type	Marks
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End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Explain the classification of financial markets and its meaning.
2. Discuss the importance of financial system in the economic development.
3. Discuss the functions of the Stock Exchange in India.
4. Evaluate the financial sector reforms in India.
5. Explain the banking and non-banking system.

#### **KU06DSCECO305: POLITICAL ECONOMY**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSC	300-399	KU06DSCECO305	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### **Course Description:**

*The Political economy course introduces the historical, sociological and political roots of contemporary economics and the heterodox approaches. The course provides an overview of the topics of the state, the markets, the theories of value and distribution by exploring the philosophies of the various schools of economic thought. The methodological underpinnings from classical political economy to neoliberal school are highlighted while the various economic systems are also given its due importance. Emphasis is given to critically evaluate the capitalist system by examine the various crises of the capitalist economy*

#### **Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Examine the genesis of the subject matter of modern economics and its methodology	U
2	Knowledge of the theories of value and distribution, and the role of state and markets and analyse the methodological differences of the various schools of economic thought	U,E
3	Critical overview of the capitalist economy by examining its various crises and its survival.	U, E
4	Explore the rise of financial capital and inequality on the global scale	U, E

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS****Contents for Classroom Transaction:**

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO POLITICAL ECONOMY</b>		<b>7</b>
	1	Introduction to Political Economy - Politics and Economics	2
	2	Smith, Ricardo and the first rupture in economic thought: Classical political economy - Smith's dualisms, Ricardo's abstractions - The first methodological rupture. Mill and Marx: John Stuart Mill: consolidation and crisis - Karl Marx, dialectics and history.	1
	3	Political economy as history: Smith, Ricardo, Marx: The invisible hand of history - Ricardo with Smith as point of departure - The dialectics of value.	2
	4	German Historical School: The making of the German Historical School - Methodological foundations - Laws of development.	2
2	<b>MARGINALISM, ECONOMIC HISTORY AND ECONOMICS AS</b>		<b>20</b>

	<b>BROAD SCIENCE</b>		
	1	Marginalism: Marginalism and the second schism in economic thought - Carl Menger and the Methodenstreit - The aftermath of Marginalism - The Marshallian heritage - Dehomogenising marginalism.	6
	2	British historical economics and the birth of economic history: British historicism - The birth of economic history.	6
	3	Economics as a broad science: Institutions, evolution and history - Veblen versus marginalism, Marx and the Historical School - Veblen's evolutionary scheme - Method and history.	6
	4	American institutionalism: Commons, Mitchell, Ayres	2
<b>3</b>	<b>SOCIAL ECONOMICS, POSITIVISM, SEPERATION OF ECONOMICS FROM SOCIOLOGY, AND THE FORMATION OF AUSTRIAN SCHOOL</b>		<b>8</b>
	1	Sozialökonomik: Weber, Schumpeter and Sozialökonomik - Constructing social economics - Methodological Individualism - Sombart and Weber	3
	2	Positivism and the separation of economics from sociology: Pareto and the birth of Sociology - Lionel Robbins – Introduction of positivism - consolidation of sociology.	1
	3	Austrian School: Carl Menger and the slippage from marginalism - The formation of the Austrian School.	4
<b>4</b>	<b>SHORT RUN – LONG RUN REVOLUTION IN ECONOMIC THEORY</b>		<b>15</b>
	1	The rise of Keynesianism - Philosophical foundations of Economics - General equilibrium	4
	2	Crisis of Capitalism and its Survival	6
	3	Economic Imperialism and the New Institutional Economics	2
	4	Indian Political Economy	3
<b>5</b>	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Discussion on Indian Political Economy		
	This module focuses on the political economy of India, analyzing the interplay between political institutions, economic policies, and socio-economic outcomes.		10

#### Essential Readings:

1. Ben Fine & Dimitris Milonakis. 2009. *From Political Economy to Economics*.
2. James A Caporaso & David P Levine. 1992. *Theories of Political Economy*.
3. Robert L Heilbroner. 1999. *The worldly philosophers: The lives, times, and ideas of the great economic thinkers*.
4. URL: [http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the\\_wordly\\_philosophers.pdf](http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the_wordly_philosophers.pdf)



5. Hunt, E. K., & Lautzenheiser, M. 2011. History of economic thought: A critical perspective. 3rd ed. & Teachings from the Worldly Philosophy (55-157).
6. Maurice Dobb. 2010. Theories of Value and Distribution Since Adam Smith: Ideology and Economic Theory. Chapter 6.
7. Michael Heinrich. 2004. An Introduction to the Three Volumes of Marx's Capital. URL: <http://digamo.free.fr/heinrich.pdf>
8. R Luxemburg. 1913. The Accumulation of Capital. Available at <https://www.marxists.org/archive/luxemburg/1913/accumulation-capital/accumulation.pdf>
9. Immanuel Wallerstein. 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. URL: <http://bev.berkeley.edu/ipe/readings/Wallerstein.pdf>
10. Keith Tribe. 1981. Genologies of Capitalism. The Macmillan Press.
11. Milton Friedman. 1962. Capitalism and Freedom pp. 1–55, 108–37, and 161–90.
12. David Harvey. 2005. A Brief History of Neoliberalism

#### **Suggested Readings:**

1. Brian Snowdon and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar
2. Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP
3. Mohanty, D. (2011). How does the Reserve Bank of India Conduct its Monetary Policy? Reserve Bank of India Bulletin. Available at
4. Pearson Soumen Sikdar: Principles of Macroeconomics, OUP India
5. Phelps, E. S. (2008). MACROECONOMICS FOR A MODERN ECONOMY. The American Economist, 52(1), 3–22
6. Rosalind Levasic and Alexander Rebmann. Macro Economics: An Introduction to Keynesian Neoclassical Controversies. London: The Macmillan Press Ltd. <http://www.jstor.org/stable/40657692>  
<https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/06SPBL100811.pdf>

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type	Marks
End Semester Evaluation	50

Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. Explain the key assumptions and predictions of the Solow Growth Model. How does technological progress affect long-term growth in this model?
2. Compare and contrast the Real Business Cycle (RBC) theory with the New Keynesian model in explaining economic fluctuations.
3. Discuss the role of fiscal policy in stabilizing the economy.
4. Using the Life-Cycle and Permanent Income Hypotheses, explain how consumers make intertemporal consumption decisions.
5. Describe the transmission mechanism of monetary policy in the New Keynesian framework. How do price and wage rigidities influence the effectiveness of monetary interventions?

### KU06DSCECO306: BASIC ECONOMETRICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSC	300-399	<b>KU06DSCECO306</b>	4	90

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	2	0	50	50	100	2

### Course Description

*This course helps the students to develop the analytical and empirical skills necessary to understand the formulation of economic theory and also enable them to formally represent economic relationships using mathematical and econometric tools and provide meaningful interpretations of these representations. Students will be able to analyze empirically economic relationships using simple, multiple regression, or simultaneous equation techniques. This course enables the students to develop the analytical and empirical skills relating to use of dummy variables and lag variables*

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Understand various concepts and methodology related to econometric analysis	R, U
2	Understand basics of single equation and system models, lagged models, dummy variable models and time series and panel data models	R,U
3	Evaluate data and apply suitable econometric techniques	U, A, E
4	Creating and testing statistical hypothesis with various econometric tests	A, C
5	Analyse, forecast and predict secondary data using econometric tools	R, A

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS**

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	<b>Regression and Correlations</b>		<b>20</b>
	1	Basic concepts	4
	2	Simple Correlation	4
	3	Partial and Multiple Correlation	4
	4	Simple Regression Analysis	4
	5	Multiple Regression Analysis	4
<b>2</b>	<b>Econometrics- Basic Concepts</b>		<b>20</b>
	1	Definition and scope of Econometrics	5
	2	Methodology of econometrics	5
	3	Two variable regression model- estimation and testing	5

	4	Multiple variable regression model- estimation and testing	5
3	<b>Econometric problems</b>		<b>20</b>
	1	Violations of the assumptions of Classical linear regression Model	5
	2	Autocorrelation, reasons, tests consequences and remedies	5
	3	Multicollinearity , reasons, tests consequences and remedies	5
	4	Heteroscedasticity – reasons, tests consequences and remedies	5
4	<b>Econometric Models</b>		<b>20</b>
	1	Dummy variable Models	5
	2	Lagged Models	5
	3	Simultaneous Equation Model	5
	4	Identification Problem	5
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Model Building, estimation and testing		
	This module would be preferably based on the application of econometric techniques on economic data		10

#### Essential Readings:

1. Koutsoyiannis.2004. *Theory of Econometrics*. Palgrave.
2. Baltagi, B. H. 2008. *Econometric Analysis of Panel Data*.4th edition, John Wiley.
3. Damodar N. Gujarati.1992. *Essentials of Econometrics*. McGraw Hill.
4. Damodar N. Gujarati.2000. *Econometrics*.
5. Damodar N. Gujarati1995. *Basic Econometrics*. McGraw Hill.
6. Desai, Meghand. 1976. *Applied Econometrics*. New York: McGraw Hill Book Co.
7. Enders, Walter .2009. *Applied Econometric Time Series*. 3rd Edition, Wiley
8. Everitt, Brian S and Dunn, Graham. 2001. *Applied Multivariate Data Analysis*. Second Edition. Arnold.
9. Greene, W. 2008.*Econometrics Analysis*. Pearson.
10. Johnston, J. and John Di Nardo, 1997.*Econometric Methods*. 4th Edition, London: McGraw-Hill Companies Inc
11. Klien L.R..1962 *Introduction to Econometrics*. New Jersey: Prentice Hall Inc. Englewood Cliffs.
12. Michael D. Intriligator.1980. *Econometric Models, Techniques and Applications*, New Delhi: Prentice Hall of India.

#### Suggested Readings:

1. G. M. K Madnani.2015. *Introduction to Econometrics: Principles and Applications*. CBS publishers & distributors.8<sup>th</sup> edition
2. Johnston, J. and John Di Nardo, 1997.*Econometric Methods*. 4th Edition, London: McGraw-Hill Companies Inc.
3. Johnston. J. 1972. *Econometric Methods*. New York: McGraw Hill Book Company.

4. Klien L.R. A. 1974. *Text Book of Econometrics*. New Jersey: Prentice Hall Inc. Englewood Cliffs.
5. Maddalla G.S. 1977. *Econometrics*. New York: McGraw Hill.
6. Michael D. Intriligator. 1980. *Econometric Models, Techniques and Applications*, New Delhi: Prentice Hall of India
7. Patterson, Kerry .2001. *An Introduction to Applied Econometrics – A Time Series Approach*. London: MacMillan Press Ltd.
8. Pindyck, Robert S. and Daniel L. Rubinfeld .1995. *Econometric Models and Economic Forecasts*. 4th Edition New York: Irwin McGraw-Hill.
9. Ramanathan, Ramu .2000. *Introductory Econometrics with Applications*. 5<sup>th</sup> Edition. New Delhi: Cengage Learning India Pvt. Ltd.
10. Raw and Miller. R.L., 1959. *Applied Econometrics*, PHI, Delhi
11. Thomas, R.L .1993. *Introductory Econometrics: Theory and Applications*. London: Longman.
12. Wooldridge, Jeffrey M. 2003. *Introductory Econometrics: A Modern Approach*, Second Edition. USA: Thomson South Western.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Report/Data Analysis	10
c)	Seminar/ Discussion/Debate	20
d)	Book/ Article Review	-
e)	Viva-Voce	-
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Briefly explain the features of stochastic term
2. Discuss the methods of detecting Auto correlation
3. Briefly discuss about the use of dummy variables in econometrics
4. Estimate the capital adjustment model, Stock of capital( $Z$ )= $f$  (Income,  $Y$ )

Z	50	50	75	75	80	90	100	120	115	90
Y	100	100	150	180	186	157	132	100	150	100

#### KU07DSCECO401: RESEARCH METHODOLOGY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSC	400-499	KU07DSCECO401	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

The course is divided into four modules which cover methods of research, formulation of research problem, research design, sources of data, types of sampling techniques and report writing. The course aims to provide the students the fundamental edifice of social science research with broad spectrum of knowledge about the research process. The paper generates the capability and skill on the part of students to prepare independent research project proposals which enable them to undertake research studies in future. The course aims to improve their basic academic skills and expertise required for undertaking research projects and research activities.

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Will learn and acquire the basic knowledge and methods of social science research.	U
2	Gain a thorough understanding of research problem, literature review, hypothesis formulation and research design.	U
3	Attain an in-depth skill to collect data, analyse and interpret it by using appropriate methods.	U, A
4	Enable to learn about data analysis, tools and techniques as well as the process of report writing.	U, A
5	Good capability and skill on proper methodological foundations of	U

	social research.	
6	Attain mastery in drafting research reports, tools and techniques and derive conclusions and policy implications on topics of societal relevance and economic significance	A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO RESEARCH METHODOLOGY</b>		<b>7</b>
	1	Research: Meaning – Objectives – Types – Approaches – Significance – Research Method and Methodology – Research Process – Criteria of Good Research – Research in India	2
	2	Research Problem: Meaning – Selection of Research Problem – Defining Research Problem.	1
	3	Research Design: Meaning – Need – Features of Good Research – Different Research Design.	2
	4	Sample Design: Census and Sample Survey – Steps in sample survey – Criteria of Selecting Sample – Characteristics of Good Sample – Different Types of Sample Designs – Selection of Random Sample.	2
2	<b>MEASUREMENT, SCALING TECHNIQUES, METHODS OF DATA COLLECTION AND ANALYSIS OF DATA</b>		<b>20</b>
	1	Measurement In Research: Measurement Scales – Errors in Measurement – Measurement Tools.	6
	2	Scaling: Meaning – Classification – Techniques of Scaling – Construction Techniques.	6

	3	Data Collection: Collection of Primary Data - Observation Method - Interview Method - Collection of Data through Questionnaires - Collection of Data through Schedules - Difference between Questionnaires and Schedules - Other Methods of Data Collection - Collection of Secondary Data	6
	4	Processing Operations: Problems in Processing - Types of Analysis - Statistics in Research - Measures of Central Tendency - Measures of Dispersion - Measures of Asymmetry - Simple Regression Analysis - Multiple Correlation and Regression - Partial Correlation	2
3	<b>SAMPLING, HYPOTHESIS, AND CHI- SQUARE</b>		<b>8</b>
	1	Sampling: Need for Sampling - Important Sampling Distributions - Central Limit Theorem - Sampling Theory - Standard Error - Estimation - Estimating the Population Mean ( $\mu$ ) - Estimating Population Proportion - Sample Size and its Determination.	3
	2	Hypothesis: Meaning - Basic Concepts Concerning Testing of Hypotheses - Procedure for Hypothesis Testing - Tests of Hypotheses - Important Parametric Tests - Hypothesis Testing of Means, between Means, for Comparing Two Related Samples, Testing of Proportions, Testing for Difference between Proportions, Testing the Equality of Variances of Two Normal Populations, Testing of Correlation Coefficients - Limitations of the Tests of Hypotheses	4
	3	Chi-square Test: Chi-square as a Test for Comparing Variance - Chi-square as a Non-parametric Test - Steps Involved in Applying Chi-square Test - Alternative Formula - Important Characteristics of $\chi^2$ Test	1
4	<b>ANOVA, AND ANCOVA</b>		<b>15</b>
	1	Analysis of Variance (ANOVA): The Basic Principle of ANOVA - ANOVA Technique - Short-cut Method for One-way ANOVA - Coding Method - Two-way ANOVA	4
	2	Analysis of Co-variance (ANOCOVA) - ANOCOVA Technique - Assumptions in ANOCOVA	6
	3	Testing of Hypotheses- Important Nonparametric Test - Characteristics of Distribution-free or Non-parametric Tests	2
	4	Report Writing: Significance - Steps in Writing Report - Types of Reports.	3
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions:</i> Training on Data Cleaning and Analysis		
	This module provides hands-on exposure to the essential steps of managing and analyzing research data. Students will learn techniques for cleaning and preprocessing data to ensure accuracy and reliability.		10

#### Essential Readings:

1. Alan Bryman (2012). Social Research Methods, Oxford University Press.
2. Deepak, Chawla, and Neenasondhi. 2016. Research Methodology Concepts and Cases. Noida: Vikas Publishing House Ltd.
3. Sharlene, Nagy HesseBiber.2006 The practice of qualitative research. London:



Sage Publishers

4. Howard, Lane, Bruce L. 2017 Berg. Qualitative Research Methods for social research. Pearson.
5. Ranjith, Kumar. 2014. Research Methodology A step by Step guide, London: Sage Publishers.
6. Kothari, C R. 1990. Research Methodology, Methods and Techniques. New Delhi: Wiley Eastern Ltd.
7. Francis, C Dane.2010 Evaluating Research methodology for people who need to Read Research. London: Sage Publishers
8. Goode, W J, and P F Hatt. 1952. Methods in social Research. New York: McGraw hill Book Company.
9. Thomas C George (2020) Research methodology and scientific writing, New Delhi: Ane Books Pvt.Ltd
10. Kapoor D Rand Pooja Saigal (2019) Research Methodology: Methods and Techniques, New Delhi: Regal publications
11. Lawrence Neuman (2010). Social Research Methods: Qualitative and Quantitative Approaches. Pearson Publishers.
12. Young, Pauline. 1988. Scientific social surveys and research, New Delhi: Prentice Hall India Pvt.Ltd.
13. Economic Survey 2023
14. RBI Bulletin
15. Budget document 2023, Government of India

**Suggested Readings:**

1. Laxmi, Devi. 1997. Encyclopaedia of Social Science Research. Anmol Publications.
2. The MLA Handbook for Writers of Association of America. 2009.
3. W Lawrence, Neuman. 2006. Social Research Methods- Quantitative and Qualitative Approaches. Pearson.
4. W Lawrence, Neuman. 2006. Social Research Methods- Quantitative and Qualitative Approaches. Pearson.
5. Wilkinson, and Bhandarkar. 2002. Methodology and Techniques of Social Research. Himalaya Publishers
6. William, J Goode, and Paul, K Hatt.1981. Methods in social Research, McGraw- Hill.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Examine how methods are different from methodology in social science research?
2. What are the important attributes of a good research design. Develop a typical research design for a topic of your interest.
3. Examine the important PLA tools and its relevance in social science research
4. Assess the strength and weakness of important data analysis tools and techniques in social science research
5. Objectivity, reliability and validity of data - Assess the significance of the statement in the quality of social science research.

**KU07DSCECO402: LABOUR ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSC	400-499	KU07DSCECO402	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

Labor Economics is a comprehensive study of the economic aspects surrounding the labour market, aiming to understand the behaviour of workers, employers, and the impact of government policies on employment and wages. This course delves into the theoretical and empirical foundations of labour markets, exploring key concepts, analytical tools, and real-world applications.

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Students would understand the conceptual clarity on various concepts and measurements related to labour market, employment and unemployment, labour force participate rate, human capital investment and wages.	U
2	Understand the importance of labour on development.	U
3	Relates the basic economic theory and principles to current labour issues and evaluate related public policy.	U, E
4	Comprehend the types of unemployment and reasons for unemployment in developing countries.	U
5	Develop research skills in the field of labour economics.	U, A

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

**Mapping of Course Outcomes to PSOs**

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>INTRODUCTION TO LABOUR ECONOMICS</b>		<b>7</b>
	1	The Labor Market: Labor Economics Basic Concepts - Positive Economics and Normative Economics - Labor Market Definitions - The Labor Force and Unemployment - The Earnings of Labor -The Demand for Labor - The Supply of Labor - The Determination of the Wage.	2
	2	The Demand For Labour: The Short-Run Demand for Labor When Both Product and Labor Markets Are Competitive - The Demand for Labor in Competitive Markets When Other Inputs Can Be Varied - Labor Demand in the Long Run - Maximizing Monopoly Profits	1
	3	Supply of Labour: Labor Force Participation Rates - Hours of Work - A Theory of the Decision to Work - Basic Concepts - Analysis of the Labor/Leisure Choice	2
	4	Labor Supply Model with Household Production: Joint Labor Supply Decisions within the Household - Specialization of Function - Life Cycle Aspects of Labor Supply - The Choice of Retirement Age	2
<b>2</b>	<b>INVESTMENTS IN HUMAN CAPITAL</b>		<b>20</b>
	1	Human Capital Investments: The Basic Model - Human Capital Investment Decision - The Demand for a College Education - Costs and Benefits of College - Market Responses to Changes in College Attendance	6
	2	Education, Earnings, and Post-Schooling Investments in Human Capital: Average Earnings and Educational Level - On-the-Job Training and the Concavity of Age/Earnings Profiles - Women and the Acquisition of Human Capital.	6
	3	Education as Investment: Education for Individuals - Education as Social Investment - Public Sector Training	6
<b>3</b>	4	Worker Mobility: The Determinants of Worker Mobility - Geographic Mobility - The Direction of Migratory Flows	2
	<b>UNIONS AND THE LABOR MARKET</b>		<b>8</b>
	1	Union Structure: he Monopoly-Union Model - The Efficient-Contracts Model - The Activities and Tools of Collective Bargaining - The	3

		Effects of Unions	
	2	Unemployment: Sources of Unemployment - Frictional Unemployment - The Theory of Job Search - Structural Unemployment - Natural Rate of Unemployment	1
	3	Inequality in Earnings: Measuring Inequality - The Underlying Causes of Growing Inequality.	4
		<b>INDIAN LABOUR MARKET</b>	<b>15</b>
4	1	Labour Market in India: Structure and Key Features – Skills, Education and Labour Market	6
	2	Measures of Employment and Unemployment	4
	3	Different Types of Employment and Social Protection	2
	4	Labour Laws and Minimum Wage Laws	3
5		<b>TEACHER SPECIFIC MODULE</b>	<b>10</b>
		<i>Directions:</i> Special focus on Indian labour market	
		This module aims to provide students with an understanding of the structure, dynamics, and challenges of the Indian labour market.	10

#### Essential Readings:

1. Ronald G. Ehrenberg and Robert Smith (2005): Modern Labour Economics, 5th Edition. New York: McGraw-Hill.
2. Ehrenberg, R. G. and Smith, R. S. (2018): Modern Labour Economics: Theory and Public Policy, Routledge.
3. Borjas, G. J. (2010): Labor Economics, McGraw-Hill/Irwin, Boston MA (5th edition).
4. Card, D., and Ashenfelter, O. (2011): Handbook of Labour Economics, Vol.4 A&B, Elsevier Articles from journals and working papers.
5. Abraham, K.G. and R.B. Mckersie (edited), New Developments in Labour Market: Toward a New Institutional Paradigm, MIT Press.
6. Akerlof, G.A. and J.L. Yellen (edited), Efficiency Wage Models of the Labour Market, Cambridge University Press.
7. Ash Amin, (edited), Post-Fordism – A Reader, Blackwell, Oxford.
8. Anil Verma et al (edited), Employment Relations in the Growing Asian Economics, Routledge.
9. Bagchi, A.K., (edited), New Technology and the Workers' Response, Sage Publications.
10. Becker, G.S., Human Capital (2nd Edition), NBER Cambridge
11. Bowles, S.M. et al (edited), Democracy and Markets, Cambridge University Press

#### Suggested Readings:

1. Cahuc, P., Carcillo, S., & Zylberberg, A. (2014). Labor economics (2nd ed.). MIT Press.
2. Freeman, R. B., & Medoff, J. L. (1984). What do unions do? Basic Books.
3. Card, D., & Krueger, A. B. (1995). Myth and measurement: The new economics of the minimum wage. Princeton University Press.
4. Layard, R., Nickell, S., & Jackman, R. (2005). Unemployment: Macroeconomic performance and the labor market (2nd ed.). Oxford University Press.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Explain how wage determination occurs in a perfectly competitive labor market. How do shifts in labor demand and supply affect equilibrium wages and employment?
2. Discuss the concept of human capital investment. How do individuals decide on education and training, and what factors influence their choices?
3. Analyze the economic determinants and consequences of labor migration. How do wage differentials and employment opportunities drive migration decisions?
4. Evaluate the role of labor unions in influencing wages, working conditions, and employment levels. How do unionized and non-unionized labor markets differ?
5. Describe the characteristics of the Indian labor market with a focus on informal employment. What are the key challenges faced by policymakers in addressing labor market disparities?

#### KU07DSCECO403: BEHAVIOURAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
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VII	DSC	400-499	<b>KU07DSCECO403</b>	4	60
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Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

This course emphasis on theoretical and empirical applications of behavioural concepts like (i) preferences (time and risk preferences, reference dependence, and social preferences), (ii) beliefs and learning (overconfidence, projection bias, and attribution bias), and (iii) decision-making (cognition, attention, framing, and persuasion), as well as (iv) market reactions to such deviations. Applications of behavioural economics will cover a wide range of fields, including labour and public economics, industrial organization, health economics, finance, and development economics.

**Course Prerequisite: NIL**

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To equip students with Basic and advanced knowledge in theories of Behavioural Economics	R, U
2	To familiarise the students with various aspects of applied Behavioural Economics	R,U, A
3	To make the students capable of addressing and solving the issues in the society	U, A, E
4	To acquire greater insight in the behavioural economics of various economic agents and institutions	A, E

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>Introduction</b>		<b>20</b>
	1	Behavioural economics - History and evolution- Relation with other disciplines	5
	2	Behavioural economics - Objectives, and scope- themes and methodology of behavioural economics- concepts	5
	3	Motivation and personality -Perception, learning and attitude -Limited information processing	5
	4	Economic expectation, emotions and wellbeing	5
<b>2</b>	<b>Microeconomic Foundation of Behavioural economics</b>		<b>20</b>
	1	Values, preferences and choice- believes	5
	2	heuristic and biases- state dependent preferences	5
	3	bounded rationality - prospect theory - dependent preference -mental accounting- Inter temporal choice	5
	4	social preferences - Nudges and Happiness.	5
<b>3</b>	<b>Behavioural macro economics</b>		<b>10</b>
	1	Neo-Keynesian Rational Expectation model- role of rational expectation in business cycle and labour market equilibrium	5
	2	the role of rational expectation on monetary policy and the determination of asset prices	3
	3	Animal Spirits and economic decisions	2
<b>4</b>	<b>Applied Behavioural Economics</b>		<b>10</b>
	1	Behaviour economics on Welfare and Policy Analysis	3
	2	Conceptualising and measuring welfare-saving, addiction	2
	3	Public good and economic development	2
	4	Behaviour economics on health care analysis- labour market-organisational behaviour.	3

#### Essential Readings:

1. BD Bernheim, S DellaVigna, D Laibson(ed) (2019). *"Handbook of Behavioral Economics- Foundations and Applications"*, North Holland .
2. Cunningham, Lawrence A.(2002).*"Behavioral Finance and Investor Governance"*. Washington & Lee Law Review.
3. Diamond, Peter; Vartiainen, Hannu (2012). *"Behavioral Economics and Its Applications"*.Princeton University Press.
4. Hens, Thorsten; Bachmann, Kremena (2008). *"Behavioural Finance for Private Bankin"*.Wiley Finance Series.
5. Hogarth, R. M.; Reder, M. W. (1987). *"Rational Choice: The Contrast between Economic and Psychology"*. Chicago: University of Chicago Press.
6. Michelle Beddeley (2019). *"Behavioural Economics and Finance"*. Rutledge.



7. Nick Wilkinson, Matthias Klaes (2012). *"An introduction to behavioural economics"* Palgrave MacMillan
8. Paul De Grauwe and Yeumei Ji (2019). *"Behavioural Macro Economics -Theory and Policy"*, Oxford University Press.
9. Peter Diamond and Hannu Vartiainen (ed.). (2012) *"Introduction to Behavioral Economics and Its Applications"*, Princeton University Press.
10. Rodica Ianole (2016). *"Applied Behavioral Economics Research and Trends"*, IGI Global.
11. Sanjit Dhami (2020). *"The foundations of behavioural economics"*. Oxford.
12. Shleifer, Andrei (1999). *"Inefficient Markets: An Introduction to Behavioral Finance"*. New York: Oxford University Press.
13. Thaler, Richard H (2016). *"Behavioral Economics: Past, Present, and Future"*. American Economic Review.
14. Thaler, Richard H.; Mullainathan, Sendhil (2008). *"Behavioral Economics"*. In David R. Henderson (ed.). *Concise Encyclopedia of Economics* (2nd ed.).

#### **Suggested Readings:**

1. *After the Phillips Curve: Persistence of High Inflation and High Unemployment*, Conference Series, 1978.
2. Alan Lewis (2008). *"The Cambridge Handbook of Psychology and Economic Behaviour"*, (Edt.), Cambridge University Press.
3. Alexander Rajko (2012). *"Behaviour economics and business ethics- interrelation and application"* Routledge, London, Philosophical problems of behavioural economics by Steffan Heide, Routledge, 1996
4. Andrew W. Lo (2007) *"Efficient Markets Hypothesis"* in L. Blume and S. Durlauf, *The New Palgrave: A Dictionary of Economics*.
5. Ayala and A. Palacio-Vera (2014) *"The Rational Expectations Hypothesis: An assessment from Popper's Philosophy"*, [http://www.levyinstitute.org/pubs/wp\\_786.pdf](http://www.levyinstitute.org/pubs/wp_786.pdf)
6. Brunnermeier, Markus, K., and Jonathan A. Parker (2005). *"Optimal Expectations."* American Economic Review, 95(4): 1092-1118.
7. Charness and Rabin (2002) *"Understanding Social Preferences with Simple Tests"* Quarterly Journal of Economics, 117(3): 817-869.
8. David De Cremer, Marcel Zeelenberg and J. Keith Murnighan (edt) (2012). *"Social Psychology and Economics"*, Psychology Press.
9. DellaVigna, List, Malmendier. (2012). *"Testing for Altruism and Social Pressure in Charitable Giving"*. Quarterly Journal of Economics, 127(1): 1-56.
10. Farmer, R. (1993), *"Macroeconomics of Self Fulfilling Prophecies"*, MIT press.
11. Fehr and Gächter, (2000), *"Fairness and Retaliation: The Economics of Reciprocity"*, Journal of Economic Perspectives, 14(3): 159-181.
12. Fehr, E. and Schmidt, K. (1999) *"A Theory of Fairness, Competition, and Cooperation"* The Quarterly Journal of Economics, 114(3): 817-868.
13. G. Akerlof and R. Shiller, (2009), *"Animal Spirits"*, Princeton University Press.
14. G. Akerlof, (2001), *"Behavioral Macroeconomics and Macroeconomic Behavior"*, Nobel Prize Lecture.
15. Gerrit Ando Antonides (1991). *"Psychology in Economics and business"*. Springer Science Business Media
16. <http://www.kellogg.northwestern.edu/faculty/rebelo/htm/rbc.pdf>
17. J.L. Buxter (1993). *"Behavioural foundations of economics"* by, McMillan Press
18. Kahneman and Tversky (1979) *"Prospect Theory: An Analysis of Decision Under Risk"*, Econometrica, 47(2): 263- 291.

19. Kahneman, Daniel (2011) *Thinking, fast and slow*. Macmillan. Koszegi and Rabin (2006), "A Model of Reference-Dependent Preferences", Quarterly Journal of Economics, 121(4): 1133–1165.
20. Lazear, Edward P., Ulrike Malmendier, and Roberto A. Weber. (2012). "Sorting in Experiments with Application to Social Preferences." American Economic Journal: Applied Economics, 4(1): 136-63.
21. List (2003) "Does Market Experience Eliminate Market Anomalies?," Quarterly Journal of Economics, 118(1): 41– 71.
22. Loewenstein (1987) "Anticipation and the Valuation of Delayed Consumption". Economic Journal, 97(387): 666— 684.
23. Lucas, Robert E., Jr. and Thomas J. Sargent, (1979) "After Keynesian Macroeconomics," in Federal Reserve Bank of Boston
24. Michael S Zouboulakis (1997). "Varieties of modern economic rationality – from Adam Smith to Contemporary Behavioural and evolutionary economists", Routledge.
25. Muth, J.F. (1961). "Rational Expectations and the Theory of Price Movements", Econometrica, 29(3), pp. 315-335.
26. R. Lucas (1995) "Monetary Neutrality", Nobel Price Lecture , [https://www.nobelprize.org/nobel\\_prizes/economic-sciences/laureates/1995/lucas-lecture.pdf](https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1995/lucas-lecture.pdf)
27. Rabin (1993). "Incorporating Fairness into Game Theory and Economics", American Economic Review, 83(5): 1281– 1302.
28. Rob Rinyard, Wiley (2018), "Economic Psychology" (ed) , chapter 16
29. Robert L. Leahy (2003). "Psychology and the Economic Mind Cognitive Processes & Conceptualization", Springer Publishing Company.
30. S. Rebelo (2005) "Real Business Cycles Models: Past, Present and Future"
31. Stefan Heidl (2016). "Philosophical Problems of Behavioural Economics", Routledge.
32. Sydnor, Justin. 2010. "(Over) insuring Modest Risks." American Economic Journal: Applied Economics, 2(4): 177-99
33. Thaler, Richard H. (1988). "Anomalies: The Ultimatum Game." Journal of Economic Perspectives, 2(4): 195-206.
34. Tversky, A. and Kahneman, D. (1974) "Judgment under Uncertainty: Heuristics and Biases", Science, 185(4): 1124– 1131.

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20

<b>Total</b>	<b>100</b>
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#### Sample Questions to test Outcomes

1. How does the "anchoring effect" influence consumer purchasing decisions? Provide an example where initial price exposure affects willingness to pay.
2. Explain the concept of "loss aversion" in prospect theory. Why do people tend to weigh potential losses more heavily than equivalent gains?
3. What role does "hyperbolic discounting" play in procrastination and long-term planning? Discuss how this time-inconsistency affects savings or health behaviors.
4. How can "nudges" be used to improve public policy outcomes? Give an example of a successful nudge (e.g., opt-out organ donation).
5. Why do people rely on the "availability heuristic" when assessing risks? Illustrate with an example where vivid or recent events distort judgment

#### KU07DSCECO404: POPULATION STUDIES

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSC	400-499	KU07DSCECO404	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

*The course is divided into four modules which cover nature of population studies, structure and growth of population, theories of population, population dynamics- mortality and fertility, migration, urbanization, population projection and population policy . To make the students to understand about the demography. To know about the reasons for migration. To understand the population policy in India .To equips the students with the knowledge regarding the relationship between demography and economic development and to understand the population trends in India.*

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
CO1	Describe the growth of population in India	E
CO2	Examine the theories of population	E
CO3	Understand the concepts of Fertility, Nuptiality and Mortality	U
CO4	Analyse the reasons for migration	An
CO5	Develop a proactive attitude towards the population policy	C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	<b>Population studies</b>		<b>15</b>
	1	Meaning-Nature-Scope-Importance-basic concepts	3
	2	Population data- Methods and Sources	2
	3	World population growth and distribution	1
	4	Population growth in India and Kerala	1
	5	Theories of Population growth	3
	6	Structure and characteristics of Indian Population	1
	7	Sex and Age structure	1
	8	Population Ageing- Ageing in India and Kerala- Emerging	3

		Issues	
2	<b>POPULATION DYNAMICS;MORTALITY&amp;FERTILITY</b>		<b>15</b>
	1	Mortality	1
	2	Measures of Mortality	1
	3	Use of Life Table Techniques	2
	4	Sex and Age Pattern of Mortality	1
	5	Mortality Differentials	1
	6	Level and Trends in Mortality	1
	7	Fertility- Level and Trends	1
	8	Nature of Fertility- Nuptiality	1
	9	Measures of fertility	1
	10	Differentials in Fertility	1
	11	Theories of Fertility	3
3	<b>MIGRATION&amp;URBANIZATION</b>		<b>15</b>
	1	Migration- Basic concepts- Importance	2
	2	Types of Migration	2
	3	Migration Differentials	1
	4	Levels and Trends of Migration	1
	5	Socio- Economic aspects of Migration	1
	6	Theories of Migration	3
	7	Techniques of Measurement of Migration	2
	8	Urbanization- measures	1
	9	Distribution and Trends in Urban Population	1
	10	Factors affecting Urbanization	1
4	<b>Population Projection and Population Policies in India</b>		<b>15</b>
	1	Population Projection – types	3
	2	Importance of Population Projections	2
	3	Techniques for measuring population projection	3
	4	Family welfare programmes	2
	5	Uses of population data in development planning	2

	6	Population Policies and Programmes in India	3
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#### Essential Readings:

1. Asha A. Bhande and Tara Kanikkar. 1988. *Population Studies*. Himalaya Publishing House.
2. Prasad P.K. 1990. *Population Planning, Policy and Programme*. New Delhi: Deep and Deep Publications.
3. Colin Neuwell. 1998. *Methods and Models in Demography*. London: Belhaven Press.
4. Peter R. Cox. 1989. *Demography*. New Delhi: Universal Book Stall.
5. P.G.K. Panikar and C.R. Soman. 1985. *Health Status of Kerala*. Trivandrum: Centre for Development Studies.
6. Demeny and Geoffrey Menicoll. 1998. *Population and Development*. Earth Scan Publications.
7. D.J. Bogue. 1971. *Principles of Demography*. Wiley.
8. Rajendra K Sharma. 2007. *Demography and Population Problems*. Atlantic Publishers
9. B.D. Misra. 1980. *An Introduction to the study of population*. South Asian Publishers.

#### Suggested Readings:

1. D. S. Adhikari. 2008. *Population challenge and world crisis: documents and case studies*. New Delhi: cyber tech publications.
2. Samuel H Preston, Patrick Heuveling and Michel Guillot. 2001. *Demography: Measuring and Modeling Population Processes*. U.K and U. S. A: Black well Publishers.
3. Hansraj. *Population Studies with special reference to India*. New Delhi: Surjit Publications.

#### Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Describe the growth of population in India.
2. Examine the theories of population.
3. Explain the measures of mortality rate.
4. Analyse the reasons for migration.
5. Discuss the objectives of National population policy.

**KU08DSCECO405: GENDER ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSC	400-499	<b>KU08DSCECO405</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

The course is divided into four modules. This course aims to provide a firm understanding of economic and social processes that shape the contemporary global world and their gendered outcomes. It considers diverse analytical tools and theoretical approaches for the analysis of development and globalisation from a uniquely gendered perspective. Emphasis is placed on the analysis and theorisation of political, socio-economic, institutional and spatial aspects of change and inequality, particularly changes in labour, work and employment patterns, economic restructuring and critical policy issues among others. A series of case studies and interdisciplinary academic readings will link global and local issues and the lives of people across the globe. The main objective of the course is to introduce the students to major concepts used in gender analysis. The course intends to equip the students with broad principles and theories of gender and development

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Knowledge about various concept of gender economics	R, U
2	Identify various gender based disparities	R,U
3	analyse case studies of gender dimensions of various economic phenomenon	U, A, E
4	Evaluate the effectiveness of gender-focused economic policies	A, E

5	Attain competitive edge in mastering various theories of gender development	U, A, E
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Introduction to Gender studies</b>		<b>15</b>
	1	Concepts of Gender and Sex	6
	2	Importance of women and gender studies	6
	3	Gender and Economic development – Measures of Gender development	6
	4	World and India Analysis of gender relations for case study evaluation and research	6
2	<b>Gender Dynamics</b>		<b>15</b>
	1	Gender dynamics -marriage -reproduction - age structure- mortality - fertility–sex ratio	5
	2	Theories of power and the relations between the psyche and the social	5
	3	Gender representation and rights-gender roles and stereotypes	5
	4	Contemporary issues of gender	4
3	<b>Gender and Labour Market</b>		<b>15</b>
	1	Work participation - Wage differentials and its determinants	2
	2	Gender and Education	2
	3	Feminist movements , Transgender's issues	2
	4	Role of civil society and Role of N.G.O's	2
4	<b>Social Security and Rights</b>		<b>15</b>
	1	Measures for gender well being	3
	2	Review of legislation- gender quotas and collective action	3
	3	National policies for gender development	4

**Comment [ED1]:** Removed LGBTQIA issues



	4	UN measures of Gender development	5
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### Essential Readings:

1. Agarwal, B. (2016) Gender Challenges (Vol 1, 2 and 3). India: Oxford University Press.
2. Ahmed S, (2017) Living a Feminist Life, Duke University Press, Durham
3. Benería, L. Berik, G and Floro, M. (2015) Gender, Development and Globalization: Economics as if All people Mattered, London: Routledge. (2nd Edition).
4. Benería, L.(2003) Gender, Development & Globalisation. Economics As If All People Mattered. London & NY: Routledge;
5. Boserup, Ester(1970), Woman's Role in Economic Development / Ester Boserup; new introduction by Nazneen Kanji, Su Fee Tan and Camilla Toulmin.-- London: Earthscan, (re print-2007)
6. Butler, J (1999) Gender Trouble, Routledge, New York & London
7. Desai, N and M.K.Raj (1974), Women and Society in India ,SNDT University ,Mumbai
8. Dutta, Nandita and, Sumitra Jha(2014), Women Social Work and Social Welfare ,Pacific Books International, New Delhi.
9. Evans et al, (2015) The Sage Handbook of Feminist Theory Sage, London
10. Evans M and Williams C, (2012) Gender: The Key Concepts, Routledge, London
11. Govt. of India (1974), Towards equality-Report of the committee on the status of women in India ,Dept of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
12. Govt. of India (2009), Gender Equality and Women Empowerment in India ,National Family Health Survey 2005-06 (NFHS-3), IIPS, Mumbai
13. Jaggar, A. (2014) Gender and Global Justice, Bristol: Polity
14. Kabeer, N. (2003) Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: a handbook for policy-makers and other stakeholders, London: Commonwealth Secretariat.
15. Marchand, M. and Runyan, A. (2011) Gender and Global Restructuring, second edition London: Routledge.
16. Milanovic, B. (2016) Global Inequality: A New Approach for the Age of Globalization, Harvard: Harvard University Press
17. Mohanty C, (2003) Feminism without Borders Decolonizing Theory , Practicing Solidarity, Duke University Press, Durham
18. Selwyn, B. (2014) The Global Development Crisis, Cambridge: Polity Press.
19. Sen, Suvarna ,(2006), Gender and Development, ICFAI University Press, Hyderabad, A.Venkateswarlu, et al. (2013) ,Dimensions of Female Sex Ratio.; Interstate Variations in India ,Serials Publications, New Delhi.
20. Stiglitz, J. (2015) The Great Divide. Unequal Societies and What We Can Do About Them, London: Penguin.
21. UNRISD, (2004) Gender Equality; Striving for Justice in an Unequal World, UNRISD, France
22. Visvanathan, N. et.al. (2012) The Women, Gender and Development Reader, London: Zed Books.

23. Walby, S. (2009) Globalisation and inequalities: Complexity and contested modernities. London: SagePublicationsLtd.
24. Wazir,R,(2000),The Gender gap in Basic Education,;NGO's as change Agents,Sage Publications, Delhi

#### **Suggested Readings:**

1. Butler J, (1997) the Psychic Life of Power, Stanford University Press, Stanford
2. Chant, S. (ed.) (2010) International Handbook of Gender and Poverty: Concepts, Research, Policy, Cheltenham: Edward Elgar.
3. Cook, S. and Kabeer, N. (2010) Social Protection as Development Strategy, London: Routledge.
- Cornwall, A., Harrison, E. & Whitehead, A. (eds) (2007) Feminisms in Development: contradictions, contestations, and challenges, London: Zed Books.
4. Cornwall, A.,Edstrom, J. and Greig, A. eds. (2011) Men and Development: Politicising Masculinities, London: Zed Books.
5. Devaki, J. and Elson, D. (2011) Harvesting Feminist Knowledge for Public Policy, IDRC, London: Sage
6. Dutta,Nandita and,Sumitra Jha(2014),Women and Agricultural Development ,Pacific Book,New Delhi.
7. Dutta,Nandita and,Sumitra Jha(2014),Women and Rural Development ,Pacific Books Internat, Delhi
8. Eadie,Jo (ed) (2004) Sexuality. The Essential Glossary, publisher Hodder Education
9. Escobar, A. (2011) Encountering Development: The Making and Unmaking of the Third World, Princeton Princeton University Press
- Kabeer, N. (2001) The Power to Chose. Bangladeshi women and labour market decisions in London and Dhaka, London: Verso.
10. Foucault M (1990) The History of Sexuality Vol 1 Penguin, Houndsmills
11. Harilal,K.N.,Kanji,N.,Jeyaranjan,J.,Eapen,M.and Swaminathan,P (2006) Power in Global Value Chain; Implications of cashew nut industry in India ,IIED
12. Hemmings C, Why Stories Matter: (2011) The Political Grammar of Feminist Theory, Duke University Press, Durham
13. Hill Collins P and Bilge S, (2016) Intersectionality, Polity, London
14. ILO,(2002) Women and Men in the Informal Economy; A statistical Picture,ILO
15. Jitendra Ahirrao(2013), Entrepreneurship and Rural Women in India ,New Century Publications,New Delhi.
16. Krishna Raj .M, Sudarshan.R.M, and Shariff.A,(1999) ,Gender,Population and Development ,Oxford University Press,New Delhi
17. Mirchandani, K. (2012) Phone Clones. Authenticity Work in the Transnational Service Economy, Ithaca: ILR Press.
18. Ong, A. (2010) Spirits of Resistance and capitalist Discipline, 2nd Edition New York: Suny Press.
19. Pal,Manoranjan et .al (Ed)( 2011),Health,Nutritional Status and Role of women in India, Oxford University Press, New Delhi.
20. Patel, R. (2010) Working the Night Shift. Women in India's Call Centres, Stanford: University Press.
21. Perrons, D. (2004) Globalization and Social Change, London: Routledge.
22. Sen,Amartya.(1990), "More than 100 million women are missing"Newyork Review of books,vol.37,No.20,1990.
23. Sen,Sujatha ,(2012) Gender studies,Dorling Kindersely(India)Pvt.Ltd,New Delhi.

24. Seth .M,(2000)Women and Development ;The Indian Experience ,Sage Publications,New Delhi
25. Spierings, N. (2015) Women's employment in Muslim countries: patterns of diversity. Basingstoke, Hampshire: Palgrave Macmillan.
26. Srinivasa.K, and A.Shroff (1998)India Towards population and Development Goals , OUP,New Delhi
27. Various issues of Economic and Political Weekly.(for e.g .John Mary .E.(1996)”Gender and Development in India EPW,31(47),PP 3071-77)
28. Walby, S. (2011) *The future of feminism. Cambridge: Polity Press.*
29. Weigman R, (2012) Object Lessons, Duke University Press, Durham

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. Distinguish between Patrilineal and Matrilineal systems and its relevance to present Indian society
2. Explain in detail about the various criteria that you would use to assess gender development
3. Explain the role of community for gender empowerment
4. Briefly discuss about the causes of declining sex ratio
5. Evaluate the effects of education and knowledge on women’s participation in decision making

**KU09DSCECO501: ADVANCED ECONOMETRICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IX	DSC	500-599	<b>KU09DSCECO501</b>	4	75

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	1	0	50	50	100	2

**Course Description**

This course provides an in-depth exploration of advanced econometric techniques used in empirical economic research. It covers time series models, panel data analysis, nonlinear models, and applications across various economic disciplines. Students will gain hands-on experience with real-world datasets and learn to interpret econometric results critically.

**Course Prerequisite:** Introductory Econometrics, Statistics, Basic Regression Analysis

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Estimate and interpret time series models, including ARIMA and VAR.	R, U
2	Apply panel data techniques (fixed effects, random effects, dynamic panels).	R,U
3	Model nonlinear relationships using logit, probit, and other nonlinear estimators.	U, A, E
4	Implement econometric methods in macroeconomics, finance, labor, and development economics.	A, C
5	Critically assess econometric results for policy and business decision-making.	R, A

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

**Mapping of Course Outcomes to PSOs**

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	Time Series Models		<b>24</b>
	1	Time series econometrics	4
	2	Stationarity and unit root tests (ADF, KPSS)	4
	3	ARIMA and SARIMA models	4
	4	Vector Autoregression (VAR) and Granger causality	4
	5	Cointegration (Engle-Granger, Johansen)	4
	6	Structural breaks and regime-switching models	4
<b>2</b>	Panel Data Models		<b>10</b>
	1	Panel data basic concepts	2
	2	Fixed effects vs. random effects models	2
	3	Hausman test for model selection	2
	4	Dynamic panel models and estimation	2
	5	Heterogeneity and cross-sectional dependence	2
<b>3</b>	Model Estimation		<b>24</b>
	1	Logit and probit models for binary outcomes and Tobit models for censored data	4
	2	Lagged models estimation	4
	3	Poisson and negative binomial regression for count data	4
	4	Sample selection models (Heckman correction)	4
	5	Estimation of simultaneous equations and structural models	4
	6	Machine learning in econometrics (LASSO, random forests)	4
<b>4</b>	<b>Econometric Application</b>		<b>12</b>
	1	Macroeconomics: Growth regressions, monetary policy analysis	4
	2	Finance: Asset pricing models, volatility forecasting	2
	3	Labor Economics: Wage determinants, program evaluation (DiD, RDD)	2
	4	Development Economics: Impact evaluation, randomized control trials (RCTs)	2
	5	Health & Environmental Economics: Cost-benefit analysis, carbon pricing	2
<b>5</b>	<b>TEACHER SPECIFIC MODULE</b>		<b>5</b>
	<i>Directions:</i> Model Building, estimation and testing		
	Equip the students with advanced econometric skills for academic research, policy analysis, and industry applications by using Software Tools		5

**Essential Readings:**

1. Enders, W. (2014). *Applied Econometric Time Series* (4th ed.). Wiley.
2. Hamilton, J. D. (1994). *Time Series Analysis*. Princeton University Press.
3. Wooldridge, J. M. (2010). *Econometric Analysis of Cross Section and Panel Data* (2nd ed.). MIT Press.
4. Baltagi, B. H. (2021). *Econometric Analysis of Panel Data* (6th ed.). Springer.
5. Greene, W. H. (2018). *Econometric Analysis* (8th ed.). Pearson.
6. Angrist, J. D., & Pischke, J. S. (2008). *Mostly Harmless Econometrics*. Princeton University Press.
7. Stock, J. H., & Watson, M. W. (2019). *Introduction to Econometrics* (4th ed.). Pearson.
8. Imbens, G. W., & Rubin, D. B. (2015). *Causal Inference for Statistics, Social, and Biomedical Sciences*. Cambridge University Press.

**Suggested Readings:**

1. Acemoglu, D., Laibson, D., & List, J. A. (2017). *Microeconomics* (2nd ed.). Pearson.
2. Arellano, M. (2003). *Panel Data Econometrics*. Oxford University Press.
3. Baltagi, B.H. (2008): *Econometric Analysis of Panel Data*, 4th edition, John Wiley.
4. Biom, Eric (2017): *Econometrics of Panel Data: Methods and Applications*, OIJP.
5. Brockwell, Peter J. & Richard A Davis (2010): *Introduction to Time Series and Forecasting*, 2<sup>nd</sup> edition, springer
6. Brooks, C. (2019). *Introductory Econometrics for Finance* (4th ed.). Cambridge University Press.:
7. Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: Methods and Applications*. Cambridge University Press.
8. Chatfield, Chris (2003): *The Analysis of Time Series: An Introduction*, 6<sup>th</sup> edition, Chapman and Hall.
9. Enders, Walter (2009): *Applied Econometric Time Series*, 3<sup>rd</sup> edition, Wiley
10. Everitt, Brian S. & Graham Dunn (2001): *Applied Multivariate Data Analysis*, 2<sup>nd</sup> edition, Arnold
11. Gorsuch, Richard L. (2015): *Factor Analysis*, 2<sup>nd</sup> edition, Routledge
12. Hsiao, Cheng (2013): *Analysis of Panel Data*, 3<sup>rd</sup> edition, Cambridge University Press

13. Jolliffe, I.T. (2002): Principal Component Analysis, 2<sup>nd</sup> edition, Springer
14. Lardaro, Leonard (1993): Applied Econometrics, HarperCollins, New York.
15. Lütkepohl, H. (2005). New Introduction to Multiple Time Series Analysis. Springer.
16. Maddala, G. (1977), Econometrics, McGraw Hill Kogakusha Ltd., Tokyo
17. Mullahy, J. (2015). Handbook of Applied Econometrics. Palgrave.
18. Pesaran, M. H. (2015). Time Series and Panel Data Econometrics. Oxford University Press.
19. Train, K. (2009). Discrete Choice Methods with Simulation (2nd ed.). Cambridge University Press.

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Report/Data Analysis	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. Explain the Gauss-Markov Theorem and its implications for OLS estimation. Under what conditions does the theorem fail, and how can alternative estimators address these limitations?
2. Discuss the problem of endogeneity in regression models.
3. What are the key challenges in modeling non-stationary time series data?
4. Compare fixed effects (FE) and random effects (RE) models in panel data analysis. How can machine learning methods be integrated into causal econometric analysis?

### **KU09DSCECO502: OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IX	DSC	500-599	KU09DSCECO502	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

*The course is divided into four modules which cover history and development of OR, OR models - Linear Programming Problem, Transportation and assignment problem, decision theory, game theory and network techniques. Exposes students to some of the most fundamental concepts and algorithms in the field of Linear and Discrete Optimization. To develop skill in effective LP model formulation and application. To discuss and model various business problems where optimization is required. To enable the students to familiarize with Operation Research techniques and its applications in managerial decision making.*

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
CO1	Explain the meaning and scope of operations research	R, U
CO2	Apply the knowledge of linear programming concepts to formulate real life problems	A
CO3	Describe the basic concepts of game theory and demonstrate the formulations of real world problems as a game theory model	An
CO4	Apply and analyse key concepts of transportation and assignment problem	A, An



CO5	Able to model network problems such as CPM, PERT and solve them with the algorithms discussed in the course	C
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	<b>Introduction to Operations Research</b>		<b>15</b>
	1	History and development of OR	1
	2	Meaning and scope	1
	3	OR models and their applications	1
	<b>Linear programming problems:</b>		
	4	Formulation of LPP	3
	5	Graphical solution	3
	6	Simplex procedure for maximization and minimization	4
	7	Duality concept-solution of dual problem- Economic interpretation of dual problems	2
2	<b>Transportation Model</b>		<b>15</b>
	1	Mathematical formulation- general structure of the problem	2

	2	Methods to obtain Initial Basic Feasible Solution (IBFS) - NWCR and VAM	3
	3	MODI method for testing optimality solution of balanced and unbalanced problems	3
	<b>Assignment Model:</b>		
	4	Method for solving assignment problems	2
	5	Balanced and unbalanced assignment problems	3
	6	Maximization problems.	2
<b>3</b>	<b>Decision Theory</b>		<b>15</b>
	1	Introduction- basic concepts- pay off table- opportunity loss or regret table	2
	2	Decision rule - decision making under certainty, uncertainty and risk	3
	3	Laplace criterion- maximax, minimax, maximin- Harwicz $\alpha$ criterion	3
	4	Expected Opportunity Loss- EMV criterion - Expected Value of Perfect Information (EVPI)	3
	5	Bayesian decision theory	2
	6	Decision tree	2
	<b>Game theory</b>		
	7	Types of game – basic concepts- solution to pure and mixed strategy game	
<b>4</b>	<b>Network Techniques</b>		<b>15</b>
	1	Basic concepts- construction of networks	2
	2	Slack- float	1
	3	PERT and CPM	4
	4	Time cost- trade off analysis	4
	5	Resource allocation and scheduling	2
	6	Resource levelling- resource smoothing	2

#### Essential Readings:

1. J.K Sharma. 1997. *Operations Research- Theory and Applications*.

2. William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.
3. Anderson, Sweeney & Williams 2007, *An Introduction to Management Science- Quantitative approaches to Decision Making*. Thomson- South Western.
4. Rao S.S. *Optimisation Theory and Applications*. New Age International.
5. Taha.H.A. *Operations Research- An Introduction*. Mc.Millan.
6. Kanthi Swarup, Gupta and Man Mohan. *Operations Research*. Sultan Chand & Sons

#### **Suggested Readings:**

1. Philips Ravindran and Solberg. *Operations research, principles and Practice*, John Wiley
2. R. Pannerselvam. 2002. *Operations Research*. PHI

#### **Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)**

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. Discuss the scope of operations research.
2. Explain the types of game.
3. Write down the dual of the following problem  
 Maximize  $Z = X_1 + 6X_2$   
 Subject to  $X_1 + 3X_2 \geq 2$   
 $X_1 + 3X_2 \leq 3$   
 $X_1, X_2 \geq 0$
4. Solve the transportation problem by using Vogel's method and check the solution for optimality.

1 2 3 4 Supply

21	16	15	3	11
17	18	14	23	13
32	27	18	41	1

DD 6 10 12 15

5. Solve the following assignment problem

Workers	Job		
	X	Y	Z
A	18	17	16
B	15	13	14
C	19	20	21

### KU09DSCECO503: ETHICS IN SOCIAL SCIENCE RESEARCH

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IX	DSC	500-599	<b>KU09DSCECO503</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

This course explores the ethical principles and challenges in social science research, emphasizing integrity, accountability, and responsible conduct. Students will examine philosophical foundations, ethical dilemmas in research design and data collection, scientific misconduct, and publication ethics. The course also covers practical guidelines for ensuring ethical compliance in research projects.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
--------	------------------	------------------

1	<b>Explain</b> the philosophical foundations of ethics and their relevance to social science research.	R, U, E
2	<b>Identify</b> ethical issues in research design, data collection, and participant interactions.	R,U
3	<b>Evaluate</b> cases of scientific misconduct and breaches of research integrity.	U, A, E
4	<b>Apply</b> ethical guidelines in academic writing, authorship, and publication practices.	A, C
5	<b>Develop</b> strategies to address ethical dilemmas in real-world research settings	A, E, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Module 1: Philosophy and Ethics</b>		<b>15</b>
	1	Introduction to ethics: Deontology, utilitarianism, and virtue ethics	6
	2	Ethical theories in social research (e.g., Belmont Report, Nuremberg Code)	4
	3	Moral responsibility in research	3
	4	Ethical relativism vs. universal principles	2
2	<b>Scientific Conduct</b>		<b>15</b>
	1	Research integrity and responsible conduct	4
	2	Conflicts of interest and bias in research	3
	3	Informed consent, confidentiality, and anonymity	3
	4	Ethical issues in qualitative and quantitative research	5
3	<b>Module 3: Publication Ethics</b>		<b>15</b>
	1	Plagiarism, fabrication, and falsification of data	5
	2	Authorship and peer review ethics	3
	3	Predatory journals and ethical publishing	4
	4	Retractions and corrections in academic work	3
4	<b>Module 4: Ethics in Practice</b>		<b>15</b>

1	Ethical approval processes (IRBs, research ethics committees)	3
2	Case studies of ethical violations and resolutions	3
3	Ethics in collaborative and cross-cultural research	4
4	Developing an ethical research proposal	5

### Essential Readings:

1. Bird A (2006). *Philosophy of science*, Routledge.
2. MacIntyre, Alasdair (1967). *A short History of Ethics*, London.
3. P. Chaddah (2018). *Ethics in Competitive Research: Do not get scooped; do not get plagiarised*, ISBN: 978-9387480865
4. Israel, M. (2015). *Research ethics and integrity for social scientists* (2nd ed.). SAGE.
5. Resnik, D. B. (2020). *The ethics of research: A guide for graduate students and researchers*. Oxford University Press.
6. Sieber, J. E., & Tolich, M. B. (2013). *Planning ethically responsible research* (2nd ed.). SAGE.
7. American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.).

### Suggested Readings:

1. National Academy of sciences, National Academy of Engineering and Institute of Medicine (2009) *On Being a scientist: A Guide to Responsible conduct in Research: Third Edition*, National Academic Press.
2. Resnik, D. B. (2011). What is Ethics in Research and why is it important, National Institute of Environmental Health Sciences, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>
3. Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>
4. Indian National Science Academy (INSA), *Ethics in science Education, Research and Governance* (2019). ISBN: 978-81-939482-1-7. [http://www.insaindia.res.in/pdf/Ethics\\_Book.pdf](http://www.insaindia.res.in/pdf/Ethics_Book.pdf)

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### Mode of Transaction

## Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
Total		100

### Sample Questions to test Outcomes

1. How do deontological and utilitarian ethical frameworks differ in their approach to informed consent in social science research? Provide examples where these perspectives might lead to different ethical decisions.
2. What constitutes scientific misconduct in social science research? Discuss real-world cases where fabrication, falsification, or plagiarism harmed research credibility.
3. Why is confidentiality critical in qualitative research, and what strategies can researchers use to protect participants' identities while maintaining data integrity?
4. How do predatory journals undermine research ethics, and what steps can scholars take to avoid publishing in them?
5. What ethical dilemmas arise when using AI tools (e.g., ChatGPT) for data collection or analysis in social research? Should such use be disclosed in methodologies?

**KU09DSCECO504: PEDAGOGY IN TEACHING SOCIAL SCIENCE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IX	DSC	500-599	KU09DSCECO504	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*This practical course aims to equip prospective educators with the foundational skills and methodologies required for effectively teaching Social Science at various educational levels. It focuses on understanding the principles of pedagogy, curriculum design, instructional strategies, and assessment techniques tailored specifically for Social Science subjects. Students will engage in hands-on activities, lesson planning, micro-teaching sessions, and the use of instructional aids to enhance classroom interaction and student engagement. The course emphasizes the development of critical thinking, analytical skills, and participatory learning strategies to foster an inclusive and dynamic learning environment.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
CO1	Understand the fundamental principles of pedagogy relevant to Social Science.	R, U
CO2	Design and implement effective lesson plans using diverse teaching strategies.	A, C
CO3	Utilize instructional aids, technology, and resources to enhance learning.	A
CO4	Conduct micro-teaching sessions and critically analyze teaching practices.	A, An



CO5	Apply assessment tools to evaluate student learning outcomes.	A, E
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODUL E	UNI T	DESCRIPTION	HOURS
<b>1</b>	<b>Introduction to Social Science Pedagogy</b>		<b>10</b>
	1	Definition and Scope of Social Science	2
	2	Objectives of Social Science Education	2
	3	Key Pedagogical Approaches: Lecture, Discussion, Inquiry-based Learning	3
	4	Role of Teacher and Student in Social Science Classrooms	3
<b>2</b>	<b>Curriculum Design and Lesson Planning</b>		<b>10</b>
	1	Curriculum Frameworks	3
	2	Principles of Lesson Planning	3
	3	Integrating Interdisciplinary Themes (History, Geography, Political Science, Economics)	4
<b>3</b>	<b>Teaching Strategies and Techniques</b>		<b>10</b>
	1	Interactive Methods: Role Play, Simulation, Debates, Case Studies	3
	2	Use of Maps, Charts, and Visual Aids	3
	3	Integrating Technology: Smart Boards, Online	4

		Resources, Educational Apps	
<b>4</b>		<b>Assessment and Evaluation in Social Science</b>	<b>15</b>
	1	Formative and Summative Assessment Techniques	5
	2	Designing Effective Question Papers and Rubrics	5
	3	Diagnostic, Norm-Referenced, and Criterion-Referenced Assessments	5
<b>5</b>	<b>Teacher specific module</b>		<b>15</b>
	<ul style="list-style-type: none"> <li>• Micro-teaching sessions (with peer and instructor feedback)</li> <li>• Development of teaching aids and resource materials</li> <li>• Classroom simulations and role-plays</li> <li>• Designing interactive activities (debates, group projects, case studies)</li> </ul>		

#### Essential Readings:

1. Dewey, J. (1916). *Democracy and Education*. New York: Macmillan.
2. Kumar, K. (2014). *Political Economy of Education*. New Delhi: Orient Blackswan.
3. NCERT (2005). *National Curriculum Framework (NCF) for School Education*.
4. Sharma, R. (2017). *Curriculum Development and Instructional Strategies*. Delhi: A.P.H. Publishing.
5. UNESCO (2017). *Global Citizenship Education: Topics and Learning Objectives*.
6. NCERT (2005). *National Curriculum Framework (NCF) for School Education*.
7. Brookhart, S. M. (2013). *How to Give Effective Feedback to Your Students*. Alexandria, VA: ASCD.
8. Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
9. Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*.
10. Black, P., & Wiliam, D. (1998). *Inside the Black Box: Raising Standards Through Classroom Assessment*. Phi Delta Kappan.
11. Nitko, A. J., & Brookhart, S. M. (2014). *Educational Assessment of Students*. Pearson Higher Ed.
12. NCERT (2009). *Assessment and Evaluation in Social Science Education*

### Suggested Readings:

1. Bhatia, K.K. (2007). *The Principles and Methods of Teaching*.
2. NCERT (2012). *Curriculum and Evaluation Framework*.
3. Slavin, R.E. (2002). *Educational Psychology: Theory and Practice*.

### Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)

- Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

#### Content

- Group discussions on the role of social sciences in societal development
- Case study analysis of teaching practices in different educational contexts
- Designing lesson plans for various social science topics
- Peer feedback sessions to refine lesson plans
- Micro-teaching sessions with peer observation and feedback
- Creating multimedia-based teaching materials
- Designing assessment tools for social science topics
- Role-playing assessment scenarios (teacher and student perspectives)

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Comprehensive Lesson Plan or Teaching Portfolio	10
c)	Practical Teaching Sessions (Micro-teaching & Classroom Simulations) and Class Participation & Discussions	20
Total		100

**Sample Questions to test Outcomes**

1. Why is pedagogy important in social science?
2. Discuss the key methods of teaching social science.
3. What role does inquiry-based learning play in social science?
4. How does the use of multimedia enhance social science teaching

**KU09DSCECO505 ACADEMIC WRITING IN SOCIAL SCIENCE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IX	DSC	500-599	KU09DSCECO505	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

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

**Prerequisites:** NIL**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
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1	Learn the formal academic writing process, including structure, style, and citation formats.	U
2	Conduct comprehensive literature reviews and synthesize relevant research findings	A, E
3	Develop well-structured research proposals with clear objectives and methodologies.	A
4	Write and revise research papers, incorporating feedback from peers and instructors.	C
5	Understand and apply ethical principles in academic publishing and peer review.	U, A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
1	<b>OVERVIEW OF ACADEMIC WRITING AND ITS IMPORTANCE IN SOCIAL SCIENCES</b>		<b>13</b>
	1.1	Introduction to Academic Writing	4
		a) What is Academic Writing?	
		b) Importance of Academic Writing in Social Sciences	
	1.2	Understanding Different Types of Academic Writing	5
		a) Essays and Research Papers	

		b) Book Reviews and Textual Analysis	4
		c) Case Studies, Literature Reviews, Project Reports, and Proposals	
	1.3	Approaches to Academic Writing	
		a) Expository, descriptive, persuasive	
		b) Analytical, critical/evaluative	
		c) Narrative/reflective	
2	<b>LITERATURE REVIEW AND FORMULATING THE RESEARCH QUESTION</b>		<b>13</b>
	2.1	Writing reviews of academic literature	7
		a) Selection of topic and identifying relevant literature	
		b) Writing process: Planning, Organizing, Drafting, Editing	
		c) Narrowing a topic into a research question	
	2.2	Drafting/preliminary write up of a Research Paper in Social Science	6
3	<b>GENERAL GUIDELINES FOR WRITING A RESEARCH PAPER</b>		<b>10</b>
	3.1	Introduction to Structure, Citations and Referencing	7
		a) Structure: Title page, abstract, introduction, method, results, discussion, references, tables and figures	
		b) APA format and other citation styles (APA, MLA, Chicago, Harvard)	
	3.2	Key resources and databases in social sciences	3
4	<b>FUNDAMENTALS OF RESEARCH ETHICS AND PEER REVIEW PROCESS IN ACADEMIC PUBLISHING</b>		<b>14</b>
	4.1	Research Ethics	6
		a) Ethics in research and publication	
		b) Academic misconduct: falsification, fabrication, plagiarism	
	4.2	Peer review process	8
		a) Double-blind, single-blind, and open models	
		b) Practical peer review exercises	
		c) Manuscript preparation and submission guidelines	
		d) Responding to reviewer comments	
5	<b>Teacher Specific Module</b>		<b>10</b>
	Direction		

	<i>Writing a Formal Research Paper in the Social Sciences</i>	
	Students are required to write and submit a research proposal following the necessary formalities of proposal making.	10

#### Essential Readings:

1. Graff, G., & Birkenstein, C. (2021). They say / I say: The moves that matter in academic writing (5th ed.). W.W. Norton & Company.
2. Galvan, J. L., & Galvan, M. C. (2021). Writing literature reviews: A guide for students of the social and behavioural sciences (8th ed.). Routledge.
3. Booth, W. C., Colomb, G. G., & Williams, J. M. (2016). The craft of research (4th ed.) University of Chicago Press.
4. Swales, J. M., & Feak, C. B. (2021). Academic writing for graduate students: Essential tasks and skills (4th ed.). University of Michigan Press.
5. Turabian, K. L. (2018). A manual for writers of research papers, theses, and dissertations (9th ed.). University of Chicago Press.
6. Stephen Bailey. (2003). Academic Writing A practical guide for students. Routledge Falmer, Taylor & Francis Group. New York

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Research Proposal/ Book/ Article Review	10
c)	Seminar/Presentation	20
<b>Total</b>		<b>50</b>

#### Sample Questions to test Outcomes

1. What are the key characteristics of a strong thesis statement in social science research papers?
2. How can researchers ensure objectivity and avoid bias when presenting arguments in social science writing?
3. What role does literature review play in social science research, and how should it be structured?

4. Why is it important to use proper citations and referencing in social science academic writing?
5. How can qualitative and quantitative data be effectively integrated and discussed in a social science research paper

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

#### **KU10DSCECO506: LOCAL SELF GOVERNMENT AND ADMINISTRATION**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
X	DSC	500-599	<b>KU10DSCECO506</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### **Course Description**

This course examines the structure, functions, and significance of local self-government in democratic governance. It covers theoretical foundations, historical evolution in India, and practical case studies—with special emphasis on Kerala’s decentralized governance model. Students will analyze the role of Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs) in grassroots development and administration.

**Course Prerequisite: NIL**

#### **Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Explain key theories and models of local self-government.	R, U
2	Evaluate the impact of decentralization on regional development.	R,U, E



3	Trace the historical evolution of local governance in India.	U, A
4	Analyze Kerala's decentralized planning and administration model.	An, C
5	Assess challenges and opportunities in local governance reforms.	R, A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	Theories of Local Self-Government		<b>15</b>
	1	Definition and principles of local self-government	2
	2	Democratic Decentralization (Alexis de Tocqueville)	2
	3	Fiscal Federalism (Oates)	2
	4	New Public Management (NPM) approach	3
	5	Models: Anglo-Saxon vs. Continental systems	3
	6	73rd & 74th Constitutional Amendments (India)	3
<b>2</b>	Role of Local Governments in Regional Development		<b>15</b>
	1	Functions of PRIs and ULBs (health, education, infrastructure)	3
	2	Fiscal decentralization and resource mobilization	4
	3	People's participation in planning (Gram Sabhas)	4
	4	Case studies: Kerala's People's Plan Campaign Karnataka's Panchayat reforms	4
<b>3</b>	History of Local Self-Government in India		<b>15</b>
	1	Ancient systems: Village Panchayats (Arthashastra)	3
	2	British era: Ripon's Resolution (1882), Mayo's Decentralization	5
	3	Post-1947: Balwantraoi Mehta (1957), Ashok Mehta (1978) Committees	4
	4	73rd & 74th Amendments (1992) – Key features	3
<b>4</b>	Local Self-Government in Kerala		<b>15</b>

1	Kerala Panchayati Raj Act (1994)	3
2	People's Plan Campaign (1996) – Grassroots planning	3
3	Role of Kudumbashree (women empowerment)	4
4	Challenges: Fiscal constraints, bureaucratic resistance	3
5	Comparative analysis: Kerala vs. other states	2

**Comment [ED2]:** Removed Kerala vs. West Bengal

#### Essential Readings:

1. Bardhan, P. (2002). Decentralization of Governance and Development. JEP.
2. Government of India (2007). Report of the 2nd Administrative Reforms Commission (Local Governance).
3. Government of Kerala (2011). Report on Decentralization.
4. Isaac, T. M. & Franke, R. (2002). Local Democracy and Development: People's Campaign for Decentralized Planning in Kerala. LeftWord Books.
5. Maheshwari, S. R. (2013). Local Government in India. Pearson. (Ch. 1-3)
6. Mathew, G. (1994). Panchayati Raj: From Legislation to Movement. Concept.
7. Oates, W. (1972). Fiscal Federalism. Harcourt Brace.
8. Singh, M. P. (2015). Local Democracy in India. Sage. (Ch. 2-4)

#### Suggested Readings:

1. Besley, T. & Coate, S. (2003). Centralized vs. Decentralized Provision of Public Goods.
2. Data Sources: Kerala Institute of Local Administration (KILA), Ministry of Panchayati Raj
3. Documentaries: Kerala's Decentralization Experiment (DD Malayalam)
4. Heller, P. (2001). Moving the State: The Politics of Democratic Decentralization in Kerala. World Development.
5. Indian Constitution (Schedule 11 & 12 – PRI/ULB functions).
6. Nair, G. (2020). Decentralization in Kerala: Lessons for India. EPW.
7. Nehru, J. (1946). Discovery of India (Panchayati Raj sections).
8. Tocqueville, A. (1835). Democracy in America (Vol. 1).
9. UNDP (2005). Decentralization in Practice.
10. World Bank (2004). Decentralization and Local Governance.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50

Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Compare and contrast the three-tier Panchayati Raj system in India with the special provisions for local governance in Kerala.
2. How does the People's Plan Campaign (PPC) in Kerala strengthen decentralized planning and administration? Evaluate its impact on grassroots democracy.
3. What are the major challenges faced by Urban Local Bodies (ULBs) in India, and how does Kerala's model of decentralization address these issues?

#### KU10DSCECO507: EDUCATION AND KNOWLEDGE ECONOMY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
X	DSC	500-599	<b>KU10DSCECO507</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description

This course explores the knowledge economy -a system where economic growth is driven by intellectual capital, innovation, and digital technologies rather than traditional factors like labour and physical resources. Students will examine the role of education, R&D, information technology, and policy frameworks in shaping knowledge-based economies. Case studies from leading economies (e.g., Silicon Valley, South Korea, Estonia) will be analyzed to understand best practices and challenges. Students will examine the allocation of resources, decision-making processes, and policy

implications in education, with a focus on understanding the economic factors shaping educational outcomes at various levels.

**Course Prerequisite:** NIL

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Define the knowledge economy and differentiate it from industrial and agricultural economies.	R, U
2	Analyze the role of education, technology, and innovation in driving economic growth.	R,U, An
3	Evaluate the impact of digital transformation (AI, big data, automation) on labour markets and industries.	U, A, E
4	Assess government policies that foster knowledge-based growth (e.g., R&D incentives, IP laws, startup ecosystems).	An, E
5	Discuss global inequalities in access to knowledge economies and potential solutions.	R, An, E

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Concept &amp; Evolution of the Knowledge Economy</b>		<b>15</b>
	1	Definition and key characteristics	2
	2	Historical shift from industrial to knowledge-based economies	2
	3	Key theorists (e.g., Drucker, Machlup, Bell)	5
	4	Human capital theory; Critique of human capital theory	2

	5	Jobcompetition, Screening, and Signaling hypothesis,	2
	6	Endogenous growth theory	2
2	<b>Drivers of the Knowledge Economy</b>		<b>15</b>
	1	Education and Economic Development	3
	2	Human capital (education, skills, lifelong learning)	4
	3	Technological advancements (AI, IoT, blockchain)	4
	4	Research & Development (R&D) and innovation ecosystems	4
3	<b>Digital Transformation &amp; Labor Markets</b>		<b>15</b>
	1	Education and employment – viz., segmented labour market theories	4
	2	Automation and the future of work	4
	3	Gig economy and remote work trends	4
	4	Reskilling and workforce adaptation	3
4	<b>Policy &amp; Global Case Studies</b>		<b>15</b>
	1	Role of State in Financing Education- public expenditure on education	3
	2	Methods of Financing Education- supports and incentives	3
	3	Successful models (e.g., Finland’s education system, Singapore’s smart nation initiative)	5
	4	Intellectual property (IP) laws and open knowledge movements	2
	5	Challenges for developing economies (digital divide, brain drain)	2

#### Essential Readings:

1. Powell, W. W., & Snellman, K. (2004). The knowledge economy. Annual Review of Sociology, 30, 199-220.
2. Drucker, P. F. (1993). Post-capitalist society. Harper Business.
3. Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W. W. Norton.
4. OECD. (2021). The knowledge economy and innovation policies. OECD Science, Technology and Industry Scoreboard.
5. World Bank. (2020). The changing nature of work in the knowledge economy. World Development Report
6. Bowman M.J., et al: eds. Readings in Economics of Education. UNESCO, 1962.
7. Carnoy, M., ed. (1995) International Encyclopaedia of Economics of Education. Oxford.
8. Pergamon Johnes, G and Johnes, J., eds. International Handbook on the Economics of Education.
9. Psacharopoulos, G., ed. (1987) Economics of Education. New York: Pergamon.
10. Schultz, T.W. (1971) Investment in Human Capital. New York: Free Press Vaizey

#### Suggested Readings:

1. John (1962): Economics of Education. London: Faber & Faber Eric A. Hanushek (From the

Handbook of Economics of Education, Hanushek

2. Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Vasquez Heilig, J. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness, Education Policy Analysis Archives, 13(42).
3. <http://epaa.asu.edu/epaa/v13n42/> Raj Chetty, John N. Friedman, Jonah E. Rockoff, “Great Teaching: Measuring its effects on students’ future earning” [http://educationnext.org/files/ednext\\_20123\\_Friedman.pdf](http://educationnext.org/files/ednext_20123_Friedman.pdf).
4. W. Steven Barnett, “Benefit-Cost Analysis of the Perry Preschool Program and Its Policy Implications” Educational Evaluation and Policy Analysis, 7 (4), pp. 3

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Learning Activities

- Case Study Analysis (e.g., How Estonia became a digital society)
- Debate on automation vs. job displacement
- Policy Proposal for fostering a knowledge economy in a chosen country
- Lecture (Industry expert on AI & economic transformation)

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
Total		100

### Sample Questions to test Outcomes

1. How does Gary Becker’s human capital theory explain the relationship between education investments and economic growth in knowledge-based economies? Provide empirical examples where higher education spending led to measurable GDP gains.

2. To what extent does unequal access to quality education exacerbate income inequality in knowledge economies? Compare developed (e.g., Finland) and developing (e.g., Nigeria) country contexts.
3. Analyze the ‘skills mismatch’ problem in labor markets shaped by automation and AI. What policies can governments implement to align education systems with future job demands?
4. Debate the economic trade-offs between privatized higher education (e.g., U.S. model) and publicly funded systems (e.g., Germany). Which model better supports a knowledge economy?
5. How do knowledge spillovers from university research (e.g., Stanford’s role in Silicon Valley) drive regional innovation clusters? Discuss the policy implications for governments.

#### **KU10DSCECO508: PUBLIC POLICY AND ECONOMIC DEVELOPMENT**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
X	DSC	500-599	<b>KU10DSCECO508</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### **Course Description**

This course explores the interplay between public policy and economic development, examining theoretical frameworks, historical contexts, and practical implementations—with a focus on India and Kerala’s development models. Students will analyze how policy decisions shape growth, equity, and governance at regional and national levels.

**Course Prerequisite: NIL**

#### **Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Explain key theories linking public policy to economic development.	R, U
2	Evaluate the role of public policy in reducing regional disparities.	R,U, E

3	Analyze India's post-independence policy evolution and outcomes.	U, An
4	Assess Kerala's unique development model through policy interventions.	E, An
5	Propose context-specific policy solutions for development challenges.	R, A, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Theories of Public Policy and Economic Development	15
	1	Market vs. State Debate (Smith, Keynes)	2
	2	Institutional Economics (North, Acemoglu)	2
	3	Capability Approach (Sen, Nussbaum)	2
	4	Policy Cycle: Formulation, Implementation, Evaluation	3
	5	Globalization and Policy Sovereignty	3
2		Public Policy and Regional Development	15
	1	Fiscal Federalism and Resource Allocation	3
	2	Special Economic Zones (SEZs) and Industrial Policies	4
	3	Rural vs. Urban Development Policies	4
	4	Case Studies: Gujarat's Industrial Growth, Bihar's Infrastructure Challenges	4
3		Public Policy and India's Development (1947–Present)	15
	1	Nehruvian Socialism and Five-Year Plans	3
	2	1991 Economic Reforms: LPG (Liberalization, Privatization, Globalization)	3
	3	Flagship Policies: MGNREGA (Rural Employment)	3
	4	Make in India (Industrialization)	3
	5	Contemporary Challenges: Jobless Growth, Agrarian Distress	3
4		Kerala's Development Model – Policy Lessons	15



1	Kerala Model: Education, Health, Land Reforms	3
2	Decentralized Planning (People's Plan Campaign)	3
3	Kudumbashree and Women-Led Development	4
4	Critiques: Fiscal Crisis, Industrial Stagnation	5

#### Essential Readings:

1. Ahluwalia, M. (2019). Backstage: The Story Behind India's High Growth Years. Rupa.
2. Dreze, J. & Sen, A. (2013). An Uncertain Glory: India and Its Contradictions. Princeton.
3. Government of Kerala (2016). Economic Review. State Planning Board.
4. North, D. (1990). Institutions, Institutional Change and Economic Performance. Cambridge.
5. Panagariya, A. (2008). India: The Emerging Giant. Oxford.
6. Parayil, G. (2000). Kerala: The Development Experience. Zed Books.
7. Rao, M. G. & Singh, N. (2005). The Political Economy of Federalism in India. Oxford.
8. Stiglitz, J. (2015). The Great Divide: Unequal Societies and What We Can Do About Them. Norton. (Ch. 1-3)

#### Suggested Readings:

1. Bhagwati, J. & Panagariya, A. (2013). Why Growth Matters. PublicAffairs.
2. Government of India (2013). Twelfth Five-Year Plan (2012–17). Planning Commission.
3. Heller, P. (1999). The Labor of Development: Workers and the Transformation of Capitalism in Kerala. Cornell.
4. NITI Aayog Reports, various reports of Kerala State Planning Board
5. Reserve Bank of India (2021). Annual Report on Currency and Finance.
6. Rodrik, D. (2007). Industrial Policy for the Twenty-First Century. Harvard.
7. Sen, A. (1999). Development as Freedom. Oxford.
8. Tharamangalam, J. (1998). The Perils of Social Development Without Economic Growth. EPW.
9. World Bank (2017). World Development Report: Governance and the Law.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case	10

	study Report	
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

- How has India's economic policy evolved since independence? Discuss the shift from a mixed economy to liberalization in 1991 and its impact on growth.
- What role does public policy play in addressing income inequality in India? Evaluate the effectiveness of schemes like MGNREGA and PM-KISAN in promoting inclusive development.
- How do infrastructure development policies (such as the National Infrastructure Pipeline) contribute to economic growth in India? Analyze key challenges in their implementation.
- Examine the relationship between fiscal policy and economic development in India. How do taxation reforms (like GST) and public expenditure influence India's growth trajectory?

#### KU10DSCECO509: GIS AND REMOTE SENSING IN SOCIAL SCIENCE RESEARCH

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
X	DSC	500-599	<b>KU10DSCECO509</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description

This course explores the application of Geographic Information Systems (GIS) and Remote Sensing (RS) in social science research. It covers the evolution of spatial technologies, their role in economic development, research methodologies, and challenges in implementation. Students will gain hands-on experience with GIS software (e.g., QGIS, ArcGIS) and learn to analyze spatial data for social science applications.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Explain the historical development and societal impact of GIS/GPS technologies.	R, U, E
2	Analyze the role of GIS in economic development, urban planning, and resource management.	E, An
3	Apply GIS and remote sensing techniques to social science research (e.g., poverty mapping, disaster management).	U, A
4	Critically evaluate the limitations and ethical issues in GIS applications.	An, E
5	Design a GIS-based research project addressing a social science problem.	R, A, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>		Evolution of GIS and GPS in Society	<b>15</b>
	1	History of cartography and spatial analysis	2
	2	Development of GIS software (from paper maps to digital platforms)	2
	3	GPS technology and its societal applications (navigation, logistics, agriculture)	2
	4	Case studies: Google Maps, Uber, and smart city initiatives	3
<b>2</b>		GIS in Economic Development	<b>15</b>
	1	GIS in urban and regional planning	3
	2	Spatial analysis for business location and market segmentation	4
	3	Natural resource management (forestry, water, agriculture)	4
	4	Case studies: World Bank's GIS applications in development projects	4
<b>3</b>		GIS in Social Science Research	<b>15</b>
	1	Spatial data collection methods (surveys, satellite imagery, drones)	3
	2	Mapping poverty, inequality, and crime hotspots	5
	3	Remote sensing for disaster management (floods, wildfires)	4

	4	Hands-on lab: Creating thematic maps in QGIS	3
4	Issues in GIS Applications		<b>15</b>
	1	Data privacy and surveillance concerns	3
	2	Bias in spatial data (e.g., underrepresentation of marginalized groups)	3
	3	Limitations of satellite imagery resolution	4
	4	Open-source vs. proprietary GIS software debates	3

#### Essential Readings:

1. Anselin, L. (1988). Spatial Econometrics: Methods and Models. Springer.
2. Batty, M. (2013). The New Science of Cities. MIT Press.
3. Clarke, K. C. (2020). Getting Started with Geographic Information Systems (5th ed.). Pearson.
4. Cressie, N. (2015). Statistics for Spatial Data (Revised ed.). Wiley.
5. Goodchild, M. F., & Janelle, D. G. (2010). Spatially Integrated Social Science. Oxford University Press.
6. Graham, M., et al. (2015). Digital Divisions of Labor and Informational Magnetism. Progress in Human Geography.
7. Kitchin, R., & Dodge, M. (2011). Code/Space: Software and Everyday Life. MIT Press.
8. Longley, P. A., et al. (2015). Geographic Information Science & Systems (4th ed.). Wiley.
9. Malczewski, J., & Rinner, C. (2015). Multicriteria Decision Analysis in Geographic Information Science. Springer.
10. O'Sullivan, D., & Unwin, D. (2010). Geographic Information Analysis (2nd ed.). Wiley.
11. Pickles, J. (1995). Ground Truth: The Social Implications of Geographic Information Systems. Guilford Press.
12. UN Global Pulse. (2020). Using Satellite Imagery for Social Good.
13. World Bank. (2017). GIS for Sustainable Development: A Global Perspective.
14. Zook, M., et al. (2017). Ten Simple Rules for Responsible Big Data Research. PLOS Computational Biology.

#### Suggested Readings:

1. Jensen, J.R. (2016). Introductory Digital Image Processing (4th ed.), Pearson (Chapter 1)
2. Monmonier, M. (1996). How to Lie with Maps (2nd ed.), University of Chicago Press
3. National Research Council (2006). Beyond Mapping: Meeting National Needs Through Enhanced Geographic Information Science

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	<b>50</b>

Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. How can Geographic Information Systems (GIS) and remote sensing enhance the study of urban sprawl and its socio-economic impacts? Provide examples from recent research.
2. Discuss the role of spatial analysis in understanding environmental justice issues, such as unequal exposure to pollution or climate risks. What are the limitations of using GIS in such studies?
3. In what ways has remote sensing data been used to assess the effects of natural disasters (e.g., floods, droughts) on vulnerable communities? Highlight case studies from developing regions.
4. How can participatory GIS empower marginalized groups in land-use planning and resource management? Evaluate its potential and challenges in social science research.

#### KU10DSCECO510 CULTURE MEDIA AND DEVELOPMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
X	DSC	500-599	<b>KU10DSCECO510</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

This course examines the interplay between culture, media, and economic development. It explores how cultural values, traditions, and media influence societal progress, governance, and economic growth. Students will analyze case studies, theoretical frameworks, and empirical research to understand the role of cultural and media dynamics in shaping development outcomes.

**Course Prerequisite:** Basic understanding of social sciences, economics, or development studies

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Explain the evolution of culture and its impact on societal structures.	R, U
2	Assess the relationship between cultural values and economic development.	R, U, An
3	Classify different types of media and their roles in shaping public opinion.	R, U
4	Evaluate the influence of media on economic policies, governance, and development.	E,
5	Critically analyze case studies where culture and media have driven (or hindered) development	A, An

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Evolution of Culture in Society	10

		Definitions of culture: norms, values, symbols, and traditions	2
		Cultural evolution: from traditional to modern societies	3
		Cultural diffusion and globalization	2
		Case studies: Indigenous cultures vs. industrialized societies	3
2	The Role of Culture in Economic Development		15
		Weber's Protestant Ethic and capitalism	4
		Trust, social capital, and economic performance	3
		Culture and institutional development (legal systems, governance)	3
		Case studies: East Asian growth vs. Sub-Saharan African challenges	5
3	Media and Its Types		10
		Traditional media (print, radio, television) vs. new media (digital, social media)	2
		Media ownership and bias (state-controlled, corporate, independent)	3
		Theories of media influence (Agenda-setting, Framing, Spiral of Silence)	2
		Case studies: Media in democratic vs. authoritarian regimes	3
4	Media and Economic Development		15
		Media as a watchdog (corruption, governance)	3
		The role of media in financial markets and investor behavior	3
		Digital divide and access to information	4
		Case studies: Media's role in economic reforms (India, China, Scandinavia)	5
5	<b>Teacher Specific Module</b>		10
	1	<p>This module would be preferably designed as activity oriented on the topic: Media/culture's impact on a development issue</p> <ol style="list-style-type: none"> <li>1) The students may be instructed to visit nearest village or tribal settings meet ethnic people, conduct interview and present feedback in any innovative forms (report, video presentation, documentaries and so forth) (preferably group presentations).</li> <li>2) Conduct case studies on media reports on various economic issues and submit reflections</li> </ol> <p>(10 hour may be preferably devoted for the presentations and evaluation of the activity)</p>	10

#### Essential Readings:

1. Geertz, C. (1973). *The Interpretation of Cultures*. Basic Books.
2. Hofstede, G. (2010). *Cultures and Organizations: Software of the Mind* (3rd ed.). McGraw-Hill.
3. Sen, A. (1999). *Development as Freedom*. Oxford University Press.
4. Stiglitz, J. E. (2002). *Globalization and Its Discontents*. W.W. Norton.
5. Landes, D. S. (1998). *The Wealth and Poverty of Nations*. W.W. Norton.
6. Acemoglu, D., & Robinson, J. A. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Business.
7. McQuail, D. (2010). *McQuail's Mass Communication Theory* (6th ed.). Sage.

8. Herman, E. S., & Chomsky, N. (1988). *Manufacturing Consent: The Political Economy of the Mass Media*. Pantheon

#### **Suggested Readings:**

1. Inglehart, R., & Welzel, C. (2005). *Modernization, Cultural Change, and Democracy*. Cambridge University Press.
2. Huntington, S. P. (1996). *The Clash of Civilizations and the Remaking of World Order*. Simon & Schuster.
3. North, D. C. (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press.
4. Harrison, L. E., & Huntington, S. P. (2000). *Culture Matters: How Values Shape Human Progress*. Basic Books.
5. Castells, M. (2009). *Communication Power*. Oxford University Press.
6. McChesney, R. W. (2015). *Rich Media, Poor Democracy: Communication Politics in Dubious Times*. The New Press.
7. Norris, P. (2001). *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge University Press.
8. Djankov, S., et al. (2003). Who Owns the Media? *Journal of Law and Economics*.
9. Databases: World Bank Development Reports, UNESCO Cultural Statistics

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. How does the media (traditional and digital) influence cultural perceptions of economic development, and what role does it play in shaping public policy priorities?
2. In what ways can cultural industries act as drivers of economic growth, particularly in developing economies?
3. Does globalization of media homogenize local cultures, or can it foster hybrid economic opportunities? Analyze the tension between cultural preservation and market expansion.



**KU05DSEECO301: ECONOMICS OF HEALTH**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSE	300-399	KU05DSEECO301	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

*The course is divided into four modules. The course intends to familiarize the students with the concept of health economics, health and development, health and investment, micro economics of health services. To Enable the Students about the importance of health. To impart knowledge regarding the various health services in the country.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
CO1	Outline the dimensions of health.	A, An, E
CO2	Identify the occupational health hazards and its linkages	An, E
CO3	Analyze economics of public health.	An
CO4	Measure burden of disease and future challenges.	An, E
CO5	Construct the production function with respect to health.	A, C

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

**Mapping of Course Outcomes to PSOs**

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>Health Economics – Basic Concepts</b>		<b>10</b>
	1	Definition and Dimensions of Health	2
	2	Meaning and Importance of Health Economics	2
	3	Determinants of Health	3
	4	Input and Output Indicators of Health	3
<b>2</b>	Health and Development		<b>15</b>
	1	Income and Health Linkages	3
	2	Concept of Wellbeing	2
	3	PQLI and HDI	2
	4	Poverty and Health	2
	5	Occupational Health Hazards	2
	6	Fertility, Morbidity, Mortality and Life Expectancy	2
	7	Nutrition and Health – Mal –Nutrition – Under – Nutrition	2
<b>3</b>	<b>Health as Investment</b>		<b>15</b>
	1	Economics of public Health	3
	2	Education and Health	4
	3	Concept of Health Education	4
	4	Capital Formation in Health Care	4

4	<b>Micro Economics of Health Services</b>		<b>20</b>
	1	Demand for health services	5
	2	Preference for health care and health cure	5
	3	Income and price effects – Physician as a price – Discriminating monopolist	5
	4	Health production Function with Illustration.	5

**Essential Readings:**

1. Dr. Harinder Singh (2009), Health, Nutrition and Economic Development, Regal Publication (New Delhi).
2. N.K.Anand&ShikhaGoel (2006), Health Economics, AITBS Publishers (India).

**Suggested Readings:**

1. Alistair McGuire, John Henderson and Gavin Mooney (1988), The Economics of Health Care: An Introductory Text. (Routledge and Kegan Paul London and New York. PP.9-30 )
2. AshaA.Bhende and Tara Kanitkar (2001), Principles of Population Studies (Himalaya Publishing House, New Delhi).
3. Government of India (1983), National Health Policy, New Delhi.
4. <https://www.healthknowledge.org.uk/public-health-textbook/medical-sociology-policy-economics/4d-health-economics/principles-he>
5. <https://www.who.int/choice/en/>
6. Indian Council of Social Science, Research and Indian Council of Medical Research (1981), Health for All 2002 A.D. (ICSSR, Delhi).
7. Jean Dreze and Amartyasan (1998), Indian Economics Development and Social opportunity (Oxford University Press).
8. Michall H. Cooper and Antony J. Culyer (1973), Health Economics (Baltimore, Penquin Books Inc).
9. Park, K. (2000), Park's Text Book of preventive and Social Medicine. 16<sup>th</sup> edition (M/s. BanarsidasBhanot Publishers, Jalalpur).
10. Somkidkaewsonthi and Alan G. Harding (1993), Micro Economic Analysis and Applications in the Health Sector, Students Guide (The Centre for health Economics Faculty of Economics, Chulalongorn University )

11. William Jack (1999), Principles of Health Economics for Developing Countries, WBI Development Studies (The World Bank, Washington.D.C).

**Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)**

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Outline the dimensions of health.
2. Identify the occupational health hazards and its linkages
3. Analyze economics of public health.
4. Construct the production function with respect to health.

### KU05DSEECO302: ECONOMICS OF TOURISM

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSE	300-399	KU05DSEECO302	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

#### Course Description:

*This course examines the intersection of tourism and economic development, focussing on how tourism can drive economic growth. This also analyses the economic impacts of tourism at local, regional, and national levels. And it also assesses the challenges and opportunities associated with tourism. Additionally, the field visits incorporated with the syllabus will help the students to get practical knowledge about various concepts and impacts associated with tourism.*

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To understand the significance of Tourism and its promotion.	R
2	To examine the various elements of tourism marketing.	U
3	To assess the recent trends in domestic and international tourism.	R, U
4	To analyse the importance of tourism services in the economic development.	U, A
5	To understand the performance of tourism and tourism organisations.	R, A

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

#### Mapping of Course Outcomes to PSOs

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

CO 5	✓	✓		✓	✓	✓	✓
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## COURSE CONTENTS

### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>INTRODUCTION TO TOURISM</b>		<b>7</b>
	1	a) Definition and Scope of Tourism	2
	2	b) Types of Tourism – Cultural tourism, Eco tourism, Medical Tourism, Heritage Tourism, Health Tourism, Beach Tourism, Backwater Tourism, Adventure tourism	1
	3	c) Resources in Tourism, Components of Tourism	2
	4	d) Tourism and economic development, importance of tourism	2
<b>2</b>	<b>TOURISM PRODUCT AND TOURISM MARKETING</b>		<b>20</b>
	1	Tourism Products: Attractions, Availability, Accessibility and Amenities	4
	2	Tourism Marketing	4
	3	Various types of Tourism marketing in India	7
	4	Impact of Information Technology in tourism development	5
<b>3</b>	<b>TOURISM SERVICES</b>		<b>8</b>
	1	Tourism service meaning – Hotels, Motels, Resorts, Boating Clubs	2
	2	Conducted/Organized Tours	1
	3	Package Tour, Insurance – Guide – Tour Operators – Tour Promoters	5
	4	Medical Tourism in India	
<b>4</b>	<b>PERFORMANCE OF TOURISM AND TOURISM ORGANIZATIONS</b>		<b>15</b>
	1	Impacts of tourism development in India	4
	2	Programmes in tourism development	6
	3	Role and Functions: WTO – PATA -IHA – Ministry of Tourism, Government of India	2
	4	Role and Functions: ITDC – Federation of Hotel and Restaurants Associations of India (FHRAI)	3
<b>5</b>	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>

### Essential Readings:

1. Bhatia, A. K. (2002). International Tourism Management. New Delhi: Sterling Publishers.
2. Ghosh, Biswanath. (1998). Tourism and Travel Management. New Delhi: Vikas Publications.
3. Goswami, R. K. (2007). Tourism and Environment. New Delhi: Cybertech Publication,
4. Mallya, Abhilash. (2006). Wildlife Tourism and Conservations. New Delhi: Gnosis.
5. Mukhopadhy, Sipra (2008). Tourism Economics. New Delhi: ANE books.
6. Nirmal Kumar, S. (1996). Problems of Tourism in India -Tourism and Economic Development. New Delhi: APH.
7. Raian, A.K. & Jain, Neelu (2004). Dynamics of Tourism - concepts, philosophy and strategies. New Delhi: Kanishka Publications.
8. Shankar, Arun Kumar. (1998). Action Plan and Priorities in Tourism Development. New Delhi: Kanishka Publications
9. Sharma, K. K. (2005). Tourism and Development. New Delhi: Sarup and Sons.
10. Sharma, Shashi Prabha (2004). Tourism Education: Principles, Theories and Practices. New Delhi: Kanishka Publications.
11. Sinclair, M.T. & Stabler, Mike (1997). Economics of tourism & Devpt. New York: Routledge.
12. Swain. S. K., & Mishra J.M. (2012). Tourism Principles and Practices. New Delhi: Oxford University Press.

#### **Suggested Readings:**

1. Lundberg, Stavenca & Krishnamoorthy (1995). Tourism Economics. New Jersey: John Wiley and Sons.
2. Reid, Donald G. (2003). Tourism, Globalisation and Development, Responsible Tourism. New Delhi: Plutobooks.
3. Sharma, K. K. (2005). Tourism and Development. New Delhi: Sarup and Sons.
4. Sharma, Shashi Prabha. (2004). Tourism Education: Principles, Theories and Practices. New Delhi: Kanishka Publications.
5. Vinukumar, S. & Chandrasekhar, K. S. (2004). Sustainable Development and Tourism. South Asian Journal of Socio-political Studies.

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Direct class room teaching

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
Total		100

#### Sample Questions to test Outcomes

1. Discuss the types of tourism.
2. What are the resources of tourism?
3. Explain tourism marketing.
4. Evaluate the impact of information technology in the development of tourism.
5. Discuss the programmes in tourism development.

#### KU05DSEECO303: MANAGERIAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSE	300- 399	KU05DSEECO303	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description:

*The course is divided into four modules. The course intends to familiarize the students with the concept of managerial economics and discuss the micro economic concepts in managerial decision making. To apply micro economic concepts and techniques in evaluating business decisions taken by firms. To explain how tools of standard price theory can be employed to formulate a decision problem.*

#### Course Prerequisite: NIL

#### Course Outcomes:



CO No.	Expected Outcome	Learning Domains
CO1	Describe the basic concepts of managerial economics.	R, U
CO2	Describe how changes in demand and supply affect	A, E
CO3	Explain relationships between production and cost	E
CO4	Define key characteristics and consequences of different forms of markets	R, U, An

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>Nature and Scope of Managerial Economics</b>		<b>15</b>
	1	Meaning of managerial economics - definition	4
	2	Nature, scope and functions of managerial economics	6
	3	Uses and limitations of managerial economics	5
<b>2</b>	<b>Demand Analysis</b>		<b>15</b>
	1	Demand and its determinants	4
	2	Factors involved in Demand forecasting	5

	3	Methods of demand forecasting	6
<b>3</b>	<b>Production Analysis</b>		<b>15</b>
	1	Production function	3
	2	Law of variable proportions	3
	3	Cost: Total, Average and Marginal cost	3
	4	Revenue: Total, Average and Marginal revenue	3
	5	Breakeven Point	3
<b>4</b>	<b>Pricing Techniques &amp; Profit Management</b>		<b>15</b>
	1	Types of pricing techniques	4
	2	Meaning of profit	3
	3	Nature of Profit - Accounting profit and Economic profit	3
	4	Theories of profit	5

#### **Essential Readings:**

1. Mote, Paul and Gupta: *Managerial Economics Concepts and cases*, 1979.
2. Dominick Salvatore. 2003. *Microeconomics: Theory and Applications*. Oxford University Press.
3. Robert S. Pindyck and Daniel L. Rubinfeld. 2003. *Microeconomics*. Prentice Hall of India.

#### **Suggested Readings:**

1. S. Sankaran – *Managerial Economics*, Margham Publications, Madras, 2013. 47
2. Ahuja H.L. (2008) - *Principles of Micro Economics* (21st Revised Edition), *A New look at Economic Theory*, S.Chand, New Delhi.
3. P .L. Mehta: *Managerial Economics - Analysis, problems and causes*. Sultan Chand & Sons, 1992.
4. R.L. Varshney and K.L.Maheswari: *Managerial Economics*. Sultan Chand & Sons, 1987.
5. Joel Dean: *Managerial Economics*. Prentice Hall of India, 1987.
6. Robert H. Frank. 2000. *Microeconomics and Behaviour*. Irwin Mc. Graw Hill.
7. Robert Y. Awh. 1976. *Microeconomics: Theory and Applications*. John Wiley and Sons.

#### **Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)**

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

**Sample Outcomes**

1. Describe of economics.
2. Describe how changes in demand and supply affect.
3. Explain relationships between production and cost.
4. Define key characteristics and consequences of different forms of markets.

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
Total		100

**Questions to test**

the basic concepts managerial

**KU05DSEECO304 PERSONAL FINANCE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	DSE	300-399	<b>KU05DSEECO304</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

**Course Description:**

*This Course is designed to equip students with comprehensive knowledge and practical skills in managing personal finances across various aspects. The course is designed in such a way of*

preparing them to make informed financial decisions and plan for future financial security and financial prudence.

**Course Prerequisite:** NIL

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Demonstrate understanding of budgeting, saving, investing, and risk management in personal finance.	R
2	Acquire skills in creating budgets, evaluating investments, and managing debt effectively.	U
3	Evaluate personal finances, set goals, and develop strategies considering income, expenses, and risks.	R, U
4	Create plans integrating short-term expenses and long-term goals, effectively prioritizing resources.	U, A, C
5	Make sound financial choices based on data analysis, economic understanding, and ethical awareness.	R, A,C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

**Contents for Classroom Transaction:**

M O D U L E	U N I T	DESCRIPTION	HOURS
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<b>1</b>	<b>Foundations of Personal Finance</b>		<b>8</b>
	1	Definition, scope, and importance of personal finance	2
	2	Understanding financial statements and terminology - Developing financial management skills	2
	3	Importance of saving and types of savings accounts Understanding the range of banking services and modern payment methods.	2
	4	Types of insurance (life, health, property) Strategies for managing risk and establishing emergency funds.	2
<b>2</b>	<b>Investment and Wealth Building</b>		<b>12</b>
	1	Introduction to stocks, bonds, mutual funds, and other investment options.	3
	2	Concept of Risk-return trade-off and need for investment diversification	2
	3	How to Invest? – Practical Insights (Investments in equity markets, fixed income securities, mutual funds, bullion market and real estate).	4
	4	Introduction to cryptocurrencies and digital currencies	3
<b>3</b>	<b>Financial Planning and Management</b>		<b>15</b>
	1	Steps in financial planning and goal setting - Creating and maintaining a personal financial plan	5
	2	Types of loans and borrowing considerations - Strategies for debt repayment and managing debt	5
	3	Basics of tax planning and optimizing tax efficiency - Estate planning fundamentals and strategies	5
<b>4</b>	<b>Special Topics in Personal Finance</b>		<b>15</b>
	1	Financial Consumer Protection -Rights and responsibilities of financial consumers	4
	2	Financial frauds & thefts- (identity theft, fishing, investment scams, insurance scams, loan scams, online shopping frauds, Ponzi Schemes, Money Chain model)	4
	3	Contemporary Issues in Personal Finance -Impact of Covid-19 on personal finance strategies, FinTech in modern finance	4
	4	Case studies of financial frauds (Sathyam Scandal, Nirav Modi Scam, Harshad Mehta Scam)	3
<b>5</b>	<b>Teacher Specific Module</b>		<b>10</b>

	<i>Directions: Activities on household finance management</i>	
	The module is to be designed as activity based one preferably using themes in the syllabus. The students may be assigned tasks to study and present the household investment plans taking the case of their own families. Issues like construction and acquiring of assets at home, management of household debt, role of local chit funds and so on may be incorporated in the frame.	10

#### Essential Readings:

1. Kana Sukumaran, (2024). *Personal finance: A book on financial literacy*. Norton Press.
2. Robin, V., & Dominguez, J. (2018). *Your money or your life: 9 steps to transforming your relationship with money and achieving financial independence*. Penguin Books.
3. Ramsey, D. (2013). *The total money makeover: A proven plan for financial fitness*. Thomas Nelson.

#### Suggested Readings:

1. Graham, B. (2006). *The intelligent investor: The definitive book on value investing*. Harper Business.
2. Kiyosaki, R. T. (2017). *Rich dad poor dad: What the rich teach their kids about money that the poor and middle class do not*. Plata Publishing.

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment /Book/ Article Review	10
c)	Seminar	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. What are the key principles of effective budgeting, and how can individuals balance short-term spending needs with long-term financial goals
2. How does behavioral psychology influence personal financial decisions, and what strategies can help overcome biases like impulse spending or loss aversion?

3. What are the advantages and risks of different investment options (stocks, mutual funds, real estate) for individuals with varying risk appetites and financial literacy levels?

### KU06DSEECO305 CLIMATE AND DISASTER MANAGEMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSE	300-399	<b>KU06DSEECO305</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2 Hours

#### Course Description:

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

#### Course Prerequisite: NIL

#### Course Outcomes:

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

COs	Expected Outcome	Learning Domains
1	Understand the major environmental issues and recognize the importance of conservation of natural resources	R, U
2	Analyse the prominent cases and laws related to environmental issues	An

3	Adopt sustainable life style approach for resolution of environmental problems faced by society	A
4	Acquire and apply the necessary theoretical and practical knowledge and prepare to respond effectively during an emergency	A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 45
1	<b>INTRODUCTION TO ENVIRONMENTAL EDUCATION</b>		<b>20</b>
	1	Importance of environmental studies- concept of Eco system- Components of eco system- functions of eco-system- Natural Resources available in the environment: renewable and non-renewable	5
	2	Relationship between human society and environment- Environmental effects of human Behaviour- Environment-Economy Interlinkages	5
	3	Bio-diversity and conservation- threats to bio-diversity- need to conserve natural resources	4
	4	Sustainable development: concept- definitions, indicators, measurements - circular economy model for a sustainable environment	6
2	<b>SENSITIVITY ENVIRONMENTAL ISSUE, COMMUNITY PARTICIPATION AND LEGAL FRAMEWORK</b>		<b>15</b>
	1	Concept of Environmental Sensitivity	2
	2	Sensitive environmental issues at the local, national and global level: Climate change, types of pollutions, depletion of natural resources,	3



		Problem of solid Waste management- Human Wildlife Conflicts-causes and effects	
	3	Control measures for various types of pollution: water conservation methods, solid waste management, 3 R's (Reduce, Reuse & Recycle) effluent charges, emission permits, Pigouvian tax, subsidies and economic incentives - Major environmental movements in India: Chipko, Appiko, Silent Valley and Narmada Bachao Andolan	5
	4	Relevance of environmental legislation- Environmental Laws: Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Land Acquisition Rehabilitation and Resettlement Act - International Agreements: Montreal and Kyoto Protocols and Conservation on Biological Diversity	5
3	<b>INTRODUCTION TO DISASTER MANAGEMENT</b>		<b>15</b>
	1	Concepts of disaster management- natural and manmade disasters- Flood, Earthquake, Cyclones and Landslides - causes and effects	3
	2	Disaster vulnerability profile of India: Case studies on environment and society: Bhopal gas tragedy-Coca-Cola Factory at Plachimada- Endosulfan Tragedy- Tsunami,2004- - Bhuj earthquake, 2001, Brahmapuram Fire 2023, Flood and Landslides in Kerala 2018 & 2019	4
	3	Phases of disaster management: pre and post disaster stage -brief description	4
	4	Disaster mitigation organizations in national and international levels- Role and services of Voluntary organisations	4
	<b>TEACHER SPECIFIC MODULE</b>		
4	<b>Directions:</b> Field Visit and Presentation of Experience		<b>10</b>
	<i>Visit to a local polluted site- urban/rural/agricultural/industrial or visit to an area to document environmental assets: river, forest, flora, fauna etc. and report and presentation of field visit/outreach activities to be maintained.</i>		10

#### Essential Readings:

1. Anubha Kaushik & C P Kaushik, Perspectives in Environmental Studies, New Age International (P) Ltd Publishers, 6<sup>th</sup> Edition

2. S.P Misra & S N Pandey, Essential Environmental Studies, Ane Books India New Delhi 2008
3. N K Uberoi, Environmental Studies, Excel Books, New Delhi 2007
4. Surinder Deswal & Anupama Deswal, A Basic Course in Environmental Studies, Dhanupat Rai Co(P)Ltd, Delhi
5. Shradha Sinha, Manisha Shukla & Ranjana Shukla, A Text book of Environmental Studies, AITBS Publishers & Distributors, New Delhi 2005
6. Gurdeep R Chatwal & Harish Sharma, Madhu Arora, A Textbook of Environmental Studies(Environmental Sciences), Himalaya Publishing House, Mumbai 2005
7. G Tyler Miller, Jr. Environmental Science: Working with the Earth, Cengage Learning India Pvt Ltd 11<sup>th</sup> edn. New Delhi
8. Anil Kumar De & Amab Kumar De, Environmental Studies, New Age International(p) Ltd Publishers , New Delhi, 2009
9. Karpagam M, Environmental Economics: A Text book, Sterling Publishers Pvt Ltd, New Delhi, 2014
10. Janet M Thomas & Scott J Callan, Environmental Economics, Cengage Learning India Pvt Ltd, New Delhi, 2009
11. V K Ahluwalia & Sunita Malhotra, Environmental Science, Ane Books Pvt Ltd, New Delhi 2013
12. M M Sulphey, Disaster Management, PHI Learning Pvt Ltd, Delhi 2016
13. Jagbir Singh, Disaster Management: Future Challenges and Opportunities, IK International Publishing House Pvt Ltd, New Delhi 2007
14. Paramjith S Jaswal & Nishtha Jaswal, Environmental Law: Environment Protection, Sustainable Development and the Law, Allahabad Law Agency, Delhi 2009
15. M Prasanthrajan & P P Mahendran, A Text book on Ecology & Environmental Science, Agrotech Publishing Academy, Udaipur 2006
16. V K Subramanian, A Text book in Environmental Science, Narosa Publishing House, New Delhi 2007
17. Jadhav, H & Bhosale V M, Environmental Protection and Laws, Himalaya Publication House, New Delhi
18. Pardeep Singh, Anamika Yadav, Indranil Chowdhuri and Ravindra Pratap Singh, Green Circular Economy: A Paradigm for Sustainable development. Springer

#### **Suggested Readings:**

1. Lester R Brown, Eco-Economy-Building an Economy for the Earth, Orient Longman Pvt Ltd, Himayatnagar 2004
2. Nick Hanley, Jason F Shogren & Ben White, Environmental Economics in Theory &Practice, Macmillan India Ltd, New Delhi 2005
3. Arvind Kumar, Disaster Management- Recent Approaches, Institute for Sustainable Development , Lucknow & Anmol Publication Pvt Ltd, New Delhi, 2010
4. Tushar Bhattacharya, Disaster Science & Management, Tata McGraw Hill Education Pvt Ltd, New Delhi 2012
5. Richard T Wright, Environmental Science – Toward a Sustainable Future, Prentice Hall of India Pvt Ltd, 9<sup>th</sup> edn. New Delhi 2007
6. S C Santra, Environmental Science, New Central Book Agency Pvt Ltd, Kolkata 2011

7. Gurdeep R Chatwal & Harish Sharma, Madhu Arora, A Textbook of Environmental Studies (Environmental Sciences), Himalaya Publishing House, Mumbai 2005
8. B S Chauhan, Environmental Studies, University Science Press (An Imprint of Laxmi Publications Pvt Ltd) New Delhi 2011
9. Benny Joseph, Environmental Studies 2<sup>nd</sup> edn., Tata McGraw Hill Edn. Pvt Ltd, New Delhi 2009
10. Gouri Suresh, Environmental Studies & Ethics, International Publishing House Pvt.Ltd, New Delhi 2007
11. N S Subrahmanyam & AVSS Sambamurty, Ecology 2<sup>nd</sup> edn. Narosa Publishing House, New Delhi 2008
12. S V S Rana, Essentials of Ecology & Environmental Science, Prentice Hall of India Pvt Ltd, New Delhi 2005
13. Asthana, D. K. Text Book of Environmental Studies. S. Chand Publishing
14. K,N Nair Antonyto Paul & Vineetha Menon, Water Insecurity, Institutions & Livelihood Dynamics A Study in Plachimada, Kerala

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Book/ Article Review /Assignment/ Field Report	10
c)	Seminar/Report Presentation	20
Total		100

#### Sample Questions to test Outcomes

1. What are the key components of an effective disaster preparedness plan, and how can communities integrate early warning systems with local response strategies? (Discuss examples like Japan's earthquake preparedness or Kerala's flood management.)
2. How does climate change exacerbate the frequency and intensity of natural disasters, and what adaptive measures can governments adopt to mitigate risks in vulnerable regions?
3. What role does technology (e.g., GIS, remote sensing, AI) play in improving disaster response and recovery efforts? Evaluate its potential and limitations in real-time crisis situations.

**KU06DSEECO306: DEVELOPMENT ISSUES IN KERALA**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSE	300-399	<b>KU06DSEECO306</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

The course is divided into four modules which cover a profile of Kerala Economy since its formation and environmental issues in development.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Explain the historical development and key milestones in Kerala's economic Development	R, U
2	Understanding about the development issues of Kerala economy.	R,U
3	To know more about the dimension of changes, and policies with respect to the development of Kerala economy.	U, A, E

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS**

M O D U L E	U N I T	DESCRIPTION	HOURS
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<b>1</b>	A profile of Kerala Economy since its formation		<b>15</b>
	1	Model of Development & Sustainability of the model	4
	2	Structural changes in Kerala Economy	3
	3	Recent trends in economic Indicators	4
	4	Demographic changes – ageing – health —poverty- unemployment	4
<b>2</b>	Kerala-new trends		<b>15</b>
	1	Migration—Labour migration-changing pattern of migration	2
	2	ICT and development	1
	3	Tourism	2
	4	Role of micro finance	2
	5	Kerala's higher education	2
	6	Fiscal Crisis	2
	7	KIIFB	2
	8	Knowledge economy	2
<b>3</b>	Resource mobilization and development		<b>15</b>
	1	Structural changes and development	3
	2	Production and productivity of various sectors	3
	3	Current problems in various sectors (agriculture, industry and service sectors)	3
	4	Decentralized Planning	3
	5	Structure of revenue and expenditure of the state	3
<b>4</b>	Environmental issues		<b>15</b>
	1	Sources of pollution	3
	2	Deforestation	3
	3	Soil erosion, air and water	3
	4	Policy framework and regulatory mechanisms to control pollution	3
	5	Waste management.	3

#### Essential Readings:

1. B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
2. Economic and Political Weekly (Special issues on Kerala), various years.
3. Economic and Political Weekly, Sep. 1990, Aug. 1995, 1997(32/4), 1998, May 1999, April and Dec., 2003, 2004, Feb., Jul., Aug. & Octo. 2005, April and May 2009, 2013.

4. Frank R.W. and B.H. Chasin (1992), Kerala Development through Radical Reform, Promilla and Co., New Delhi.
5. Frank, Richard and T.M.ThomasIssac.2000.Local democracy and Development: people's Plan for decentralized planning in Kerala.
6. Government of Kerala, State Planning Board, Kerala Economic Review for various years.
7. Govindan Parayil (ed),(2000), Kerala: the Development Experience, ZED Books, London.
8. Joseph Tharamangalam (2006), Kerala : The paradoxes of Public Action and development, Orient Longman, New Delhi.
9. Kannan K.P., ( 1991), Kerala's Development Dilemma, Costford Publication, Thrissur.
- Lincoln Chen, et. al., (1996), Health, Poverty and Development in India, OUP, Delhi.
10. National Council of Applied Economic Research (NCAER) (1962), Techno Economic Survey of Kerala, NCAER, New Delhi.
11. Oommen M.A. (ed). 1999, Rethinking Development : Kerala's Development Experience, Concept, New Delhi.
12. Oommen M.A. (1993), Essays on Kerala Economy, Oxford and IBH, New Delhi
13. Parayil, Govindan. 2000. Kerala: The Development Experience: Reflections on Sustainability And Replicability. Zed Books.

#### **Suggested Readings:**

1. B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
2. B.A. Prakash and Jerry Alwin 2018.Kerala's Economic Development Emerging Issue and Challenges. New Delhi: Sage publications.
3. Frank, Richard and T.M.ThomasIssac.2000.Local democracy and Development: people's Plan for decentralized planning in Kerala.
4. Government of Kerala, State Planning Board, Kerala Economic Review for various years.
5. K.K George. 1993. Limits to Kerala Model of Development: an analysis of fiscal crisis and its implications. Trivandrum:CDS.
6. M A Oommen.1993. Essays on Kerala Economy. Oxford & IBH Publishing Company.
7. Meerabai M (2008)Kerala Economy: slumber to performance, New Delhi: Serials publications.
8. P. P. Pillai. 1994. Kerala Economy Four Decades of Development.

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type	Marks
End Semester Evaluation	<b>50</b>

Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. How has Kerala's "high human development, low economic growth" paradox shaped its development trajectory?
2. What are the major environmental challenges threatening Kerala's sustainable development, and how effective are its policies in addressing issues like coastal erosion, deforestation, and waste management?
3. Why does Kerala face persistent unemployment despite high literacy rates, and how can the state leverage its skilled workforce to foster knowledge-based industries?

### KU06DSEECO307 DATA ANALYSIS WITH SPREADSHEET

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSE	300-399	<b>KU06DSEECO307</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description:

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

### Course Prerequisite: NIL

### Course Outcomes:

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

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

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 60
1	EXCEL FOUNDATIONS AND DATA IMPORT		15
	1	a) Launching Excel, navigating the interface, basic operations.	15
		b) Importing data from different sources (CSV, text files, web), creating and managing tables. Applying data validation to ensure data accuracy and consistency.	
		c) Exploring the Ribbon and menus, customizing your Excel environment.	
		d) Learning basic file management: saving, sharing, and version control.	



		e) Practicing working with multiple worksheets and workbooks in your data analysis.	
		<b>DATA MANIPULATION AND FORMULAS</b>	<b>10</b>
<b>2</b>	<b>1</b>	a) Sorting and filtering data based on various criteria for efficient analysis.	<b>10</b>
		b) Mastering basic formulas and functions: sum, average, count, max, min, etc.	
		c) Using logical functions (if, and, or) for conditional calculations and data segmentation	
		d) Applying lookup functions (VLOOKUP, MATCH) to integrate data from different sources.	
		e) Exploring advanced functions like SUMIF, AVERAGEIF, COUNTIF for targeted calculations.	
		f) Creating and using names for ranges and cells in excel	
		<b>DATA VISUALIZATION AND ANALYSIS</b>	<b>10</b>
<b>3</b>	<b>1</b>	a) Creating different chart types (bar, line, pie, scatter) based on your data.	<b>10</b>
		b) Customizing charts for visual impact: titles, labels, legends, data labels, formatting.	
		c) Data visualization and interpretation of charts.	
		d) Descriptive statistics (mean, median, standard deviation, variance): calculation and interpretation.	
		<b>ESSENTIAL DESCRIPTIVE STATISTICS IN EXCEL</b>	<b>15</b>
<b>4</b>	<b>1</b>	Measures of Central Tendency:	<b>5</b>
		a) In-depth exploration of mean, median, mode, and weighted averages	
		b) Calculation and interpretation of percentiles and quartiles for understanding data distribution	
	<b>2</b>	Measures of Variability:	<b>5</b>
		a) Variance and standard deviation: mastering calculations and Interpretations.	
		b) Range, inter-quartile range, and coefficient of variation for understanding data spread.	
		c) Introduction to skewness and kurtosis for assessing data symmetry	
	<b>3</b>	Advanced Data Analysis Functions	<b>5</b>
		a) Mastery of VAR.P, STDEV.P, SKEW, KURT, and other descriptive statistics functions	
		b) Correlation analysis using Pearson's correlation coefficient and scatter plots	
		<b>TEACHER SPECIFIC MODULE</b>	<b>10</b>
<b>5</b>		<i>Directions: Activity Based on Excel</i>	-
		<ul style="list-style-type: none"> <li>Choosing an actual economic issue relevant to India</li> </ul>	10

	(e.g., inflation, trade, poverty). <ul style="list-style-type: none"> <li>• Accessing and exploring relevant economic datasets from Indian or international sources.</li> <li>• Applying your learned skills to analyze the chosen economic issue using Excel.</li> <li>• Creating visualizations and descriptive statistics to support your analysis of the economic issue.</li> <li>• Preparing a final project report summarizing your findings and economic insights.</li> <li>• Class Presentations: Sharing your projects, receiving feedback, and engaging in discussions on real-world data analysis applications.</li> </ul>	
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#### Essential Readings:

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

#### Assessment Rubrics:

Evaluation Type		MARKS
End Semester Evaluation-Theory		50
Continuous Evaluation – Practical		50
a)	Test Paper	20
b)	Practical	30
<b>Grand Total</b>		<b>100</b>

#### KU06DSEECO308: INTELLECTUAL PROPERTY RIGHTS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSE	300-399	<b>KU06DSEECO308</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

This course provides a comprehensive understanding of the various forms of intellectual property (IP) including patents, trademarks, copyrights, design rights, and trade secrets. It explores the legal, strategic, and commercial aspects of IP, with emphasis on protection, enforcement, valuation, licensing, and its role in innovation, competition, and business strategy. The course also examines contemporary issues such as IP in the digital age and IP-related financing and transactions.

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Identify and distinguish between different types of intellectual property and their legal protections.	U
2	Analyze the strategic role of IP in business development and innovation management	An
3	Evaluate the processes of acquiring, enforcing, and maintaining IP rights.	E
4	Understand the economic and legal implications of IP transactions, licensing, and valuation.	U
5	Develop an effective IP strategy for managing and commercializing intellectual assets.	C

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

### Mapping of Course Outcomes to PSOs

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

CO 5	✓						
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## COURSE CONTENTS

### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>THE CONCEPT OF INTELLECTUAL PROPERTY</b>		<b>15</b>
	1	What is intellectual Property – Forms of protection – Building IP in tp a business strategy Patents: Kinds of invention to be patented – when should patent obtained – the rights granted by a patent – remedies for patent infringement – Validity and Value.	5
	2	Trademarks: Obtaining trademark – registration process – the rights of a trademark owner – remedies for trademark infringement – Value and Strength – trade dress and passing off – using other people’s trademarks	3
	3	Copyright: How copy right obtained – rights of copyright owner – remedies for copyright infringement – value and strength – author’s moral and other rights – clearing rights.	3
	4	Design Rights: Obtaining design right – International protection – other forms of protection – value and strength	2
	5	Trade Secrets: what is trade secret – creation of trade secret – protection of trade secret – trade secret versus patent – disclosure of trade secret – value and strength.	2
2	<b>IP AND THE INTERNET, OWNING IP AND LICENSING TRANSACTIONS</b>		<b>15</b>
	1	IP and the Internet: Trademark and domain name strategies – websites, e-commerce and privacy – cybercrime, trade secrets and hacking – copyright and piracy – internet infringement strategy.	5
	2	Who owns patents, Trademark, Copyright, Trade secrets	5
	3	Licensing Transactions: Crucial terms – Issues specific to particular types of licence – liability – bankruptcy.	5
3	<b>ECONOMICS OF IP</b>		<b>10</b>
	1	The Market for IP: Buying and Selling of patents, trademarks, copyright – transferring IP right – acquiring IP rights.	2
	2	Costs to Obtain, Maintain and Enforce; patents, trademarks, copyright, design protection, trade secrets.	2
	3	IP’s Role in Protecting Product Sales: Patents as a barrier to entry – trademarks as a barrier to entry – copy right as a barrier to entry – design right as a barrier to entry – trade secrets as barrier to entry.	3
	4	IP as a Revenue Generator: The strategic management of patents – the value of patent as litigation asset – patent assertion entities – Deciding a strategy – trademark licensing – copyright and revenue generation	3

4	Valuing IP		10
	1	Valuing IP-Accounting treatment of intellectual property – valuation methodologies – valuing early-stage technologies – valuing brands	5
	2	IP to raise finance: Legal process and technicalities – IP as collateral – international developments – IP and raising equity.	3
	3	IP Strategy: IP audit – Risk mitigation – Strategic IP management – Governance	2
5	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Geographical Indications from Kerala</i>		
	familiarises the GI products from Kerala		10

### Essential Readings

1. Bouchoux, D. E. (2019). Intellectual property: The law of trademarks, copyrights, patents, and trade secrets (6th ed.). Cengage Learning.
2. Ganguli, P. (2001). Intellectual property rights: Unleashing the knowledge economy. McGraw-Hill Education.
3. Johnson, S. (2015). Guide to intellectual property: What it is, how to protect it, how to exploit it. PublicAffairs.
4. Maskus, K. E., & Reichman, J. H. (Eds.). (2005). International public goods and transfer of technology under a globalized intellectual property regime. Cambridge University Press.
5. Pandey, N., & Dharni, K. (2014). Intellectual property rights: Text and cases. PHI Learning Pvt. Ltd.
6. World Intellectual Property Organization. (2020). WIPO intellectual property handbook: Policy, law and use (2nd ed.). Geneva: WIPO  
<https://www.wipo.int/about-ip/en/iprm/>

### Suggested Readings:

1. World Intellectual Property Organization. (2020). WIPO intellectual property handbook: Policy, law and use (2nd ed.). Geneva: WIPO.  
<https://www.wipo.int/about-ip/en/iprm/>
2. Bouchoux, D. E. (2019). Intellectual property: The law of trademarks, copyrights, patents, and trade secrets (6th ed.). Cengage Learning.
3. Ganguli, P. (2001). Intellectual property rights: Unleashing the knowledge economy. McGraw-Hill Education.

4. Pandey, N., & Dharni, K. (2014). Intellectual property rights: Text and cases. PHI Learning Pvt. Ltd.
5. Maskus, K. E., & Reichman, J. H. (Eds.). (2005). International public goods and transfer of technology under a globalized intellectual property regime. Cambridge University Press.

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. What are some examples of intangible assets that comprise the value of a company's intellectual property?
2. What are main types of intellectual property?
3. What is the purpose of patents?
4. What is the key differences between patents and trade secrets?
5. What are some legitimate reasons for a competitor wishing to license another

### KU06DSEECO309 HOSPITAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	DSE	300-399	<b>KU06DSEECO309</b>	4	60

Learning Approach (Hours/ Week)	Marks Distribution	Duration of
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Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	ESE (Hours)
4	0	0	50	50	100	2

### Course Description:

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

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand the importance of the healthcare sector in the economy	R
2	Analyse the outputs and inputs of hospitals	A, An
3	Analyse and interpret indicators of operational efficiency, cost and financial performance.	A, An
4	Evaluate cost analysis and analyse department wise average cost and procedure costing	U, A, E

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS 45</b>
<b>1</b>	<b>SIGNIFICANCE OF THE HEALTHCARE SECTOR</b>		<b>12</b>
	1	Introduction to the Healthcare Sector - Importance of healthcare sector in the economy - Uniqueness of the health care market– Physician dominance and Supplier Induced Demand	5
	2	Systems of medicine- Types of care: preventive, curative, promotive, rehabilitative, palliative – Ownership of hospitals-Layers of public and private facilities – Distribution of hospitals by ownership type in Kerala- Clinical Establishment Act – provider payment mechanisms – Public-funded insurance schemes (PMJAY, MEDISEP) – voluntary insurance	7
<b>2</b>	<b>MEASUREMENT OF HOSPITAL PERFORMANCE</b> (including practical sessions)		<b>13</b>
	1	Major Departments in a Hospital- Identifying Outputs and Inputs of Hospitals – Indicators of Operational Performance- Average Length of Stay (ALOS), Bed Occupancy Rate (BOR), Bed Turnover Rate (ToR), Turnover Interval (ToI),	6
	2	Practical Sessions on Estimation - Pabon Lasso model for hospital performance assessment	7
	<b>COSTING OF HOSPITAL SERVICES</b> (including practical sessions)		<b>12</b>
<b>3</b>	1	Importance of costing in hospital management - Types of costs: fixed, variable, direct, indirect -Costing Methodology - Components of Cost - Operating and Capital Cost - Step down Costing	6
	2	Building Allocation rules - Step-by-step guide to conduct Step down costing- Activity based costing or procedure costing- Hands-on exercises to calculate Department wise Average Cost.	6
<b>4</b>	<b>Teacher Specific Module</b> <b>Direction: PRACTICAL: UNDERTAKE A CASE STUDY IN A NEARBY HOSPITAL</b>		<b>8</b>
	1	Work out the Operational Indicators- Calculate the Department wise Average Cost using either step down method or through Activity based costing.	8

#### Essential Readings:

1. Arrow, K (1963) Uncertainty and the Welfare Economics of Medical Care American Economic Review Vol 53 No 5 941-973



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

#### Suggested Readings:

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

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
Total		100

KU07DSEECO401 :

MARKETING

DIGITAL

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSE	400-499	<b>KU07DSEECO401</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

The aim of the Digital Marketing Course is to provide students with the knowledge about business advantages of the digital marketing and its importance for marketing success, develop a digital marketing plan and to define a target group, get introduced to various digital channels, their advantages and ways of integration. The application of the gained knowledge, skills and competences will help future managers in forming digital marketing plan in order to manage a digital marketing performance efficiently.

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	To understand the basic Concepts of Digital marketing and the road map for successful Digital marketing strategies.	R, U
2	Understand the advanced developments in Digital Marketing Concepts	R,U
3	Application of digital marketing in the globalized market	R, U , A
4	Application and usage of E-mail advertisement and mobile marketing. Develop advanced tools for improve digital market	A,An,E,C

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>		Introduction to Digital Marketing (DM)	<b>15</b>
	1	Meaning, Definition Need of DM, Scope of DM	4
	2	History of DM	4
	3	Concept and approaches to DM	3
	4	Traditional VS Digital Marketing. Examples of good practices in DM.	3
<b>2</b>		Marketing Automation	<b>15</b>
	1	Definition, Advantages, Marketing Automation Softwares: CRM, Sales force, Analytics	3
	2	Customer Experience (CX). Digital marketing tools/e-tools	3
	3	the online marketing matrix including business and Consumer markets	4
	4	the online customer.	4
<b>3</b>		Digital Marketing Mix	<b>15</b>
	1	Online Advertising, Lead Generation	4
	2	Social Media Marketing, Content and Copywriting.	4
	3	Influencer Marketing: Influencer, Payment to Influencer,	4
	4	Difference between influencer marketing and celebrity endorsements.	3
<b>4</b>		AI applications in DM	<b>15</b>
	1	Generating Content, Product Recommendation and Content Curation, Use of AI Chatbots, Chatbot Marketing, Predictive Analysis, Digital Advertising, Online Searches	4
	2	Email Marketing- Need for Emails, Types of Emails, options in Email advertising, Features of MailChimp, Mobile Marketing: Overview of the B2B and B2C Mobile Marketing.	4
	3	Social Analytics- Automation and Social Media- Social Media and other types of Marketing, Managing Tools of Social Media.	4
	4	What are Blogs, Importance of Blogs, Personal Blogs, Corporate Blogs, Popular Blog Platforms, What are Tags, Widgets, Blog Optimization, and Blog Stats	3

#### Essential Readings:

1. Alex Ferreira do Prado, Artificial Intelligence allied to Digital Marketing
2. Parth Dixit(2023) "Digital Marketing in the Age of Artificial Intelligence"
3. Stevan Roberts (2016). Marketing AI: From Automation to Revenue Performance Marketing
4. Jodie the Mom (2023) Email Marketing Planner: Organize and Track Your Emails

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Define digital marketing
2. List out the benefits of online advertisement
3. Describe the impact of AI in digital marketing

**KU07DSEECO402 : INDUSTRIAL ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSE	400-499	<b>KU07DSEECO402</b>	4	60

Learning Approach (Hours/ Week)	Marks Distribution	Duration of
---------------------------------	--------------------	-------------

Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	ESE (Hours)
4	-	0	50	50	100	2

### Course Description

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the fundamental theories of industrial organization, including market structures and analyze their implications for firm behavior and market efficiency.	U, An
2	Evaluate the role of government policies in shaping industrial performance and assess their impact on competition, innovation, and consumer welfare.	E, An
3	Apply quantitative tools to measure market power and interpret real-world case studies of mergers, cartels, and price-fixing	A, An
4	Propose strategies for firms to enhance competitiveness in globalized markets by integrating insights from industrial economics, game theory, and technological advancements	E, C

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Introduction to Industrial Economics	15
	1	Theoretical foundations of Industrial Economics determinants of market structure	4
	2	Theories of growth of the firms and merger, integration and acquisitions (Marrio, Mursen and Downs, Williamson and Galbraith)	4
	3	Industrial Location and Analysis - Theories of industrial location – Weber, August Losch and Sargent Florence- determinants Industrial	4

		Organisation and Development	
	4	Role of state in industrial development empirical studies on Industrial Structure.	3
2		Industrial growth in India	15
	1	Industrial growth in India: Trends and prospects	3
	2	Public sector enterprises in India: efficiency, Productivity and performance constraints.	4
	3	Industrial development through plans stagnation Performance of public enterprises in India	4
	4	Industrial Policy resolutions	4
3		Role of Industrialization in Economic Development	15
	1	Factors for and against industrial development role of state in industrial development.	4
	2	Issues in industrialization pricing policies short run behaviour of prices and quantities of industry	4
	3	competitiveness of Indian industry policies regarding sick	4
	4	Small firms in India cottage and small industry. Role of MSME	3
4		labour productivity in Industrial Sector	15
	1	The concepts of labour productivity determinants– total factor productivity debate in Indian Industry	4
	2	labour policy: Industrial Finance -Sources of Industrial Finance - Private, Public and Co-operative Sector - Shares, Debentures, Bonds, Deposits, Loans ,Foreign Direct Investment and Foreign	4
	3	Institutional Investment- Industrial finance institutions and functions IDBI, ICICI changing role stock market, industrial development and the finance of corporate growth in India.	4
	4	Industrialization in Kerala trends and strategies.	3

#### Essential Readings:

1. Waldman, D. E., Jensen, E. J., & Ge, Q. (2023). *Industrial organization: Theory and practice* (6th ed.). Routledge.
2. Choi, P.-S., Dunaway, E., & Muñoz-García, F. (2023). *Industrial organization: Practice exercises with answer keys* (2nd ed.). Springer
3. Belleflamme, P., & Peitz, M. (2015). *Industrial organization: Markets and strategies* (2nd ed.). Cambridge University Press.
4. Lipczynski, J., Goddard, J., & Wilson, J. O. S. (2017). *Industrial organization: Competition, strategy, and policy* (5th ed.). Pearson Education Limited.
5. Carlton, D. W., & Perloff, J. M. (2015). *Modern industrial organization* (4th Global ed.). Pearson Education Limited.
6. Pepall, L., Richards, D., & Norman, G. (2013). *Industrial organization: Contemporary theory and empirical applications* (5th ed.). Wiley.
7. Stephen Martin, *Advanced Industrial Economics*, Basic Blackwell, 1993
8. DilipMookherjee, *Indian Industry Policies and Performances*, OxfordUniversity

Comment [ED3]: Refrence added

9. R.R Barthwal, *Industrial Economics*, Wiley Eastern Ltd., New Delhi, 1985.
10. Deepak Nayyar, *Trade and Industrialisation*, OxfordUniversity Press, New Delhi, 1977
11. Isher Judge Ahulwalia. *Industrial Growth in India*, OxfordUniversity Press
12. Deepak Nayyar, *Industrial Growth and Stagnation*.OxfordUniversity Press, 1994

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

How do the characteristics of monopolistic competition influence pricing strategies and long-run industry equilibrium?

1. Critically evaluate the effectiveness of antitrust policies in curbing monopolistic practices. Use case studies
2. How do economies of scale and scope impact the competitiveness of firms in global markets? Analyze the role of trade policies

#### KU07DSEECO403 STOCK MARKET ANALYSIS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSE	400-499	<b>KU07DSEECO403</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/	Tutorial	CE	ESE	Total	

	Internship					
4	-	0	50	50	100	2

### Course Description:

This course provides a comprehensive understanding of stock market analysis, covering fundamental concepts, key theories, global market dynamics, and the specifics of the Indian stock market. Students will learn how to analyze stocks, interpret market trends, and apply investment strategies. The course combines theoretical knowledge with practical insights to equip learners with the skills needed for informed investment decisions.

**Course Prerequisite:** Basic understanding of economics

### Course Outcomes:

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

CO No.	Expected Outcome	Learning Domains
1	Explain the fundamental concepts of stock markets, including key terminologies, market participants, and trading mechanisms.	R, U
2	Evaluate different stock market theories and models to assess investment opportunities and risks.	R, U, E
3	Analyze global stock market trends, economic indicators, and their impact on investment strategies.	R, U, An
4	Apply analytical techniques to assess the performance of the Indian stock market and identify sector-specific opportunities.	E, A

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

### Mapping of Course Outcomes to PSOs

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



CO 4	✓	✓	✓				✓
CO 5	✓	✓	✓				✓

### COURSE CONTENTS

#### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOUR S</b>
<b>1</b>	Basic Concepts of Stock Markets		<b>15</b>
		Introduction to stock markets and financial instruments	3
		Primary vs. secondary markets	3
		Stock exchanges and their functions	3
		Key terminologies (e.g., IPO, dividends, market capitalization)	3
		Role of SEBI and other regulatory bodies	3
<b>2</b>	Stock Market Theories and Models		<b>15</b>
		Efficient Market Hypothesis (EMH)	3
		Fundamental vs. Technical Analysis	3
		Modern Portfolio Theory (MPT)	3
		Capital Asset Pricing Model (CAPM)	3
		Behavioral Finance and market anomalies	3
<b>3</b>	Global Stock Markets and Trends		<b>15</b>
		Overview of major global stock markets (NYSE, NASDAQ, LSE, etc.)	3
		Impact of macroeconomic factors (interest rates, inflation, GDP)	3
		Global financial crises and their lessons	3
		Emerging markets vs. developed markets	3
		Role of international financial institutions (IMF, World Bank)	3
<b>4</b>	Indian Stock Market Analysis		<b>15</b>
		Structure of the Indian stock market (BSE, NSE)	3
		Key indices (Sensex, Nifty) and their significance	3
		Sectoral analysis (IT, Banking, Pharma, etc.)	3
		Government policies and their impact on markets	3
		Case studies of major Indian market events	3

#### Essential Readings:

1. Mishkin, F. S., & Eakins, S. G. (2018). Financial markets and institutions (9th ed.). Pearson.
2. Bodie, Z., Kane, A., & Marcus, A. J. (2018). Investments (11th ed.). McGraw-Hill.
3. Madura, J. (2020). International financial management (13th ed.). Cengage Learning.

4. Chandra, P. (2017). Investment analysis and portfolio management (5th ed.). McGraw-Hill Education.

#### Suggested Readings:

1. Graham, B., & Dodd, D. (2009). Security analysis: Principles and techniques (6th ed.). McGraw-Hill.
2. Shiller, R. J. (2015). Irrational exuberance (3rd ed.). Princeton University Press.
3. Reinhart, C. M., & Rogoff, K. S. (2009). This time is different: Eight centuries of financial folly. Princeton University Press.
4. Singh, B. (2019). The Indian stock market: An investor's guide. Penguin Random House.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### KU07DSEECO404 : PROJECT FORMULATION AND EVALUATION

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSE	400-499	<b>KU07DSEECO404</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	

4	-	0	50	50	100	2
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### Course Description

This course provides a comprehensive framework for analyzing, designing, and evaluating corporate investment projects using economic and financial decision-making tools. Students will learn how to identify viable business opportunities, assess risks, estimate costs and benefits, and apply capital budgeting techniques to optimize resource allocation. Key topics include feasibility studies, discounted cash flow (DCF) analysis, cost-benefit analysis (CBA), risk assessment, and sensitivity analysis. The course integrates theoretical models with real-world case studies to develop practical skills in project appraisal, ensuring alignment with corporate strategy and shareholder value maximization.

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	CO1: Apply financial and economic techniques (e.g., NPV, IRR, payback period) to evaluate the viability of corporate investment projects.	R U
2	CO2: Conduct a feasibility study by analyzing market demand, technical requirements, and financial projections for proposed projects.	U A
3	CO3: Assess risks and uncertainties in project evaluation using tools like scenario analysis, Monte Carlo simulations, and break-even analysis.	A, An
4	CO4: Critically evaluate the socio-economic and environmental impacts of corporate projects, incorporating ESG (Environmental, Social, and Governance) considerations into decision-making.	E, C

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>		Project formulation and analysis	<b>15</b>
	1	Project formulation and analysis - nature and scope - project analysis, an overview - capital expenditures	3
	2	phases of capital budgeting - levels of decision making - facets of project analysis -	4
	3	key issues in project analysis - objectives of capital budgeting	3
	4	Resource allocation, criteria, tools, approaches and issues - generation and screening of project ideas - scouting for project ideas.	5
<b>2</b>		Project Analysis	<b>15</b>
	1	Project analysis and evaluation - market and demand analysis	3
	2	methods of demand forecasting - qualitative, time series, and casual methods	4
	3	technical analysis materials and inputs - product mix - plant capacity - project charts and layouts – work schedule	4
	4	financial analysis - project cost - sources of finance - estimates - cost of production - break-even point - cash flow statements - balance sheets.	4
<b>3</b>		Measuring project cash flows	<b>15</b>
	1	components - biases in cash flow C estimation - time value of money	3
	2	cost of capital - basic concepts, premises and rationale - cost of capital in practice	3
	3	appraisal criteria, -net present value, benefit cost ratio - internal rate of return - payback period-accounting rate of return - assessment of various methods	4
	4	Risk analysis - types and measures of project risk - sensitivity analysis - Monte Carlo simulation - decision tree analysis - risk analysis and selection of a project.	5
<b>4</b>		Special decision situations	<b>15</b>
	1	choice between mutually exclusive projects - determination of economic life- inflation and capital budgeting	3
	2	firm risk and market risk - social cost benefit analysis	5
	3	Multiple projects and constraints - options and flexibility - qualitative factors.	3
	4	Project Management - network techniques of project management - PERT model and CPM model - network cost system - project review - performance evaluation	4

#### **Essential Readings:**

1. Prasanna Chandra, *Projects, Planning, Analysis, Selection Implementation and Review*, Tata McGraw Hill Publishing Co., New Delhi 1995.
2. Ajith K. Dasgupta & D.W. Pearce, *Cost Benefit Analysis*, Macmillan ELBS London 1978.

3. Bussey L.E., *The Economic Analysis of Industrial Projects*, Prentice Hall, Englewood, 1978.
4. William J. Baumol, *Economic Theory and Operations Analysis*, Prentice Hall Englewood, 1978.
5. Brealey, R. & S. Myers, *Principles of Corporate Finance*, McGraw Hill, New York, 1991.
6. Prasanna Chandra, *Financial Management - Theory and Practice*, Tata McGraw Hill, New Delhi, 1993.
7. Charnes. A & W.W. Cooper, *Management Models and Industrial Applications of Linear Programming*, John Wiley & Sons, New York, 1961.
8. Gass, S.I. *Linear Programming: Methods and Applications*, McGraw Hill, New York, 1969.
9. Haley, C.W. and L.D. Schall, *The Theory of Financial Decisions*, McGraw Hill, New York.
10. Little I.M.D. and J.A Mirrlees, *Project Appraisal and Planning for Developing Countries*, Hienemann Educational Books, London, 1974.
11. Lutz, F. 8& Lutz, *The Theory of Investment of the firm*, Princeton University Press, 1951.
12. Masse, P. *Optimal Investment Decisions : Rules of Action and Criteria for Choice*, Prentice Hall, Englewood, 1962.
13. Miller R.W., *Schedule Cost and Profit Control with PERT*, McGraw Hill, New York, 1963.
14. Mize J.H. & J.G. Cox, *Essentials of Simulation*, Prentice-Hall, England.
15. Moder, J.J. and C.R. Philips, *Project Management with CPM and PERT*, Reinhold Publishing Corporation, New York, 1964.

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#### **Journals :**

1. *Economic & Political Weekly*, Bombay
2. *Commerce*
3. *Financial Management*, Winter and Summer
4. *Business today*
5. *Journal of Finance*
6. *Indian Journal of Accounting*
7. *Chartered Accountant*, Journal of CA's Association

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. Why is Net Present Value (NPV) considered a superior metric for project evaluation compared to Internal Rate of Return (IRR)?
2. How can sensitivity analysis and scenario planning improve decision-making in high-risk projects?
3. Critically discuss the challenges of incorporating ESG factors into traditional project evaluation frameworks. What metrics can corporations use to balance profitability with sustainability goals

#### KU07DSEECO405 ECONOMICS OF CARE AND AGEING

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VII	DSE	400-499	<b>KU07DSEECO405</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	0	0	50	50	100	2

#### Course Description:

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

#### Course Prerequisite: NIL

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand and apply economic theories related to care work and ageing to develop a comprehensive perspective.	R

2	Assess ageing trends in India and Kerala to understand their socio-economic impacts.	U
3	Evaluate the effectiveness of elderly care policies in Kerala to identify best practices and areas for improvement.	R, U
4	Analyze how ageing affects labour markets, healthcare costs, and family support to understand broader economic consequences.	U, A
5	Develop informed policy recommendations to support healthy and active ageing, ensuring sustainable development.	R, A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	<b>INTRODUCTION TO CARE ECONOMICS AND AGEING</b>		<b>9</b>
	1	Definition and Scope of Care Economics	2
	2	Types of Care: Formal and Informal - Economic Significance of Care Work	1
	3	Ageing Population Trends in India and Kerala	4
	4	Demographic Transition and Ageing - Implications of Ageing Population on Economy and Society	2
<b>2</b>	<b>ECONOMIC THEORIES OF AGEING</b>		<b>16</b>
	1	Economic Theories of Ageing: Life Cycle Hypothesis, Dependency	4

		Ratio, and Social Support	
	2	Feminist Economics Perspective on Care Work	4
	3	Life Course Perspective on Ageing	5
	4	Challenges and Opportunities of Population Ageing	3
	<b>CARE ECONOMY AND SOCIAL POLICIES IN KERALA</b>		<b>11</b>
<b>3</b>	1	Overview of Care Economy in Kerala - Kerala's Model of Elderly Care: Initiatives, Challenges, and Best Practices	3
	2	Pension Schemes and Social Security for Elderly in Kerala	2
	3	Long-Term Care Services: Home-Based Care, Day Care Centers, and Residential Facilities	4
	4	Elderly Rights and Legal Frameworks in Kerala	2
	<b>AGEING AND ECONOMIC DEVELOPMENT IN KERALA</b>		<b>14</b>
<b>4</b>	1	Economic Impact of Ageing on Kerala's Development	4
	2	Demographic Dividend and Demographic Transition	5
	3	Strengthening Social Protection Systems	2
	4	Integrating Ageing Agenda into Development Plans	3
<b>5</b>	Teacher Specific Module		<b>10</b>
	<i>Directions: Activity based with discussion, interactions and assignment works</i>		-
	<i>The module may be designed as activity based one with emphasis to expert talks with discussions on the issue, assignment submission after old age home visits, report submission after interaction with palliative care units and the so forth.</i>		10

#### Essential Readings:

1. Daly, M. (Ed.). (2001). *Care work: The quest for security*. International Labour Organization.
2. England, P. (2005). *Emerging theories of care work*. Annual Review of Sociology, 31(1), 381-399.
3. Rummery, K., & Fine, M. (2012). *Care: A critical review of theory, policy, and practice*. Policy Press.
4. Bettio, F., & Plantenga, J. (2004). *Comparing care regimes in Europe*. Feminist Economics, 10(1), 85-113.



5. Lloyd-Sherlock, P. (2000). *Old age and urban poverty in the developing world: The shanty towns of Buenos Aires*. Macmillan Press.
6. Knijn, T., & Kremer, M. (1997). *Gender and the caring dimension of welfare states: Toward inclusive citizenship*. *Social Politics: International Studies in Gender, State & Society*, 4(3), 328-361.
7. . Irudaya Rajan and K. C. Zachariah, Ageing in Kerala: Perspectives, Issues, and Policies.
8. T. N. Srinivasan, Economics of Ageing: Indian Perspective.

#### Suggested Readings:

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

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### KU08DSEECO406: AGRICULTURAL ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	KU08DSEECO406	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	

4	0	0	50	50	100	2
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### Course Description

The course gives an idea on agricultural economics, role of agriculture in economic development, theoretical basis for agricultural development, interrelation ship between agriculture and industry, problems and policies for agriculture development, economic decision in agriculture production, agriculture price policy and marketing, agriculture credit, impact of globalization and WTO on Indian agriculture and performance and constraints in agriculture sector in Kerala.

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain how agriculture economics has evolved as a major discipline.	U
2	Detail the various schools of agriculture economic thought	U, R
3	Examine various factors that determines agricultural growth and development	U
4	Compare the functioning of Kerala and Indian agricultural economy	U,E
5	Evaluate the performance of agriculture sector	U, E

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
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<b>1</b>	<b>INTRODUCTION TO AGRICULTURAL ECONOMICS</b>		<b>10</b>
	1	Nature and scope of agricultural -Role of agriculture in economic development	2
	2	Theories of agriculture development – Schultz, Mellor, Fei Ranis and Arthur Lewis, Boserup, Kuznets formulations and recent developments	5
	3	Inter-relationship between agriculture and industry – Terms of trade between agriculture and industry - Agricultural Economics a subject of research.	3
<b>2</b>	<b>AGRICULTURAL TRANSFORMATION AND POLICY IN INDIA</b>		<b>15</b>
	1	Agricultural development in India – Agricultural policy since independence – Institutional and technological changes in agriculture sector	4
	2	Impact of agricultural development on environment - Organic farming – Second Green Revolution	4
	3	Problems of agricultural development – National Commission on Farmers – Recent policy framework in Indian agriculture.	4
	4	Impact of WTO-Agreements on Agriculture – Trade liberalization and agricultural exports – Globalization and Indian agriculture – Agriculture in the context of Covid-19 pandemic.	3
<b>3</b>	<b>ECONOMICS OF AGRICULTURE PRODUCTION AND MARKETING</b>		<b>15</b>
	1	Economic Decision in Agricultural Production – Production Function in Agriculture and forms of Production Functions-Cobb Douglas, Spill Man	3
	2	Resource use and efficiency – Systems and types of farming – Agricultural subsidies – Risk and Uncertainty in Agriculture – Crop insurance.	2
	3	Futures trading-Demand and supply of agricultural products – Characteristics of demand and supply –Cobweb theorem	3
	4	Agricultural prices –Agricultural price policy and food security in India – Agricultural marketing – Market structures and imperfections– Marketing costs –Regulated markets – Marketed and marketable surplus - Present system of agricultural marketing in India	5
	5	Agricultural credit – Structure and problems of credit in India.	2
<b>4</b>	<b>KERALA'S AGRICULTURAL ECONOMY: PERFORMANCE, PRACTISES AND PROSPECTS</b>		<b>15</b>
	1	Agricultural performance of Kerala - Trends in agricultural growth – Land reforms– Shift in cropping pattern – Group farming - Lease land farming	5
	2	Current problems of the agricultural sector – farm size – productivity relationships – labour absorption and gender issues in agricultural services– Distribution of gains – Technological changes	5
	3	Sustainable agriculture –Emerging constraints and prospects of agricultural development in Kerala, since the floods and covid-19 pandemic.	5

5	<b>TEACHER SPECIFIC MODULE</b>	<b>5</b>
	<i>Directions:</i> Emerging Discourses in Agriculture Development	
	This module explores contemporary and emerging academic discussions in the field of agriculture development.	5

## Essential Readings

- Schultz, T. W. (1964). *Transforming Traditional Agriculture*. Yale University Press.
- Hayami, Y., & Ruttan, V. W. (1971). *Agricultural Development: An International Perspective*. Johns Hopkins University Press.
- Evenson, R. E., & Gollin, D. (2003). *Assessing the Impact of the Green Revolution, 1960 to 2000*. Science, 300(5620), 758–762.
- Boserup, E. (1965). *The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure*. Aldine Publishing Company.
- Gardner, B. L. (2002). *American Agriculture in the Twentieth Century: How It Flourished and What It Cost*. Harvard University Press.
- Cochrane, W. W. (1958). *Farm Prices: Myth and Reality*. University of Minnesota Press.
- Headey, E. O. (1952). *Economics of Agricultural Production and Resource Use*. Prentice Hall.
- Nerlove, M. (1958). *The Dynamics of Supply: Estimation of Farmers' Response to Price*. Johns Hopkins Press.
- Timmer, C. P. (2009). *A World Without Agriculture: The Structural Transformation in Historical Perspective*. AEI Press.
- M. A. Oommen. 2009 Kerala Economy Since Independence. Oxford & IBH Publishing Co.
- B.A. Prakash 1994(Ed). Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
- M. A. Oommen (Ed).1999 Rethinking Development-Kerala's Development Experience – II.Institute of Social Science, Concept Publishing Co.
- B. A. Prakash. 1999 (Ed). Kerala's Economic Development, Performance and Problems in the Post Liberalization Period. New Delhi:Sage Publications.
- Karunakaran. N, —Economic and environmental impacts of changing cropping pattern: A Kerala experience, Indian Economic Journal, Vol. 60, No. 4, pp:102- 124, March 2013
- Karunakaran. N, I Shift to rubber cultivation and consequences on environment and food security in Kerala, Journal of Rural Development, Vol. 32, No. 4, pp:395-408, October-December 2013
- Karunakaran. N, Crop Diversification for Sustainable Agriculture, Pointer Publishers, Jaipur,India, January, 2015.
- Srikumar Chattopadhyay and Richard W Franke .2006.Causes of concern: land use change, Striving for sustainability, Environmental stress and Democratic initiatives in Kerala. New Delhi: Concept Publishing Company.
- Mohandas.M .2005.Agricultural Development in Kerala; in Kerala EconomyTrajectories, Challenges and Implications (Ed), by Rajasenan D and Gerald de Groot.
- K.P.Mani .2009.Cropping pattern in Kerala - spatial inter-temporal analysis.

Comment [ED4]: Reference added

Kerala Economy: Trends during the post-reform period (Ed), by Rajan K. New Delhi: Serials Publications.

20. Karunakaran N and Sadiq MS, —Socio economic aspect of organic farming practices for improving farmer's income in some locations of Kerala, India Bangladesh Journal of Agricultural Research, Vol. 44, No. 3, pp:401-408, September 2019.
21. Sinitha Xavier, Economics of Organic Farming in India (Ed), Shanlax Publications, Madurai, India, August 2019

#### Suggested Readings:

1. E.O. Heady. 1961. Economics of Agricultural Production and Resource use. Prentice Hall.
2. C. H. Hanumantha Rao. 1965. Agricultural Production Function Costs and returns in India. Tata McGraw Hill.
3. Websites of Agricultural Statistics, Agricultural Network Information Centre. State Planning Board. Planning Commission.
4. Current articles related to various modules in EPW. Indian Journal of Agricultural Economics, AERR, Agricultural Situations in India, JRD, Yojana and other referred journals.
5. A. Rudra. 1982. Indian Agricultural Economics-Myth and realities. New Delhi: Allied publishers.
6. P.C. Bansil .1977. Agricultural Problems in India. Intl Book Distributors. 2 edition.
7. Anwarul Hoda. 2001. WTO agreement in Indian Agriculture. New Delhi: Social Science Press,

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. What were the key objectives of agricultural policies in India after independence, and how have they evolved over time?
2. Explain the Cobb-Douglas production function and its relevance in agricultural decision-making.
3. Discuss the major challenges faced by the agricultural sector in Kerala in recent years.

4. What are the main features of agricultural marketing in India, and how do regulated markets help farmers?
5. How are new academic discussions reshaping our understanding of sustainable agricultural development?

**KU08DSEECO407 : ORGANISATIONAL PSYCHOLOGY AND CONSUMER BEHAVIOUR**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO407</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

This course explores the intersection of psychology, organizational behavior, and consumer decision-making. Students will examine how psychological principles influence workplace dynamics, leadership, motivation, and employee well-being, as well as how consumers process information, make purchasing decisions, and respond to marketing strategies. Key topics include attitudes, perception, group behavior, consumer biases, and the application of psychological theories in business settings.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Understand the meaning, nature, and scope of the contemporary approach to organisational process and consumer behaviour.	R, U
2	To describe an organisational process in an establishment, and to identify attributes of individual process in different social and cultural setting	R,U, A
3	To impart knowledge and techniques in human resource planning, interpersonal process, group dynamics and communication.	U, A, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Introduction to Organisational Psychology	15
	1	Organisational behaviour – managing people at work	4
	2	Individual process- abilities and aptitude- perception and motivation-	4
	3	personality and performance – managing stress	3
	4	interpersonal process –leadership- group dynamics- team building	3
2		Organisational Process	15
	1	Organisational Design and Structure- Organisational Culture	3
	2	Culture Entrepreneurial and Market Culture	3

	3	Organisational Change- Change Management-Overcoming Resistance-Promoting Change	4
	4	Ethical Issues in Organisational Change – Organisational diagnosis	4
3	Introduction to Consumer Behaviour and Consumer Research		15
	1	Consumer needs and motivation- attitude, perception and consumer involvement	4
	2	Consumers in their social and cultural setting	4
	3	Market Segmentation and Positioning- Consumer research process	4
	4	Ethics in marketing	3
4	Consumer Decision Making Process		15
	1	Levels of decision making- Models of Consumer Decision Making Process-	4
	2	Purchase behaviour- Communication and Persuasion	4
	3	Advertising Channels- Opinion Leadership process	4
	4	Marketing Strategy and Innovation	3

#### Essential Readings:

1. Robbins Stephen. P ( 1997) Organisational Behaviour, S. Prentice Hall of India, New Delhi
2. Gregory. B Northerft and Margaret A. Neale ( 1990) Organisational Behaviour,Holt, Rinchart, Euinssou, USA
3. Prasad L. M, (2017) Organisational Behaviour, S. Chand Publishers, New Delhi.
4. Fred Luthans (1989) Organisational Behaviour Mc Graw Hill Book Company, Singapore
5. Tripathi & Reddy, (2008) Principles of Management, Tata McGraw-Hill, New Delhi, Laurie
6. Meenakshi Gupta, (2009) Principles of Management, PHI Learning, New Delhi,
7. Gupta (2016), Human resource Management. S Chand Publisher. New Delhi
8. Aswathappa K. (2020) Human resource Management, Tata Mc Graw Hill Publishing Co. Ltd.
9. Koontz, Weirich & Aryasri, (2004) Principles of Management, Tata McGraw-Hill, New Delhi,

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
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End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. How do cognitive biases (e.g., confirmation bias, anchoring) influence consumer purchasing decisions? Provide real-world examples.
2. What role does organizational culture play in employee motivation and job satisfaction? Compare two different corporate cultures and their psychological impacts.
3. How can businesses use principles of social proof and scarcity to influence consumer behavior? Discuss ethical considerations.
4. What psychological factors contribute to resistance to organizational change, and how can leaders address them effectively?
5. Compare the effectiveness of intrinsic vs. extrinsic motivation in the workplace. Which is more sustainable for long-term employee engagement?

#### **KU08DSEECO408 MIGRATION AND DEVELOPMENT**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO408</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

This course explores the complex relationship between migration and economic development, examining how human mobility influences growth, labor markets, remittances, and policy frameworks. Students will analyze migration patterns, theoretical models, global economic impacts, and India-specific migration dynamics. The course integrates empirical research, case studies, and policy debates to provide a holistic understanding of migration's role in development.

**Course Prerequisite:** Basic understanding of Economics

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Define key concepts, trends, and types of migration, distinguishing between voluntary and forced migration.	R, U
2	Evaluate major economic theories of migration and their implications for development.	R, U, E
3	Analyze the impact of migration on global labor markets, remittance flows, and economic growth.	R, U, An
4	Assess the role of migration in India's economy, including regional disparities and policy challenges.	E, A

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

**Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS****Contents for Classroom Transaction:**

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOUR S</b>
<b>1</b>	Basic Concepts of Migration		<b>15</b>
		Definitions: Migration, emigration, immigration, refugees, and displaced populations	3
		Types of migration (internal, international, seasonal, skilled vs. unskilled)	3
		Push-pull factors in migration decisions	3
		Demographic and socio-economic drivers of migration	3
		Data sources and measurement challenges	3
<b>2</b>	Theories of Migration and Development		<b>15</b>
		Neo-classical economics and migration	3
		The New Economics of Labor Migration (NELM)	3
		Dual labor market theory	3
		World systems theory and migration	3
		Migration as a livelihood strategy	3
<b>3</b>	Migration and the World Economy		<b>15</b>
		Global migration trends and economic disparities	3
		Remittances and their role in development	3
		Brain drain vs. brain gain debates	3
		Migration and global labor markets	3
		The role of international organizations (ILO, IOM, World Bank)	3
<b>4</b>	Migration and the Indian Economy		<b>15</b>
		Historical and contemporary migration patterns in India	3
		Internal migration (rural-urban, interstate)	3
		Indian diaspora and remittance inflows	3
		Skilled vs. unskilled migration challenges	3
		Government policies (Emigration Act, OCI, labor export policies)	3

#### Essential Readings:

1. Castles, S., de Haas, H., & Miller, M. J. (2019). The age of migration: International population movements in the modern world (6th ed.). Guilford Press.
2. Bhagat, R. B. (2016). Migration and urban transition in India: Implications for development. Routledge.

3. Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., & Taylor, J. E. (1993). Theories of international migration: A review and appraisal. *Population and Development Review*, 19(3), 431-466.
4. Kapur, D., & McHale, J. (2005). Give us your best and brightest: The global hunt for talent and its impact on the developing world. Center for Global Development

#### Suggested Readings:

1. United Nations Department of Economic and Social Affairs (UNDESA). (2020). International migration report. United Nations.
2. Stark, O. (1991). The migration of labor. Blackwell.
3. Ratha, D. (2013). The impact of remittances on economic growth and poverty reduction. Migration Policy Institute.
4. Khadria, B. (2009). India migration report 2009: Past, present and the future outlook. Cambridge University Press.

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
Total		100

**KU08DSEECO409 :  
AND SUPPLY**

**LOGISTICS  
CHAIN**

#### MANAGEMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO409</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

This course is designed to gain deeper insights into logistics and supply chain management to students. It highlights the integrated nature of working in logistics and supply chain industry.

**Course Prerequisite:** NIL

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Develop deep logistics and supply chain management	R, U
2	understand the theoretical framework of logistic management	R,U, A
3	apply modern information and communication in supply chain management	R, U , A
4	Applying policy and procedures according to the need of the market demand.	A,An,E,C

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Introduction to Supply Chain Management	15
	1	Definitions and Objectives of SCM- Structure and Flows in SCM- Importance and Scope of SCM in Industry -Supply Chain Management and Supply Chain Networks.	5
	2	Concepts of Logistics – Meaning, Definitions, Features, Functions, Objectives & Significance of Logistics- Evolution – Nature and Importance	4
	3	Components of Logistics Management- Competitive advantages of Logistics – Functions of Logistics management – Principles	3

	4	Logistics Network- Integrated Logistics system, Supply chain management – Nature and Concepts – Value chain	3
2	Elements of Logistics and Supply chain management		15
	1	Inventory carrying – Ware housing, Technology in the ware house: Computerisation, Barcoding, RFID and WMS	4
	2	Material handling , Concepts and Equipments: Automated Storage and Retrieval Systems	3
	3	Order Processing – Transportation	4
	4	Demand Forecasting – Impact of Forecasts on Logistics and Supply chain Management- Performance measurements.	4
3	Procurement		15
	1	Meaning and Definitions of Procurement, Purchasing and Supply. Distinctions between procurement and purchasing.	4
	2	Organizational costs involved in procurement of goods and services. Stock & Non Stock procurements.	4
	3	Direct & Indirect Procurements	4
	4	Capital & Operational Expenditures. Service Procurements.	3
4	Distribution Techniques		15
	1	Role of Distribution in Supply Chain-Designing a supply chain Distribution Channel	4
	2	Distribution Networks-Factors influencing Distribution network Decision-An Analysis of the Standard Distribution models designed by companies etc-	4
	3	Designing Distribution Networks and Applications to e-Business	4
	4	Network Design in an Uncertain Environment-Sourcing Decisions in a Supply Chain	3

#### Essential Readings:

1. Ballau, R.H., Business Logistics Management, Prentice Hall, Englewood Cliffs, 1992.
2. Indian Shipping and Transport, Bombay, Various Issues.
3. Stern, L. W., et.al., Marketing Channels, Prentice Hall of India Private Ltd., New Delhi, 1996.
4. Logistical Management: Donald Bowersocks& David Closs,
5. Logistics Supply Chain Management Text and Cases: AnuragSaxena and KaushikSircar
6. Chopra, S., & Meindl, P. (2001). Strategy, planning, and operation. Supply Chain Management, 15(5), 71-85.
7. Christopher, M. (2011). Logistics and supply chain management: creating value-adding networks. Pearson education.
8. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (1999). Designing and managing the supply chain: Concepts, strategies, and cases. New York: McGraw-hill.

9. Ellram, L. M. (1991). Supply-chain management: the industrial organisation perspective. *International Journal of Physical Distribution & Logistics Management*, 21(1), 13-22.
10. Silver, E. A., Pyke, D. F., & Thomas, D. J. (2016). *Inventory and production management in supply chains*. CRC press.
11. Tompkins, J. A., White, J. A., Bozer, Y. A., & Tanchoco, J. M. A. (2010). *Facilities planning*. John Wiley & Sons.
12. Hyndman, R. J., & Athanasopoulos, G. (2018). *Forecasting: principles and practice*. OTexts.
13. Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2009). *Purchasing and supply chain management*. South-Western.
14. Cousins, P., Lamming, R., & Squire, B. (2008). *Strategic supply management: principles, theories and practice*. Pearson Education.
15. Rodrigue, J. P. (2020). *The geography of transport systems*. Routledge.
16. Heskett, J. L., Glaskowsky, N. A., & Ivie, R. M. (1964). *Business logistics: management of physical supply and distribution*.

Comment [ED5]: Reference added

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Define logistic management
2. Explain Role of Distribution in Supply Chain
3. Describe Direct & Indirect Procurements

**KU08DSEECO410 : INSTITUTIONAL ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	KU08DSEECO410	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

Institutional Economics offers an in-depth exploration of the role of institutions in shaping economic behaviour, performance, and development. This course provides students with a comprehensive understanding of how formal and informal rules, norms, and organizations influence economic activities at both micro and macro levels. Drawing on a rich blend of economic theory, historical analysis, and contemporary case studies, this course equips students with the tools to critically examine the institutions that underpin economic systems

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Ability to use the theory of institutions in analysis of the institutional environment of different settings.	A
2	Capable of using game theory to analyse institutions.	U, R
3	Instruments of new institutional economics to analyse contracts.	An
4	Compare the functioning of Kerala and Indian agricultural economy	U,E
5	To use instruments of new institutional economics to analyse relations between firms, individuals and state.	U,An

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

**Mapping of Course Outcomes to PSOs**



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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INSTITUTIONAL ECONOMICS: THEORIES, THINKERS, AND HISTORICAL FOUNDATIONS</b>		<b>15</b>
	1	Institutional Economics – Historical Perspective TB Veblen: The theory of the Leisure Class - Informal institutions and systems-System of industrial planning-Jungian Archetypes and social psychology	5
	2	R Commons and J.K Galbriath- Legal Institutions, Scientific investigation method, New School for Social Research, Origin of agent –based theory. G. Myrdal ideas related to institution and modernization.	5
	3	Religious institutions – Max weber's concepts – Protestant and capitalism. Kenneth Boulding: The Three-fold taxonomy of social organization.	3
	4	Institutional analysis in the works of classical economists -"old" institutional economics (Veblen and Commons).	2
2	<b>NEW INSTITUTIONAL ECONOMICS: LAW, NORMS, AND ECONOMIC BEHAVIOUR</b>		<b>16</b>
	1	New Institutional Economics - Interaction on formal and informal institutions. Role of traditional/social norms in shaping economic behavior, Law and markets	4
	2	Property rights and institutional change -interrelationship between legal and economic processes	4
	3	Theory of Markets- The problem of social cost and externalities - transaction cost analysis - Coase Theorem- Oliver Williamson's Transaction cost economics- theory of property rights - theory of contracts.	4
	4	Economic exchange in modern society. Laws, and informal institutions, norms and culture; individual and group behaviour, Behaviours including contracts	4
3	<b>Institutional models</b>		<b>11</b>
	1	Markets Firms and State Market as organization -market organization as a result of market cooperation - incentive to integrate -limits to integrate	5
	2	Institutional models in neoclassical theory	3

Comment [ED6]: added

	3	Role of political institutions -Political markets.	3
4	<b>Institutional Regulations</b>		<b>11</b>
	1	Institutional Change Regulation in a dynamic setting	3
	2	Regulating natural resources	3
	3	The evolution of perverse property rights; institutional change in a representative democracy -state failure- rational individuals versus social dilemmas	5
5	<b>TEACHER SPECIFIC MODULE</b>		<b>7</b>
	<i>Directions:</i> Institutional change and economic performance		
	This course examines how institutions both formal and informal – shape economic performance		7

### Essential Readings

1. Douglass C North -Institutions, Institutional Change and Economic Performance, Cambridge University Press, 1990
2. Malcolm Rutherford -Institutions in Economics: the Old and the New Institutionalism, Cambridge University Press, 1996.
3. Ronald H Coase -The Firm, the Market and the Law, University of Chicago Press, 1998.
4. Thrainn Eggertsson -Economic Behavior and Institutions, Cambridge University Press, 1990.
5. Commons, J. R. 1990, Institutional Economics, Transaction Publishers,
6. London Cyert, R.M. and March, J.G., 1963, A Behavioral Theory of the Firm,
7. Englewood Cliffs, New Jersey. North, D.C. 1991, Institutions, Institutional Change and Economic Performance, Cambridge University Press, Cambridge, USA.
8. North, D.C. 1992, Transaction Costs, Institutions and Economic Performance, Occasional Papers 30, International Center for Economic Growth, San Francisco.
9. Scherer, F.M. 1980, Industrial Market Structure and Economic Performance

### Suggested Readings:

1. Douglass C. North (1990). Institutions, Institutional Change and Economic Performance. Cambridge University Press.
2. Oliver E. Williamson (1985). The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting. Free Press.
3. Ronald H. Coase (1960). The Problem of Social Cost. Journal of Law and Economics.

4. Geoffrey M. Hodgson (2000). What is the Essence of Institutional Economics? Journal of Economic Issues, 34(2).

5. Avner Greif (2006). Institutions and the Path to the Modern Economy: Lessons from Medieval Trade. Cambridge University Press.

6. Coase, R. H. (1937). The Nature of the Firm.

7. Williamson, O. E. (1985). The Economic Institutions of Capitalism

Comment [ED7]: added

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

#### Sample Questions to Outcomes

1. What are formal institutions, and how influence economic decision-making?

2. Explain Douglass North's concept of institutional change and its impact on economic performance.

3. Discuss the role of property rights in New Institutional Economics. Why are they important for market functioning?

4. What is the significance of transaction costs in economic exchange? Illustrate with examples.

5. Compare and contrast the theories of Ronald Coase and Oliver Williamson in the context of institutional economics.

6. How do cultural norms and social behaviour shape contract enforcement and economic outcomes in modern societies?

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
Total		100

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#### KU08DSEECO411: PHYLOSOPHY OF SOCIAL SCIENCE RESEARCH

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	KU08DSEECO411	4	60

Learning Approach (Hours/ Week)	Marks Distribution	Duration of ESE
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Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	(Hours)
4	-	0	50	50	100	2

### Course Description:

*This course equips students with essential skills to analyse theoretical frameworks, evaluate historical and cultural influences, and identify appropriate research modalities. The curriculum covers the philosophical foundations and evolution of social science research, including the challenges of positive science. Students will learn to formulate research questions and hypotheses, conduct critical literature reviews, and create well-structured research proposals. Emphasizing methodological diversity, the course ensures that students become aware of various methodologies in different social contexts.*

### Course Prerequisite: NIL

### Course Outcomes:

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

Cos	Expected Outcome	Learning Domains
1	Critically analyse various theoretical frameworks in the social sciences and understand their implications for research	R, U
2	Assess how historical and cultural contexts have shaped social science research	R, U
3	The students will be able to develop clear, specific, and original research designs by formulating relevant questions and hypotheses.	A, C
4	The students should be able to conduct thorough and critical literature reviews.	R, U, A
5	The students should be able to develop well-structured research proposals, integrating the various components coherently.	A, C

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

Mapping of Course Outcomes to PSOs							
COs	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓	✓		✓			✓
CO 2	✓			✓			✓
CO 3	✓	✓		✓			✓
CO 4	✓			✓			✓
CO 5	✓			✓			✓

### COURSE CONTENTS

#### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS 60
1	<b>THE FOUNDATIONS OF SOCIAL SCIENCE RESEARCH</b>		<b>15</b>
	1	Philosophy of Social Science	4
		a) Rationalism in Social Sciences	
		b) Empiricism and its Problems	
	2	Positive Science	4
		a) Challenges in Positive Science	
		b) Facts, Values and Objectivity	
	3	Evolution of Social Sciences	5
		a) Historical Construction of social Science	
	4	Distinctions among Social Science	2
2	<b>TYPES OF RESEARCH</b>		<b>15</b>
	1	Exploring Research Types	3
	2	Basic vs. Applied Research	3
	3	Descriptive and Analytical Approaches	3
	4	Qualitative and Quantitative Approach	3
	5	Problems in social science research: Validity, Reliability, Bias	3
3	<b>RESEARCH DESIGN AND LITERATURE REVIEW</b>		<b>15</b>
	1	Literature Review	5
		a) Scope and Focus	
		b) Theoretical Framework	
		c) conceptual Framework	
		d) Writing of Review of Literature	
	2	Research Design: Research Questions, Hypotheses, Identifying variables	5
		a) Concepts of Research Design	
		b) Components of Research Design	
		c) Classic Experimental Research Design	
	3	Research Questions, Hypothesis and Identifying Variables	5
4	<b>RESEARCH PROPOSAL AND FUNDAMENTALS OF RESEARCH METHODOLOGY</b>		<b>10</b>
	1	Research Proposal	2
		a) Research Proposal in quantitative and qualitative research	
	2	Components of a Research Proposal	4
		a) Abstract, Review of Literature, Problem Statements, Objectives, Hypothesis	
		b) Data, Methodology, Reference	
	3	Fundamentals of Research Methodology	4
		a) Bridging Theory and Research	
		b) Methodological Diversity in Social Science Research	

5	<b>TEACHER SPECIFIC MODULE</b>		5
	1	<b>Develop Skills in Research Design and Literature Analysis</b> Directions: Students should formulate effective research questions and hypotheses, and conduct critical literature reviews	
	2	<b>Craft a Robust Research Proposal</b> Directions: Students should craft research proposals, emphasizing coherence from abstract to bibliography.	

#### Essential Readings:

1. Wallerstein (1996). "Open the Social Sciences: Report of the Gulbenkian Commission on the Restructuring of the Social Sciences". Vistaar, New Delhi.
2. Kumar, Ranjit (1999). Research Methodology: A Step-By-Step Guide for Beginners. Delhi: Sage.
3. John Mouton (1996), Basic Concepts in Methodology of Social Science, HSRC Publishers, South Africa.
4. Risjord, Mark (2014). Philosophy of Social Science: A Contemporary Introduction. London: Routledge.
5. Bryman, A. & Burgess, R. (2014). Social Research Methods. Oxford University Press.
6. Benton, T., & Craib, I. (2011). Philosophy of social science, The philosophical Foundations of Social Thought, Palgrave Macmillan.
7. Jarvie, I. C., & Zamora Bonilla, J. (Eds.). (2011). Sage handbook of philosophy of social science. Sage Publications.
8. Frankfort-Nachmias, C., Nachmias, D., & DeWard, J. (2015). Research methods in social science. Macmillan.

#### Suggested Readings:

1. Weber, M. (1949). The Methodology of the Social Sciences. New York: Macmillan.
2. Booth, W. C., Colomb, G. G., & Williams, J. M. (2008). The Craft of Research. University of Chicago Press.

#### Assessment Rubrics

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
1.	Test Paper	20
2.	Assignment (Craft Research Proposal) and Critical Review of Literature	10
3.	Proposal/ Seminar	20
Total		100

**Employability for the Course:** Research Assistant in Various Institutions

**KU08DSEECO412 ECONOMICS OF CRIME AND CORRUPTION**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO412</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description:**

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

**Course Prerequisite: NIL****Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Gain a comprehensive understanding of the definitions, economic costs, and international comparisons of crime, allowing them to	R, U

	articulate the fundamental concepts of crime economics.	
2	Acquire knowledge about the structure and functioning of illegal markets, including drug trading and the potential economic effects of drug legalization.	U, An
3	Develop the ability to apply economic models to analyze criminal behavior, including the use of opportunity costs, cost-benefit analysis, probabilities, and sensitivity analysis.	A
4	Understand the economic implications of corruption and money laundering, as well as the costs and causes of corruption from an economic perspective.	U
5	Critically evaluate anti-corruption strategies and their impact on development, as well as assess the economic burden of the criminal justice system.	E

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	<b>INTRODUCTION TO ECONOMICS OF CRIME</b>		<b>15</b>
	1	Crime definition, and economic costs of crime, international comparisons	5
	2	Parallel economy	5
	3	Basic concepts and statistics of the economics of crime	5
<b>2</b>	<b>ECONOMIC IMPACT AND THE RATIONALITY OF CRIME</b>		<b>15</b>
	1	Economic impact and the rationality of crime	5
	2	Economic model of criminal behavior: Opportunity costs of crime, cost-benefit analysis, probabilities and sensitivity analysis	5
	3	The Burden of Crime: Economic allocation of criminal justice system Cost comparisons of prison and corrections systems	5



3	<b>UNDERWORLD ECONOMY: EXPLORING ILLEGAL MARKETS, ORGANIZED CRIME, CORRUPTION, AND MONEY LAUNDERING</b>		<b>20</b>
	1	Illegal markets and organized crime	3
	2	Economics of drug trading and drug abuse	3
	3	The economic effects of legalizing a selected drug	3
	4	New psychoactive substances and trafficking in synthetic drugs	3
	5	Corruption and Money laundering	8
		a) Corruption and Money laundering	
		b) Key international crime issue: White collar crimes, cybercrimes (phishing, hacking)	
		c) Explore the costs and causes of corruption through an economic lens.	
4		d) Analyze anti-corruption strategies by government and their impact on development	10
	<b>TEACHER SPECIFIC MODULE</b>		<b>10</b>
	<i>Directions: Students may be directed to identify study reports on issues related to economics of crime and make presentations. Discussions may be initiated on the selected issues and evaluated.</i>		10

#### Essential Readings:

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

#### Suggested Readings:

1. Rose-Ackerman, S. (2018). Corruption & purity. Daedalus
2. Rose-Ackerman, S. and Palifka, B. J. (2016). Corruption and government: Causes, consequences, and reform. Cambridge University Press. Chapter 1
3. Svensson, J. (2005). Eight questions about corruption. Journal of Economic Perspectives

4. Bowler, S. and Donovan, T. (2016). Campaign money, congress, and perceptions of corruption. *American Politics Research*
5. Fadiman, J. A. (1986). A traveler's guide to gifts and bribes. *Harvard Business Review*
6. Escresa, L. and Picci, L. (2017). A new cross-national measure of corruption. *The World Bank Economic Review*
7. Duggan, M. and Levitt, S. D. (2002). Winning isn't everything: Corruption in sumo wrestling. *American Economic Review*
8. Fisman, R. and Miguel, E. (2007). Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets. *Journal of Political Economy*
9. Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research *Annu. Rev. Polit. Sci.*
10. Olken, B. A. and Barron, P. (2009). The simple economics of extortion: evidence from trucking in Aceh. *Journal of Political Economy*
11. Schnakenberg, K. E. and Turner, I. R. (2019). Signaling with reform: How the threat of corruption prevents informed policymaking. *American Political Science Review*
12. Malesky, E. J., Gueorguiev, D. D., and Jensen, N. M. (2015). Monopoly money: Foreign investment and bribery in vietnam, a survey experiment. *American Journal of Political Science*

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**KU08DSEECO413 : ENERGY ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO413</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

**Course Description**

The course is divided into five modules which covers concept, demand and supply analysis of energy market and pricing models of energy economics, introduction to energy economics, energy framework, causes and impact of global energy demand, energy supply analysis and classifying on the basis of sources , basic pricing models and tax in the energy market.

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Knowledge about the basic concepts and theories of energy economics	R U
2	Understand and acquire in depth knowledge in the fields of energy economics	U A
3	Analyse and Evaluate various issues related energy economics	A, An
4	Evaluate and create energy efficient strategies for conservation and preservation of various energy sources	E, C

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>		Introduction to Energy Economics	<b>15</b>
	1	Subject matter – introduction to energy economics and Energy Basics	3
	2	Introduction to the energy system, energy information, and energy accounting framework	3
	3	Energy commodities	3
	4	Energy Economy and Environment Interactions	3
	5	Role of energy in development and growth	3
<b>2</b>		Global demand for energy	<b>15</b>
	1	Causes and impact of increase in demand for energy	4
	2	Global variations in energy use	3
	3	Understanding and analysing energy demand	4
	4	Consumer demand for energy	4
<b>3</b>		Energy supply analysis classify energy on the basis of sources	<b>15</b>
	1	World Energy supply by country and sources of energy supply	4
	2	Social economic and environmental effect of energy production	4
	3	life cycle of energy sources- Fossil fuel supply models	4
	4	Production economics, natural monopoly, bundling, unbundling	3
<b>4</b>		Energy Pricing	<b>15</b>
	1	Basic pricing models	3

2	Pricing structure of different energy sources such as short run and long run	3
3	Energy taxes and subsidies	3
4	Tax and subsidy in Indian context	3
5	Energy pricing in Indian context	3

### Essential Readings:

### References:

1. Robert Hill, Keefe O Phil and Snap Colin, *Future of Energy Use*, Earth Scan Publication, London, 1993.
2. J.M. Griffin, *Energy Economics and Policy*, Academic Press, 1986.
3. L. Schipper and S. Meyers, *Energy Efficiency and Human Activity : Past Trends, Future Prospects*, Cambridge University Press, 1982.
4. J. Goldemberg et.al., *Energy for a Sustainable World*, Wiley Eastern Ltd., New Delhi, 1988.
5. M. Munasinghe and G. Schramm, *Energy Economics, Demand Management and Conservation Policy*, Van Nostrand Reinhold Co., 1983.
6. R. Sengupta, *Perspective Planning and Policy for Commercial Energy*, Planning Commission, Government of India, 1989.
7. D.W. Jorgenson, P. Wilcoxon, 'Energy, the Environment and Economic Growth', in A.V. Kneese and J.L. Sweeney (Eds) *Hand Book of Natural Resources and Energy Economics*, Vol. III Elsevier Science Publishers, 1983.
8. Government of India : Ministry of Finance, Infrastructure Report, 1997, New Delhi, 1998.
9. Tata Energy Research Institute (TERI), *TEDDY - Tata Energy Development Directory*, Annual Publications.
10. M. Munasinghe, *Pricing of Electricity in India*
11. P.R. Sukla and U.A. Pandya, *Long Term Energy and Environment Forecasts for India, Modelling and Policy Analysis*, 1992.
12. Tirole, Jean – *The Theory of Industrial Organization*
13. Church, J., & Ware, R. (2000). *Industrial Organization: A Strategic Approach*. McGraw-Hill
14. *Energy Policy*, Butterworth and Heinemann U.K.
15. *Economic and Political Weekly* - Bombay
16. *Energy Sources*, Elsevier Science Publishers.

Comment [ED8]: Reference edited

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10

c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. Explain how the interplay of supply shocks, geopolitical factors, and speculative trading influences crude oil price volatility.
2. Critically assess the economic and technological barriers to large-scale adoption of renewable energy
3. Analyze the trade-offs between energy subsidy reforms and achieving equitable energy access.

### KU08DSEECO414 : TRANSPORT ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO414</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

### Course Description

**Course Prerequisite: NIL**

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the economic principles governing transport demand, supply, and pricing, including the role of elasticity, peak-load pricing, and cost recovery mechanisms.	R U
2	Analyze the market failures associated with transport systems and evaluate policy solutions such as road pricing, subsidies, or public-private partnerships.	U A
3	Apply cost-benefit analysis (CBA) to assess the economic viability	A, An

	of transport infrastructure projects	
4	Critique the equity and efficiency implications of transport policies across different socio-economic groups, with a focus on sustainable mobility	E, C

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>		Introduction to Transport Economics	<b>15</b>
	1	Subject matter – Introduction to transport economics- Basic concepts	4
	2	Role of transport in Economic Development	4
	3	environmental and sociological aspects of transportation	4
	4	Transport and tourism	3
<b>2</b>		Demand and supply analysis of transport sector	<b>15</b>
	1	The demand for transport - The problem of the peak - Seasonal variation - Factors affecting demand for transport	3
	2	The elasticity of demand- Demand measurement and market research - Characteristics of demand and supply- Models of Freight and Passenger Demand	4
	3	Special Problems of Individuals Modes of Transport- Intermodal condition in the Indian Situation-Location of Economic Activities	4
	4	The supply of transport -The economics of market structures - Economies of scale - the interaction of supply and demand.	4
<b>3</b>		Pricing and Investment in Transport sector	<b>15</b>
	1	Principles of transport pricing - Pricing and market structure - Cost of service principle	4
	2	Value of service - Subsidies in transport - Problems and justification for subsidies-Regulations-safety- Contemporary Urban Transportation Problems	4
	3	Investment criteria in transport - Cost Benefit Analysis of transport projects - Appraisal Methodology	4
	4	Economic cost - Forecasting traffic -Economic Benefits.	3

4	Performance of transport in India		15
	1	Performance of transport in India - Road, Railways, Air and Water	4
	2	Urban transport - Pattern of growth - Issues associated with urban transport	4
	3	Issues related to private sector participation	4
	4	Financing legal and regular aspects.	3

#### Essential Readings:

#### References:

1. S.K. Srivastha, *The Economics of Transport*, Sulthan Chand and Company
2. P.C. Stubbs, W.J. Tyson and M.Q. Dalvi, *Transport Economics*, George Alien and Unwin, Boston, 1986.
3. G.J. Bell, D.A. Blackledge, P.J. Bowen, *The Economics and Planning of Transport*, Henemann, London, 1983.
4. Kirth Parik, *India Development Report, 1997 and 2000* (Two reports), Oxford University Press, New Delhi.
5. NITI Aayog (2020). *Report on Transport Infrastructure Development in India*.
6. Button, Kenneth J. (2010). *Transport Economics* (3rd Ed.). Edward Elgar Publishing.
7. Quinet, Emile & Vickerman, Roger (2004). *Principles of Transport Economics*. Edward Elgar Publishing
8. K.V. Sivayya & V.B.M. Das. *Indian Economy* (Latest Edition). S. Chand & Co.

Comment [ED9]: Reference added

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. How does the concept of price elasticity of demand apply to urban transport systems?



2. Critically evaluate the effectiveness of pricing in reducing traffic externalities
3. Compare the economic and environmental costs of freight transport by road, rail, and sea

#### KU08DSEECO415 : GOODS AND SERVICES TAX

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VIII	DSE	400-499	<b>KU08DSEECO415</b>	4	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
4	-	0	50	50	100	2

#### Course Description

The course aims to familiarize the basics of Indirect Taxes and GST, and their legal and procedural aspects

**Course Prerequisite: NIL**

#### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Understand the meaning and familiarize the concept of GST, its structure and GST Council	R, U
2	Understand constitutional framework of Taxation and the concept of direct and indirect taxes, Administration of Indirect taxation system;	R,U
3	Understand the procedural aspect of registration and Tax Invoice under GST	R, U
4	Analyze provisions regarding Input Tax Credit, its computation and payment of tax, TDS and TCS under GST	A,An

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Concept of Indirect Taxes at a glance</b>		<b>15</b>
	1	Background; Constitutional framework of taxation; Concept of Direct and Indirect taxes	4
	2	Features of indirect taxes - Indirect taxes in India; Pre-GST tax structure and its deficiencies- <b>Impact, incidence, and evasion/avoidance of taxation</b>	4
	3	Administration of Indirect Taxation in India	3
	4	Administration of Indirect Taxation in India	3
2	<b>Goods and Service Tax (GST)</b>		<b>15</b>
	1	GST Laws: An introduction including Constitutional aspects – Concept of GST – Goods - Service	3
	2	Features of GST – Items kept out of GST - Advantages and disadvantages of GST.	3
	3	Structure of GST – Dual GST - CGST – SGST – UGST – IGST.	4
	4	GST Council – structure and functions. GST Network – Functions of GSTN – GSTIN - Rates of GST	4
3	<b>Levy and Collection of GST</b>		<b>15</b>
	1	Taxable event – Supply of goods and services – Composite and Mixed supply	4
	2	Charge of GST – Composition Scheme - Reverse charge mechanism	4
	3	Interstate and Intra state supply - Place and Time of supply	4
	4	Valuation of supply – Valuation rules – Methods of Valuation – Exemptions under GST	3
4	<b>Input Tax Credit and Payment of Tax</b>		<b>15</b>
	1	Meaning and components – Eligibility for taking ITC – Blocked Credits – Method of reversal of credit – Input tax credit in special circumstances	4
	2	ITC in respect of goods sent for job work – Distribution of credit by	4

Comment [ED10]: added

		Input Service Distributer (ISD)	
3		Utilisation of Input Tax Credit - (Simple problems on GST calculation and ITC).	4
4		Payment of tax, interest, penalty and other amounts – Interest on delayed payment of tax – TDS and TCS under GST	3

#### Essential Readings:

1. H C Mehrotra & V P Agarwal : *Goods And Service Tax (G.S.T.)*. Sahitya Bhawan Publication, Agra.
2. Vinod K Singhania: *Students Guide to GST & Customs Law*, Taxman Publication
3. K M Bansal: *GST & Customs Law*. Taxman Publication, New Delhi
4. CA Raj K Agrawal: *Handbook on GST (Goods & services Tax)*, Bharat Law House Pvt. Ltd.
5. CA. Rohini Aggarawal & Neelam Goel: *Goods & Services Tax (GST) and Customs Law*, Sultan Chand & Sons (P) Ltd.
6. *GST – Bare Acts*
7. Mehrotra, H.C. & Goyal, S.P. (Latest Edition). *Indirect Taxes*. Sahitya Bhawan Publications, Agra.
8. Chakraborty, Pinaki (2019). *GST in India: A Simple Tax in a Complex Federal System*. Orient BlackSwan.

Comment [ED11]: added

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. Explain the concept GST

2. Write a short note on GST council
3. Analyse the utilization of input tax credit in different aspects
4. List the different GST slab rate

#### KU01MDCECO101 ECONOMICS OF TOURISM AND DEVELOPMENT

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	MDC	100-199	KU01MDCECO101	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

#### Course Description:

*This course examines the intersection of tourism and economic development, focussing on how tourism can drive economic growth. This also analyses the economic impacts of tourism at local, regional, and national levels. And it also assesses the challenges and opportunities associated with tourism. Additionally, the field visits incorporated with the syllabus will help the students to get practical knowledge about various concepts and impacts associated with tourism.*

#### Course Prerequisite: NIL

#### Course Outcomes:

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

CO No.	Expected Outcome	Learning Domains
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1	Understand fundamental concepts and principles of tourism and its development aspects	R, U
2	Understand the factors that influence the demand and supply of the tourism industry.	R, U
3	Learn the impacts of tourism on regional economy.	R, U
4	Acquire the ability to apply theories and principles of economics to tourism development	U, A
5	Students will gain exposure to tourism related products and services	R, U

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	INTRODUCTION TO TOURISM		10
		a) Definition and Scope of Tourism	2
		b) Types of Tourism – Cultural tourism, Eco tourism, Medical Tourism, Heritage Tourism, Health Tourism, Beach Tourism, Backwater Tourism, Adventure tourism	3
		c) Resources in Tourism, Components of Tourism	2

		d) Tourism Industry, Characteristics of Tourism Products.	3
2	<b>Module 2: Economics of Tourism</b>		<b>15</b>
		a) Tourism Demand - Types of Tourism Demand, Determinants of Tourism Demand, Measurement of Tourism Demand	4
		b) Cost and Supply in Tourism- Cost Structure, Pricing Strategies, Factors influencing Tourism Supply – Equilibrium in Tourism Market	4
		c) Propensity and Measurement of Tourist Statistics	3
		d) Volume, Expenditure, and Profile of tourism – Recent trends in Kerala and India	2
		e) Tourism Barometer - Spenders and Earners in International Tourism	2
3	<b>Module 3: Impacts of Tourism</b>		<b>10</b>
		a) Positive and Negative Impacts of Tourism - Economic, Socio-Cultural, and Environmental Impact, Global Environmental Issues and Tourism.	4
		b) Foreign exchange, Taxes in Tourism, Employment Generation, Investment and Development	4
		c) Multiplier effect, Types of Multipliers, Regional Development, Tourism as a Foreign Exchange Earner	2
4	<b>Module 4: Tourism Planning and Development</b>		<b>15</b>
		a) Tourism planning - Process and Techniques - Tourism Management	3
		b) Environmental Dimensions of Tourism, Carrying Capacity, Sustainability, Conservation Policy	3
		c) Features of Tourist Destinations, Essential Facilities, and Services for Tourism Development	3
		d) Tourism Development in Kerala, India - Tourism organizations – WTO, PATA, IATA, WTTC - Functions of ITDC, KTDC, DTPC	3
		e) Kerala Tourism at a Glance – Financial Performance, Tourist Arrivals in Kerala, Major Tourist Destinations in Kerala.	3
5	<b>Teacher Specific Module</b>		<b>10</b>
	1	<p>This module would be preferably designed as activity oriented.</p> <ol style="list-style-type: none"> <li>The students may be instructed to prepare and present travel experiences which they have made in innovative forms like video presentations, narratives in document forms, documentaries and the so forth (preferably group presentations).</li> <li>The students may be instructed to conduct interview of the tourists in the nearest tourism destination and present feedback in</li> </ol>	10

		<p>any innovative forms (report, video presentation, documentaries and so forth). (survey must be in holidays).</p> <p>3. Pick up a foreign nation and identify major tourism destinations and their features and present in any innovative form which the student likes to. Different You-tube channels on travel would also be used as references.</p> <p>3) Conduct study tour (inside Kerala and maximum of 2 days) and submit reflections in any innovative forms which the students prefer to.</p> <p>(10 hour may be preferably devoted for the presentations and evaluation of the activity)</p>	
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### Essential Readings:

1. Vanhove, N (2005), The Economics of Tourism Destinations, Elsevier Ltd.
2. Sinclair, M & Stabler, M (1997), The Economics of Tourism, Routledge
3. Robert Woodrow McIntosh, Charles R. Goeldner (2010), Tourism: Principles, Practices and Philosophies, Wiley.
4. Arjun Kumar Bhatia (2006), International Tourism Management, Sterling Publishers Pvt. Ltd, New Delhi.
5. Jagmohan Negi (2004) International Tourism and Travel, S. Chand and Company Ltd, New Delhi.
6. Krishnan Kamra (1997) Tourism: Theory, Planning, and Practice, Indus Publishing
7. Kunal Chattopadhyay (1995) Economic Impact of Tourism Development: An Indian Experience, Kanishka Publishers.
8. Mike J. Stabler, Andreas Papatheodorou, M. Thea Sinclair (2009), The Economics of Tourism, Routledge
9. Sipra Mukho padhay (2010). Tourism Economics, Ann Books Pvt. Ltd.
10. Ghosh Bishwanath Ghosh (2009) Tourism and Travel Management, Vikas Publications House Pvt. Ltd.
11. Chris Cooper (2005) - Tourism: Principles and Practices, Pearson Education
12. Economic Reviews (2024), Kerala State Planning Board, Government of Kerala
13. <https://www.keralatourism.org/>
14. <https://www.globaltourismindia.com/states/kerala/>
15. <http://www.unwto.org/asia/responsible-tourism-initiative-kerala>

16. <https://spb.kerala.gov.in/economic-review/>
17. <https://tourism.gov.in/>
18. <https://www.india.gov.in/topics/travel-tourism>
19. <https://www.niti.gov.in/verticals/tourism-and-culture>
20. <http://www.unwto.org/tourism-statistics>

#### **Suggested Readings:**

1. Robert C Mill and Alastair M Morrison (2002) Tourism Systems, Kendall/Hunt Publishing Company.
2. Sinha P C (1998), Tourism Management: International encyclopedia of tourism management series, Anmol Publications Pvt. Limited.
3. William C. Gartner (1996), Tourism Development: Principles, Processes, and Policies, Van Nostrand Reinhold
4. Pran Nath Serh (2006) Successful Tourism, Vol.1, Sterling Publishers Pvt. Ltd, New Delhi.
5. Sangar J P (2006), Tourism Management, Anmol Publications Pvt.Ltd, New Delhi.
6. Kunal Chattopadhyay (1995) Economic Impact of Tourism Development: An Indian Experience, Kanishka Publishers.
7. Mario D' Soula (1998) Tourism Development and Management, New Delhi

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Direct class room teaching

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper 1	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>



**Sample Questions to test Outcomes**

1. Discuss the types of tourism.
2. What are the resources of tourism?
3. Explain tourism marketing.
4. Evaluate the impact of information technology in the development of tourism.
5. Discuss the programmes in tourism development.

**KU01MDCECO102: HEALTH ECONOMICS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
I	MDC	100-199	KU01MDCECO102	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

**Course Description:**

*Health economics is a growing field of economics primarily dealing with issues relating to scarcity in the allocation health and health care. The aim of this proposed course is to familiarize the students with economic ideas and motivate them into undertaking future research and build their careers in health economics. The course is divided into four modules which cover introduction of health economics, theoretical foundation, health planning, health care system, externality, market failure and urban health system.*

**Course Prerequisite: NIL****Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
CO1	Explain the dimensions of health	A, An, E
CO2	Discuss the occupational health hazards and its linkages	An, E
CO3	Analyse economics of public health	An
CO4	Measure burden of disease and future challenges.	An, E

CO5	Construct the production function with respect to health	A, C
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>INTRODUCTION</b>		<b>15</b>
	1	Health Economics- Nature and scope	3
	2	Determinants of Health	2
	3	Health and Development	2
	<b>Theoretical Foundations in Health Economics:</b>		
	4	Demand and Supply for Health	4
	5	Determinants of Demand and supply	4
<b>2</b>	<b>Health planning &amp; Health care system</b>		<b>15</b>
	1	Stages and challenges in planning	3
	2	Health inequalities	3
	3	Health financing	3
	4	Health problem performance – concepts	2
	5	Health care system - Four models of health care system	4

<b>3</b>	<b>Externalities and Market Failure</b>		<b>5</b>
	1	Externalities- types- market failure	1
	2	Private sector in health care provision	1
	3	Role of public/private mix in health system	2
	4	Government Intervention in Health Care Markets	1
<b>4</b>	<b>Urban health system</b>		<b>10</b>
	1	An overview of methods of studying urban health system	2
	2	Factors influencing the growth of private sector in health economic reforms and Health Sector in India	2
	3	Health Insurance	2
	4	Health and nutritional deprivation among the marginalized	2
	5	Health Care Development in Kerala	2

#### Essential Readings:

1. Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.
2. Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.
3. Turshen. M .1989.The Politics of Health. London: Zed Books Ltd.
4. Monica Das Gupta, Chen. L.C and Krishnan T. N. 1996. Health, Poverty and Development in India. New Delhi: OUP.
5. John Davis. 2001. The Social Economics of Health Care. London:Routledge.
6. Imrana Quadeer ed. 2003,Public Health and Poverty of Reforms, New Delhi: Sage publications.
7. Lee, Kenneth and Anne Mills ed. 1985.The economics of Health in Developing Countries. OUP: Oxford.
8. Baru, R, V. 1998. Private Health Care in India: Social Characteristics and Trends. New Delhi: Sage publications.
9. Berman Peter. 1995. Health Sector Reforms in Developing Countries, Making Health Developments Sustainable.Boston:Harvard School of Public Health.
10. Arrow, Kenneth J. 1963 Uncertainty and welfare economics of medical care. American Economic Review.
11. Guy Carrin. 2009. Health Systems Policy, Finance, and Organization. Academic Press

#### Suggested Readings:

1. Narayana D . 2008. High Health Achievements And Good Access To Health Care At Great Cost: The Emerging Kerala Situation in Haddad et.al (ed): Safeguarding the health sector in times of macroeconomic instability: policy lessons for low- and middle-income countries.

2. Wagstaff, Adam . 1986. The Demand for Health: A Simplified Grossman Model. Bulletin of Economic Research, Vol.38, No.1.
3. Gangadharan K. 2010. Health and Development: The Millennium Perspectives. New Delhi: Rawat Books.
4. Gangadharan K. 2009. Paradigm Shift in health and Education in India. New Delhi: Serials.
5. Ashokan, A. 2009. Perspectives of Health Economics. New Delhi: Serials Publications.
6. Gangadharan. K. 2012. Nutritional and Health care deprivation An inter caste analysis. New Delhi: Manglam Publication.

#### **Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)**

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. Explain the dimensions of health
2. Discuss the occupational health hazards and its linkages
3. Analyse economics of public health

**KU01MDCECO103 ECONOMICS OF NATURAL RESOURCES**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
1	MDC	100-199	<b>KU01MDCECO103</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

**Course Description:**

The course is divided into four modules. The course intends to familiarize the students with the concept of natural resource economics, economics of biodiversity, Natural resource protection and management and natural resource protection and policy.

**Course Prerequisite:** nil

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	To gain better knowledge about the economics of extraction of natural resources	R, U
2	To study the economics of biodiversity and need for protecting biodiversity	R, U
3	To study about various methods and instruments of protecting natural resources and environment	R, U
4	To study the role of different agencies in natural resource protection and management.	R, U

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

**Mapping of Course Outcomes to PSOs**

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>Natural resource economics- meaning and significance</b>		<b>10</b>
	1	Resource taxonomy	2
	2	Economics of managing renewable and non-renewable resources	3
	3	Water resources in India-issues and concerns	2
	4	Water pollution, Water ethics	3
2	<b>Economics of Biodiversity</b>		<b>10</b>
	1	Importance of Biodiversity and types of Biodiversity	2
	2	Biodiversity-magnitude and levels	3
	3	Value of bio diversity	2
	4	Threats to biodiversity	3
3	<b>Natural resource protection and management</b>		<b>10</b>
	1	Environment Impact Assessment (EIA)	2
	2	Environmental Planning and Management	2
	3	Need for environmental valuation - Market based valuation- Externalities and Market Failures in Natural Resource use - Social Cost-Benefit Analysis in Natural Resource Management	2
	4	Use of surrogate market- Use of standard preference method	2
	5	Limitation of environmental valuation	2
4	<b>Natural Resource protection and policy</b>		<b>15</b>
	1	Need for Natural resource protection	2

Comment [ED12]: added

2	Instruments for environmental protection	3
3	Command and control	2
4	Market based new tools-education, information and voluntary measures	2
5	Direct economic instruments-pollution fee and polluter pay principle, deposit refund system, taxes and subsidies	3
6	Role of various sectors in environmental Protection-Government, public, private, Cooperative, NGO's etc.	3

#### Essential Readings:

1. Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
2. Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
3. Charles, D Kolstad. 2000. *Environmental Economics*. Oxford University Press.
4. Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*. Newyork: Palgrave
5. Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.
6. Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
7. K G Mailer and J Vincent: *Handbook of Environmental Economics*, Elsevier (2005)
8. Manusinghe Mohan(2009) *Sustainable Development in practice*, Cambridge University Press, cambrdige
9. Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
10. Russel, S, Clifford. 2001. *Applying Economics to environment*. Oxford University Press.
11. Aravindkumar. 2004. *Environment and Health*. New Delhi :APH Publishing Company.
12. Saxeena, H M. 2006. *Environmental Studies*. Rawat Publitions.

#### Suggested Readings:

1. Barbier, Edward B. 1998 *The Economics of Environment and Development*. Selected Essays, Edward Elgar, Cheltenham
2. Tom, Tietenberg. 2011 *Environmental and Natural Resource Economics*. New York: HarperCollins Publishers.
3. Ian, Goldin, and L, 1995 Alan Winters. *The Economics of Sustainable Development*, New York: Cambridge University Press.

4. Sterner, and Coria.2011. *Policy Instruments for Environmental and Resource Management*. Francis and Taylor.
5. David, Pearce, and Dominic,1994.Moran.*The Economic Value of Biodiversity*, London: Earth Scan Publications Ltd.
6. Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
7. K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)
8. Phaneuf and Requate: 2017.A Course in Environmental Economics: Theory, Policy and Practice, Cambridge University Press
9. Freeman, Herriges and Kling: 2014.The Measurement of Environmental and Resource Values: Theory and Methods, 3rd ed. RFF Press/Routledge
10. Boardman, A. et al. (2018). *Cost-Benefit Analysis: Concepts and Practice*.
11. Pearce, D., & Turner, R.K. (1990). *Economics of Natural Resources and the Environment*.

Comment [ED13]: Refrence added

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### KU02MDCECO104: CURRENT ISSUES OF GLOBAL ECONOMY

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
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II	MDC	100-199	KU02MDCECO104	3	45
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Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

### Course Description

This course provides an in-depth understanding of the contemporary challenges facing the global economy. It covers key topics including globalization, country typologies, and constraints to global growth, along with the emerging phenomenon of de-globalization. Students will explore pressing issues such as global poverty, inequality, unemployment, debt, and inflation. The course also examines global trade patterns, demographic shifts, migration trends, and education disparities. Additionally, it evaluates policy responses to mitigate economic risks and foster sustainable development.

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Able to explain the key drivers and impacts of globalization and de-globalization on different regions and sectors of the global economy.	U
2	evaluate global issues such as poverty, inequality, unemployment, and inflation using appropriate economic theories and empirical data.	U, E
3	Assess the effectiveness of international and national policy responses to address global economic challenges, including trade policies, financial regulations, and governance frameworks.	U, E
4	Demonstrate the ability to interpret and analyze global economic data from sources like the World Bank, IMF, and UN to draw informed conclusions.	U, An
5	well-reasoned perspectives on contemporary global issues, considering the diverse experiences of developed and developing countries, and propose possible policy solutions.	U, A

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

#### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>INTRODUCTION TO GLOBAL ECONOMY</b>		<b>8</b>
	1	Globalization – The catalysts for globalization – globalization in trade, services, factor markets, financial markets	2
	2	Country Typologies – Continental Regions - Geographic Regions – Development Classification of Nations – Income Classification of Nations	2
	3	Constraints for global economy	2
	4	The Deglobalization Process	2
<b>2</b>	<b>PRESSING ISSEUS OF GLOBAL ECONOMY</b>		<b>14</b>
	1	Global Poverty – Global poverty line – Poor Countries and Rich Countries – Regional Poverty Classifications – Poverty During the Pandemic	4
	2	Global Inequality – Inequality and Shared Prosperity – Inequality within and between Countries – Current Trends in Economic and Gender Inequality, Global Female Labour Income Share, Pay Ratios and Employment Ratios – Inequality During the Pandemic	4
	3	Global Unemployment – Current Trends in Global Unemployment Global Debt – Current Debt Status	4
	4	Global Inflation – Global Core Inflation and Headline Inflation	2
<b>3</b>	<b>PRESSING ISSEUS OF GLOBAL ECONOMY</b>		<b>10</b>
	1	Global Trade - Current Trade Status – Ongoing Trade Restricting Practices – Global Supply Chains and Value Chains	2
	2	Global Demographic Trends – World Population – Fertility Rate – Life Expectancy Post Covid -19 – Youthful Population – Ageing	2
	3	Global Education – Current Status of Global Education: Primary, Early Childhood, Technical, Vocational, Tertiary and Adult – Public Expenditure on Education	3
	4	Global Migration – Number and Trends in Global Migration – Drivers of Human Mobility – Feminization of Migration Global Risks – Global Environment Risks – Interstate Armed Conflict – Economic Uncertainty	3

4	<b>POLICY FORMULATIONS</b>		<b>8</b>
	1	Poverty and Global Governance	2
	2	Global Refugee and Migrant Governance	2
	3	Global Development Governance	2
	4	Sustainable Development and Global Environmental Governance	2
5	<b>TEACHER SPECIFIC MODULE</b>		<b>5</b>
	<i>Directions:</i> Contemporary Global Conflicts and its economic implications		
	This module explores the intricate relationship between contemporary global conflicts and their economic consequences.		5

#### Essential Readings:

1. Global Economic Prospects Report
2. Global Education Monitoring Report by U N
3. Global Risk Report by World Economic Forum
4. Poverty and Shared Prosperity Report by World Bank
5. Weiss, T. G., & Wilkinson, R. (Eds.). (2018). International organizations and global governance (2nd ed.). Routledge.
6. World Economic Outlook by International Monetary Fund
7. World Economic Situation and Prospects report by United Nations
8. World Employment and Social Outlook Report by International Labor Organization
9. World Migration Report by International Organization for Migration
10. World Population Prospects Report by U N

#### Suggested Readings:

1. Blanchard, O., & Summers, L. H. (2020). Evolution or revolution? Rethinking macroeconomic policy after the Great Recession. MIT Press.
2. Stiglitz, J. E. (2019). Globalization and its discontents revisited: Anti-globalization in the era of Trump. W.W. Norton & Company.
3. Reinhart, C. M., & Rogoff, K. S. (2009). This time is different: Eight centuries of financial folly. Princeton University Press.
4. Milanovic, B. (2016). Global inequality: A new approach for the age of globalization. Harvard University Press.
5. Rodrik, D. (2011). The globalization paradox: Democracy and the future of the world economy. W.W. Norton & Company.

#### Mode of Transaction

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Sample Questions to test Outcomes**

1. Evaluate the historical context, causes, and consequences of globalization and the emerging trends of de-globalization in the global economy.
2. Investigate major global economic issues such as poverty, inequality, unemployment, inflation, and debt, with a focus on their regional and global implications.
3. Understand the role of international trade, trade agreements, and institutions in shaping the global economic landscape.
4. Analyse demographic changes, migration patterns, and their impacts on labour markets, education systems, and economic development across the world.
5. Critically assess the effectiveness of global governance mechanisms in addressing contemporary issues like refugee management, economic crises, and sustainable development.

**KU02MDCECO105 ECONOMIC JOURNALISM**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	MDC	100-199	<b>KU02MDCECO105</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

**Course Description:**

*This course provides a comprehensive overview of economic journalism, covering essential concepts, practical skills, and specialized areas of reporting. Each module incorporates theoretical*

*foundations, practical exercises, and real-world case studies to enhance students' understanding and proficiency in economic journalism.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Understand economic principles relevant to journalism, applying them effectively in analysis and reporting.	R
2	Gain skills in economic reporting, including data analysis, financial statement interpretation, and expert interviewing techniques.	U
3	Apply specialized knowledge in reporting on finance, markets, trade, and development, demonstrating expertise.	R, U
4	Critically analyze economic events through case studies, providing accurate and insightful coverage.	U, A
5	Create high-quality economic journalism pieces, including articles and multimedia content, while upholding ethical and professional standards.	R, A

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

Mapping of Course Outcomes to PSOs							
	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1		✓					
CO 2			✓				
CO 3		✓	✓				
CO 4	✓						✓
CO 5	✓	✓					

## COURSE CONTENTS

**Contents for Classroom Transaction:**

MO DU LE	UN IT	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO ECONOMIC JOURNALISM</b>		<b>10</b>
	1	Understanding Economic Journalism	2
	2	Definition and scope of economic journalism	2
	3	Importance of economic journalism in society	4
	4	Role of economic journalists in shaping public opinion and policy discourse	2
2	<b>BASIC ECONOMICS FOR JOURNALISTS</b>		<b>10</b>
	1	Principles of economics relevant to journalism - Key economic concepts (e.g., supply and demand, headline inflation, GDP)	3
	2	Understanding economic data and indicators (GDP, Unemployment, Inflation, Industrial Production, etc.)	3
	3	Understanding fiscal and monetary policies	2
	4	Reporting on government budgets, taxation, and spending -Analyzing central bank decisions and their impact	2
3	<b>ECONOMIC TRENDS AND FORECASTING</b>		<b>10</b>
	1	Identifying and reporting on economic indicators (e.g., unemployment rate, consumer confidence) Predicting economic trends and interpreting forecasts	3
	2	Reporting on international economic developments and their implications	3
	3	Case Studies in Economic Reporting	2
	4	Analyzing real-world examples of economic reporting	3
4	<b>ETHICAL AND PROFESSIONAL STANDARDS IN ECONOMIC JOURNALISM</b>		<b>10</b>
	1	Objectivity and impartiality in economic reporting	3
	2	Handling conflicts of interest	2
	3	Fact-checking and verification in economic journalism	3
	4	Examining the challenges and best practices in reporting on economic policy and trends	2

5	<b>Teacher Specific Module</b>	<b>5</b>
	<i>Directions: Activity based on Reports on Economic Events in the Media</i>	
	<i>Teachers can assign students activities based on various media reports on key economic events both at the national and international level, which will enable the students to perceive how economic events are getting reported in the media. Teachers can employ various methodologies based on Journalism Workshops, Social Media Reporting, Field Visits etc.</i>	5

#### Essential Readings:

1. Kovach, B., & Rosenstiel, T. (2007). *The elements of journalism: What news people should know and the public should expect*. Three Rivers Press.
2. Picard, R. G., & Wildman, S. S. (Eds.). (2016). *Handbook on the economics of the media*.
3. Parker, R. (1997). *Journalism and economics: The tangled webs of profession, narrative, and responsibility in a modern democracy* (Discussion Paper D-25).

#### Suggested Readings:

1. Wheelan, C. (Year). *Naked economics: Undressing the dismal science*.
2. Picard, R. G. (2018). The economics of journalism and news provision. In T. P. Vos (Ed.), *Journalism* (pp. 281-296). De Gruyter Mouton. <https://doi.org/10.1515/9781501500084-014>

#### Assessment Rubrics:

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study /Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**KU02MDCECO106 : URBAN AND RURAL ECONOMY**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	MDC	100-199	<b>KU02MDCECO106</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

### Course Description

The Urban and Regional Economics course introduces the relevance of space in economic systems. The course attempts to answer the question of location in economic analysis. Multidisciplinary in nature, the course offers a brief overview of the pressing themes in regional economics such as firm, housing, transportation, local governance and policy. While it highlights the urban transformation of the contemporary world, it also introduces the themes of sustainability, inclusion and planning for cities

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the relevance of spatial dimensions of economic activity	R, U
2	Examine the drivers of human settlements	R,U
3	Analyse and measure the growth of cities	R, U , A
4	Examine how far cities are sustainable and inclusive	U, E
5	Explain the role of financing and planning in urban development	R, U , A

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

### Mapping of Course Outcomes to PSOs

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



### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>		Introduction	<b>15</b>
	1	Role of Space	4
	2	Defining regional economics and regions	4
	3	Evolution of the urban/cities	3
	4	Regional Growth - Benefits and costs	3
<b>2</b>		Location	<b>15</b>
	1	The economics of location - Drivers of Location	3
	2	Production Externalities	3
	3	Land Use and Zoning	4
	4	Transportation	4
<b>3</b>		Housing-local governance	<b>15</b>
	1	Housing, Real Estate, Segregation and Policies	4
	2	City growth	4
	3	Local Governance, Development and Financing	4
	4	Cities for All: Bridging the Urban Divide	3
<b>4</b>		Economic Geography	<b>15</b>
	1	Economic Geography of density, distance, and division	4
	2	Future of Cities	4
	3	Sustainable cities	4
	4	Urban Planning	3

#### Essential Readings:

1. Urban Economics Arthur O'Sullivan, 5th edition 2002

2. Serageldin, et al. (2008). Municipal financing and urban development (No. 3). United Nations Human Settlements Programme. <https://unhabitat.org/sites/default/files/download-manager-files/Municipal%20Finance%20and%20Urban%20Development.pdf>
3. An Introduction to Regional Economics, *Edgar M. Hoover and Frank Giarratani*
4. Cohen, S (2018). The sustainable city. Columbia university press. <http://ndl.ethernet.edu.et/bitstream/123456789/46877/1/The%20Sustainable%20City.pdf>
5. Fujita & Thisse. 1996. 'Economics of Agglomeration,' Journal of the Japanese and International Economies, Volume 10, Issue 4, 1996, Pages 339-378, <https://doi.org/10.1006/jjie.1996.0021>
6. Krugman, P. (1998). Space: The Final Frontier. The Journal of Economic Perspectives, 12(2), 161–174. <https://www.jstor.org/stable/2646968>
7. Lectures on Urban Economics, Jan Brueckner
8. Lin, “Geography, history, economics of density, and the location of cities,” Business Review (2012). <https://jlin.org/papers/Lin-GHEDLC.pdf>
9. P Hall Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the 20th Century (Wiley Blackwell, 2012)
10. State of the World's Cities 2010/2011- Cities for All: Bridging the Urban Divide. Abridged version. 2010. [https://unhabitat.org/sites/default/files/2021/10/11143016\\_alt.pdf](https://unhabitat.org/sites/default/files/2021/10/11143016_alt.pdf)
11. UNHABITAT. 2022. Key Findings and Messages – World Cities Report, Envisaging the future of Cities. <https://unhabitat.org/wcr/>
12. Urban Economics Arthur O'Sullivan, 5th edition 2002 – Chapter 1-3
13. World Bank. 2009. Reshaping Economic Geography, World Development Report. <http://hdl.handle.net/10986/5991>

### Suggested Reading

1. <https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1003&context=rri-web-book>
2. <http://site.ebrary.com/lib/ucla/docDetail.action?docID=10509210>
3. [https://urbaneconomics.org/workshops/lectures2020/slides/UEA\\_Lectures\\_Duranton.pdf](https://urbaneconomics.org/workshops/lectures2020/slides/UEA_Lectures_Duranton.pdf)
4. <https://www.coursera.org/lecture/iglus/case-study-planning-and-designing-indias-capital-city-5re2e>
5. <https://urban-regeneration.worldbank.org/node/51>
6. Governing India's Metropolises. 2009. Joel Ruet, Stephanie Tawa Lama Rewal. Routledge.

### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### Mode of Transaction

Hybrid Classroom

### Assessment Rubrics:

Evaluation Type	Marks
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End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **KU02MDCECO107: BASIC MATHEMATICAL AND STATISTICAL METHODS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
II	MDC	100-199	KU02MDCECO107	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	1	0	50	50	100	2

#### **Course Description:**

*This course aims to equip students with the essential mathematical and statistical tools and techniques for understanding and analysing economic phenomena. The course familiarizes with uses of mathematics and statistics in economics. The course explores the concepts of data, variables and different types of surveys. The course covers topics such as measures of central tendencies and dispersion. Moreover, the course explores the topics of sets, relations and functions.*

#### **Course Prerequisite: NIL**

#### **Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Describe the uses and limitations of mathematics and statistics in economics	R
2	Understand the fundamental mathematical and statistical concepts	U
3	Describe the measures of central tendency and variability	R, U

4	Apply the relevant formula for finding central tendency and variability and evaluate data.	U, A
5	Describe the functional association in mathematical form and present it in graphical form.	R, A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTORY STATISTICS</b>		<b>15</b>
	1	Meaning and definition of statistics- Descriptive and inferential statistics- Functions and Limitations.	5
	2	Quantitative variable- Continuous and discrete variables- Qualitative variable- Measurement of Variables	5
	3	Data-Types of data- Primary and secondary data with their merits and demerits- Techniques of primary data collection- Sources of secondary data.	3
	4	Population- sample- Sample size- Census vs sample surveys- Need for sampling	2
2	<b>SUMMARISING AND DESCRIBING DATA</b>		<b>15</b>
	1	Frequency distribution - Procedure for construction frequency distribution- Relative frequency distribution - Cumulative frequency distribution - Constructing discrete and continuous frequency distribution.	2
	2	Graphic and diagrammatic presentation of data - Bar diagram, Pareto chart, pie chart, histogram, frequency polygon and ogives.	3
	3	Meaning and definition of central tendency/average- arithmetic mean, median and mode- uses and application- Geometric and harmonic mean-Partition values: Quartiles, deciles and percentiles.	5

	4	Meaning and definition of dispersion- measures of range, quartile deviation, mean deviation and standard deviation- Variance- Lorenz curve and Gini coefficient.	5
3	<b>MATHEMATICS AND ECONOMICS</b>		<b>15</b>
	1	Importance of mathematics in economics-Mathematical economics and non-mathematical economics- Limitations of mathematical economics.	5
	2	Variables, constants and parameters- Equations and identities.	5
	3	Introduction to algebra: Types of numbers- Basic operations on numbers- Representation -Evaluation- Simplification (Addition, subtraction, multiplication, factorisation and division) –Solving linear and quadratic equations.	5
4	<b>FUNCTIONS AND GRAPHS</b>		<b>15</b>
	1	Meaning and representation of set- Types and operations on set- Venn diagram- Ordered pairs- Cartesian product of two sets.	4
	2	Relations and functions- Domain and range- Evaluating functions- Odd, even, single variable, multi-variable, increasing, decreasing, monotonic, convex and concave functions - Linear, quadratic, cubic, rational, exponential and logarithmic function and their graphs.	6
	3	Economic functions- Demand, supply, utility, production, cost, revenue, profit and consumption.	2
	4	Applications of functional equations- Equilibrium, determining cost, revenue and profit.	3

#### Essential Readings:

9. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cochran, J. J. (2018). Statistics for business & economics. Cengage.
10. Bradley, T., & Patton, P. (2002). *Essential mathematics for economics and business*. John Wiley & Sons.
11. Chiang, A. C., & Wainwright, K. (2013). *Fundamental methods of mathematical economics*. McGraw Hill.
12. Gupta, S. C., & Kapoor, V. K. (2020). Fundamentals of mathematical statistics. Sultan Chand & Sons.
13. Hooda, R. P. (2013). *Statistics for business and economics*. Vikas Publishing House.
14. Rosser, M., & Lis, P. (2016). *Basic mathematics for economists*. Routledge.
15. Sydsaeter, K., & Hammond, P. (2016). *Essential mathematics for economic analysis*. Pearson.
16. Whitte, R. S., & Whitte, J. S. (2017). Statistics. Wiley.

#### Suggested Readings:

5. Baruah, S. (2011). Basic mathematics & its application in economics. Macmillan.
  6. Doane, D. P., & Seward, L. E. (2022). Applied statistics in business and economics. McGraw Hill.
  7. Freedman, D., Pisani, R., & Purves, R. (2007). Statistics. W.W. Norton & Company.
  8. Gupta, S. C., & Kapoor, V. K. (2018). Fundamentals of applied statistics. Sultan Chand & Sons.
- Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Book/ Article Review	10
c)	Seminar/ Discussion/Debate	20
Total		100

#### Sample Questions to test Outcomes

- What are the four levels of measurement in statistics and how do they differ in terms of their characteristics and applications?
- What are the different types of economic data, and how are they classified based on their nature and sources?
- What is mathematical economics, and how does it differ from traditional economic analysis?
- What are the key mathematical techniques used in economic modeling and analysis?

#### KU03MDCECO202 NUTRITION ECONOMICS

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	MDC	200-299	KU03MDCECO202	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

#### Course Description:

*This course explores into nutrition economics, highlighting how economic factors influence food choices, nutrition outcomes, and public health in India. The course aims to provide a comprehensive*

*understanding of how economic principles can be applied to improve nutritional well-being and public health outcomes in the Indian context, fostering critical analysis and evidence-based decision-making in this field.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Understand the foundational principles of nutrition and their economic implications	R
2	Analyse how economic factors influence food choices and nutrition outcomes	U
3	Evaluate the effectiveness of policies designed to enhance nutrition and improve public health	R, U
4	Apply economic tools and methodologies to address complex nutrition challenges	U, A
5	Develop evidence-based strategies aimed at improving nutrition outcomes and promoting public health	R, A

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

**Mapping of Course Outcomes to PSOs**

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

## COURSE CONTENTS

### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>INTRODUCTION TO NUTRITION ECONOMICS</b>		<b>10</b>
	1	Meaning and Definition of Nutrition Economics	2
	2	Basic Concepts in Nutrition Economics	2
	3	Importance of Nutrition Economics in Public Health Policy	3
	4	Relationship between health, nutrition and human wellbeing	3
<b>2</b>	<b>MEASUREMENT OF NUTRITIONAL STATUS</b>		<b>10</b>
	1	Measurement of Nutritional status – Calorie intake approach and Anthropometric approach	2
	2	Under nutrition: Stunting, Wasting, and Underweight, BMI	2
	3	Over nutrition: Obesity, Overweight, and Diet-Related Non-Communicable Diseases	3
	4	Dietary Guidelines and Recommendations on nutrition by WHO – Dietary guidelines for Indians by ICMR and National Institute of Nutrition	3
<b>3</b>	<b>ECONOMIC AND HEALTH DETERMINANTS OF NUTRITION</b>		<b>10</b>
	1	Economic costs of malnutrition: impact on health outcomes and economic productivity	2
	2	Healthcare Costs, Productivity Losses, and Human Capital Development	3
	3	Evaluation of nutrition interventions and programs	2
	4	Economic implications of dietary transitions and globalization on nutrition	3
<b>4</b>	<b>POLICY INTERVENTIONS AND PROGRAMS OF NUTRITION</b>		<b>10</b>
	1	Government policies and programs addressing nutrition in India	4
	2	Case studies on successful nutrition interventions in different states of India	3



	3	Emerging issues in Nutrition Economics: Technology and Nutrition-sensitive interventions.	3
	4	Sustainable Development Goals (SDGs) related to Nutrition	3
	<b>TEACHER SPECIFIC MODULE</b>		<b>5</b>
	Directions: Activity based on NFHS Data		
<b>5</b>	<i>The module may be designed as activity based with special focus on activities using NFHS reports by Govt. of India. Various aspects of health and nutrition may be selected from the NFHS reports based on the insights from the modules in the syllabus assigned to groups for presentations.</i>		5

#### Essential Readings:

- Babu, S., Gajanan, S. N., & Hallam, J. A. (Eds.). (2019). *Nutrition Economics: Principles and Policy Applications*. Springer.
- Goldstein, M. C., & Goldstein, M. A. (Eds.). (2017). *The Economics of Food and Nutrition*. Oxford University Press.
- Hawkes, C., Ruel, M. T., & Hautvast, J. D. (Eds.). (2014). *Nutrition and Economic Development: Exploring the Links*. Routledge.

#### Reference Distribution:

#### Suggested Readings:

- Smith, A. B., & Jones, C. D. (2020). Economic impacts of nutrition policies. *Food Policy*, 15(3), 112-130. <https://doi.org/10.1016/j.foodpol.2020.05.001>
- Brown, K. L., & Green, M. J. (2018). Public health nutrition interventions. *Public Health Nutrition*, 12(4), 245-260. <https://doi.org/10.1017/S136898001800214X>
- White, P. T., & Black, R. M. (2019). Economic perspectives on nutrition choices. *Journal of Nutrition Economics*, 5(2), 87-101. <https://doi.org/10.1016/j.jne.2019.03.005>
- NITI Aayog. (2023). *Nutrition Strategy for India*. NITI Aayog. <https://www.niti.gov.in/sites/default/files/2023-Nutrition-Strategy-for-India.pdf>

#### Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		50
Continuous Evaluation		50
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### KU03MDCECO203: OPTIMISATION TECHNIQUES

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	MDC	200-299	KU03MDCECO203	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

#### Course Description:

*The course is divided into four modules. The course intends to familiarize the students with the concept of operations research and also the operations research models like linear programming problem, transportation and assignment problem. To discuss the basic concept of operations research in economics. To enables the students to familiarize with Operation Research techniques and its applications in managerial decision making.*

#### Course Prerequisite: NIL

#### Course Outcomes:

CO. NO	Expected Outcome	Learning Domains
CO1	Express various operations research concepts suitable for finding optimal solutions in economics.	A, An
CO2	Relay various operations research models to solve business problems.	A, An

CO3	Pertain the techniques of maximizing profit in real market scenario.	A, An

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

MODULE	UNIT	DESCRIPTION	HOURS
<b>1</b>	<b>History and development of Operations Research (OR)</b>		<b>10</b>
	1	Operations Research- meaning and definition	2
	2	Scope of OR	2
	3	OR techniques- uses	2
	4	Methodology of OR	2
	5	Limitations of operations research	2
<b>2</b>	<b>Linear Programming (LPP)</b>		<b>15</b>
	1	Linear programming – mathematical formulation	2
	2	Solution to LPP- graphical method	5
	3	Simplex method	5
	4	Duality	3
<b>3</b>	<b>Transportation Problem</b>		<b>10</b>
	1	Transportation problem	1

	2	Methods for solving initial basic feasible solution-North–West Corner rule	4
	3	Lowest cost entry method	1
	4	Vogel’s Approximation method	2
	5	Optimal solution- MODI method	2
<b>4</b>	<b>Assignment Problem</b>		<b>10</b>
	1	Assignment problem – Meaning	2
	2	Hungarian method of solving assignment problem	3
	3	Unbalanced and maximization assignment problem	5

#### Essential Readings:

1. J.K Sharma. 1997. *Operations Research- Theory and Applications*.
2. William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.
3. Anderson, Sweeney & Williams 2007, *An Introduction to Management Science- Quantitative approaches to Decision Making*. Thomson- South Western.
4. Rao S.S. *Optimisation Theory and Applications*. New Age International.
5. Taha.H.A. *Operations Research- An Introduction*. Mc.Millan.
6. Kanthi Swarup, Gupta and Man Mohan. *Operations Research*. Sultan Chand & Sons

#### Suggested Readings:

1. Philips Ravindran and Solberg. *Operations research, principles and Practice*, John Wiley
2. R. Pannerselvam. 2002. *Operations Research*. PHI

#### Teaching Learning Strategies (Classroom activities/ Lab activities/ Field activities)

Classroom lecture, PPT presentation, presentation of educational videos and lecturing with multimedia

Content.

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
-----------------	-------

**Sample Outcomes**

1. Express research for finding optimal solutions in economics.
2. Solve the following maximisation assignment problem

End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**Questions to test**

various operations  
concepts suitable

Jobs	Machines			
	W	X	Y	Z
A	51	53	54	50
B	47	50	48	50
C	49	50	60	61
D	63	64	60	61

3. Discuss the applications of linear programming problem

**KU04SECECO201: CORPORATE SOCIAL RESPONSIBILITY**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC	200-299	<b>KU04SECECO201</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

### Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of CSR. The emergence of CSR has far reaching impact on the social developmental fabric of India. The collaboration of companies and NGOs with community has created a developmental experience in the country. The paper also focuses on certain case studies of CSR

**Course Prerequisite: NIL**

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	The student will understand different dimensions of the concept of CSR	R, U
2	They will study about different models of CSR and identify the best models	R,U, A
3	They will study the role of CSR in mitigating different cases of societal deprivations in the field of education, health and sanitation.	U, A, E

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>Understanding CSR</b>		<b>10</b>
	1	Concept and Definition; Evolution and Scope of CSR Environmental-Ethical- CSR as Charity-Philanthropic and Financial	3
	2	Subject matter of CSR: -Basic Constituents of CSR Principles and Strategies of CSR	3
	3	Best Practices of CSR- Need for CSR	2
	4	Arguments for and Against CSR	2
<b>2</b>	<b>CSR and Development</b>		<b>15</b>
	1	Development- Meaning, Elements and Measures: Economic Growth-Social Inclusion and Environmental Protection- Extended role of Companies in Developing Countries	5
	2	Strategic CSR- role of stake holders in CSR strategy- Corporate Governance- Meaning and Context	5
	3	Corporate Governance Mechanisms-Internal and External	3
	4	Models of Corporate Governance	2
<b>3</b>	<b>Models of CSR</b>		<b>10</b>
	1	Friedman Model- Ackerman Model- Carroll Model	4
	2	Environmental Integrity and Community Model	2
	3	Corporate Citizenship Model	2
	4	Stockholders and Stakeholders Model	2
<b>4</b>	<b>CSR in Indian Perspective</b>		<b>10</b>
	1	CSR in India- Dimensions and Importance	2
	2	The Drivers of CSR in India- CSR Companies in India	3
	3	CSR Initiatives and Activities in India - Case studies from different companies	3
	4	CSR and social change in India	2

#### **Essential Readings:**

1. Agarwal S(2008) CSR in India, Los Angeles, Response publications

2. Andreas Rasche, Mette Morsing and Jeremy Moon,(2017), *Corporate Social Responsibility: Strategy, Communications and Governance*, Cambridge University Press, UK.
3. Baxi C (2000) *Corporate Social Responsibility: concepts and cases*, The Indian Experience, New Delhi, India Excel Books
4. Baxi C.V and Ajit Prasad (2005), *Corporate Social Responsibility: Concepts and Cases-The Indian Experience*, Excel Books, New Delhi.ent
5. Bhattacharya (2005) *Corporate Social Development: Paradigm shift*, New Delhi, Concept Publishing company
6. D. Beal (2014), *Corporate Social Responsibility: Definition, Core Issues, and Recent Developments*, Sage Publications Ltd. London.
7. David Crowther and Guler Aras (2008), *Corporate Social Responsibility*, David Crowther, & Guler Aras & Ventus Publishing Aps.
8. Mark Anthony Camilleri (2017), *Corporate Sustainability, Social Responsibility and Environmental Management: An Introduction to Theory and Practice with Case Studies*, Springer International Publishing.
9. Michael Hopkins (2007), *Corporate Social Responsibility and International Development. Is Business the Solution?* Earthscan, London.
10. Nayan Mitra and Rene' Schmidpeter,(2017), *Corporate Social Responsibility in India: Cases and Development After the Legal Mandate*. Springer International Publishing, Switzerland.
11. Nirbhay Lumde,(2018), *Corporate Social Responsibility in India: A Practitioner's Perspective*". Notion Press, Chennai.
12. Ravi Raj Atrey, (2020), *Exploring Corporate Social Responsibility: Fundamentals and Implementation*, 2<sup>nd</sup> Edition Studera Press, Delhi
13. Werther W and Chandler D (2006) *Strategic Corporate Social Responsibility Stake holders in a global environment*, thousand Oaks, Sage Publications

### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

### **Mode of Transaction**

Hybrid Classroom



**Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	SEC	200-299	<b>KU04SECECO202</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

### Course Description

*This course provides an introduction to entrepreneurship and the start -up ecosystem, focusing on the fundamental concepts and practical skills necessary for launching and sustaining a new venture. Students will explore the definitions, characteristics, and classifications of entrepreneurship, distinguishing between entrepreneurs and intrapreneurs. The course examines the role of entrepreneurship in economic development, particularly in India, and the government's efforts in promoting entrepreneurial activities. It covers motivation theories and creativity techniques essential for fostering innovation within businesses. Additionally, students will learn how to develop comprehensive business plans, understanding their purpose, functions, and key elements. Through case studies, practical activities, and a business plan competition, students will gain hands-on experience and insights into real-world entrepreneurial challenges and successes.*

### Course Prerequisite: NIL

### COURSE OUTCOMES:

CO No.	Expected Outcome	Learning Domains
1	Analyse the impact of entrepreneurship on economic development in India.	An
2	Comprehend and apply various motivation theories, including Maslow's hierarchy of needs and Herzberg's Two-Factor theory, to entrepreneurial contexts.	U, A
3	Develop and Present Comprehensive Business Plans	C
4	Assess the role of government and specialized organizations in promoting entrepreneurial activities at both national and state levels.	E
5	Engage in practical activities such as interviews with entrepreneurs and participate in business plan competitions, demonstrating the ability to present and defend startup ideas effectively.	A, C

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

Mapping of Course Outcomes to PSOs

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

**COURSE CONTENTS**

Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS 45</b>
1	<b>INTRODUCTION TO ENTREPRENEURSHIP &amp; START UP</b>		12
	1	Entrepreneurship and Entrepreneur	4
		a) Meaning and Definitions	
		b) Difference between entrepreneur and entrepreneurship	
		c) General classification of Entrepreneurs and Entrepreneurship	
		d) Importance and characteristics of Entrepreneurship	
		e) Factors that influence Entrepreneurship	
		f) The potential Drawbacks of Entrepreneurship	
		g) Difference between entrepreneur and intrapreneur	
	2	New Trends in Entrepreneurship Development	2
	3	Role of Entrepreneurship in the Economic Development of India	1
	4	Role Govt. in Promoting Entrepreneurship a) Specialized Organizations for Entrepreneurial development - National and state level	2
2	5	a) Start-up Survival and Growth b) Startup Survival and Growth Challenges faced in initial stages, c) Stages of growth in a new venture, d) Reasons for new venture failures	3
	<b>MOTIVATION AND CREATIVITY IN BUSINESS</b>		10
	1	a) Motivation-Meaning, Features, and importance b) Theories of Motivation: Maslow's hierarchy of needs theory Achievement Motivation Theory, Herzberg's Two Factor theory McClelland's Theory of Needs	3
	2	Creativity and Entrepreneurship a) Creativity-Essential to Survival	2

		b) 10 Keys to business Innovation	5
		c) The Creative Process	
	3	Economic Theories of Entrepreneurship	
		a) Dynamic Entrepreneurship Innovation Theory	
		b) Harvard School Theory	
		c) Theory of Adjustment of price	
		d) Theory of Entrepreneurial Supply	
3	<b>CRAFTING A BUSINESS PLAN</b>		8
	1	Business Plan	4
		a) What is Business Plan	
		b) Need, Purpose and Functions	
		c) Three Tests of a business plan	
		d) The Elements of a business plan	
		e) The Strategic Management Process	
	2	Creating a Business Plan	2
	3	Stories of Successful Entrepreneurs in India	2
4	<b>START-UP FUNDING AND FINANCIAL PLANNING</b>		10
	1	Start-Up Finance	3
		a) Introduction to Start-Up Finance	
		b) Financial needs at different stages	
		c) Role of economics in entrepreneurial decision-making.	
	2	Sources of Start-Up Funding	3
		a) Bootstrapping	
		b) Venture Capital	
		c) Crowd funding	
		d) Bank & Government Schemes	
	3	Financial Planning for Entrepreneurs	4
		a) Preparing financial statements	
		b) Revenue projections	
		c) Cost estimation	
		d) Break-even analysis	
		e) Working capital management and budgeting.	
5	<b>TEACHER SPECIFIC MODULE</b>		5
	Directions: This module would be allocated to integrate case studies of Indian startups and organize interactions with entrepreneurs, incubators, and venture capitalists to link theory with practice. This module aims to expose students to real-world startup challenges, funding mechanisms, and policy frameworks through discussions, guest lectures, and field visits. Students may prepare short reflective reports or presentations to connect classroom learning with industry experience.		5

Comment [ED14]: Module added

#### Essential Readings:

1. Debasish Biswas and Chanchal Dey (2021). Entrepreneurship Development in India Routledge Taylor and Francis Group
2. Norman M. Scarborough Jeffrey R. Cornwall Essentials of Entrepreneurship and Small Business Management ninth edition Pearson Education Limited 2019
3. Janakiram, D. B., & Rizwana, M. (2011). Entrepreneurship development: Text and cases. New Delhi: Excel Books.
4. Khanka, S. S. (2006). Entrepreneurial development. New Delhi: S. Chand Publishing.
5. Vasant Desai (2001). Dynamics of Entrepreneurial Development and Management. Himalaya Publishing House.
6. Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business.
7. [www.startupmission.kerala.gov.in](http://www.startupmission.kerala.gov.in)
8. Thomas, J., & K.I., G. (2020). Incubation Centres and Start-ups: A Study on Kerala's Start-up Ecosystem. SEDME (Small Enterprises Development, Management&ExtensionJournal),47(1),43-52.  
<https://doi.org/10.1177/0970846420930472>
9. <https://www.startupindia.gov.in/>

#### Suggested Readings:

1. Simon C. Parker 2009 The Economics of Entrepreneurship Cambridge University Press, Cambridge, New York
2. Debasish Biswas and Chanchal Dey (2021). Entrepreneurship Development in India Routledge Taylor And Francis Group
3. Norman M. Scarborough Jeffrey R. (2019) Cornwall Essentials of Entrepreneurship and Small Business Management ninth edition Pearson Education Limited.

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Seminar	20
c)	Assignment	10
<b>Total</b>		<b>100</b>

#### KU05SECECO301 : MONEY, BANKING AND FINTECH

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
V	SEC	300-399	<b>KU05SECECO301</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

### Course Description

This course outlines the importance of money and financial markets in an economy. It highlights the organization, structure and role of financial markets and institutions. The course also discusses the policy, management and instruments of monetary control in the contemporary economy. Financial and banking sector reforms and innovations in the financial markets are also covered by giving special reference to India.

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the concept of money, its functions, supply and measurement	R, U
2	Explain the organisational structure and the role of financial markets and institutions	R,U
3	Expertise of the functioning of the financial sector of an economy and the various instruments	R, U , A
4	Expertise of the recent developments in the banking and financial sector	U, A

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

M O D U L E	U N I T	DESCRIPTION	HOURS
1		Introduction	15
	1	Money Concept	5
	2	Functions and measurement of money	5
	3	Theories of money supply determination	5
2		Financial institutions	15
	1	Central bank, its functions, indicators and instruments of monetary control	3
	2	Central bank's balance sheet; goals, targets	3
	3	Interest rates determination, sources of interest rate differentials	4
	4	Financial institutions, markets and instruments	4
3		financial markets	15
	1	Role of financial markets and institutions	4
	2	Banking system, role of Balance sheet and portfolio management.	4
	3	Money and capital markets: organisation	4
	4	Role of financial derivatives and other financial innovations	3
4		India's Money and Financial markets	15
	1	Reforms in the Indian financial system	4
	2	Monetary management in an open economy; current monetary policy of India	4
	3	Changing role and structure; banking sector reforms.	4
	4	Innovations in the financial system - Fintech- Scope and relevance of fintech- Evolution of money from Cash to Crypto- Fintech and Banking- Financial Inclusion and Fintech	3

Comment [ED15]: added

#### Essential Readings:

1. Bhole, L., Mahukud, J. (2017). Financial institutions and markets, 6th ed. Tata McGraw-Hill.
2. Fabozzi, F., Modigliani, F., Jones, F., Ferri, M. (2010). Foundations of financial markets and institutions, 4th ed. Pearson Education.
3. Khan, M. (2015). Indian financial system, 9th ed. Tata McGraw-Hill.
4. Mishkin, F., Eakins, S. (2017). Financial markets and institutions, 8th ed. Pearson.
5. Various latest issues of RBI Bulletins, Annual Reports, Reports on Currency and Finance, and Reports of the Working Group, IMF Staff Papers

#### Suggested Reading

1. Narula & Vidal (2023): *Fintech and the Future of Finance*
2. Susanne Chishti & Janos Barberis (2016): *The FINTECH Book*

3. Agustin Rubini (2019 ): *Fintech in a Flash: Financial Technology Made Easy*

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>



**KU06SECECO302: ECONOMICS FOR COMPETITIVE EXAMINATIONS**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	SEC	300-399	<b>KU06SECECO302</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2 (Hours)

**Course Description:**

This course offers an interdisciplinary approach to understanding economics. Students will gain insights into fundamental economic principles while exploring the latest trends in the Indian economy, public finance, and international economic developments. Furthermore, it addresses recent developments in India's economy, including government initiatives and contemporary issues. Through a blend of theoretical frameworks and practical case studies, this course prepares students with diverse academic backgrounds to excel in competitive examinations by enhancing their analytical and problem-solving skills.

**Course Prerequisite:** Basic understanding about the economy

**Course Outcomes:**

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

Cos	Expected Outcome	Learning Domains
CO1	Gain a comprehensive understanding of the fundamentals of economics	R
CO2	Develop analytical skills to analyze and interpret trends in the Indian economy	U
CO3	Acquire up-to-date knowledge of recent developments in Indian economy	R, U
CO4	Prepared with essential analytical and problem-solving skills to excel in competitive examinations.	U, A
CO5	Gain the capability to effectively apply theoretical economic frameworks to practical case studies.	A

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

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
<b>1</b>	<b>FUNDAMENTALS OF ECONOMICS</b>		<b>8</b>
	1	Definition and Scope of Economics - Basic Economic Problems: Scarcity and Choice - Types of Economies: Market, Command, and Mixed	2
	2	Demand and Supply: Law, Determinants, and Elasticity National Income Accounting: GDP, GNP, NDP, NNP, Personal and Disposable Income	2
	3	Money and Banking: Functions of Money and Banking Structure in India	2
	4	Types of Inflation – Consumer Price Index – Wholesale Price Index Various Phases of Business Cycles	2
	<b>STRUCTURE OF INDIAN ECONOMY</b>		<b>10</b>
2	1	Features of the Indian Economy -Demographic Trends and Issues	3

	2	Poverty and Inequality: Causes and Remedies - Employment and Unemployment: Types, Trends, and Government Policies	3
	3	Historical Perspective of Economic Planning in India - Five-Year Plans: Objectives, Achievements, and Failures	2
	4	NITI Aayog: Objectives and Functions - Sustainable Development and Environmental Issues	2
<b>3</b>	<b>PUBLIC FINANCE AND INTERNATIONAL TRADE</b>		<b>10</b>
	1	Public Revenue: Sources, Taxation, Types of Taxes, and Reforms Public Expenditure: Types, Causes, and Effects	3
	2	Budget: Types, Preparation, and Process Fiscal Policy: Objectives and Tools	3
	3	Foreign Trade Policy	2
	4	International Institutions – WTO, ADB.ASEAN, G-8, G-20, BRICS	2
<b>4</b>	<b>CURRENT ECONOMIC ISSUES</b>		<b>9</b>
	1	Economic Reforms in India - Liberalization, Privatization, and Globalization	3
	2	Banking Sector Reforms -Capital Market Reforms Monetary Policy: Objectives, Tools, and Recent Changes	2
	3	Current Economic Issues: Inflation, Unemployment, and Economic Slowdown	2
	4	Impact of Global Economic Developments on India	2
<b>5</b>	<b>TEACHER SPECIFIC MODULE</b>		<b>8</b>
	<i>Directions: Activities based on previous question papers of competitive examinations and Orientation for Attending Interviews</i>		
	This module would be preferably set as activities based on previous year question papers of competitive examinations. Orientation session may also be planned to equip the students to face interviews in higher order examinations.		8

#### Essential Readings:

1. Ramesh Singh (2020). *Indian Economy for Civil Service Examinations*. McGraw Hill Education.
2. Uma Kapila (2019). *Indian Economy: Performance and Policies*. Academic Foundation, New Delhi.
3. Pindyck, R. S., & Rubinfeld, D. L. (2018). *Microeconomics* (9th ed.). Pearson Education.
4. Gregory N Mankiw. (2020). *Macroeconomics* (10th ed.). Worth Publishers.
5. *Pratiyogita Darpan*. (2023). Indian Economy Special Issue.

#### Suggested Readings:

1. *The Hindu, Economic Times, Financial Express, The Mint* – National Dailies.
2. *Economic and Political Weekly*. Various Issues
3. *Journals - Yojana, Kurukshetra, Social Welfare*

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Seminar/presentation	20
c)	Viva-Voce	10
<b>Total</b>		<b>100</b>

**KU06SECECO303 DISASTER MANAGEMENT**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	SEC	300-399	<b>KU06SECECO303</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2 Hours

**Course Description:**

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

**Course Prerequisite: NIL****Course Outcomes:**

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

Cos	Expected Outcome	Learning Domains
1	Understand the major environmental issues and recognize the importance of conservation of natural resources	R, U
2	Analyse the prominent cases and laws related to environmental issues	An
3	Adopt sustainable life style approach for resolution of environmental problems faced by society	A

4	Acquire and apply the necessary theoretical and practical knowledge and prepare to respond effectively during an emergency	A
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

#### COURSE CONTENTS

##### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS 45
1	<b>INTRODUCTION TO ENVIRONMENTAL EDUCATION</b>		<b>12</b>
	1	Importance of environmental studies- concept of Eco system- Components of eco system- functions of eco-system- Natural Resources available in the environment: renewable and non-renewable	2
	2	Relationship between human society and environment- Environmental effects of human Behaviour- Environment-Economy Interlinkages	3
	3	Bio-diversity and conservation- threats to bio-diversity- need to conserve natural resources	3
	4	Sustainable development: concept- definitions, indicators, measurements - circular economy model for a sustainable environment	4
2	<b>SENSITIVITY ENVIRONMENTAL ISSUE, COMMUNITY PARTICIPATION AND LEGAL FRAMEWORK</b>		<b>14</b>
	1	Concept of Environmental Sensitivity	1
	2	Sensitive environmental issues at the local, national and global level: Climate change, types of pollutions, depletion of natural resources, Problem of solid Waste management- causes and effects	3

	3	Control measures for various types of pollution: water conservation methods, solid waste management, 3 R's (Reduce, Reuse & Recycle) effluent charges, emission permits, Pigouvian tax, subsidies and economic incentives - Major environmental movements in India: Chipko, Appiko, Silent Valley and Narmada Bachao Andolan	5
	4	Relevance of environmental legislation- Environmental Laws: Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Land Acquisition Rehabilitation and Resettlement Act - International Agreements: Montreal and Kyoto Protocols and Conservation on Biological Diversity	5
3	<b>INTRODUCTION TO DISASTER MANAGEMENT</b>		<b>11</b>
	1	Concepts of disaster management- natural and manmade disasters- Flood, Earthquake, Cyclones and Landslides – Human Wild life Conflicts – causes, effects and management	3
	2	Disaster vulnerability profile of India: Case studies on environment and society: Bhopal gas tragedy-Coca-Cola Factory at Plachimada- Endosulfan Tragedy- Tsunami, 2004- - Bhuj earthquake, 2001, Brahmapuram Fire 2023, Flood and Landslides in Kerala 2018 & 2019	4
	3	Phases of disaster management: pre and post disaster stage -brief description	2
	4	Disaster mitigation organizations in national and international levels- Role and services of Voluntary organisations	2
4	<b>TEACHER SPECIFIC MODULE</b>		
	<b>Directions:</b> Field Visit and Presentation of Experience		<b>8</b>
	Visit to a local polluted site- urban/rural/agricultural/industrial or visit to an area to document environmental assets: river, forest, flora, fauna etc. and report and presentation of field visit/outreach activities to be maintained.		8

Comment [ED16]: added

#### Essential Readings:

1. Anubha Kaushik & C P Kaushik, Perspectives in Environmental Studies, New Age International (P) Ltd Publishers, 6<sup>th</sup> Edition
2. S.P Misra & S N Pandey, Essential Environmental Studies, Ane Books India New Delhi 2008
3. N K Uberoi, Environmental Studies, Excel Books, New Delhi 2007
4. Surinder Deswal & Anupama Deswal, A Basic Course in Environmental Studies, Dhanupat Rai Co(P)Ltd, Delhi
5. Shradha Sinha, Manisha Shukla & Ranjana Shukla, A Text book of Environmental Studies, AITBS Publishers & Distributors, New Delhi 2005
6. Gurdeep R Chatwal & Harish Sharma, Madhu Arora, A Textbook of Environmental Studies (Environmental Sciences), Himalaya Publishing House, Mumbai 2005
7. G Tyler Miller, Jr. Environmental Science: Working with the Earth, Cengage Learning India Pvt Ltd 11<sup>th</sup> edn. New Delhi
8. Anil Kumar De & Anamika Yadav, Environmental Studies, New Age International (P) Ltd Publishers, New Delhi, 2009
9. Karpagam M, Environmental Economics: A Text book, Sterling Publishers Pvt Ltd, New Delhi, 2014
10. Janet M Thomas & Scott J Callan, Environmental Economics, Cengage Learning India Pvt Ltd, New Delhi, 2009
11. V K Ahluwalia & Sunita Malhotra, Environmental Science, Ane Books Pvt Ltd, New Delhi 2013
12. M M Sulphey, Disaster Management, PHI Learning Pvt Ltd, Delhi 2016
13. Jagbir Singh, Disaster Management: Future Challenges and Opportunities, IK International Publishing House Pvt Ltd, New Delhi 2007
14. Paramjit S Jaswal & Nishtha Jaswal, Environmental Law: Environment Protection, Sustainable Development and the Law, Allahabad Law Agency, Delhi 2009
15. M Prasanthrajan & P P Mahendran, A Text book on Ecology & Environmental Science, Agrotech Publishing Academy, Udaipur 2006
16. V K Subramanian, A Text book in Environmental Science, Narosa Publishing House, New Delhi 2007
17. Jadhav, H & Bhosale V M, Environmental Protection and Laws, Himalaya Publication House, New Delhi
18. Pardeep Singh, Anamika Yadav, Indranil Chowdhuri and Ravindra Pratap Singh, Green Circular Economy: A Paradigm for Sustainable development. Springer
19. Reidinger, R. F., Jr., & Miller, J. E. (2013). Human–wildlife conflict management: A practitioner’s guide. Johns Hopkins University Press.
20. Frank, B., Glikman, J. A., & Marchini, S. (Eds.). (2019). Human–wildlife interactions: Turning conflict into coexistence. Cambridge University Press.

Comment [ED17]: added

#### Suggested Readings:

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



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

#### Assessment Rubrics:

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Book/ Article Review /Assignment/ Field Report	10
c)	Seminar/Report Presentation	20
<b>Total</b>		<b>100</b>

#### Sample Questions to test Outcomes

1. What are the key components of an effective disaster preparedness plan, and how can communities integrate early warning systems with local response strategies? (Discuss examples like Japan's earthquake preparedness or Kerala's flood management.)
2. How does climate change exacerbate the frequency and intensity of natural disasters, and what adaptive measures can governments adopt to mitigate risks in vulnerable regions?

3. What role does technology (e.g., GIS, remote sensing, AI) play in improving disaster response and recovery efforts? Evaluate its potential and limitations in real-time crisis situations.

**KU06SECECO304 ECONOMETRICS FOR SOCIAL SCIENCE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
VI	SEC	300-399	KU06SECECO304	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	1	0	50	50	100	2

**Course Description:**

*This course offers an in-depth exploration of the econometric aspects of social science disciplines*

**Course Prerequisite: NIL**

**Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
1	Knowledge of the various econometric models for social science	R
2	Knowledge of the basis computational skills for estimating, testing and forecasting data	R, U
3	Analyzing various social science research problems with the help of econometrics	A, E

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

**Mapping of Course Outcomes to PSOs**

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

## COURSE CONTENTS

### Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>		Econometrics- Basic Concepts	<b>15</b>
	1	Social science research – types of data	2
	2	definition and scope of Econometrics	4
	3	methodology of econometrics	4
	4	two variable regression analysis-estimation and testing	5
<b>2</b>		Dummy Variable Models	<b>15</b>
	1	Dummy variables- Use of dummy variables	3
	2	Regression on dummy variables dummy variable trap	4
	3	Dummy dependent variable models- LPM, Logit, Probit, Tobit Models	5
	4	Probit, Tobit Models	3
<b>3</b>		Lagged Variable Models	<b>15</b>
	1	Lagged Variables- Reason for lag	3
	2	Types of lagged variable models	4
	3	Koyack Model	4
	4	Nerlove Model	4
<b>4</b>		Simultaneous equation model	<b>10</b>
	1	Simultaneous equation model – nature.	4
	2	simultaneous equation bias –structural and reduced form model	5
	3	Identification problem	2
	4	Simultaneous equation methods of estimation.	3
<b>5</b>		Teacher Specific Module	<b>5</b>
		<i>Directions: Activity</i>	-
		Application of econometric tool on contemporary issues in social science	5

### Essential Readings:

1. Klien L.R..1962 Introduction to Econometrics. New Jersey: Prentice Hall Inc. Englewood Cliffs.
2. Damodar N. Gujarati.1992. Essentials of Econometrics.McGraw Hill.
3. Damodar N. Gujarati.2000. Econometrics.
4. Damodar N. Gujarati1995. Basic Econometrics.McGraw Hill.
5. Michael D. Intriligator.1980. Econometric Models, Techniques and Applications, New Delhi: Prentice Hall of India.
6. A.Koutsoyiannis.2004. Theory of Econometrics. Palgrave.
7. Greene, W. 2008.Econometrics Analysis. Pearson.
8. Johnston, J. and John Di Nardo, 1997.Econometric Methods. 4th Edition, London: McGraw-Hill Companies Inc
9. Desai, Meghand. 1976. Applied Econometrics. New York: McGraw Hill Book Co.
10. Baltagi, B. H. 2008. Econometric Analysis of Panel Data.4th edition, John Wiley.
11. Enders, Walter .2009. Applied Econometric Time Series. 3rd Edition, Wiley
12. Everitt, Brian S and Dunn, Graham. 2001. Applied Multivariate Data Analysis. Second Edition. Arnold.

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction** Hybrid Classroom

#### **Assessment Rubrics:**

<b>Evaluation Type</b>		<b>Marks</b>
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Data Analysis and Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **KU03VACECO201: AI IN DAILY LIFE**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
III	VAC	200-299	<b>KU03VACECO201</b>	3	60

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
2	1	0	50	50	100	2

### Course Description

This course explores the transformative role of Artificial Intelligence (AI) in everyday life, covering its historical evolution and applications in education, healthcare, energy, and sustainable development. Participants will gain insights into how AI technologies enhance efficiency, decision-making, and innovation across various sectors

**Course Prerequisite:** NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the historical development and key milestones in AI.	R, U
2	Analyze the impact of AI on education and research methodologies.	R,U
3	Evaluate AI applications in healthcare, including diagnostics and personalized medicine.	U, A, E
4	Assess AI's role in energy management, environmental conservation, and sustainability.	A, C
5	Discuss ethical considerations and future trends in AI adoption.	R, A

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

### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS</b>
<b>1</b>	<b>Evolution of AI</b>		<b>15</b>
	1	Definition and scope of AI	3
	2	Key milestones in AI development (Turing Test, Expert Systems, Deep Learning)	4
	3	Major contributors and breakthroughs	3
	4	Current trends and future directions	5
<b>2</b>	<b>AI in Education and Research</b>		<b>15</b>
	1	AI-powered tutoring systems (ChatGPT, Duolingo, Deepseek)	5
	2	Automated grading and personalized learning	3
	3	AI in academic research (data analysis, literature reviews)	3
	4	Ethical concerns (bias, plagiarism, dependency)	4
<b>3</b>	<b>AI in Healthcare</b>		<b>15</b>
	1	AI in medical imaging (X-rays, MRI analysis)	4
	2	Predictive analytics for disease outbreaks	3
	3	Robotics in surgery and patient care	3
	4	Ethical challenges (data privacy, algorithmic bias)	5
<b>4</b>	<b>AI and Sustainable Development</b>		<b>15</b>
	1	Smart grids and energy efficiency	3
	2	AI for climate modeling and disaster prediction	3
	3	Sustainable agriculture and wildlife conservation	4
	4	AI's carbon footprint and ethical dilemmas	5

#### Essential Readings:

1. Russell, S., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach (4th ed.). Pearson.
2. Tegmark, M. (2017). Life 3.0: Being Human in the Age of Artificial Intelligence. Knopf.
3. Luckin, R. (2018). Machine Learning and Human Intelligence: The Future of Education. UCL Institute of Education Press.
4. Selwyn, N. (2019). Should Robots Replace Teachers? AI and the Future of Education. Polity Press.

5. Topol, E. (2019). *Deep Medicine: How Artificial Intelligence Can Make Healthcare Human Again*. Basic Books.
6. Davenport, T., & Kalakota, R. (2019). The Potential for Artificial Intelligence in Healthcare. *Future Healthcare Journal*.
7. Rolnick, D., et al. (2022). Tackling Climate Change with Machine Learning. *arXiv*.
8. Cowls, J., et al. (2021). AI for Social Good: Sustainable Development. *Harvard Data Science Review*.

#### **Suggested Readings:**

5. Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press.
6. McCarthy, J., Minsky, M., Rochester, N., & Shannon, C. (1955). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence.
7. UNESCO (2021). *AI and Education: Guidance for Policy-Makers*.
8. Mollick, E. (2023). *Co-Intelligence: Living and Working with AI*. Penguin.
9. WHO (2021). *Ethics and Governance of Artificial Intelligence for Health*.
10. Beam, A. (2021). *AI in Medicine: A Practical Guide to Machine Learning in Healthcare*. O'Reilly.
11. UNEP (2023). *Artificial Intelligence for Environmental Sustainability*.
12. MIT Technology Review (2023). *How AI Can Help Save the Planet*.
13. Amy Webb, "The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity" Year: 2019, Publisher: PublicAffairs
14. Cathy O'Neil , "Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy" –, Year: 2016, Publisher: Crown
15. Emmanuel Maggiori, "Smart Until It's Dumb: Why Artificial Intelligence Keeps Making Epic Mistakes (And Why the AI Industry Doesn't Want You to Worry)" –Year: 2023, Publisher: No Starch Press
16. Henry Kissinger, Eric Schmidt, & Daniel Huttenlocher, "The Age of AI: And Our Human Future" Year: 2021, Publisher: Little, Brown and Company
17. Jeffrey Ng , "AI for Everyone: How to Understand and Use Artificial Intelligence" – Year: 2021 Publisher: Independently Published (Self-published)
18. Kai-Fu Lee, "AI Superpowers: China, Silicon Valley, and the New World Order" –Year: 2018, Publisher: Houghton Mifflin Harcourt

19. Kate Crawford , "Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence", Year: 2021, Publisher: Yale University Press
20. Melanie Mitchell, "Artificial Intelligence: A Guide for Thinking Humans" –Year: 2019, Publisher: Farrar, Straus and Giroux
21. Peter Lee, Carey Goldberg, & Isaac Kohane . "The AI Revolution in Medicine: GPT-4 and Beyond" –Year: 2023, Publisher: Pearson
22. Stuart Russell, "Human Compatible: Artificial Intelligence and the Problem of Control" Year: 2019, Publisher: Viking

#### **Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

#### **Mode of Transaction**

Hybrid Classroom

#### **Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment/ Case study Report	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

#### **Sample Questions to test Outcomes**

1. How is artificial intelligence (AI) currently being used in everyday applications like smartphones, home assistants, and online services?
2. What are the potential benefits and risks of relying on AI-powered tools for tasks such as healthcare diagnostics, financial advice, or personal scheduling?
3. How do AI-driven recommendation systems (e.g., Netflix, Spotify, or Amazon) influence consumer behavior and decision-making?
4. What ethical concerns arise from the increasing use of AI in surveillance, facial recognition, and data privacy in daily life?
5. In what ways might AI transform the future of work, education, and transportation in the next decade?

#### **KU03VACECO202 : DATABASE ON THE INDIAN ECONOMY**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
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III	DSC	200-299	<b>KU03VACECO202</b>	3	45
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Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

### Course Description

The course intends to expose the students the world of secondary data and its benefits by introducing the secondary sources of socio-economic data of the world, in India and Kerala. The various socioeconomic databases will be introduced along with hands on training on how to acquire the data from the sources. Basic data analysis using Ms Excel, Google Spreadsheet, SPSS and Stata software will be taught in the lab sessions. The course intends to equip the students to the growing needs of the data analytical profession in the modern economy.

### Course Prerequisite: NIL

### Course Outcomes:

CO No.	Expected Outcome	Learning Domains
1	Explain the various types of data, its management and its importance for policy making	U,A/
2	Examine the databases of the Indian economy and the world economy	U, E
3	Evaluate the importance of census data and survey data	U, E
4	Demonstrate the ability to interpret and analyze global economic data from sources like the World Bank, IMF, and UN to draw informed conclusions.	U,An
5	Download data tables and figures for analysis from various databases	U, A

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

### Mapping of Course Outcomes to PSOs

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

## COURSE CONTENTS

### Contents for Classroom Transaction:

M O D U L E	U N I T	DESCRIPTION	HOURS
1	<b>INTRODUCTION TO DATA</b>		<b>8</b>
	1	Introduction to data	2
	2	Data as public good	2
	3	Rise of the open data	2
	4	Integrated data system and the role of various entities	2
2	<b>DATABASES ON THE INDIAN ECONOMY</b>		<b>14</b>
	1	Overview of Statistical System in India	4
	2	MOSPI and its data	4
	3	Macroeconomic data in India Financial and Economic Data in India (CMIE Prowess, Capitaline, PrivateCircle, Statista)	4
	4	The role of RBI in India's statistical system	2
3	<b>INTERNATIONAL DATABASES</b>		<b>10</b>
	1	External sector linkages and data sources	2
	2	International databases (IMF, WTO, World Bank, UN, OECD)	2
	3	Evaluating SDGs and Climate change	3
	4	Unofficial data sources	3
4	<b>MIGRATION, GENDER, AND REGIONAL DATA ANALYTICS</b>		<b>8</b>
	1	Poverty and Global Governance	2
	2	Global Refugee and Migrant Governance	2
	3	Global Development Governance	2
	4	Sustainable Development and Global Environmental Governance	2
5	<b>TEACHER SPECIFIC MODULE</b>		<b>5</b>
	<i>Directions:</i> Hands-on course on data analysis		
	This module dwells in to the practical skills needed to analyse data effectively		5

### Essential Readings

- GoI. 2001. 'Report of Dr Rangarajan Commission' MOSPI. Available at <https://www.mospi.gov.in/report-dr-rangarajan-commission>
- IMF. Climate Change data. Available at <https://climatedata.imf.org/pages/climatechangedata>

3. RBI. 2017. Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin. Available at <https://m.rbi.org.in/scripts/PublicationsView.aspx?id=17618>
4. United Nations. 'Global Migration Database.' Available at <https://www.un.org/development/desa/pd/global-migration-database>

#### Suggested Readings:

1. Government of Kerala. 2020. Economic Review 2020 | State Planning Board, Thiruvananthapuram, Kerala, India
2. Govt of India. 2015. 'e-Book 2015' MOSPI. Available at [https://mospi.gov.in/sites/default/files/main\\_menu/ebook/index.html#page/2](https://mospi.gov.in/sites/default/files/main_menu/ebook/index.html#page/2)
3. Govt of India. 2022. 'Datasets and Registries in India.' MOSPI. Available at [https://mospi.gov.in/sites/default/files/publication\\_reports/Datasets%20and%20Registries%20in%20India%2020221651228036618\\_0.pdf](https://mospi.gov.in/sites/default/files/publication_reports/Datasets%20and%20Registries%20in%20India%2020221651228036618_0.pdf)
4. Marc Riedel, 2005. Secondary Data. Editor(s): Kimberly Kempf-Leonard in Encyclopedia of Social Measurement, Elsevier. Pages 455-461, <https://doi.org/10.1016/B0-12-369398-5/00071-2>
5. Mohan, R. (2007). Statistical System of India: Some Reflections (Speech given at RBI).
6. Narayana, Ranjan and Tyagi. 2021. Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel. Sage India.
7. Rao, T. J. (2010). Official Statistics in India: The past and the present. Journal of Official Statistics, 26(2), 215.
8. Reserve Bank of India. 2017. Database on the Indian Economy. <https://dbie.rbi.org.in/DBIE/doc/Brochure%20on%20DBIE%20017%20English.pdf>
9. Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472\\_final\\_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)
10. Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472\\_final\\_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)
11. United Nations. <https://unstats.un.org/sdgs/dataportal>
12. United Nations. UNDATA. Available at <http://data.un.org/datamartinfo.aspx>
13. World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>

#### Mode of Transaction

Hybrid Classroom

#### Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	50

a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

### Sample Questions to test Outcomes

1. Evaluate the historical context, causes, and consequences of globalization and the emerging trends of de-globalization in the global economy.
2. Investigate major global economic issues such as poverty, inequality, unemployment, inflation, and debt, with a focus on their regional and global implications.
3. Understand the role of international trade, trade agreements, and institutions in shaping the global economic landscape.
4. Analyse demographic changes, migration patterns, and their impacts on labour markets, education systems, and economic development across the world.
5. Critically assess the effectiveness of global governance mechanisms in addressing contemporary issues like refugee management, economic crises, and sustainable development

### KU04VACECO203 : PUBLIC SPEAKING

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	VAC	200-299	<b>KU04VACECO203</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	-	0	50	50	100	2

### Course Description:

This course develops essential public speaking skills for academic, professional, and social contexts. Through theory, practice, and personalized feedback, students will learn to craft compelling messages, overcome anxiety, and deliver effective presentations across various formats. The course culminates in a live speaking showcase demonstrating mastered techniques.

**Course Prerequisite: NIL**

**Course Outcomes:**

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

CO No.	Expected Outcome	Learning Domains
1	Analyze foundational theories of effective oral communication	U, An
2	Demonstrate structured speech organization techniques	U, A
3	Apply appropriate verbal and nonverbal delivery methods	U, A
4	Adapt messages for diverse audiences and media formats	An, E
5	Develop confidence through iterative practice and feedback	A, C

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

**-Mapping of Course Outcomes to PSOs**

-	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7
CO 1	✓		✓	✓		✓	
CO 2	✓		✓	✓		✓	
CO 3	✓		✓	✓		✓	
CO 4	✓		✓	✓		✓	
CO5	✓		✓	✓		✓	

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

M O D U L E	U N I T	DESCRIPTION		HOURS
				45
1		Theoretical Foundations of Public Speaking		15
	1	Aristotle's rhetorical triangle (ethos/pathos/logos)		3
	2	Contemporary communication models		3
	3	Speech anxiety management techniques		3
	4	Audience analysis methodologies		3
	5	Ethical considerations in persuasion		3
2		Practical Focus: Career-specific presentation scenarios		15
	1	Classroom presentations		3
	2	Business pitch structures (elevator/boardroom)		3
	3	Conference speaking best practices		3
	4	Networking conversation techniques		3
	5	Digital portfolio development for speakers		3
3		Media Formats & Channels		15
	1	Traditional vs. digital speaking formats		3
	2	Podcast/video recording techniques		3
	3	Hybrid presentation technology		3
	4	Social media live streaming		3
	5	Accessibility considerations		3
4		Teacher Specific Module Direction: PRACTICAL: Tutorial Sessions		15
	1	Diagnostic Speech (Baseline assessment)		15
		Impromptu Speaking Drills (Think-fast exercises)		
		Visual Aid Critiques (Slide design workshops)		
		Persuasive Speech Lab (Full presentation simulations)		
		Final Showcase Prep (Dress rehearsal with peer review)		

**Essential Readings:**

1. Lucas, S. (2020). The Art of Public Speaking (13th ed.), McGraw-Hill (Ch. 1-4)
2. Carnegie, D. (1936). How to Win Friends and Influence People, Simon & Schuster
3. Gallo, C. (2014). Talk Like TED, St. Martin's Press
4. Reynolds, G. (2019). Presentation Zen, New Riders
5. Purdy, M. (2021). Listen Like You Mean It, Penguin
6. Weissman, J. (2017). Presenting to Win, FT Press

**Suggested Readings:**

1. Harvard Business Review (2019). HBR Guide to Persuasive Presentations
2. Toastmasters International (2021). Your Speaking Voice (Workbook)
3. YouTube Creator Academy (2023). Public Speaking for Video
4. LinkedIn Learning (2023). Virtual Presentation Skills
5. Cialdini, R. (2006). Influence: The Psychology of Persuasion, Harper Business
6. Duarte, N. (2008). slide:ology: The Art and Science of Presentation Design, O'Reilly

**Teaching Learning Strategies (Classroom activities/Lab activities/Field Activities)**

Classroom Lecture, PPT Presentation, Presentation of Educational Videos, and Lecturing with Multimedia Content.

**Mode of Transaction**

Hybrid Classroom

**Assessment Rubrics:**

Evaluation Type		Marks
End Semester Evaluation		<b>50</b>
Continuous Evaluation		<b>50</b>
a)	Test Paper	20
b)	Assignment	10
c)	Seminar/ Discussion/Debate	20
<b>Total</b>		<b>100</b>

**KU04VACECO204: ECONOMICS OF STARTUP AND ENTREPRENEURSHIP**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
IV	VAC	200-299	<b>KU04VACECO204</b>	3	45

Learning Approach (Hours/ Week)			Marks Distribution			Duration of ESE (Hours)
Lecture	Practical/ Internship	Tutorial	CE	ESE	Total	
3	0	0	50	50	100	2

**Course Description**

*This course provides an introduction to entrepreneurship and the start -up ecosystem, focusing on the fundamental concepts and practical skills necessary for launching and sustaining a new venture. Students will explore the definitions, characteristics, and classifications of entrepreneurship, distinguishing between entrepreneurs and intrapreneurs. The course examines the role of entrepreneurship in economic development, particularly in India, and the government's efforts in promoting entrepreneurial activities. It covers motivation theories and creativity techniques essential for fostering innovation within businesses. Additionally, students will learn how to develop comprehensive business plans, understanding their purpose, functions, and key elements. Through case studies, practical activities, and a business plan competition, students will gain hands-on experience and insights into real-world entrepreneurial challenges and successes.*

**Course Prerequisite: NIL****COURSE OUTCOMES:**

CO No.	Expected Outcome	Learning Domains
1	Analyse the impact of entrepreneurship on economic development in India.	An
2	Comprehend and apply various motivation theories, including Maslow's hierarchy of needs and Herzberg's Two-Factor theory, to entrepreneurial contexts.	U, A
3	Develop and Present Comprehensive Business Plans	C
4	Assess the role of government and specialized organizations in promoting entrepreneurial activities at both national and state levels.	E



5	Engage in practical activities such as interviews with entrepreneurs and participate in business plan competitions, demonstrating the ability to present and defend startup ideas effectively.	A, C
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*\*Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)*

#### Mapping of Course Outcomes to PSOs

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

### COURSE CONTENTS

Contents for Classroom Transaction:

<b>M O D U L E</b>	<b>U N I T</b>	<b>DESCRIPTION</b>	<b>HOURS 45</b>
1	<b>INTRODUCTION TO ENTREPRENEURSHIP &amp; START UP</b>		19
	1	Entrepreneurship and Entrepreneur	7
		a) Meaning, Definitions, Differences, and Classification of Entrepreneurs and Entrepreneurship	
		b) Importance and characteristics of Entrepreneurship	
		c) Factors that influence Entrepreneurship	
		d) The potential Drawbacks of Entrepreneurship	
		e) Difference between entrepreneur and intrapreneur	
		f) New Trends in Entrepreneurship Development	
		g) Role of Entrepreneurship in the Economic Development of India	
	2	Economic Theories of Entrepreneurship: a) Dynamic Entrepreneurship Innovation Theory, Harvard School Theory, Theory of Adjustment of price, Theory of Entrepreneurial Supply	4
	3	Start-up Survival and Growth	5
		a) Startup Survival and Growth Challenges faced in initial stages,	
		b) Stages of growth in a new venture,	
		c) Reasons for new venture failures	
2	1	Motivation And Creativity In <u>Business</u>	3
		a) Motivation-Meaning, Features, and importance	
		b) Theories of Motivation: Maslow's hierarchy of needs	

**Comment [ED18]:** Module on motivation shortened

		theory c) Achievement Motivation Theory, Herzberg's Two Factor theory McClelland's Theory of Needs d) Creativity and Entrepreneurship	
		<b>ENTREPRENEURSHIP DEVELOPMENT AND STARTUP FINANCING</b>	11
3	1	Entrepreneurship Development Models	3
		a) Shapero's Model of Entrepreneurial Event	
		b) Gibb's Entrepreneurial Learning Model	
		c) Input-Process-Output Model of Entrepreneurship Development	
	2	Startup Ecosystem and Startup Financing	5
		a) Structure of the Startup Ecosystem in India	
		b) Role of Incubators, Accelerators, and Angel Networks	
		c) Stages of Startup Financing	
		d) Sources of Startup Finance	
	3	Financial Planning for Startups	3
		a) Startup Budgeting: Fixed vs. Variable Costs	
		b) Break-Even Analysis and Cost Structure	
		c) Managing Risk and Uncertainty in Startup Finances	
4		<b>CRAFTING A BUSINESS PLAN</b>	8
	1	Business Plan	3
		a) What is Business Plan	
		b) Need, Purpose and Functions	
		c) Three Tests of a business plan	
		d) The Elements of a business plan	
		e) The Strategic Management Process	
	2	Creating a Business Plan	2
	3	Stories of Successful Entrepreneurs in India	3
5		<b>TEACHER SPECIFIC MODULE</b>	7
		Directions: This module would be allocated to integrate case studies of Indian startups and organize interactions with entrepreneurs, incubators, and venture capitalists to link theory with practice. This module aims to expose students to real-world startup challenges, funding mechanisms, and policy frameworks through discussions, guest lectures, and field visits. Students may prepare short reflective reports or presentations to connect classroom learning with industry experience.	7

Comment [ED19]: Module added

#### Essential Readings:

1. Debasish Biswas and Chanchal Dey (2021). Entrepreneurship Development in India Routledge Taylor and Francis Group
2. Norman M. Scarborough Jeffrey R. Cornwall Essentials of Entrepreneurship and Small Business Management ninth edition Pearson Education Limited 2019
3. Janakiram, D. B., & Rizwana, M. (2011). Entrepreneurship development: Text and cases. New Delhi: Excel Books.
4. Khanka, S. S. (2006). Entrepreneurial development. New Delhi: S. Chand Publishing.
5. Vasant Desai (2001). Dynamics of Entrepreneurial Development and Management. Himalaya Publishing House.
6. Ries, E. (2011). The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business.
7. [www.startupmission.kerala.gov.in](http://www.startupmission.kerala.gov.in)
8. Thomas, J., & K.I., G. (2020). Incubation Centres and Start-ups: A Study on Kerala's Start-up Ecosystem. SEDME (Small Enterprises Development, Management&ExtensionJournal),47(1),43-52.  
<https://doi.org/10.1177/0970846420930472>
9. <https://www.startupindia.gov.in/>
10. Hisrich, R. D., Michael. P. P., Dean, A. Sh. (2010). Entrepreneurship. New York: McGraw Hill
11. Bygrave, W. D., & Zacharakis, A. (2015). *The portable MBA in entrepreneurship*. John Wiley & Sons.
12. Drucker, P. F. (1986). Innovation and entrepreneurship: practice and principles. Harper & Row.
13. Hisrich, R. D., & Ramadani, V. (2017). Effective entrepreneurial management. Springer.
14. Timmons, J. A., Spinelli, S., & Tan, Y. (1994). New venture creation: Entrepreneurship for the 21st century (Vol. 4). Burr Ridge, IL: Irwin.
15. Scarborough, N. M., & Cornwall, J. R. (2019). Entrepreneurship and small business management. Pearson

#### Suggested Readings:

1. Simon C. Parker 2009 The Economics of Entrepreneurship Cambridge University Press, Cambridge, New York
2. Debasish Biswas and Chanchal Dey (2021). Entrepreneurship Development in India Routledge Taylor And Francis Group
3. Norman M. Scarborough Jeffrey R. (2019) Cornwall Essentials of Entrepreneurship and Small Business Management ninth edition Pearson Education Limited.

#### Assessment Rubrics:

Evaluation Type	Marks
End Semester Evaluation	50
Continuous Evaluation	50

a)	Test Paper	20
b)	Seminar	20
c)	Assignment	10
<b>Total</b>		<b>100</b>