


# KANNUR UNIVERSITY

## FYUGP

# SYLLABUS

# ECONOMICS

*Effective from 2024 admissions*

**2024**

# INTRODUCTION

## Kannur University - Four-Year Undergraduate Programme: Backdrop and Context

The implementation of the Four-Year Undergraduate Programme (FYUGP) has been drivenby the pressing need to address contemporary challenges ensuring responsive changes to the evolving needs of students, industry, and society at large. Recognizing the curriculum as the cornerstone of any education system, it requires regular refinement to align with evolving socio-economic factors. Higher education must provide students with practical and technical skills relevant to their fields of interest, necessitating the development of a job-oriented curriculum. Despite significant increases in access and expansion of higher education over the years, concerns persist regarding the quality and relevance of educational outcomes, particularly in terms of employability skills. As the world becomes increasingly interconnected, our education system must evolve to instill 21st-century skills, enabling students not only to survive but to thrive in this dynamic environment. Moreover, there is a growing need for higher education institutions to embrace social responsibility and contributeto the development of a knowledge society capable of driving sustainable development through innovation. With the central objective of fostering a robust knowledge society to support a knowledge economy, the Government of Kerala has initiated steps to reform higher education. Accordingly, three commissions were established to suggest reforms in higher education policy, legal and regulatory mechanisms, and evaluation and examination systems.It is within this context that a comprehensive reform of the undergraduate curriculum has been proposed, leading to the restructuring of the Four-Year Undergraduate Programme.

# KANNUR UNIVERSITY
# VISION AND MISSION STATEMENTS

## Vision

To establish a teaching, residential and affiliating University and to provide equitable and just access to quality higher education involving the generation, dissemination and a critical application of knowledge with special focus on the development of higher education in Kasargode and Kannur Revenue Districts and the Manandavady Taluk of Wayanad Revenue District.

## Mission

To produce and disseminate new knowledge and to find novel avenues for application of such knowledge.

To adopt critical pedagogic practices which uphold scientific temper, the uncompromised spirit of enquiry and the right to dissent.

To uphold democratic, multicultural, secular, environmental and gender sensitive values as the foundational principles of higher education and to cater to the modern notions of equity, social justice and merit in all educational endeavors.

To affiliate colleges and other institutions of higher learning and to monitor academic, ethical, administrative and infrastructural standards in such institutions.

To build stronger community networks based on the values and principles of higher education and to ensure the region's intellectual integration with national vision and international standards.

To associate with the local self-governing bodies and other statutory as well as non-governmental organizations for continuing education and also for building public awareness on important social, cultural and other policy issues.

# KANNUR UNIVERSITY- FOUR YEAR UNDER GRADUATE PROGRAMME (KU-FYUGP)

**Program Outcomes (POs):**

Program Outcomes (POs) serve as a foundational framework defining the skills, knowledge, and attributes that students at Kannur University are expected to acquire upon completion of a specific academic program. Tailored to the unique goals of each program, POs articulate the overarching learning objectives that guide curriculum design and assessment. These outcomes encompass a diverse range of competencies, including critical thinking, problem-solving, effective communication, and discipline-specific expertise. POs play a crucial role in shaping educational experiences, ensuring alignment with academic standards and industry expectations. By articulating clear and measurable expectations, 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.

**At the end of the graduate programme at Kannur University, a student would**:

| | |
|---|---|
| PO1 | **Critical Thinking and Problem-Solving:** Apply critical thinking skills to analyse 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. |

## PROGRAMME SPECIFIC OUTCOMES (PSO)

**Programme Specific Outcomes for KU-FYUGP - Economics Programme at Kannur University**:

| | |
|---|---|
| PSO1 | **Economic Theory Analysis and Policy Development**: Apply economic theories and methodologies to analyze real-world economic phenomena, and develop policy recommendations to address socio-economic challenges at local, national, and global levels |
| PSO2 | **Theory informed Data Interpretation and Quantitative Skills**: Demonstrate proficiency in interpreting economic data, employing statistical and econometric techniques to analyze economic trends, and make informed decisions in economic policy formulation and business strategies. |
| PSO3 | **Sectoral Understanding and Market Dynamics**: Develop a deep understanding of various economic sectors, including agriculture, industry, services, and finance, and analyze market dynamics to assess their impact on economic development and welfare |
| PSO4 | **Economic Research and Writing**: Acquire skills in conducting economic research, synthesizing literature, and effectively communicating research findings through well-structured and persuasive writing, contributing to the advancement of economic knowledge and discourse |
| PSO5 | **Policy Advocacy and Civic Engagement:** Engage in advocacy for theory informed and evidence -based economic policies, collaborate with stakeholders, and participate in community initiatives to address socio-economic inequalities, promoting inclusive growth and sustainable development |
| PSO6 | **Global Economic Perspectives:** Explore global economic issues, trends, and policies, develop an understanding of international trade, finance, and economic integration, and analyze their implications for domestic economies and policy formulation |
| PSO7 | **Environmental sensitization for Sustainability:** Evaluate the economic dimensions of environmental challenges, analyze the trade-offs between economic growth and environmental conservation, and propose strategies for promoting sustainable development and ecological resilience |

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

| SEMESTER | COURSE CODE | COURSE NAME | MARKS | | | | | CREDITS | HOURS/WEEK |
|---|---|---|---|---|---|---|---|---|---|
| | | | CCA | | ESE | | | | |
| | | | P | L | P | L | TOTAL | | |
| I | **KU1DSCECO101** | Introductory Microeconomics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU1DSCECO102** | Economics for Beginners | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU1DSCECO103** | Economics of Tourism and Development | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU1DSCECO104** | Fundamentals of Economic Development | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU1DSCECO105** | Economic Journalism | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| II | KU2DSCECO106 | Introductory Macroeconomics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU2DSCECO107** | Demography | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU2DSCECO108** | Personal Finance | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU2DSCECO109** | Nutrition Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU2DSCECO110** | Foundations of Economic Analysis | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| III | **KU3DSCECO201** | Intermediate Microeconomics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU3DSCECO202** | Basic Analytical Tools for Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU3DSCECO203** | Economics of Banking and Finance | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU3DSCECO204** | Fundamentals of Social Science Research | 10 | 25 | 15 | 50 | 100 | 4 | 5 |
| | **KU3DSCECO205** | Economics of Care and Ageing | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| IV | **KU4DSCECO206** | Intermediate Macroeconomics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU4DSCECO207** | Environmental Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU4DSCECO208** | Public Finance | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| V | **KU5DSCECO301** | International Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU5DSCECO302** | Heterodox Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU5DSCECO303** | Statistical Tools for Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSCECO304** | Development Issues of Indian Economy I | 0 | 30 | 0 | 70 | 100 | 4 | 4 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **VI** | **KU6DSCECO305** | Mathematical Tools for Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSCECO306** | Introductory Econometrics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| **VII** | **KU7DSCECO401** | Advanced Microeconomics I | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU7DSCECO402** | Advanced Macroeconomics I | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU7DSCECO403** | Advanced Quantitative Techniques for Economic Analysis | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU7DSCECO404** | Development Issues of Indian Economy II | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU7DSCECO405** | Readings in Political Economy | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| **VIII** | **KU8DSCECO406** | Advanced Microeconomics II | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU8DSCECO407** | Advanced Macroeconomics II | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU8DSCECO408** | Applied Econometrics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU8DSCECO409** | Advancements in Economic Research | 10 | 25 | 15 | 50 | 100 | 4 | 5 |
| | **KU8DSCECO410** | Behavioral Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| **Internship in Major Discipline/Research Project in Major Discipline** | | | | | | | | | |
| **VI** | **KU6INTECO301** | (Credit for internship to be awarded only at the end of Semester 6) | 15 | 0 | 35- | 0 | 50 | 2 | 4 |
| **VIII** | **KU8RPHECO401** | Project (in Honours Programme) | 60 | 0 | 140- | 0 | 200 | 8 | 16 |
| **VIII** | **KU8RPHECO402** | Research Project (in Honours with Research Programme) | 90 | 0 | 210- | 0 | 300 | 12 | 24 |

**FOUR YEAR UNDERGRADUATE PROGRAMME IN ECONOMICS**

**LIST OF DISCIPLINE SPECIFIC ELECTIVE COURSES**

**DETAILS OF COURSES OFFERED.**

| SEMESTER | COURSE CODE | COURSE NAME | MARKS | | | | | CREDITS | HOURS/WEEK |
|---|---|---|---|---|---|---|---|---|---|
| | | | CCA | | ESE | | | | |
| | | | P | L | P | L | TOTAL | | |
| V | **KU5DSEECO301** | Contours of Economic Ideas | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU5DSEECO302** | Economic Geography | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU5DSEECO303** | Agricultural Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU5DSEECO304** | Economics of Growth and Development | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| VI | **KU6DSEECO305** | Gender Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSEECO306** | Managerial Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSEECO307** | Advanced Mathematical Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSEECO308** | Institutional Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU6DSEECO309** | Labour Economics | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| VIII | **KU8DSEECO401** | Economics of Health and Education | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU8DSEECO402** | Project management | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **KU8DSEECO403** | Economics of Innovation | 0 | 30 | 0 | 70 | 100 | 4 | 4 |
| | **LISTS OF MDC/ SEC/ VAC IN ECONOMICS** | | | | | | | | |
| | **MULTIDISCIPLINARY COURSES** | | | | | | | | |
| I | KU1MDCECO101 | Economics in Daily Life | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| I | KU1MDCECO102 | Economics for Competitive Examination | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| II | KU2MDCECO103 | Issues in Indian Economic Development | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| II | KU2MDCECO104 | Economics of Startup and Entrepreneurship | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| | **VALUE ADDED COURSES** | | | | | | | | |
| III | KU3VACECO201 | Environmental Sensitization and Disaster Management | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| III | KU3VACECO202 | Academic Writing in Social Science | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| IV | KU4VACECO203 | Economics of Crime and Corruption | 0 | 25 | 0 | 50 | 75 | 3 | 3 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IV** | KU4VACECO204 | Ethics in Academic Writing | 0 | 25 | 0 | 50 | 75 | 3 | 3 |
| **SKILL ENHANCEMENT COURSES** | | | | | | | | | |
| **IV** | KU4SECECO201 | Data Analysis with Spreadsheet | 15 | 10 | 35 | 15 | 75 | 3 | 5 |
| **IV** | KU4SECECO202 | Hospital Economics | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **V** | KU5SECECO301 | Experiencing Indian Stock Market- | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **V** | KU5SECECO302 | Logistic and Supply Chain Management | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **V** | KU5SECECO303 | Reading Economic Survey and Union Budget | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **VI** | KU6SECECO304 | Goods and Services Tax | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **VI** | KU6SECECO305 | Finance and Technology | 10 | 15 | 15 | 35 | 75 | 3 | 4 |
| **VI** | KU6SECECO306 | Databases and Basic Computational Techniques For Data Analysis | 10 | 15 | 15 | 35 | 75 | 3 | 4 |

## Course and Credit Structure for Different Pathways
## Course Distribution for Students in Semesters I – VI

(1) ***Single Major***: The 6 courses together in B and C can be in different disciplines.

(2) ***Major with Multiple Disciplines***: B and C represent two different disciplines.

(3) ***Major with Minor***: B and C represent the same Minor discipline.

| I SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | AEC1 (English) | 3/4 | 3 | 75 |
| 2 | AEC2 (Additional Language) | 3/4 | 3 | 75 |
| 3 | MDC1 | 3 | 3 | 75 |
| 4 | DSC A1 | 4 | 4 | 100 |
| 5 | DSC B1-minor-1 | 4 | 4 | 100 |
| 6 | DSC C1-minor2 | 4 | 4 | 100 |
| | **Total** | **22/25** | **21** | **525** |

| II SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | AEC3 (English) | 3/4 | 3 | 75 |
| 2 | AEC4 (Additional Language) | 3 | 3 | 75 |
| 3 | MDC2 | 3 | 3 | 75 |
| 4 | DSC A2 | 4/5 | 4 | 100 |
| 5 | DSC B2-minor-3 | 4/5 | 4 | 100 |
| 6 | DSC C2-minor-4 | 4/5 | 4 | 100 |
| | **Total** | **22/25** | **21** | **525** |

| III SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | MDC3 (Kerala Studies) | 3 | 3 | 75 |
| 2 | VAC1 | 3 | 3 | 75 |
| 3 | DSC A3 | 4 | 4 | 100 |
| 4 | DSC A4 | 4 | 4 | 100 |
| 5 | DSC B3-minor-5 | 5 | 4 | 100 |
| 6 | DSC C3-minor-6 | 4/5 | 4 | 100 |
| | **Total** | **23/25** | **22** | **550** |

| IV SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC1 | 3/4/5 | 3 | 75 |
| 2 | VAC2 | 3 | 3 | 75 |
| 3 | VAC3 | 3 | 3 | 75 |
| 4 | DSC A5 | 4 | 4 | 100 |
| 5 | DSC A6 | 4 | 4 | 100 |
| 6 | DSC A7 | 4 | 4 | 100 |
| | **Total** | **21/22/23** | **21** | **550** |

| V SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC2 | 3/4 | 3 | 75 |
| 2 | DSC A8 | 4 | 4 | 100 |
| 3 | DSC A9 | 4 | 4 | 100 |
| 4 | DSC A10 | 4/5 | 4 | 100 |
| 5 | DSE A11-elective-1 | 4/5 | 4 | 100 |
| 6 | DSE A12-elective-2 | 4/5 | 4 | 100 |
| | **Total** | **23/25** | **23** | **575** |

| VI SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC3 | 3/4 | 3 | 75 |
| 2 | DSC A13 | 4/5 | 4 | 100 |
| 3 | DSC A14 | 4/5 | 4 | 100 |
| 4 | DSC A15 | 4 | 4 | 100 |
| 5 | DSE A16-elective-3 | 4 | 4 | 100 |
| 6 | DSE A17-elective-4 | 4 | 4 | 100 |
| 7 | Internship | | 2 | 50 |
| | **Total** | **23/25** | **23** | **625** |

***4) Double major pathway****:* A and B represent the courses offered by the two departments. Students should choose one of the disciplines as their major 1 and the other as major 2

| I SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | AEC1 (English) | 4 | 3 | 75 |
| 2 | AEC2 (Additional Language) | 3 | 3 | 75 |
| 3 | MDC A/B | 3 | 3 | 75 |
| 4 | DSC A1 | 4/5 | 4 | 100 |
| 5 | DSC A2 | 4/5 | 4 | 100 |
| 6 | DSC B1-minor-1 | 4/5 | 4 | 100 |
| | **Total** | **22/25** | **21** | **525** |

| II SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | AEC2 (English) | 4 | 3 | 75 |
| 2 | AEC3 (Additional Language) | 3 | 3 | 75 |
| 3 | MDC A/B | 3 | 3 | 75 |
| 4 | DSC A3 | 4/5 | 4 | 100 |
| 5 | DSC B2-minor-2 | 4/5 | 4 | 100 |
| 6 | DSC B3-minor-3 | 4/5 | 4 | 100 |
| | **Total** | **22/25** | **21** | **525** |

| III SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | MDC A/B | 3 | 3 | 75 |
| 2 | VAC A/B | 3 | 3 | 75 |
| 3 | DSC A4 | 4 | 4 | 100 |
| 4 | DSC A5 | 4/5 | 4 | 100 |
| 5 | DSC B4-minor-4 | 5 | 4 | 100 |
| 6 | DSC B5-minor-5 | 4/5 | 4 | 100 |
| | **Total** | **23/25** | **22** | **550** |

| IV SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC A/B | 3/4/5/6 | 3 | 75 |
| 2 | VAC A/B | 3 | 3 | 75 |
| 3 | VAC A/B | 3 | 3 | 75 |
| 4 | DSC A6 | 4/5 | 4 | 100 |
| 5 | DSC A7 | 4/5 | 4 | 100 |
| 6 | DSC B6-minor-6 | 4/5 | 4 | 100 |
| | **Total** | **24/25** | **21** | **550** |

| V SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC A/B | 3 | 3 | 75 |
| 2 | DSC A8 | 4/5 | 4 | 100 |
| 3 | DSC A9 | 4/5 | 4 | 100 |
| 4 | DSE A10 | 4/5 | 4 | 100 |
| 5 | DSC B7-minor-7 | 4/5 | 4 | 100 |
| 6 | DSE B8-minor-8 | 4/5 | 4 | 100 |
| | **Total** | **23/25** | **23** | **575** |

| VI SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | SEC A/B | 3 | 3 | 75 |
| 2 | DSC A11 | 4/5 | 4 | 100 |
| 3 | DSE A12 | 4/5 | 4 | 100 |
| 4 | DSC B9-minor-9 | 4/5 | 4 | 100 |
| 5 | DSC B10-minor-10 | 4/5 | 4 | 100 |
| 6 | DSE B11-minor-11-elective | 4/5 | 4 | 100 |
| 7 | Internship | | 2 | 50 |
| | **Total** | **23/25** | **23** | **625** |
| **On completion of 3-year UG Student will get 68 credits in major A (48 + 18+2 = 68 (50% of 133)) and 53 credits in Major B (44 + 9 = 53 (40% of 133))** | | | | |

**STUDENT CAN EXIT WITH UG DEGREE / PROCEED TO FOURTH YEAR WITH MINIMUM 133 CREDITS.**

| VII SEMESTER | | | | |
|---|---|---|---|---|
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | DSC A1 | 4/5 | 4 | 100 |
| 2 | DSC A2 | 4/5 | 4 | 100 |
| 3 | DSC A3 | 4/5 | 4 | 100 |
| 4 | DSC A4 | 4/5 | 4 | 100 |
| 5 | DSC A5 | 4/5 | 4 | 100 |
| | **Total** | **20/25** | **20** | **500** |
| **VIII SEMESTER** | | | | |
| **Sl No.** | **Course** | **Hours/Week** | **Credits** | **Total Marks** |
| 1 | DSC A6 | 4 | 4 | 100 |
| 2 | DSC A7 | 4 | 4 | 100 |
| 3 | DSC A8 | 4 | 4 | 100 |
| **OR** | | | | |
| 4 | KU8RPHECO402 Research Project (in Honours with Research Programme) | | 12 | 300 |
| **OR** | | | | |
| 5 | KU8RPHECO401 Project (in Honours | | 8 | 200 |

| | | | | | |
|---|---|---|---|---|---|
| | Programme) | | | | |
| 6 | Any one DSC from A6-A8 | | 4 | 4 | 100 |
| **OR** | | | | | |
| 7 | KU8RPHECO403(Project for Honours) | | | 12 | 300 |
| | **Total** | | | **12** | **300** |
| **ELECTIVES:** Three elective courses are compulsory for Honours and Honours with Research Programmes. For Honours with research Programme one must be KU8RPHECO402 Research Project (in Honours with Research Programme. | | | | | |
| 8 | DSE A1 | | 4 | 4 | 100 |
| 9 | DSE A2 | | 4 | 4 | 100 |
| 10 | DSE A3 | | 4 | 4 | 100 |
| **OR** | | | | | |
| 11 | DSC B1 | From any discipline/ any three disciplines | | 4 | 100 |
| 12 | DSC B2 | | | 4 | 100 |
| 13 | DSC B3 | | | 4 | 100 |
| | Two of these courses can be in the online mode. These online courses can be taken either in semester VII or in semester VIII, but their credits shall be added to the student's account only in semester VIII. For those students who go to another institution for doing the Project, all these three courses can be in the online mode or in the in-person mode from the institution where the Project is being done. | | | | |
| | **Total** | | **12** | **12** | **300** |

## KU1DSCECO101: INTRODUCTORY MICROECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| I | DSC-Major | 100-199 | KU1DSC ECO101 | 4 | 60 |

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

**Course Description:**

*This course sets foundation for studying the intermediate microeconomics and advanced microeconomics in the forthcoming semesters. 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. Foundations of production, cost and revenue analysis are followed in the subsequent module and ends with concepts in factor market and welfare analysis. 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 semesters.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | 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 |
| 2 | Understand the basic concepts of demand and supply for analysing market dynamics | R, U |

| | | |
|---|---|---|
| 3 | Understand the basic concepts of production, cost and revenue for learning the subject in the subsequent semesters | R, U |
| 4 | Learn the concepts for analysing factor markets and welfare related concepts for better learning microeconomics at the intermediate and advanced levels | R, U |
| 5 | 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 | ✓ | | | | | | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **INTRODUCTION TO MICROECONOMICS** | **10** |
| | 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** | **BASICS OF DEMAND AND SUPPLY** | | **15** |
| | 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 | 4 |
| | | a) Price, income and cross elasticity | |
| | | b) Degrees of price elasticity | |
| | | c) Point vs arc elasticity | |
| | | d) Elasticity of supply – degrees of supply elasticities | |
| | 6 | Effects of government intervention on market – price controls and price support | 1 |
| **3** | **FOUNDATIONS OF PRODUCTION, COST AND REVENUE** | | **15** |
| | 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** | **FACTOR MARKET AND WELFARE FOUNDATIONS** | | **10** |
| | 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

**Reference Distribution:**

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

**Suggested Readings:**

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

**Assessment Rubrics:**

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

## KU1DSCECO102: ECONOMICS FOR BEGINNERS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| 1 | DSC-Minor | 100-199 | KU1DSCECO102 | 4 | 60 |

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

**Course Description:**

*This course delves into foundational economic concepts and theories, focusing on Microeconomics, Macroeconomics, and Indian Economy. Students will be able to explore foundational theories of Microeconomics and Macroeconomics, and also get an outlook on the working of India's economy. The course integrates theoretical knowledge with practical applications, case studies, and real-world examples to enhance student's understanding of complex real world economic phenomena.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Understand the fundamental principles and concepts of economics, including microeconomics and macroeconomics. | R, U |
| CO 2 | Understand economic systems, economic agents' roles and economic models and theories. | R, U |
| CO 3 | Comprehend microeconomic principles such as scarcity, opportunity cost, supply and demand and market structures. | R, U |
| CO 4 | Understand consumer behaviour, producer behaviour, and the concepts of utility, budget constraints and profit maximization. | U |
| CO 5 | Gain knowledge of macroeconomic principles like national income accounting, fiscal and monetary policies and economic indicators. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO ECONOMICS** | **13** |
| | 1 | Definition and Scope of Economics | 2 |
| | 2 | Microeconomics vs. Macroeconomics | 2 |
| | 3 | Economic Systems- Capitalism, Socialism, Mixed Economies | 6 |
| | 4 | Economic Agents- Consumers, Producers, Government | 3 |
| 2 | | **MICRO-ECONOMIC PRINCIPLES** | **12** |
| | 1 | Scarcity, Choice, and Opportunity Cost | 1 |
| | 2 | Supply and Demand: Law, Equilibrium, Elasticity | 4 |
| | 3 | Cardinal and ordinal analysis- utility, law of diminishing marginal utility, Indifference Curve and its properties | 3 |
| | 4 | Producer Behaviour: Production Costs, Revenue, Profit Maximization | 2 |
| | 5 | Market Structures: Perfect Competition, Monopoly, Oligopoly, Monopolistic Competition (concepts only) | 2 |
| 3 | | **MACROECONOMIC PRINCIPLES** | **13** |
| | 1 | National Income Accounting: GDP, GNP, NI, PI, DI | 3 |
| | 2 | Aggregate Demand and Aggregate Supply | 1 |
| | 3 | Fiscal Policy: Government Spending, Taxes, Budget Deficits | 3 |
| | 4 | Monetary Policy: Money Supply, Interest Rates, Central Banks | 3 |
| | 5 | Inflation- types, Unemployment- types | 3 |

| | | | |
|---|---|---|---|
| **4** | **INDIAN ECONOMY** | | **12** |
| | 1 | Economic History and Evolution of India | 3 |
| | 2 | Key Sectors: Agriculture, Industry, Services | 2 |
| | 3 | Economic Reforms: Liberalization, Privatization, Globalization (LPG) | 2 |
| | 4 | Economic Challenges: Unemployment, Poverty, Inequality | 3 |
| | 5 | Government Policies: Five-Year Plans, NITI Aayog, Economic Surveys, Budgets (conceptual understanding only) | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions* | | |
| | *This module aims to allow teachers the flexibility to choose topics from microeconomics and macroeconomics considering students' learning needs. Teachers can select core concepts from microeconomics and macroeconomics like scarcity, opportunity cost, supply and demand, market structures, GDP, inflation, unemployment and the so forth. The module should be designed in such a way to use interactive teaching methods, real-world examples, and encouraging discussions to deepen students' understanding of micro economic fundamentals* | | 10 |

**Essential Readings:**


1. Principles of Economics by N. Gregory Mankiw
2. Economics: Principles, Problems, and Policies'' by Campbell R. McConnell and Stanley L. Brue
3. Microeconomics & quot; by A. Koutsoyiannis
4. Microeconomics: Theory and Applications with Calculus by Jeffrey M. Perloff
5. Macroeconomics by N. Gregory Mankiw
6. Macroeconomics: Principles, Applications, and Tools by Arthur O'Sullivan, Steven M. Sheffrin, and Stephen J. Perez
7. Indian Economy by Ramesh Singh
8. Indian Economy: Performance and Policies & quot; by Uma Kapila


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**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings 1 and 2 | |
| | 2 | Essential Readings 1 and 2 | |
| | 3 | Essential Readings 1 and 2 | |
| | 4 | Essential Readings 1 and 2 | |
| **2** | 1 | Essential Readings 3 and 4 | |
| | 2 | Essential Readings 3 and 4 | |
| | 3 | Essential Readings 3 and 4 | |
| | 4 | Essential Readings 3 and 4 | |
| | 5 | Essential Readings 3 and 4 | |
| **3** | 1 | Essential Readings 5 and 6 | |

| | | | |
|---|---|---|---|
| | 2 | Essential Readings 5 and 6 | |
| | 3 | Essential Readings 5 and 6 | |
| | 4 | Essential Readings 5 and 6 | |
| | 5 | Essential Readings 5 and 6 | |
| **4** | 1 | Essential Readings 7 and 8 | |
| | 2 | Essential Readings 7 and 8 | |
| | 3 | Essential Readings 7 and 8 | |
| | 4 | Essential Readings 7 and 8 | |
| | 5 | Essential Readings 7 and 8 | |
| 5 | - | Essential Reading 1, 2, 5 and 6 | Preferably |

**Suggested Readings: NIL**

**Assessment Rubrics:**

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

## KU1DSCECO103: ECONOMICS OF TOURISM AND DEVELOPMENT

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| 1 | DSC-Minor | 100-199 | KU1DSCECO103 | 4 | 60 |

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

**Course Description:**

*This course 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 |
|---|---|---|
| 1 | Understand fundamental concepts and principles of tourism economics. | R, U |
| 2 | Understand the factors that influence the demand and supply of the tourism industry. | R, U |
| 3 | Learn the negative and positive impacts of tourism. | R, U |
| 4 | Acquire the ability to apply economic principles to tourism | U, A |
| 5 | Students will gain exposure to tourism products in various tourist spots. | 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:**

| MODULE | UNIT | 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 | **Module 2: Economics of Tourism** | | **15** |
| | | 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** | **Module 3: Impacts of Tourism** | | **10** |
| | | 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** | **Module 4: Tourism Planning and Development** | | **15** |
| | | 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** | **Teacher Specific Module** | | **10** |
| | 1 | This module would be preferably designed as activity oriented. A few suggestions are as follows (pick up any one and need to be evaluated);<br>1) 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).<br>2) The students may be instructed to conduct interview of the tourists in the nearest tourism destination and present feedback in any innovative forms (report, video presentation, documentaries and so forth). (survey must be in holidays).<br>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.<br>4) Conduct study tour (inside Kerala and maximum of 2 days) and submit reflections in any innovative forms which the students prefer to.<br>(10 hour may be preferably devoted for the presentations and evaluation of the activity) | 10 |

**Essential Readings:**

l. 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

**Reference Distribution:**

| Module | Reference No. | REMARKS |
|---|---|---|
| **1** | Essential Readings 4,8,9 and 10 | - |

| | | |
|---|---|---|
| **2** | Essential Readings 1,2,8 and 9 | - |
| 3 | Essential Readings 2,3,5,7,8 and 10 | - |
| 4 | Essential Readings 1,3,4,6,11 and 12 | - |
| 5 | Websites, Reports, Travel Vlogs, Travel Channels (The reference is open ended) | Preferably |

**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 Pv1.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

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 10 |
| b) | Test Paper-2 | 10 |
| c) | Assignment | - |
| d) | Seminar | |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |

| | | |
|---|---|---|
| g) | Field visit report | 10 |
| **Total** | | **100** |

## KU1DSCECO104: FUNDAMENTALS OF ECONOMIC DEVELOPMENT

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| I | DSC-Minor | 100-199 | KU1DSCECO104 | 4 | 60 |

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

**Course Description:**

*This course 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, then, explores the role of human resources in development. The course also introduces concepts of sustainable development, and analyses India's development experience from pre-independence to contemporary scenario.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Conceptualize economic development and differentiate it from economic growth. | R, U |
| 2 | Understand the determinants of economic growth and development using theoretical frameworks and empirical evidence. | R, U |
| 3 | Understand 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 | Study 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**

| | 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 | **ECONOMIC DEVELOPMENT- MEANING AND MEASUREMENT** | | **13** |
| | 1 | Meaning of economic development | 2 |
| | 2 | Distinction between Growth and Development | 2 |
| | 3 | Determinants of Growth and Development | 3 |
| | 4 | Measurement of Growth and Development – GNP Per-capita, PQLI, HDI, Gender Development Index, Gender Empowerment Index, Global Hunger Index | 6 |
| 2 | **HUMAN RESOURCE AND ECONOMIC DEVELOPMENT** | | **12** |
| | 1 | Human Resource and Development | 1 |
| | 2 | Manpower planning | 1 |
| | 3 | Concept of intellectual capital and its size | 1 |
| | 4 | Role of education and health in economic development | 2 |
| | 5 | Gender and development | 2 |
| | 6 | Women in the labour force | 2 |
| | 7 | Theory of demographic transition | 2 |

| | | | |
|---|---|---|---|
| | 8 | Ageing and 'younging' issues | 1 |
| **3** | **INTRODUCTION TO SUSTAINABLE DEVELOPMENT** | | **12** |
| | 1 | Definition and concept of sustainable development | 2 |
| | 2 | Objectives of Sustainable development | 2 |
| | 3 | Three pillars of sustainable development | 1 |
| | 4 | Dimensions of sustainable development-social, economic and environmental | 3 |
| | 5 | The Millennium Development Goals | 2 |
| | 6 | Tools for Sustainable growth | 2 |
| **4** | **INDIAN DEVELOPMENT EXPERIENCE** | | **13** |
| | 1 | Pre-Independence Economy and Development Challenges | 2 |
| | 2 | Planning for Development: The Five-Year Plans | 3 |
| | 3 | Sectoral Development Policies (Green Revolution and agricultural transformation -Industrial policy and public sector undertakings) | 4 |
| | 4 | Economic Reforms and Liberalization | 2 |
| | 5 | Contemporary Development Issues – climate change | 2 |
| **5** | **Teacher Specific Module** | | **10** |
| | **Directions:** *Initiate Discussions on the themes of contemporary Significance* | | - |
| | This module would be set as a discussion or activity-based module preferably keeping any of the essential reading as basic reference. The content may be based on the modules in the syllabus or any other topic so as to give better learning experience of the course. | | 10 |

**Essential Readings:**

1. Todaro and Smith, Economic Development, Pearson Education, New Delhi.
2. Debraj Ray, Development Economics. Oxford University Press, New Delhi.
3. Thirlwall, Growth and Development with Special Reference to Developing Countries. Palgrave McMillian, New Delhi.

**Reference Distribution:**

| Modules | Reference | Remarks |
|---|---|---|
| **1** | Essential Reading 1 | |
| | Essential Reading 2 | |
| | Essential Reading 3 | |
| **2** | Essential Reading 1 | |
| | Essential Reading 2 | |
| **3** | Essential Reading 1 | |
| | Essential Reading 2 | |
| **4** | Essential Reading 1 | |
| | Essential Reading 2 | |
| | Essential Reading 3 | |
| 5 | Essential Reading 1, 2 and 3 | Preferably |

**Suggested Readings: Nil**

**Assessment Rubrics:**

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

## KU1DSCECO105: ECONOMIC JOURNALISM

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| I | DSC-Minor | 100-199 | KU1DSCECO105 | 4 | 60 |

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

**Course Description:**

*This course 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **INTRODUCTION TO ECONOMIC JOURNALISM** | | **10** |
| | 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 | **BASIC ECONOMICS FOR JOURNALISTS** | | **12** |
| | 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 | 3 |
| | 4 | Reporting on government budgets, taxation, and spending -Analyzing central bank decisions and their impact | 3 |
| 3 | **ECONOMIC TRENDS AND FORECASTING** | | **13** |
| | 1 | Identifying and reporting on economic indicators (e.g., unemployment rate, consumer confidence)<br>Predicting economic trends and interpreting forecasts | 4 |

| | | | |
|---|---|---|---|
| | 2 | Reporting on international economic developments and their implications | 3 |
| | 3 | Case Studies in Economic Reporting | 3 |
| | 4 | Analyzing real-world examples of economic reporting | 3 |
| **4** | **ETHICAL AND PROFESSIONAL STANDARDS IN ECONOMIC JOURNALISM** | | **15** |
| | 1 | Objectivity and impartiality in economic reporting | 4 |
| | 2 | Handling conflicts of interest | 4 |
| | 3 | Fact-checking and verification in economic journalism | 3 |
| | 4 | Examining the challenges and best practices in reporting on economic policy and trends | 4 |
| **5** | **Teacher Specific Module** | | **10** |
| | *Directions: Activity based on Reports on Economic Events in the Media* | | |
| | *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.* | | 10 |

**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).


**Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| **1** | 1 | Essential readings 2 and 3 |
| | 2 | Essential readings 2 and 3 |
| | 3 | Essential readings 2 and 3 |
| | 4 | Essential readings 2 and 3 |
| **2** | 1 | Essential readings 1 and 3 |
| | 2 | Essential readings 1 and 3 |
| | 3 | Essential readings 1 and 3 |
| | 4 | Essential readings 1and 3 |
| **3** | 1 | Essential readings 2 and 3 |
| | 2 | Essential readings 2 and 3 |

| | | |
|---|---|---|
| | 3 | Essential readings 2 and 3 |
| **4** | 1 | Essential readings 1,2 and 3 |
| | 2 | Essential readings 1,2 and 3 |
| | 3 | Essential readings 1,2 and 3 |
| | 4 | Essential readings 1,2 and 3 |

**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:**

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

## KU1MDCECO101: ECONOMICS IN DAILY LIFE

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| I | MDC | 100-199 | KU1MDCECO101 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 |

**Course Description:**

*This course is designed to provide multidisciplinary foundations of economics with 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 are expected to gain practical insights into economics. By the end of the course, participants will be able to develop basic understanding of economic phenomena, enabling them to make informed decisions and engage meaningfully with economic issues in their everyday life.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| **COs** | **Expected Outcome** | **Learning Domains** |
|---|---|---|
| CO 1 | Gain a foundational understanding of economic principles to interpret and engage with economic issues in everyday life. | R, U |
| CO 2 | Understand economic concepts to make informed decisions regarding personal finance and investments. | R, U |
| CO 3 | Develop awareness of global economic dynamics and their implications for individual economies and societies. | R, U |
| CO 4 | Enhance critical thinking skills to address social and economic challenges such as inequality, discrimination, poverty and corruption. | R, U, A |

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

**Mapping of Course Outcomes to PSOs**

| CO | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
|---|---|---|---|---|---|---|---|
| CO 1 | ✔ | | ✔ | | | | |
| CO 2 | ✔ | | ✔ | | | | |
| CO 3 | ✔ | | ✔ | | | ✔ | |
| CO 4 | ✔ | | | | ✔ | | |

**COURSE CONTENT**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS 45 |
|---|---|---|---|
| 1 | **BASIC UNDERSTANDING OF ECONOMICS** | | **17** |
| | 1 | What is economics?<br>a) Definition and the scope of economics | 1 |
| | 2 | Importance of learning economics in daily life<br>a) Role of economics in decision-making and understanding societal systems | 1 |
| | 3 | Price determination<br>a) Factors influencing prices and reasons for price fluctuations | 2 |
| | 4 | Per-capita GDP | 1 |
| | 5 | Understanding Inflation<br>a) Meaning of inflation and how it is measured in India | 1 |
| | 6 | Economic cycles<br>a) Understanding the phases of economic cycles | 3 |
| | 7 | Personal budget<br>a) Income, expenditure, saving, and investment (concepts)<br>b) Alternatives to savings accounts and considerations for investment decisions | 2 |
| | 8 | Government budget<br>a) Taxes and subsidies<br>b) Components of government budget<br>c) Reasons behind heavy taxation on specific goods (eg: Taxation on alcohol and tobacco) | 3 |

| | | | |
|---|---|---|---|
| | 9 | Stock market mechanics<br>a) Bulls and bears<br>b) Functioning of stock markets | 3 |
| **2** | **ECONOMIC SYSTEMS AND GLOBALIZATION** | | **8** |
| | 1 | Capitalism vs. socialism<br>a) Contrasting features and implications of different economic systems.<br>b) Balancing between state regulation and free market dynamics. | 3 |
| | 2 | Nationalization<br>a) Effects of government ownership on economic growth | 2 |
| | 3 | International Trade<br>a) Imports, and exports<br>b) Free trade: controversies surrounding unrestricted trade policies | 3 |
| **3** | **ECONOMICS OF SOCIAL ISSUES** | | **12** |
| | 1 | Inequality<br>a) Inequality in income distribution<br>b) Disproportionate earnings: Concept of income inequality | 3 |
| | 2 | Discrimination in the job market<br>a) Examination of gender and minority discrimination in employment<br>b) Gender pay gap | 3 |
| | 3 | Poverty<br>a) Feasibility and strategies for poverty alleviation | 2 |
| | 4 | Unemployment<br>a) Types of unemployment<br>b) Definition and implications of an acceptable level of unemployment | 3 |
| | 5 | Corruption: An economic perspective | 1 |
| **4** | | **TEACHER SPECIFIC MODULE** | **8** |
| | | This module aims at engaging students through simple practical and interactive learning activities. Teacher may include activities like;<br>1.Personal Budget Creation: Provide students with a hypothetical monthly income and a list of expenses | **8** |

| | | |
|---|---|---|
| | 2. Group Discussion and Problem-Solving: Divide students into groups, each group may be assigned a specific social issue (e.g., income inequality, poverty, gender discrimination). | |

**Essential Readings:**

1. Officer, L. H. (2009). Everyday Economics: Honest Answers to Tough Questions. Palgrave Macmillan**.**
2. Krugman, P., & Wells, R. (2020). Economics (6th ed.). Worth Publishers.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1-9 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| **2** | 1-3 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| **3** | 1-5 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |

**Suggested Readings:**

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**.**

**Assessment Rubrics:**

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

KU1MDCECO102: **ECONOMICS FOR COMPETITIVE EXAMINATIONS**

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| I | MDC | 100-199 | KU1MDCECO102 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 (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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **FUNDAMENTALS OF ECONOMICS** | | **8** |
| | 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<br>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<br>Various Phases of Business Cycles | 2 |
| | **STRUCTURE OF INDIAN ECONOMY** | | **10** |
| 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 |
| **3** | **PUBLIC FINANCE AND INTERNATIONAL TRADE** | | **10** |
| | 1 | Public Revenue: Sources, Taxation, Types of Taxes, and Reforms<br>Public Expenditure: Types, Causes, and Effects | 3 |
| | 2 | Budget: Types, Preparation, and Process<br>Fiscal Policy: Objectives and Tools | 3 |
| | 3 | Foreign Trade Policy | 2 |
| | 4 | International Institutions – WTO, ADB.ASEAN, G-8, G-20, BRICS | 2 |
| **4** | **CURRENT ECONOMIC ISSUES** | | **9** |
| | 1 | Economic Reforms in India - Liberalization, Privatization, and Globalization | 3 |
| | 2 | Banking Sector Reforms -Capital Market Reforms<br>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 |
| **5** | **TEACHER SPECIFIC MODULE** | | **8** |
| | *Directions: Activities based on previous question papers of competitive examinations and Orientation for Attending Interviews* | | |
| | 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.

**Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| **1** | 1 | Essential Reading 3 |
| | 2 | Essential Reading 3 and 4 |
| | 3 | Essential Reading 1 and 4 |
| | 4 | Essential Reading 1 and 4 |
| **2** | 1 | Essential Reading 1 and 5 |
| | 2 | Essential Reading 1 and 5 |
| | 3 | Essential Reading 1 and 5 |
| | 4 | Essential Reading 1 and 5 |
| **3** | 1 | Essential Reading 1 and 5 |
| | 2 | Essential Reading 1 and 5 |
| | 3 | Essential Reading 1 and 5 |
| **4** | 1 | Essential Reading 1 and 5 |
| | 2 | Essential Reading 1 and 5 |
| | 3 | Essential Reading 1 and 5 |
| | 4 | Essential Reading 1 and 5 |
| | | Essential Reading 1 and 5 |

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

# KU2DSCECO106: INTRODUCTORY MACROECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | DSC-Major | 100-199 | KU2DSCECO106 | 4 | 60 |

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

**Course Description:**

*This course introduces the essence of macroeconomics and national income accounting, and delves into macroeconomic phenomena such as unemployment, inflation, and economic growth. It is also designed to introduce the students classical and Keynesian macroeconomic theories. The course enables the students to comprehend the intricacies of national income measurement and also familiarises basic analytical tools to understand various macroeconomic variables and their interactions.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Recall the definitions of key macroeconomic concepts such as GDP, GNP, inflation, and unemployment and learn the formulas and methods used in national income accounting. | R, U |
| 2 | Understand the relationships between different macroeconomic variables and concepts and the differences between microeconomics and macroeconomics | R, U |

| | | |
|---|---|---|
| 3 | Apply various measurement methods (value-added, income, expenditure) to calculate national income and GDP and use macroeconomic theories to analyse and interpret economic data | U, A |
| 4 | Understand the causes and consequences of macroeconomic issues such as unemployment and inflation | U |
| 5 | Understand the changes in macroeconomic variables from Keynesian and classical perspective and make interpretation | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| **1** | **INTRODUCTION TO MACRO ECONOMICS** | | **10** |
| | 1 | Conceptualising macroeconomics | 1 |
| | 2 | Micro Vs macro economics | 1 |
| | 3 | Concepts in Macroeconomics | 6 |
| | | a) Macroeconomic variables - stock and flow variables, endogenous and exogenous variables, ex-ante and ex-post variables | |
| | | b) Equilibrium and disequilibrium - partial and general equilibrium, static, comparative and dynamic equilibrium. | |

| | | | |
|---|---|---|---|
| | 4 | Major macroeconomic issues - unemployment, inflation, business cycle and economic growth. | 2 |
| **2** | **BASIC CONCEPTS OF NATIONAL INCOME ACCOUNTING** | | **13** |
| | 1 | Introduction to National Income Accounting - SNA approach | 2 |
| | 2 | Concepts in national income accounting | 5 |
| | | a) Concepts of GNP, GDP, NNP, GVA and NDP at market price and at factor cost. | |
| | | b) Personal income and disposable income | |
| | | c) Real versus Nominal GDP | |
| | | d) GDP Deflator and its significance. | |
| | 3 | Measuring the value of Economic Activity - Value Added Method, income method and Expenditure Method. | 4 |
| | 4 | Circular flow of income in a four-sector model | 2 |
| | | Note: ***Algebraic solutions may be applied to various concepts and methods in the module*** | - |
| **3** | **CLASSICAL APPROACH TO MACROECONOMICS** | | **15** |
| | 1 | The Classical Pillars: Say's law, wage-price flexibility, interest rate flexibility | 5 |
| | 2 | Classical Dichotomy and neutrality of money | 3 |
| | 3 | Equilibrium output and employment: labour demand, labour supply and labour market equilibrium | 4 |
| | 4 | The classical quantity theory of money | 3 |
| **4** | **KEYNESIAN APPROACH TO MACRO ECONOMICS** | | **12** |
| | 1 | The simple Keynesian model: The components of aggregate demand - consumption, investment, government spending and taxes | 3 |
| | 2 | Role of effective demand in Keynesian model of determining equilibrium employment and output | 2 |
| | 3 | Components of Aggregate supply and aggregate demand and equilibrium in two sector model | 4 |

| | | | |
|---|---|---|---|
| | 4 | Investment multiplier, government expenditure multiplier and balanced budget multiplier | 2 |
| | 5 | Determination of equilibrium income in three and four sector model | 1 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Exercises from Schaum's Outline* | | - |
| | *This module would be set as exercise-based module preferably keeping Schaum's outlines of Macroeconomics as basic reference. The content may be based on the theoretical modules in the syllabus or any other topic so as to give better conceptual foundations in Macroeconomic theory.* | | 10 |

**Essential Readings:**


1. Mankiw, N. Gregory, "Macroeconomics." (2006) Worth Publishers
2. Mukherjee, Sampat. *Analytical Macroeconomics: From Keynes to Mankiw*. New Central Book Agency (P) Ltd, 2021
3. Mukherjee, Sampat. *Maco economics A global Text*. New Central Book Agency (P) Ltd, 2013
4. Dwivedi, D.N. (2006) Macro Economics – Theory & Policy, Tata McGraw Hill Publishing Company Microeconomics Theory & Application Pearson.
5. List Stonier, A.W. and Hague, D.C.: A Textbook of Economic Theory, Longman Group, London
6. Mankiw, N.G.: Elementary Macroeconomics, Worth Publishers, 7th edition, 2010.
7. System of National Accounts 2008 - 2008 SNA https://unstats.un.org/unsd/nationalaccount/sna2008.asp#:~:text=The%20System%20of%20National%20Accounts,%2C%201993%20(1993%20SNA).


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1 | - |
| | 2 | Essential Reading 4 | - |
| | 3a | Essential Readings 4 and 8 | - |
| | 3b | Essential Reading 4 | - |

| | | | |
|---|---|---|---|
| | 4 | Essential Reading 3 | - |
| 2 | 1 | Essential Reading 7 | - |
| | 2a | Essential Readings 3 and 4 | - |
| | 2b | Essential Reading 3 | - |
| | 2c | Essential Readings 3 and 6 | - |
| | 2d | Essential Reading 6 | - |
| | 3 | Essential Reading 3 | - |
| | 4 | Essential Readings 1and 2 | - |
| 3 | 1 | Essential Reading 3 | - |
| | 2 | Essential Reading 3 | - |
| | 3 | Essential Readings 3 and 4 | - |
| | 4 | Essential Readings 3 and 1 | - |
| 4 | 1 | Essential Readings 1 and 3 | - |
| | 2 | Essential Reading 3 | - |
| | 3 | Essential Readings 1 and 3 | - |
| | 4 | Essential Reading 1 | - |
| | 5 | Essential Readings 1 and 3 | - |

**Suggested Readings:**


1 List Stonier, A.W. and Hague, D.C.: A Textbook of Economic Theory, Longman Group, London

2 Mankiw, N.G.: Elementary Macroeconomics, Worth Publishers, 7th edition, 2010.

3 Errol D'Souza, Macroeconomics, Pearson Education, 2009.

4 Mankiw, N. G. *Principles of economics*. Cengage Learning, 2021.


**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |

| | | |
|---|---|---|
| b) | Test Paper-2 | 6 |
| c) | Assignment | 9 |
| d) | Seminar/Debate | 5 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce/Quiz | 4 |
| g) | Field Report | - |
| **Total** | | **100** |

## KU2DSCECO107: FOUNDATIONS OF ECONOMIC ANALYSIS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | DSC-Minor | 100-199 | KU2DSCECO107 | 4 | 60 |

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

**Course Description:**

*Foundations of Economic Analysis is designed to build upon the foundational knowledge for analysing economic issues. This course delves into foundational economic concepts and theories, focusing on development economics, public finance, Economics of Banking and the specific economic dynamics of the Kerala region. Students will be able to explore theories of economic development, public finance principles, business strategies, the economic challenges and opportunities unique to Kerala. The course integrates theoretical knowledge with practical applications, case studies, and real-world examples to enhance understanding of complex economic phenomena.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Gain a comprehensive understanding of development economics theories, economic growth, poverty, inequality, and human development indices. | R, U |
| 2 | Understand government budgeting, fiscal policies, taxation principles, public expenditure and the role of government in market failures. | R, U |
| 3 | Gain a comprehensive understanding of the banking sector, including its functions, regulatory framework, and economic impact to analyse the role of central banks in formulating monetary policies and managing financial stability. | R, U |

| | | |
|---|---|---|
| 4 | Explore economic history, key sectors, social development indicators, government policies specific to the Kerala. | R, U |
| 5 | Understand the need for developing critical thinking, analytical skills, and the ability to apply economic theories to real-world economic scenarios and decision-making processes. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **ECONOMICS OF DEVELOPMENT** | | **12** |
| | 1 | Economic Growth vs. Economic Development | 2 |
| | 2 | Poverty, Inequality and Unemployment | 3 |
| | 3 | Human Development Index (HDI) and PQLI and its Components | 3 |
| | 4 | Role of Institutions in Development | 2 |
| | 5 | Sustainable Development Goals (SDGs) | 2 |

| | | | |
|---|---|---|---|
| **2** | **PUBLIC FINANCE** | | **13** |
| | 1 | Role of Government in Market Failures<br>Public Goods and Externalities | 3 |
| | 2 | Introduction to Budget, types, importance and Fiscal Policy | 3 |
| | 3 | Taxation: Types, Principles, and Impact and Incidence | 3 |
| | 4 | Causes of growth of public expenditure | 2 |
| | 5 | Public debt and its redemption methods | 2 |
| **3** | **ECONOMICS OF BANKING** | | **13** |
| | 1 | Banking Sector Overview | 3 |
| | | a) Core functions: intermediation, deposits, lending | |
| | | b) Types of banks: commercial, central, cooperative | |
| | 2 | Role of Central Banks | 3 |
| | | a) Monetary policy formulation and implementation | |
| | | b) Regulatory oversight and supervision | |
| | | c) Transmission Mechanism | |
| | 3 | Monetary Policy Tools | 2 |
| | | a) Repo Rate | |
| | | b) Reverse Repo Rate | |
| | | c)Statutory Liquidity Ratio (SLR | |
| | 4 | 4. Banking Regulations | 2 |
| | | a) Capital adequacy standards and Basel norms | |
| | | b) Regulatory supervision by institutions like RBI. | |
| | 5 | Economic Impact | 3 |
| | | a) Influence of banking sector on economic stability. | |
| | | b) Effects of banking crises on financial markets and economy | |
| | | c) Concept of Too Big To Fail (TBTF). | |

| | | | |
|---|---|---|---|
| **4** | **KERALA ECONOMY** | | **12** |
| | 1 | Economic History and Evolution and Kerala Model of Development | 2 |
| | 2 | Agriculture, Industry, and Service Sectors | 2 |
| | 3 | Social Development Indicators | 2 |
| | 4 | Tourism Industry and Economic Impact | 2 |
| | 5 | Challenges and Opportunities in Kerala's Economy | 2 |
| | 6 | Kerala Government Policies and Economic Initiatives | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions: Works or activities based on selected cases* | | - |
| | *This module offers teachers freedom to select and explore key concepts from macroeconomics and international economics based on their expertise and students' interests. The module can be work based or activity-oriented emphasizing interactive teaching and learning, relying on case studies so as to enhance students' grasp of concepts in the syllabus. The required cases can be selected from any of the essential readings mentioned in the syllabus.* | | 10 |

**Essential Readings:**


1. Todaro, M. P., &; Smith, S. C. (2019). Economic Development (Chapters 1-5).
2. Development Economics by Debraj Ray
3. Rosen, H. S., Gayer, T. (2020). Public Finance (Chapters 1-6).
4. Public Finance and Public Policy by Jonathan Gruber
5. Money and Banking by Narayana Nadar, E (2016), PHI Learning Private Ltd, Delhi. 3.
6. Indian Financial System by Machiraju, H. R. (2010).. Vikas Publishing House.
7. Kerala development Reports by state planning Board
8. Kerala Economy: Performance, Problems, and Prospects by K. P. Kannan and B. A. Prakash


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings 1 and 2 | - |
| | 2 | Essential Readings 1 and 2 | - |
| | 3 | Essential Readings 1 and 2 | - |
| | 4 | Essential Readings 1 and 2 | - |
| | 5 | Essential Readings 1 and 2 | - |
| **2** | 1 | Essential Readings 3 and 4 | - |
| | 2 | Essential Readings 3 and 4 | - |
| | 3 | Essential Readings 3 and 4 | - |
| | 4 | Essential Readings 3 and 4 | - |
| | 5 | Essential Readings 3 and 4 | - |
| **3** | 1 | Essential Readings 5 and 6 | - |
| | 2 | Essential Readings 5and 6 | - |
| | 3 | Essential Readings 5 and 6 | - |
| | 4 | Essential Readings 5 and 6 | - |
| | 5 | Essential Readings 5 and 6 | - |
| 4 | 1 | Essential Readings 7 and 8 | - |
| | 2 | Essential Readings 7 and 8 | - |
| | 3 | Essential Readings 7 and 8 | - |
| | 4 | Essential Readings 7 and 8 | - |
| | 5 | Essential Readings 7 and 8 | - |
| | 6 | Essential Readings 7 and 8 | - |

**Assessment Rubrics:**

| Evaluation Type | Marks |
|---|---|
| End Semester Evaluation | **70** |
| Continuous Evaluation | **30** |

| | | |
|---|---|---|
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 9 |
| d) | Seminar/Debate | 5 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce/Quiz | 4 |
| g) | Field Report | - |
| **Total** | | **100** |

## KU2DSCECO108: DEMOGRAPHY

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | DSC-Minor | 100-199 | KU2DSCECO108 | 4 | 60 |

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

**Course Description:** *This course provides students with a comprehensive understanding of demography's scope and significance; emphasizing its nexus with economic dynamics. It covers key demographic theories and their connection to key population measures like fertility, mortality, migration, and urbanization. Through quantitative analysis, students learn to articulate economic perspectives on demographic phenomena, with a focus on navigating diverse demographic data sources, particularly pertaining to India.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Understand the core concepts and theories of demography. | R, U |
| 2 | Understand population data using various sources and techniques | R, U |
| 3 | Assess the impact of demographic factors on development and policy. | R, U |
| 4 | Apply demographic knowledge to the context of India and its population challenges. | R, U, A |
| 5 | Describe the necessity, objectives, and categories of population strategies. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| **1** | **FOUNDATIONS OF DEMOGRAPHY** | | **12** |
| | 1 | Meaning and Scope of Demography | 2 |
| | | a) Definition, branches, and applications of demography | |
| | 2 | Components of Population Growth | 3 |
| | | a) Birth rates, death rates, migration, and natural increase. | |
| | 3 | Sources of Population Data | 3 |
| | | a) Population censuses, vital registration systems, sample surveys, and other sources. | |
| | 4 | Population and Development | 2 |
| | | a) Interrelationships between population, economic growth, and social development. | |
| | 5 | Malthusian Theory of Population | 2 |
| | | a) Population growth, resource limitations, and potential consequences. | |

| | | | |
|---|---|---|---|
| **2** | **POPULATION DYNAMICS** | | **12** |
| | 1 | Fertility<br>a) Concepts, measures (crude birth rate, total fertility rate)<br>b) factors affecting fertility (socioeconomic, cultural, policy). | 2 |
| | 2 | Mortality<br>a) Concepts, measures (crude death rate, life expectancy),<br>b) Factors affecting mortality (socioeconomic, health, environmental) | 3 |
| | 3 | Life Tables<br>a) Construction and interpretation of life tables | 3 |
| | 4 | Migration<br>a) Meaning, types (internal, international), causes and effects of migration (economic, political, social). | 2 |
| | 5 | Everett Lee Theory<br>a) Population aging and its implications for social and economic systems. | 2 |
| **3** | **POPULATION ISSUES AND POLICY IN INDIA** | | **13** |
| | 1 | Urbanization<br>a) Trends, causes, and consequences of urbanization in India. | 3 |
| | 2 | New Population Policy in India<br>a) Objectives, strategies, and challenges of the policy. | 3 |
| | 3 | Family Planning Strategies in India<br>a) Government programs, methods, and their effectiveness. | 3 |
| | 4 | Aging of Population in India<br>a) Demographic trends, social and economic implications, and policy responses. | 4 |
| **4** | **POPULATION PROJECTIONS AND FUTURE TRENDS** | | **13** |

| | | | |
|---|---|---|---|
| | 1 | Methods of Population Projection<br>a) Cohort component method, other methods, and their limitations. | 3 |
| | 2 | Trends in the Rate of Growth of Indian Population<br>a) Analysing past and projected trends, understanding future challenges. | 3 |
| | 3 | Emerging Issues in Demography<br>a) Environmental concerns, climate change, and their demographic impacts. | 3 |
| | 4 | Demographic Research and Policy Applications<br>a) Importance of demographic research, informing policy decisions. | 2 |
| | 5 | Critical Thinking and Debate<br>a) Discuss the ethical considerations and potential biases in demographic research and policy. | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Direction:** *Works based on Census Data Base* | | - |
| | *The module is to be designed as activity or work based preferably taking census as data base. Population dynamics may be better understood from the census data. The teacher may design works on any topics in the syllabus or outside based on the level of the course so as to make the learning experience of the course better.* | | 10 |

**Essential Readings:**


1. K. Srinivsan: Basic Demographic Techniques and Applications - Sage, New Delhi.
2. D.J. Bogue: Principles of Demography - John Wiley, New York.
3. S.N. Agarwal: India's Population Problem - Tata McGraw-Hill Co. Bombay.
4. Bhende, A. and T. Kanitkar *Principles of Population Studies*, Himalaya Publishing House, Mumbai.
5. Jennifer Hickes Lundquist & Douglas L. Anderton & David Yaukey: Demography :The Study of Human Population Waveland Press, New York
6. Population and society: An introduction to Demography: Dudley l. Poston, Leon f. Bouvier, Cambridge University Press, New York

7. Everett S. Lee A Theory of Migration, : Demography, Vol. 3, No. 1 (1966), Population Association of America

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Reading 1,2 5 and 6 | - |
| | 2 | Essential Reading 5 and 6 | - |
| | 3 | Essential Reading 3,4,5 and 6 | - |
| | 4 | Essential Reading 2 and 4 | - |
| | 5 | Essential Reading 4 and 5 | - |
| **2** | 1 | Essential Reading 3,4 and 6 | - |
| | 2 | Essential Reading 3,4 and 6 | - |
| | 3 | Essential Reading 5 | - |
| | 4 | Essential Reading 3,4 and 6 | - |
| | 5 | Essential Reading 7 | - |
| **3** | 1 | Essential Reading 3 and 5 | - |
| | 2 | Essential Reading 3 and 4 | - |
| | 3 | Essential Reading 3 and 4 | - |
| | 4 | Essential Reading 3 and 4 | - |
| **4** | 1 | Essential Reading 4 and 5 | - |
| | 2 | Essential Reading 3 and 4 | - |
| | 3 | Essential Reading 1and 2 | - |
| | 4 | Essential Reading 1 and 2 | - |
| | 5 | Essential Reading 5 and 6 | - |
| 5 | - | Census Commissioner of India, Census Data | Preferably |

**Suggested Readings:**

1. Weeks, John R. *Population: An Introduction to Concepts and Issues*, Wadsworth Publishing Company, California.
2. Chandana, R. C. *Geography of Population: Concepts, Determinants and Patterns*, Kalyani Publishers, New Delhi
3. Yadava, K. N. S. *Rural-Urban Migration in India: Determinants, Patterns and Consequences,* Independent Publishing Company, Delhi.
4. Irudaya Rajan, (2007) *Social Security for the Elderly Experiences from South Asia,* Routledge, New Delhi.
5. Rajendra Kumar Sharma, Demography and Population Problems, Atlantic Publishers, Delhi.
6. B N Ghosh, Studies in Population and Economic Development Vol.1&II Deep and Deep Publication
7. Jhingan, Bhat& Desai, Demography, Vrinda Publications, Delhi.
8. Hans Raj of Demography – Surjeet Publication, Delhi.
9. Registrar General of India Census Publications
10. National Family Health Surveys Reports

**Assessment Rubrics:**

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

## KU2DSCECO109: PERSONAL FINANCE

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | DSC-Minor | 100-199 | KU2DSCECO109 | 4 | 60 |

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

**Course Description:**

*This Course is 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 |
| 5 | Make sound financial choices based on data analysis, economic understanding, and ethical awareness. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **Foundations of Personal Finance** | **8** |
| | 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<br>Understanding the range of banking services and modern payment methods. | 2 |
| | 4 | Types of insurance (life, health, property)<br>Strategies for managing risk and establishing emergency funds. | 2 |
| **2** | **Investment and Wealth Building** | | **12** |

| | | | |
|---|---|---|---|
| | 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 |
| **3** | **Financial Planning and Management** | | **15** |
| | 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 |
| **4** | **Special Topics in Personal Finance** | | **15** |
| | 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 |
| **5** | **Teacher Specific Module** | | **10** |
| | *Directions: Activities on household finance management* | | |

| | | |
|---|---|---|
| | 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.

**Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| **1** | 1 | Essential Reading 1 |
| | 2 | Essential Reading 1 |
| | 3 | Essential Reading 1 |
| | 4 | Essential Reading 1 |
| **2** | 1 | Essential Readings1,2 and 3 |
| | 2 | Essential Readings 1,2 and 3 |
| | 3 | Essential Readings 1,2 and 3 |
| | 4 | Essential Readings 1,2 and 3 |
| **3** | 1 | Essential Readings 1 and 2 |
| | 2 | Essential Readings 1 and 2 |
| | 3 | Essential Readings 1 and 2 |
| **4** | 1 | Essential Readings 1and 3 |
| | 2 | Essential Readings 1and 3 |
| | 3 | Essential Readings 1and 3 |
| | 4 | Essential Readings 1and 3 |

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

## KU2DSCECO110: NUTRITION ECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | DSC-Minor | 100-199 | KU2DSCECO110 | 4 | 60 |

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

**Course Description:**

*This course 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:**

| **MODULE** | **UNIT** | **DESCRIPTION** | **HOURS 60** |
|---|---|---|---|
| **1** | **INTRODUCTION TO NUTRITION ECONOMICS** | | **12** |
| | 1 | Meaning and Definition of Nutrition Economics | 3 |
| | 2 | Basic Concepts in Nutrition Economics | 3 |
| | 3 | Importance of Nutrition Economics in Public Health Policy | 3 |
| | 4 | Relationship between health, nutrition and human wellbeing | 3 |
| **2** | **MEASUREMENT OF NUTRITIONAL STATUS** | | **13** |
| | 1 | Measurement of Nutritional status – Calorie intake approach and Anthropometric approach | 3 |
| | 2 | Undernutrition: Stunting, Wasting, and Underweight, BMI | 3 |
| | 3 | Overnutrition: 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 | 4 |
| **3** | **ECONOMIC AND HEALTH DETERMINANTS OF NUTRITION** | | **12** |
| | 1 | Economic costs of malnutrition: impact on health outcomes and economic productivity | 3 |
| | 2 | Healthcare Costs, Productivity Losses, and Human Capital Development | 3 |
| | 3 | Evaluation of nutrition interventions and programs | 3 |
| | 4 | Economic implications of dietary transitions and globalization on nutrition | 3 |
| **4** | **POLICY INTERVENTIONS AND PROGRAMS OF NUTRITION** | | **13** |
| | 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 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | Directions: Activity based on NFHS Data | | |
| | *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.* | | 10 |

**Essential Readings:**


1. Babu, S., Gajanan, S. N., & Hallam, J. A. (Eds.). (2019). *Nutrition Economics: Principles and Policy Applications*. Springer.
2. Goldstein, M. C., & Goldstein, M. A. (Eds.). (2017). The Economics of Food and Nutrition. Oxford University Press.
3. Hawkes, C., Ruel, M. T., & Hautvast, J. D. (Eds.). (2014). Nutrition and Economic Development: Exploring the Links. Routledge.


**Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| **1** | 1 | Essential Reading 1 |
| | 2 | Essential Reading 1 |
| | 3 | Essential Reading 1 |

| | | |
|---|---|---|
| | 4 | Essential Reading 1 |
| **2** | 1 | Essential Reading 2 |
| | 2 | Essential Reading 2 |
| | 3 | Essential Reading 2 |
| | 4 | Essential Reading 2 |
| **3** | 1 | Essential Reading 3 |
| | 2 | Essential Reading 3 |
| | 3 | Essential Reading 3 |
| **4** | 1 | Essential Reading 3 |
| | 2 | Essential Reading 3 |
| | 3 | Essential Reading 3 |
| | 4 | Essential Reading 3 |

**Suggested Readings:**


1. 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
2. Brown, K. L., & Green, M. J. (2018). Public health nutrition interventions. Public Health Nutrition, 12(4), 245-260. https://doi.org/10.1017/S136898001800214X
3. 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
4. NITI Aayog. (2023). *Nutrition Strategy for India*. NITI Aayog. https://www.niti.gov.in/sites/default/files/2023-Nutrition-Strategy-for-India.pdf


**Assessment Rubrics:**

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

| | | |
|---|---|---|
| g) | Field Report | - |
| **Total** | | **100** |

KU2MDCECO103**: ISSUES IN INDIAN ECONOMIC DEVELOPMENT**

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | MDC | 100 -199 | KU2MDCECO103 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 |

*This course is open to students from various disciplines. The course offers a comprehensive exploration of crucial issues in Indian economic development. Through engaging lectures and discussions, students will delve into fundamental concepts of economic growth and development, population dynamics, poverty, inequality, and unemployment. Emphasizing a multi-disciplinary approach, the course integrates insights from sociology, public policy, and other relevant disciplines to provide a holistic understanding of India's development challenges. By analysing real-world case studies and policy debates, students will develop critical thinking skills and gain practical insights to address complex socio-economic issues, equipping them to make informed contributions to the discourse on India's development journey.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| COs | Expected Outcomes | Learning Domains |
|---|---|---|
| CO 1 | Grasp the concepts of economic growth and development, including the distinctions between the two, and the common characteristics of development and underdevelopment. | R, U |
| CO 2 | Understand the interplay between population growth and economic development, examining demographic changes, theory of demographic transition, and the potential impact of population trends on India's economic trajectory. | U |

| | | |
|---|---|---|
| CO 3 | Understand the dimensions and causes of poverty, inequality, and unemployment in India, exploring economic, structural, and social factors. | R, U |
| CO 4 | Acquire skills in proposing effective policy solutions to address challenges related to poverty in India. | A |
| CO 5 | Compare development issues of third world countries with Indian economy. | U, An |

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

**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 45 |
|---|---|---|---|
| 1 | **BASIC CONCEPTS OF ECONOMIC DEVELOPMENT** | | **10** |
| | 1 | Economic Development | 4 |
| | | a) Defining Economic Development | |
| | | a) Growth versus Development | |
| | | c) Development and Underdevelopment- common Characteristics | |
| | 2 | Factors in Economic Development | 2 |
| | | a) Economic factors | |
| | | b) Non-Economic factors | |
| | 3 | Human Development | 4 |

| | | | |
|---|---|---|---|
| | | a) Essential components of Human Development | |
| | | b) Measurements of human Development- HDI, GDI, GII, MPI | |
| **2** | **THE POPULATION GROWTH AND ECONOMIC DEVELOPMENT** | | **12** |
| | 1 | Demographic Transitions | 6 |
| | | a) Components of demographic change: fertility, mortality, and migration | |
| | | b) Theory of demographic transition | |
| | | c) India's Population: size and growth trends | |
| | 2 | Population and Economic Development<br>a) Remedies for population explosion | 3 |
| | 3 | India's Population: The Future<br>a) Causes of the rapid growth of population | 3 |
| **3** | **POVERTY, INEQUALITY AND UNEMPLOYMENT** | | **15** |
| | 1 | Dimensions of Poverty | 4 |
| | | a) Absolute vs. Relative poverty | |
| | | b) Income poverty, multidimensional poverty, and poverty thresholds | |
| | | c) Poverty Line | |
| | 2 | Causes of Poverty | 2 |
| | | a) Economic factors | |
| | | b) Structural and Social factors | |
| | 3 | Poverty Alleviation Programmes after Economic Reforms | 2 |
| | 4 | Inequality | 3 |
| | | a) Types of inequality | |
| | | b) Methods and indicators used to measure inequality- Lorenz curve & Gini Coefficient | |
| | | c) Reasons for inequality | |
| | 5 | Unemployment | 4 |

| | | | |
|---|---|---|---|
| | | a) Types of unemployment | |
| | | b) Causes and Remedial Measures | |
| 4 | **TEACHER SPECIFIC MODULE** | | **8** |
| | *This module may focus on engaging students in in-depth debates and discussions on key issues in Indian economic development viz "Universal Basic Income (UBI) vs. Targeted Welfare Programs: Which is More Effective in Poverty Alleviation?", "Challenges and Opportunities of India's Demographic Dividend", "Gender Disparities in Indian Economic Development: Addressing the Gender Gap" etc. This can foster critical thinking, encourage students to consider diverse perspectives, and deepen their understanding of key issues in Indian economic development.* | | 8 |

**Essential Readings:**


1. Kapila Uma (2018). Indian Economy Performance and Policies. Academic Foundation, New Delhi.
2. Michael P. Todaro and Stephen Smith (2011). Economic Development, Pearson
3. Taneja, M. L., & Myer, R. M. (2017). Economics of development and planning (15th ed.). Vishal Publishing Co.
4. Puri, V.K., & Misra, S.K. (2013). Indian Economy-Its Development Experience. Himalaya Publishing House. Latest Edition
5. Agrawal A.N. (2014). Indian Economy Problems of Development and Planning. New Age International Publishers, New Delhi. Latest Edition


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings 1, 2 and 3 | - |
| | 2 | Essential Readings 3 | - |
| | 3 | Essential Readings 3 | - |
| | 4 | Essential Readings 1, 4 and 5 | - |
| **2** | 1 | Essential Readings 1, 3 and 5 | - |
| | 2 | Essential Readings 1, 3 and 5 | - |

| | | | |
|---|---|---|---|
| | 3 | Essential Readings 1, 3 and 5 | - |
| | 4 | Essential Readings 1, 3 and 5 | - |
| **3** | 1 | Essential Readings 4 and 5 | - |
| | 2 | Essential Readings 4 and 5 | - |
| | 3 | Essential Readings 4 and 5 | - |
| | 4 | Essential Readings 3 and 4 | - |
| | 5 | Essential Readings 1 and 5 | - |
| 4 | - | Essential Readings from 1 to 5 | Preferably |

**Suggested Readings:**


1. Kapila Uma (2018). Indian Economy Performance and Policies. 18th Edition, Academic Foundation, New Delhi.
2. Basu, Kaushik (2016): An Economist in the Real World: The Art of Policy Making in India.
3. EPW, Yojana magazines, Kurukshetra journal
4. Human Development Report, Economic Survey


**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **50** |
| Continuous Evaluation | | **25** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | 7,5 |
| d) | Seminar/ Debate | 4 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce/Quiz | 3.5 |
| g) | Field Report | - |
| **Total** | | **75** |

## KU2MDCECO104: ECONOMICS OF STARTUP AND ENTREPRENEURSHIP

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| II | MDC | 100-199 | KU2MDCECO104 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 |

**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:

| MODULE | UNIT | DESCRIPTION | HOURS 45 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO ENTREPRENEURSHIP & START UP** | 14 |
| | 1 | Entrepreneurship and Entrepreneur | 5 |
| | | 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<br>a) Specialized Organizations for Entrepreneurial development - National and state level | 3 |
| | 5 | a) Start-up Survival and Growth | 3 |
| | | b) Startup Survival and Growth Challenges faced in initial stages, | |
| | | c) Stages of growth in a new venture, | |
| | | d) Reasons for new venture failures | |
| 2 | | **MOTIVATION AND CREATIVITY IN BUSINESS** | 14 |
| | 1 | a) Motivation-Meaning, Features, and importance | 5 |
| | | b) Theories of Motivation: Maslow's hierarchy of needs theory Achievement Motivation Theory, Herzberg's Two Factor theory McClelland's Theory of Needs | |
| | 2 | Creativity and Entrepreneurship | 4 |

| | | | |
|---|---|---|---|
| | | a) Creativity-Essential to Survival | |
| | | b) 10 Keys to business Innovation | |
| | | c) The Creative Process | |
| | 3 | Economic Theories of Entrepreneurship | |
| | | a) Dynamic Entrepreneurship Innovation Theory | |
| | | b) Harvard School Theory | 5 |
| | | c) Theory of Adjustment of price | |
| | | d) Theory of Entrepreneurial Supply | |
| 3 | **CRAFTING A BUSINESS PLAN** | | 9 |
| | 1 | Business Plan | |
| | | a) What is Business Plan | |
| | | b) Need, Purpose and Functions | |
| | | c) Three Tests of a business plan | 4 |
| | | d) The Elements of a business plan | |
| | | e) The Strategic Management Process | |
| | 2 | Creating a Business Plan | 3 |
| | 3 | Stories of Successful Entrepreneurs in India | 2 |
| 4 | **TEACHER SPECIFIC MODULE** | | 8 |
| | Directions: *This module would be allocated to examine start up funding at the national and state level. An in-depth discussion of various schemes by the central government and state government would be an ideal choice so as to expose the students to the availability of funds for investments in the start-up (to site a few, 1) Kerala Start Up Mission Funding, 2) SIDBI Schemes.* | | 8 |

**Essential Readings:**


1. Debasish Biswas and Chanchal Dey (2021). Entrepreneurship Development in India Routledge Taylor and Francis Group
2. Norman M. Scarborough Jeffrey R. Cornwal 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
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/

**Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| 1 | 1 | Essential Reading 1 and 5 |
| | 2 | Essential Reading 1 |
| | 3 | Essential Reading 1 |
| | 4 | Essential Reading 1 |
| | 5 | Essential Reading 1 and 6 |
| 2 | 1 | Essential Reading 1 |
| | 2 | Essential Reading 1, 2, 3 and 4 |
| | 3 | Essential Reading 1,2.3 and 4 |
| | 4 | Essential Reading 1,2,3 and 4 |
| 3 | 1 | Essential Reading 1 |
| | 2 | Essential Reading 1,3 and 4 |
| | 3 | Essential Reading 7. 9 |
| 4 | | Essential Reading 7 and 8 |

**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) Cornwal Essentials of Entrepreneurship and Small Business Management ninth edition Pearson Education Limited.


**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **50** |
| Continuous Evaluation | | **25** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | 7.5 |
| d) | Seminar/Debate | 3.5 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| g) | Field Report/Startup unit visit report | 4 |
| **Total** | | **75** |

## KU3DSCECO201: INTERMEDIATE MICROECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | DSC-Major | 200-299 | KU3DSCECO201 | 4 | 60 |

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

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

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

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

**-Mapping of Course Outcomes to PSOs**

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

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| **MODULE** | **UNIT** | **DESCRIPTION** | **HOURS** |
|---|---|---|---|
| **1** | **CONSUMER BEHAVIOUR ANALYSIS** | | **15** |
| | 1 | Consumer preferences | 2 |
| | | a) Market baskets | |
| | | b) Basic assumptions about consumer preferences: Completeness, consistency, transitivity and more is better than the less | |
| | 2 | Budget constraints - Budget line | 1 |
| | | a) Effects of changes in income and prices on Budget lines | |

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

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

**Essential Readings:**


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

**Reference Distribution:**

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

**Suggested Readings:**


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


**Assessment Rubrics:**

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

## KU3DSCECO202: BASIC ANALYTICAL TOOLS FOR ECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | DSC-Major | 200-299 | KU3DSCECO202 | 4 | 60 |

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

**Course Description:**

*This course 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **INTRODUCTORY STATISTICS** | | **7** |
| | 1 | Meaning and definition of statistics- Descriptive and inferential statistics- Role and functions of statistics- Limitations. | 2 |
| | 2 | Quantitative variable- Continuous and discrete variables- Qualitative variable- Nominal, ordinal, interval and ratio levels of measurement. | 1 |
| | 3 | Data-Types of data- Primary and secondary data with their merits and demerits- Techniques of primary data collection- Sources of secondary data. | 2 |
| | 4 | Population- sample- Sample size- Census vs sample surveys- Need for sampling | 2 |
| 2 | **SUMMARISING AND DESCRIBING DATA** | | **20** |
| | 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- Requisites for an ideal measure of central tendency- Properties and computation of arithmetic mean, median and mode- Relationship between mean, median and mode- Geometric and harmonic mean-Partition values: Quartiles, deciles and percentiles. | 7 |
| | 4 | Meaning and definition of dispersion-Characteristics of an ideal measure of dispersion- Properties and computation of absolute and relative measures of range, quartile deviation, mean deviation and standard deviation- Variance- Lorenz curve and Gini coefficient. | 5 |
| 3 | **MATHEMATICS AND ECONOMICS** | | **8** |
| | 1 | Importance of mathematics in economics-Mathematical economics and non-mathematical economics- Limitations of mathematical economics. | 2 |

| | | | |
|---|---|---|---|
| | 2 | Variables, constants and parameters- Equations and identities. | 1 |
| | 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** | **FUNCTIONS AND GRAPHS** | | **15** |
| | 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** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions:* Skewness and Kurtosis | | |
| | This module would be preferably based on the theoretical understanding and works on Skewness and Kurtosis | | 10 |

**Essential Readings:**


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


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential readings 4, 5 and 8 | |
| | 2 | Essential readings 1and 8 | |
| | 3 | Essential readings 5 | |
| | 4 | Essential readings 5 and 8 | |
| **2** | 1 | Essential readings 5 and 8 | |
| | 2 | Essential readings 5 and 8 | |
| | 3 | Essential readings 5 and 8 | |
| | 4 | Essential readings 5 and 8 | |

| | | | |
|---|---|---|---|
| **3** | 1 | Essential readings 3 | |
| | 2 | Essential readings 3 | |
| | 3 | Essential readings 3, 6 and 7 | |
| **4** | 1 | Essential readings 3 | |
| | 2 | Essential readings 3 and 7 | |
| | 3 | Essential readings 2 | |
| | 4 | Essential readings 3 | |
| **5** | | Essential readings 4, 5 and 8 | preferably |

**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.


**Assessment Rubrics:**

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

## KU3DSCECO203: ECONOMICS OF BANKING AND FINANCE

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | DSC-Minor | 200-299 | KU3DSCECO203 | 4 | 60 |

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

**Course Description:**

*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:**

| COs | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | The students will be equipped with theoretical as well as practical aspects of the structure and working of financial system. | R, U |
| CO 2 | To understand how central banks conduct monetary policy. | U, An |
| CO 3 | The course is expected to expand the skill set of the students for higher studies and employment in finance | R, U |
| CO 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 | R, U |
| CO 5 | To get a real-world experience with the financial market. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **FINANCIAL SYSTEM** | | **7** |
| | 1 | Financial system | 7 |
| | | a) Meaning and functions | |
| | | b) Financial intermediaries, Financial markets, Financial instruments | |
| | | c) Structure of Indian financial system | |
| 2 | **BANKING AND NON-BANKING INSTITUTIONS** | | **18** |
| | 1 | Commercial Banks | 6 |
| | | a) Definition and functions | |
| | | b) Balance sheet of a commercial bank | |
| | | c) Principles of port-folio management | |
| | | d) Mechanism of credit creation | |
| | 2 | Development Banks | 4 |
| | | a) Meaning and functions | |
| | | b) Major development banks in India (IDBI, SIDBI, NABARD) | |
| | 3 | Non-banking Financial Institutions | 3 |
| | | a) Meaning and types | |
| | | b) Difference between banking and non-banking institutions | |
| | 4 | Recent innovations in Indian banking sector | 5 |
| | | 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** | **FINANCIAL MARKETS AND INSTRUMENTS** | | **17** |
| | 1 | Money market | 5 |
| | | a) Meaning and functions | |
| | | b) Instruments; call money, commercial bill, treasury bill, certificate of deposit, commercial paper, Inter Bank Participation Certificate (IBPC), Repo instruments | |
| | | c) limitations of Indian money market | |
| | 2 | Capital market | 5 |
| | | a) Meaning and functions | |
| | | b) Indian capital market - Structure, instruments and problems | |
| | 3 | Stock exchanges (BSE, NSE), stock market index; SENSEX, NIFTY. Internet trading; meaning and advantages | 5 |
| | | a) BSE and NSE | |
| | | b) Stock market index SENSEX, NIFTY | |
| | | c) Internet trading – Meaning and advantages | |
| | 4 | d) Derivative instrument - meaning and types (forwards, futures, options, swaps) | 2 |
| **4** | **REGULATORY MECHANISM** | | **8** |
| | 1 | a) Reserve Bank of India (RBI) | 4 |
| | | a) Structure, Objectives and Functions | |
| | | b) RBI and monetary control | |
| | 2 | Securities and Exchange Board of India (SEBI) | 2 |
| | | a) Meaning, Objectives and Functions | |
| | 3 | A brief account of the objectives of IRDAI and PFRDA | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Direction: Case Study on Banking Institution of any category** | | **-** |
| | *Students can be assigned group exercises insisting them to visit any near-by banking institution of any category and submit a report of its functioning and performance. The allotted hours can be used for the presentation and discussion.* | | 10 |

**Essential Readings:**

1. M. Y. Khan, Indian Financial System, Tata McGraw Hill, 7th edition, 2011
2. K.C. Shekhar and Lekshmy Shekhar, Banking Theory and Practice, Vikas Publishing House Pvt Ltd, Noida, 21st edition, 2013

3. Narayana Nadar, E (2016) Money and Banking, PHI Learning Private Ltd, Delhi.
4. Muraleedharan, D. (2014). Modern Banking: Theory and Practice. PHI Learning Pvt. Ltd.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | **1** | Essential Readings 1 and 2 | - |
| **2** | **1 to 4** | Essential Readings 2, 3 | - |
| **3** | **1 to 4** | Essential Readings 1, 2, 3 | - |
| **4** | **1 to 3** | Essential Readings 2, 3, 4 | - |
| **5** | **-** | Annual Reports of the Respective Bank | Preferably |

**Suggested Readings:**

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

**Assessment Rubrics:**

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

## KU3DSCECO204: FUNDAMENTALS OF SOCIAL SCIENCE RESEARCH

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | DSC-Minor | 200-299 | KU3DSCECO204 | 4 | 60 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 1 | 0 | 35 | 65 | 100 | 1.5 |

**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 | **THE FOUNDATIONS OF SOCIAL SCIENCE RESEARCH** | | **12** |
| | 1 | Philosophy of Social Science | 3 |
| | | 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 | 3 |
| | | a) Historical Construction of social Science | |
| | 4 | Distinctions among Social Science | 2 |
| 2 | **TYPES OF RESEARCH** | | 11 |
| | 1 | Exploring Research Types | 2 |
| | 2 | Basic vs. Applied Research | 2 |
| | 3 | Descriptive and Analytical Approaches | 2 |
| | 4 | Qualitative and Qualitative Approach | 2 |
| | 5 | Problems in social science research: Validity, Reliability, Bias | 3 |
| 3 | **RESEARCH DESIGN AND LITERATURE REVIEW** | | 12 |
| | 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 | 4 |
| | | a) Concepts of Research Design | |
| | | b) Components of Research Design | |
| | | c) Classic Experimental Research Design | |
| | 3 | Research Questions, Hypothesis and Identifying Variables | 3 |
| 4 | **RESEARCH PROPOSAL AND FUNDAMENTALS OF RESEARCH METHODOLOGY** | | 15 |
| | 1 | Research Proposal | 4 |
| | | 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 | 7 |
| | | a) Bridging Theory and Research | |
| | | b) Methodological Diversity in Social Science Research | |
| 5 | **TEACHER SPECIFIC MODULE** | | 10 |
| | 1 | **Develop Skills in Research Design and Literature Analysis**<br>Directions: Students should formulate effective research questions and hypotheses, and conduct critical literature reviews | |
| | 2 | **Craft a Robust Research Proposal**<br>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.& Bell Edward (2021). Social Research Methods. Oxford University Press.
6. Benton, T., & Craib, I. (2011). Philosophy of social science, The philosophical Foundations o f Social Thought, Palgrave Macmillian.
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.


**Reference Distribution:**

| Module | Unit | Reference |
|---|---|---|
| 1 | 1 | Essential Reading 6 |
| | 2 | Essential Reading 6&7 |
| | 3 | Essential Reading 1 |
| | 4 | Essential Reading 1 |
| 2 | 1 | Essential Reading 5 |
| | 2 | Essential Reading 2 |
| | 3 | Essential Reading 2 |
| | 4 | Essential Reading 5 |
| | 5 | Essential Reading 7 |
| 3 | 1 | Essential Reading 2 |
| | 2 | Essential Reading 8 & 2 |
| | 3 | Essential Reading 2 |
| 4 | 1 | Essential Reading 2 |
| | 2 | Essential Reading 2 & 3 |
| | 3 | Essential Reading 2 |
| 5 | 1 | Essential Reading 2 & 3 |
| | 2 | Essential Reading 2& 3 |

**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-Theory | 50 |
| End Semester Evaluation – Practical | 15 |
| **End Semester Evaluation – Total** | **65** |
| Continuous Evaluation – Theory | 25 |
| a) Test Paper- 1 | 6 |
| b) Test Paper-2 | 6 |
| c) Assignment | 5 |
| d) Seminar | 5 |
| e) Book/ Article Review | - |
| f) Viva-Voce | 3 |
| Continuous Evaluation -Practical | 10 |
| **Continuous Internal Evaluation – Total** | **35** |
| **Grand Total** | **100** |

- **Employability for the Course:** Research Assistant in Various Institutions

## KU3DSCECO205: ECONOMICS OF CARE AND AGEING

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | DSC-Minor | 200-299 | KU3DSCECO205 | 4 | 60 |

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

**Course Description:**

*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:**

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

| | | | |
|---|---|---|---|
| | 1 | Overview of Care Economy in Kerala - Kerala's Model of Elderly Care: Initiatives, Challenges, and Best Practices | 3 |
| | 2 | Pension Schemes and Social Security for Elderly in Kerala | 2 |
| | 3 | Long-Term Care Services: Home-Based Care, Day Care Centers, and Residential Facilities | 4 |
| | 4 | Elderly Rights and Legal Frameworks in Kerala | 2 |
| **4** | **AGEING AND ECONOMIC DEVELOPMENT IN KERALA** | | **14** |
| | 1 | Economic Impact of Ageing on Kerala's Development | 4 |
| | 2 | Demographic Dividend and Demographic Transition | 5 |
| | 3 | Strengthening Social Protection Systems | 2 |
| | 4 | Integrating Ageing Agenda into Development Plans | 3 |
| **5** | Teacher Specific Module | | **10** |
| | *Directions: Activity based with discussion, interactions and assignment works* | | - |
| | *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.* | | 10 |

**Essential Readings:**


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

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

**Reference Distribution:**

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

**Suggested Readings:**

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

**Assessment Rubrics:**

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

KU3VACECO201**: ENVIRONMENTAL SENSITISATION AND DISASTER MANAGEMENT**

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | VAC | 200-299 | KU3VACECO201 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 Hours |

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

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

**Mapping of Course Outcomes to PSOs**

| 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 45 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO ENVIRONMENTAL EDUCATION** | **12** |
| | 1 | Importance of environmental studies- concept of Eco system- Components of eco system- functions of eco-system- Natural Resources available in the environment: renewable and non-renewable | 2 |
| | 2 | Relationship between human society and environment- Environmental effects of human Behaviour- Environment-Economy Interlinkages | 3 |
| | 3 | Bio-diversity and conservation- threats to bio-diversity- need to conserve natural resources | 3 |
| | 4 | Sustainable development: concept- definitions, indicators, measurements - circular economy model for a sustainable environment | 4 |
| 2 | | **SENSITIVITY ENVIRONMENTAL ISSUE, COMMUNITY PARTICIPATION AND LEGAL FRAMEWORK** | **14** |
| | 1 | Concept of Environmental Sensitivity | 1 |
| | 2 | Sensitive environmental issues at the local, national and global level: Climate change, types of pollutions, depletion of natural resources, Problem of solid Waste management- causes and effects | 3 |
| | 3 | Control measures for various types of pollution: water conservation methods, solid waste management, 3 R's (Reduce, Reuse & Recycle) effluent charges, emission permits, Pigouvian tax, subsidies and economic incentives - Major environmental movements in India: Chipko, Appiko, Silent Valley and Narmada Bachao Andolan | 5 |

| | | | |
|---|---|---|---|
| | 4 | Relevance of environmental legislation- Environmental Laws: Environmental Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Land Acquisition Rehabilitation and Resettlement Act - International Agreements: Montreal and Kyoto Protocols and Conservation on Biological Diversity | 5 |
| **3** | **INTRODUCTION TO DISASTER MANAGEMENT** | | **11** |
| | 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 | 2 |
| | 4 | Disaster mitigation organizations in national and international levels- Role and services of Voluntary organisations | 2 |
| **4** | **TEACHER SPECIFIC MODULE** | | |
| | **Directions:** Field Visit and Presentation of Experience | | **8** |
| | *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.* | | |

**Essential Readings:**


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

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

**Reference Distribution:**

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

**Suggested Readings:**

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

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

**Assessment Rubrics:**

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

## KU3VACECO202: ACADEMIC WRITING IN SOCIAL SCIENCE

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| III | VAC | 200-299 | KU3VACECO202 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 |

**Course Description:**

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

**Prerequisites:** NIL

**Course Outcomes:**

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

| | | |
|---|---|---|
| 5 | Understand and apply ethical principles in academic publishing and peer review. | U, A |

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

**Mapping of Course Outcomes to PSOs**

| COs | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
|---|---|---|---|---|---|---|---|
| CO 1 | ✔ | ✔ | ✔ | ✔ | | ✔ | |
| CO 2 | | ✔ | ✔ | ✔ | | ✔ | |
| CO 3 | | ✔ | | ✔ | | ✔ | |
| CO 4 | | ✔ | | ✔ | | | |
| CO 5 | ✔ | ✔ | ✔ | ✔ | | ✔ | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

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

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

**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

**Reference Distribution:**

| Module | Reference |
|---|---|
| 1 | 1. Graff, G., & Birkenstein, C. (2021). *They say / I say: The moves that matter in academic writing* (5th ed.). W.W. Norton & Company. |
| | 2. Stephen Bailey (2003). *Academic Writing: A practical guide for students*. Routledge Falmer, Taylor & Francis Group. New York. |
| | 3. Swales, J. M., & Feak, C. B. (2021). *Academic writing for graduate students: Essential tasks and skills* (4th ed.). University of Michigan Press. |
| 2 | 1. Galvan, J. L., & Galvan, M. C. (2021). *Writing literature reviews: A guide for students of the social and behavioural sciences* (8th ed.). Routledge. |
| | 2. Booth, W. C., Colomb, G. G., & Williams, J. M. (2016). *The craft of research* (4th ed.). University of Chicago Press. |
| | 3. Turabian, K. L. (2018). *A manual for writers of research papers, theses, and dissertations* (9th ed.). University of Chicago Press. |
| 3 | 1. Perrin, R. (2018). *Pocket guide to APA style* (6th ed.). Cengage Learning. |
| | 2. Turabian, K. L. (2018). *A manual for writers of research papers, theses, and dissertations* (9th ed.). University of Chicago Press. |
| | 3. Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers. |
| 4 | 1. Resnik, D. B. (2020). *The ethics of research with human subjects: Protecting people, advancing science, promoting trust*. Springer. |
| | 2. Wager, E., & Kleinert, S. (2011). *Responsible conduct of research* (2nd ed.). BMJ Books. |
| | 3. Singh, Y. K. (2006). *Fundamental of research methodology and statistics*. New Age International Publishers. |

**Assessment Rubrics:**

| **Evaluation Type** | **Marks** |
|---|---|
| End Semester Evaluation | **50** |
| Continuous Evaluation | **25** |

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

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

## KU4DSCECO206: INTERMEDIATE MACROECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | DSC-Major | 200-299 | KU4DSCECO206 | 4 | 60 |

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

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| | | |
|---|---|---|
| 5 | Evaluate the effectiveness of policy measures in reducing unemployment or controlling inflation in different economic environments | 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 60 |
|---|---|---|---|
| 1 | **MONEY SUPPLY AND DEMAND FOR MONEY** | | **10** |
| | 1 | a) Supply of money; definition, kinds and functions of money.<br>b) measures of money supply; high powered money and money multiplier | 4 |
| | 2 | Demand for money- Classical Theories of Money: Fisher's and Cambridge Versions of Quantity Theory of Money. | 3 |
| | 3 | Keynesian liquidity preference theory – indeterminacy of rate of interest in the liquidity preference theory – the liquidity trap. | 3 |
| 2 | **INFLATION AND UNEMPLOYMENT** | | **14** |
| | 1 | Inflation, types of inflation, measures of inflation | 2 |
| | 2 | Economic Effects of inflation | 1 |
| | 3 | Theories of inflation- classical, Neo-classical and, Keynesian theories of inflation | 3 |
| | 4 | Monetarist view on inflation | 1 |
| | 5 | Modern theories of inflation-Demand pull and cost push inflation | 1 |
| | 6 | Unemployment, measurement of unemployment rate and different types of unemployment | 3 |
| | 7 | Okun's Law | 1 |

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

**Essential Readings:**


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

**Reference Distribution:**

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

**Suggested Readings:**

1. Mukherjee, Sampat. *Analytical macroeconomics: from Keynes to Mankiw*. New Central Book Agency (P) Ltd, 2021.

2. Froyen Richard T. Macroeconomics-Theories and Policies, Macmillan Pub., Com pany, NY.
3. Dornbusch R, Stanley Fischer, and Richard Startz, Macroeconomics, McGraw Hill Inc., NY.
4. D'Souza, Errol. *Macroeconomics*. Pearson Education India, 2009.

**Assessment Rubrics:**

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

## KU4DSCECO207: ENVIRONMENTAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | DSC-Major | 200-299 | KU4DSCECO207 | 4 | 60 |

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

**Course Description:**

*This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages. Selected topics on international environmental problems are also discussed.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| Cos | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Understand key theoretical and empirical concepts in environmental economics. | R, U |
| CO 2 | Equip with a comprehensive analytical understanding of environmental policy theory, spanning from externalities to global environmental accords. | A, R |
| CO 3 | Understand and sensitise major issues in environmental valuation and the fundamental features of environmental policy tools | U, A |
| CO 4 | Understand the transboundary environmental problems and demonstrate their critical understanding of environmental policies | R, E U |
| CO 5 | Gain insight into India's environmental policies, including regulation implementation and the roles of government agencies and NGOs in conservation. | E, A, 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | | **ECONOMY AND THE NATURAL ENVIRONMENT** | **12** |
| | 1 | Why study Environmental economics?<br>a) Inter linkages between the economy and environment<br>b) First and Second law of thermodynamics and material balance model | 3 |
| | 2 | Micro foundations of Environmental Economics (welfare economics)<br>a) Classification and characterization of natural resources | 2 |
| | 3 | The relationship between economic development and environmental quality.<br>a) Environmental Kuznets curve<br>b) Environmental adjust of national income | 4 |
| | 4 | Components and Indicators of Sustainable Development<br>a) Strong and weak sustainability<br>b) Sustainable development goals | 3 |
| 2 | | **MODELLING ENVIRONMENTAL PROBLEMS AND SOLUTIONS** | **10** |
| | 1 | Review of market theory and price determination in an environmental context | 2 |
| | 2 | Market failure of pollution using both a public goods model and externality theory | 2 |
| | 3 | Allocation of property right and Coase theorem | 2 |

| | | | |
|---|---|---|---|
| | 4 | Economic solutions to environmental problems | 4 |
| | | a) Modelling a deposit refund system and pollution permit system | |
| | | b) Modelling a deposit refund system and pollution permit system | |
| **3** | **VALUATION OF ENVIRONMENTAL GOODS AND SERVICES** | | **14** |
| | 1 | Theory of environmental valuation and conceptual basis of its methods | 4 |
| | | a) Compensating Variations and Surplus | |
| | | b) Equivalent Variations and Surplus | |
| | | c) Willingness to pay or accept for improvement or loss of environmental goods and services | |
| | 2 | Empirical approaches in environmental valuation | 10 |
| | | a) Indirect Methods of environmental valuation | |
| | | i)Revealed Preference Methods: Hedonic Pricing | |
| | | ii) Revealed Preference Methods: Household Production Function approach | |
| | | iii)Revealed Preference Methods: Defensive cost, health cost, and travel cost methods | |
| | | b) Direct method of environmental valuation: Stated preference: Contingent valuation method | |
| **4** | **ENVIRONMENTAL PROBLEMS AND POLICIES** | | **14** |
| | 1 | Global Environmental issues | 3 |
| | | a) Economics of climate change | |
| | | b) Climate change and food security | |
| | 2 | International summits on combating climate change | 3 |
| | | a) UN climate change conference-latest | |
| | 3 | International trade and environment | 4 |
| | | a) Various International Environmental Agreements<br>b) Basic idea about Montreal and Kyoto Protocol and Talks on Climate Change | |
| | 4 | India's environmental policies | 4 |
| | | a) Implementation of environmental regulations and laws in India | |
| | | b) Role of government agencies and non-governmental organizations in environmental conservation | |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Direction: Study Tour (Maximum of 4 Days) - Integrate Environmental Economics into Classroom Practice* | | - |
| | *Students may be directed to visit different ecologically important places in Kerala to identify the effects of govt policies on Environmental sustainability.* | | 10 |

| | | |
|---|---|---|
| | *The hours allocated may be used for individual / group presentations on their experience.* | |

**Essential Readings:**

1. Environmental Economics and Management – Theory, Policy and Applications – Scott J Callan and Janet M Thomas
2. Environmental Economics: An Introduction" by Barry C. Field and Martha K. Field
3. Natural Resource and Environmental Economics" by Roger Perman, Yue Ma, Michael Common, and David Maddison
4. Valuing Environmental Changes: Theoretical and Empirical Perspectives" edited by J. Braden and C. Kolstad
5. Climate Change: What Everyone Needs to Know" by Joseph Romm
6. International Environmental Law and Policy" by David Hunter, James Salzman, and Durwood Zaelke
7. Environmental Law and Policy in India" by Ranganath Misra and Shalu Nigam
8. "Environmental Management: Text and Cases" by Anil Kumar De and S. Shivaraman

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential readings 1 | - |
| | 2 | Essential readings 2 & 3 | - |
| | 3 | Essential readings 1 | - |
| | 4 | Essential readings 1 | - |
| **2** | 1 | Essential readings 1 | - |
| | 2 | Essential readings 1 | - |
| | 3 | Essential readings 1 | - |
| | 4 | Essential readings 1 | - |
| **3** | 1 | Essential readings 5 | - |
| | 2 | Essential readings 5 | - |
| **4** | 1 | Essential readings 6 | - |
| | 2 | Essential readings 6 | - |
| | 3 | Essential readings 6 | - |
| | 4 | Essential readings 7 &8 | - |

**Suggested Readings:**

1. Hanley N, Shogren J.F. &White B. Environmental Economics in Theory and Practice, Macmillan
2. Kolstad C, Environmental Economics, OUP
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, Natural Resource and Environmental Economics, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, ―Environmental Economics:

A Survey,‖ Journal of Economic Literature, Volume 30:675-740.
5. The Politics of Climate Change: Environmental Dynamics in International
6. Internet on recent environment agreements

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 4 |
| d) | Seminar/Debate | 4 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| g) | Field Report / Study Tour Report | 10 |
| **Total** | | **100** |

## KU4DSCECO208:PUBLIC FINANCE

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | DSC-Major | 200-299 | KU4DSCECO208 | 4 | 60 |

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

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

**Mapping of Course Outcomes to PSOs**

| 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 | **INTRODUCTION TO PUBLIC FINANCE** | | **11** |
| | 1 | Why study public finance? | 2 |
| | | a) The role of government in the economy. | |
| | | b) Fiscal Functions, Objectives of public finance -allocation, distribution, and stabilization. | |
| | 2 | Tools of Normative Analysis. | 3 |
| | | Welfare economics principles- Pareto Efficiency, Equity, and Social Welfare. | |
| | 3 | Public Goods and Externalities. | 3 |
| | | a) Market failures. | |
| | | b) Characteristics of public goods, Public good vs private good. | |
| | | c) Externalities: positive and negative. | |
| | 4 | Creative Solutions for externality problem. | 3 |
| | | a) Private sector solution to Negative Externalities- Property Rights and Coarse Theorem. | |
| | | b) Public sector solution to Negative Externalities -Tax incentives, subsidies, regulation. | |
| 2 | **TAXATION** | | **12** |
| | 1 | Major Revenue Sources-Tax and Non-Tax Revenue. | 2 |
| | 2 | Principles of taxation - Principle of equity: Horizontal and Vertical– Ability to pay, cost of service and benefit principles. | 2 |
| | 3 | Impact and incidence of tax–Tax Shifting and its influencing factors. | 2 |
| | 4 | Major Taxes in India, Major Tax Reforms in India. | 3 |
| | 5 | Current Issues of India's Tax System-Goods and Services Tax (GST) in India: Concept and Structure. | 3 |
| 3 | **PUBLIC EXPENDITURE AND PUBLIC DEBT** | | **12** |

| | | | |
|---|---|---|---|
| | 1 | Public Expenditure –Major classification of Public Expenditure-Plan and Non-plan Expenditure-Developmental and Non-developmental expenditure- Revenue and capital expenditure. | 3 |
| | 2 | Theory of Public Expenditure-Wagner's Hypothesis, Peacock - Wiseman Hypothesis. | 3 |
| | 3 | Trends and Composition of Public Expenditure in India - FRBM Phase. | 3 |
| | 4 | Public Debt- Sources, Methods of debt redemption- Trends in Central Government Debt and Liabilities. | 3 |
| **4** | **PUBLIC BUDGET AND FISCAL FEDERALISM IN INDIA** | | **15** |
| | 1 | Public Budget: Structure -Classification of budget Concepts: Revenue Account, Capital Account. | 3 |
| | 2 | Types of Deficits and their significance - Revenue Deficit, Fiscal Deficit and Primary Deficit. | 3 |
| | 3 | Principles of Federal Finance -Finance Commission & it's functions- latest Finance Commission report. | 3 |
| | 4 | Local Finance: Meaning and problems of local finance - Functions and Resources of local bodies -Municipalities and Municipal Corporation. | 3 |
| | 5 | Challenges facing the development of fiscal federalism in India. | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions: Seminar or Presentations on Selected Issues* | | |
| | Tax evasion, black money and parallel economy in India<br>**OR**<br>An evaluative report on budgetary trends in India<br>**OR**<br>Public policy paper on Financing in higher education sector | | 10 |

**Essential Readings:**


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

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

**Reference Distribution:**

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

**Suggested Readings:**

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

**Assessment Rubrics:**

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

## KU4SECECO201: DATA ANALYSIS WITH SPREADSHEET

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | SEC | 200-299 | KU4SECECO201 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 1 | 2 | 0 | 30 | 45 | 75 | 1.5 Hrs |

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

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

**Mapping of Course Outcomes to PSOs**

| COs | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
|---|---|---|---|---|---|---|---|
| CO 1 | ✔ | | ✔ | | | | |
| CO 2 | ✔ | | | ✔ | | | |
| CO 3 | | ✔ | | | ✔ | | |
| CO 4 | | ✔ | | | ✔ | | |
| CO 5 | | ✔ | | | ✔ | | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS 45 |
|---|---|---|---|
| 1 | | EXCEL FOUNDATIONS AND DATA IMPORT | **10** |
| | 1 | a) Launching Excel, navigating the interface, basic operations. | 10 |
| | | 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. | |
| 2 | | DATA MANIPULATION AND FORMULAS | **9** |
| | 1 | a) Sorting and filtering data based on various criteria for efficient analysis. | 9 |
| | | 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 | |
| 3 | | DATA VISUALIZATION AND ANALYSIS | **9** |
| | 1 | a) Creating different chart types (bar, line, pie, scatter) based on your data. | 9 |

| | | | |
|---|---|---|---|
| | | 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. | |
| **4** | ESSENTIAL DESCRIPTIVE STATISTICS IN EXCEL | | **9** |
| | 1 | Measures of Central Tendency: | 3 |
| | | a) In-depth exploration of mean, median, mode, and weighted averages | |
| | | b) Calculation and interpretation of percentiles and quartiles for understanding data distribution | |
| | 2 | Measures of Variability: | 3 |
| | | a) Variance and standard deviation: mastering calculations and Interpretations. | |
| | | b) Range, inter-quartile range, and coefficient of variation for understanding data spread. | |
| | | c)Introduction to skewness and kurtosis for assessing data symmetry | |
| | 3 | Advanced Data Analysis Functions | 3 |
| | | a) Mastery of VAR.P, STDEV.P, SKEW, KURT, and other descriptive statistics functions | |
| | | b) Correlation analysis using Pearson's correlation coefficient and scatter plots | |
| **5** | **TEACHER SPECIFIC MODULE** | | **8** |
| | *Directions: Activity Based on Excel* | | - |
| | ● Choosing an actual economic issue relevant to India (e.g., inflation, trade, poverty).<br>● Accessing and exploring relevant economic datasets from Indian or international sources.<br>● Applying your learned skills to analyze the chosen economic issue using Excel.<br>● Creating visualizations and descriptive statistics to support your analysis of the economic issue.<br>● Preparing a final project report summarizing your findings and economic insights.<br>● Class Presentations: Sharing your projects, receiving feedback, and engaging in discussions on real-world data analysis applications. | | 8 |

**Essential Readings:**

1. Basic Computational Techniques for Data Analysis An Exploration in MS Excel, 2nd Edition (D Narayana, Sharad Ranjan, Nupur Tyagi)
2. Microsoft Excel 2019 Step by Step by Curtis Frye, Pearson Education

3. Microsoft Excel 2019: Data Analysis & Business Modelling by Wayne Winston, PHI Learning
4. Don't Fear the Spreadsheet: A Beginner's Guide to Overcoming Excel's Frustrations by Tyler Nash, Bill Jelen, Kevin Jones, Tom Urtis, Holy Macro! Books

**5. Reference Distribution:**

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

**Assessment Rubrics:**

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

## KU4SECECO202: HOSPITAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | SEC | 200-299 | KU4SECECO202 | 3 | 45 |

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

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

| | | |
|---|---|---|
| 4 | Evaluate cost analysis and analyse department wise average cost and procedure costing | An, E |

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

**-Mapping of Course Outcomes to PSOs**

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

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

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

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

**Essential Readings:**


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

**Reference Distribution:**

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

**Suggested Readings:**


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


**Assessment Rubrics:**

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

## KU4VACECO203: ECONOMICS OF CRIME AND CORRUPTION

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | VAC | 200-299 | KU4VACECO203 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 |

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Gain a comprehensive understanding of the definitions, economic costs, and international comparisons of crime, allowing them to articulate the fundamental concepts of crime economics. | R, U |
| 2 | Acquire knowledge about the structure and functioning of illegal markets, including drug trading and the potential economic effects of drug legalization. | U, An |
| 3 | Develop the ability to apply economic models to analyze criminal behavior, including the use of opportunity costs, cost-benefit analysis, probabilities, and sensitivity analysis. | A |

| | | |
|---|---|---|
| 4 | Understand the economic implications of corruption and money laundering, as well as the costs and causes of corruption from an economic perspective. | U |
| 5 | Critically evaluate anti-corruption strategies and their impact on development, as well as assess the economic burden of the criminal justice system. | E |

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

**Mapping of Course Outcomes to PSOs**

| COs | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
|---|---|---|---|---|---|---|---|
| CO 1 | ✔ | | | | | | |
| CO 2 | | ✔ | | | | | |
| CO 3 | | | ✔ | | ✔ | | |
| CO 4 | | | ✔ | | | | |
| CO 5 | | | | | | | ✔ |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **INTRODUCTION TO ECONOMICS OF CRIME** | | **8** |
| | 1 | Crime definition, and economic costs of crime, international comparisons | 3 |
| | 2 | Parallel economy | 2 |
| | 3 | Basic concepts and statistics of the economics of crime | 3 |
| 2 | **ECONOMIC IMPACT AND THE RATIONALITY OF CRIME** | | **10** |
| | 1 | Economic impact and the rationality of crime | 2 |
| | 2 | Economic model of criminal behavior: Opportunity costs of crime, cost-benefit analysis, probabilities and sensitivity analysis | 4 |
| | 3 | The Burden of Crime: Economic allocation of criminal justice system Cost comparisons of prison and corrections systems | 4 |
| 3 | **UNDERWORLD ECONOMY: EXPLORING ILLEGAL MARKETS, ORGANIZED CRIME, CORRUPTION, AND MONEY LAUNDERING** | | **19** |
| | 1 | Illegal markets and organized crime | 3 |
| | 2 | Economics of drug trading and drug abuse | 3 |
| | 3 | The economic effects of legalizing a selected drug | 3 |
| | 4 | New psychoactive substances and trafficking in synthetic drugs | 3 |
| | 5 | Corruption and Money laundering | 7 |
| | | a) Corruption and Money laundering | |

| | | | |
|---|---|---|---|
| | | b) Key international crime issue: White collar crimes, cybercrimes (phishing, hacking) | |
| | | c) Explore the costs and causes of corruption through an economic lens. | |
| | | d) Analyze anti-corruption strategies by goverment and their impact on development | |
| **4** | **TEACHER SPECIFIC MODULE** | | **8** |
| | *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.* | | 8 |

**Essential Readings:**

9. Handbook of the Economics of Crime" edited by John P. Leubsdorf and Michael
10. Corruption and Governance: Concepts, Causes, Consequences by Susan Rose- Ackerman
11. Drugs & the World Economy: Global Policy Dilemmas by Peter Reuter and David P Greenwalt (2007)
12. Databases on crime.
    - NCRB
    - BPRD
    - SCRB
13. Interpol crime areas http://www.interpol.int/Crime-areas
14. UNODC http://www.unodc.org/uno dc/index.html.

**15. Reference Distribution:**

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

**Suggested Readings:**

1. Rose-Ackerman, S. (2018). Corruption & purity. Daedalus

2. Rose-Ackerman, S. and Palifka, B. J. (2016). Corruption and government: Causes, consequences, and reform. Cambridge University Press. Chapter 1
3. Svensson, J. (2005). Eight questions about corruption. Journal of Economic Perspectives
4. Bowler, S. and Donovan, T. (2016). Campaign money, congress, and perceptions of corruption. American Politics Research
5. Fadiman, J. A. (1986). A traveler's guide to gifts and bribes. Harvard Business Review
6. Escresa, L. and Picci, L. (2017). A new cross-national measure of corruption. The World Bank Economic Review
7. Duggan, M. and Levitt, S. D. (2002). Winning isn't everything: Corruption in sumo wrestling. American Economic Review
8. Fisman, R. and Miguel, E. (2007). Corruption, norms, and legal enforcement: Evidence from diplomatic parking tickets. Journal of Political Economy
9. Treisman, D. (2007). What have we learned about the causes of corruption from ten years of cross-national empirical research Annu. Rev. Polit. Sci.
10. Olken, B. A. and Barron, P. (2009). The simple economics of extortion: evidence from trucking in Aceh. Journal of Political Economy
11. Schnakenberg, K. E. and Turner, I. R. (2019). Signaling with reform: How the threat of corruption prevents informed policymaking. American Political Science Review
12. Malesky, E. J., Gueorguiev, D. D., and Jensen, N. M. (2015). Monopoly money: Foreign investment and bribery in vietnam, a survey experiment. American Journal of Political Science

**Assessment Rubrics:**

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

| | | |
|---|---|---|
| g) | Field Report | 10 |
| **Total** | | **75** |

## KU4VACECO204: ETHICS IN ACADEMIC WRITING

| Semester | Course Type | Course Level | Course Code | Credits | Total Hours |
|---|---|---|---|---|---|
| IV | VAC | 200-299 | KU4VACECO204 | 3 | 45 |

| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
|---|---|---|---|---|---|---|
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 0 | 0 | 25 | 50 | 75 | 1.5 (Hours) |

**Course Description:**

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

**Course Prerequisite: NIL**

**Course Outcomes:**

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

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

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

**Mapping of Course Outcomes to PSOs**

| 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 | **ACADEMIC WRITING: CORE PRINCIPLES** | | **13** |
| | 1 | Integrity and Authorship: Defining academic integrity, responsible authorship, and intellectual honesty. | 3 |
| | 2 | Understanding Plagiarism: Exploring different types of plagiarism and prevention strategies. act, detection software- Turnitin | 3 |
| | 3 | Citation Strategies: Mastering proper citation styles (APA, MLA, Chicago) and reference formatting | 4 |
| | 4 | Copyright and Fair Use: Navigating copyright laws and ethical utilization of published materials | 3 |
| 2 | **RESEARCH ETHICS** | | **12** |
| | 1 | Informed Consent and Privacy: Protecting participants in research and respecting their privacy. | 3 |
| | 2 | Responsible Data Practices: Learning ethical techniques for data collection, analysis, and reporting | 3 |
| | 3 | Identifying Misconduct: Recognizing data manipulation and research misconduct | 3 |
| | 4 | Collaboration Challenges: Understanding and addressing ethical hurdles in collaborative research | 3 |
| 3 | **ETHICAL WRITING SKILLS** | | **12** |
| | 1 | Evaluating Sources: Critically assessing information sources for credibility and relevance. | 3 |
| | 2 | Paraphrasing and Quoting: Mastering effective paraphrasing, summarizing, and quoting techniques. | 3 |

| | | | |
|---|---|---|---|
| | 3 | Applying Integrity: Putting ethical principles into practice across various writing tasks | 3 |
| | 4 | Reflection and Prevention: Developing self-evaluation skills and strategies for preventing academic misconduct. | 3 |
| **4** | **TEACHER SPECIFIC MODULE** | | **8** |
| | Directions: This module can focus on engaging students in some of the following selected topics; | | |
| | ● Pedagogical Approaches: Strategies for teaching academic integrity, responsible authorship, and ethical writing practices.<br>● Creating Assignments: Designing assignments that promote ethical writing and critical thinking.<br>● Providing Feedback: Effective feedback techniques to address plagiarism and promote ethical writing.<br>● Classroom Discussions: Facilitating discussions on ethical dilemmas in writing and research.<br>● Academic Integrity Policies: Implementing and enforcing academic integrity policies in the classroom.<br>● Professional Development: Resources for teachers to enhance their own understanding of ethical writing practices. | | 10 |

**Essential Readings:**

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

**5. Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Reading 1 - 4 | - |
| | 2 | Essential Reading 1 - 4 | - |
| | 3 | Essential Reading 1 - 4 | - |
| | 4 | Essential Reading 1 - 4 | - |
| **2** | 1 | Essential Reading 1 - 4 | - |
| | 2 | Essential Reading 1 - 4 | - |
| | 3 | Essential Reading 1 - 4 | - |

| | | | |
|---|---|---|---|
| | 4 | Essential Reading 1 – 4 | - |
| **3** | 1 | Essential Reading 1 – 4 | - |
| | 2 | Essential Reading 1 – 4 | - |
| | 3 | Essential Reading 1 – 4 | - |
| | 4 | Essential Reading 1 – 4 | - |

**Suggested Readings:**


1. Ahuja, Ram. Research Method, Rawat Publication, New Delhi, 2001
2. Art, RobertJ. and Jervis, Robert International Politics: Enduring Concepts and Contemporary Issues, Longman, 2010
3. Dhiman, Delhi, AK and SC Sinha. Research Methodology, EssEss Publication, New 2002
4. Fowler, Flyod J. (Jr). Survey Research Methods, Sage, Beverley Hills, 1984.
5. Gerring, John 2004. "What is a Case Study and What is it Good for?"Anerican Political Science Review
6. Kuhn, Thomas, The Structure of Scientific Revolution, Chicago: University of Chicago Press, 2012. (50th edition).
7. Popper, Press, 2013. Karl, Open Society and Its Enemies, New Jersy: Pentagon University
8. Kohari, New Age C. R and Garg, Research Methodology: Methods and Techniques, International Publisher, New Delhi, 2019 (4th edition).
9. A, Maclntyre. (1974). A Short History of Ethics. London.


**Assessment Rubrics:**

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

## KU5DSCECO301: INTERNATIONAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSC-Major | 300-399 | KU5DSCECO301 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | - | - | 30 | 70 | 100 | 2 |

***Course Description:***

*This course provides a comprehensive understanding of the principles and complexities of international economics. It covers the nature, scope, and significance of international trade and the key theories that explain trade patterns and policies. Moreover, the syllabus introduces various analytical tools and models to understand the dynamics of international trade, foreign exchange markets, and balance of payments.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Students will recall key concepts and theories related to international economics including traditional and modern trade theories | ***R*** |
| 2 | Students will explain the differences between internal and international trade and interpret various analytical tools used in international economics | ***U,An*** |
| 3 | Students will apply international trade theories and policies to analyse real-world trade patterns and issues. | **A** |
| 4 | Students will examine the factors contributing to balance of payments equilibrium and disequilibrium and analyse the effects of different trade policies. | **Analyse (An)** |
| 5 | Students will critically evaluate the implications of trade theories and policies on economic growth and development | **E ,C** |

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

**Mapping of Course Outcomes to PSOs**

| CO | 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 | **INTRODUCTION TO INTERNATIONAL ECONOMICS** | | **10** |
| | 1 | International economics-Nature, scope, subject matter and importance. | 3 |
| | 2 | Differences between internal and international trade. | 2 |
| | 3 | Various tools in international theory | |
| | | a) linear and non-linear Production Possibility curve, | 2 |
| | | b) Community indifference Curve | 2 |
| | | c) Offer curve | 1 |
| 2 | **THEORIES OF INTERNATIONAL TRADE** | | **15** |
| | 1 | Traditional theories-. | |
| | | a) Adam smith's absolute advantage theory, | 2 |
| | | b) Ricardos comparative advantage, | 2 |
| | | c) Gottfried Haberle's opportunity cost theory | 4 |
| | 2 | Modern theories-. | |
| | | a) Theory of Reciprocal Demand | 3 |
| | | b) Heckscher-Ohlin Theory and Leontief Paradox. | 4 |
| 3 | **TRADE RELATED POLICIES** | | **15** |

| | | | |
|---|---|---|---|
| | 1 | Terms of Trade – Terms of trade and its importance, classification of TOT | 3 |
| | 2 | Commercial policy – Free trade vs protection | 3 |
| | 3 | Methods of trade restrictions | |
| | | a) Tariff barriers and non-tariff barriers | 2 |
| | | b) Types of tariffs, effect of tariff | 3 |
| | | c) Methods of non-tariff barriers – Quotas, Export subsidies, Voluntary Exchange restraints, international cartels, Dumping, technical, administrative and other measures. | 4 |
| **4** | **FOREIGN EXCHANGE AND BALANCE OF PAYMENT** | | **10** |
| | 1 | Foreign Exchange – Foreign exchange market and its structures. | 1 |
| | 2 | The foreign exchange rate fixed and flexible | 1 |
| | 3 | Theories of exchange rate Termination, | |
| | | a) The Mint Parity theory | 1 |
| | | b)The Purchasing Power Parity theory, | 1 |
| | | c)Demand and supply analysis | 1 |
| | 4 | Balance of Trade and Balance of Payments | |
| | | a) Meaning and definition | 1 |
| | | b) Structure of BOP- Current account and Capital account | 1 |
| | | c) **B**alance of payment equilibrium and disequilibrium | 2 |
| | | d) Causes of disequilibrium – corrective measures- automatic and deliberate measures | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | This module may be meant for teaching the concept of Global Value Chains, understanding how production processes are fragmented and distributed across different countries. This topic will cover the roles of various nations in different stages of production, the economic benefits and challenges of GVCs, and their impact on international trade and global economic integration. | | |

**Essential Readings:**

1. Rana and Verma: (2009) International Economics (Fifth edition) Vishal Publishing Co-New Delhi
2. Cherunilam Francis: 2006) International Economics (5th Edition) Tata McGraw-Hill Companies.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings: 1 | |
| | 2 | Essential Readings: 1 | |
| | 3 | Essential Readings: 1 | |
| **2** | 1 | Essential Readings: 1/2 | |
| | 2 | Essential Readings: 1/2 | |
| **3** | 1 | Essential Readings: 1/2 | -- |
| | 2 | Essential Readings: 1/2 | -- |
| | 3 | Essential Readings: 1/2 | -- |
| **4** | 1 | Essential Readings: 1/2 | -- |
| | 2 | Essential Readings: 1/2 | -- |
| | 3 | Essential Readings: 1/2 | |
| | 4 | Essential Readings: 1/2 | -- |

**Suggested Readings:**

1. Sodersten, Bo and Reed. G. (2005), International Economics, 3rd edition, Mc Millian Press Ltd.– International Economics.
2. Dominic Salvatore, (Recent Edition), International Economics: Trade and Finance, John Wiley and Sons, Limited.

**Assessment Rubrics:**

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

## KU5DSCECO302: HETERODOX ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSC | 300-399 | KU5DSCECO302 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

This course aims at providing a variety of perspectives outside the established orthodoxy and neo-classical economics. Students may get an opportunity to familiarise different perspectives in terms of economic theory, method and policy against the backdrop of pluralism. The course shall also enhance and diversify knowledge profile of students and provide a sound base to pursue higher education and research in heterodox economics. Further, the study of heterodox economics provides space for critical thinking, epistemological relativity and ontology which, *inter alia,* are the important pillars of heterodox knowledge production.

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | This course shall provide an alternative to mainstream economics and thereby students may get an opportunity to familiarise different perspectives of and approaches to economic analysis based on pluralism in economic theory. | U,A, An |
| 2 | The course content shall strengthen the knowledge profile of students by familiarising different perspectives of economic theory and policy. | U,A, An |
| 3 | Such an exposure shall enhance and diversify the knowledge profile of students and may get opportunities to pursue higher education and research by employing theory and method of heterodox economics. | A, An,E |
| 4 | This course seeks to cultivate analytical and critical skills relevant to development policy and other methods relevant to address development challenges such as inequality, discrimination, and corruption. | A, E |
| 5 | The course shall also provide an opportunity for students to apply heterodox economic policies for stabilisation and development | U,A, An and E |

***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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **FROM ORTHODOXY TO HETERODOXY** | **10** |
| | 1 | Orthodox, Mainstream and Neo-classical economics: A brief overview. | 3 |
| | 2 | Equilibrium-Paradigm Blindness-Market and Market Failure-Information Asymmetry-Role of Institutions. | 3 |
| | 3 | Heterodox Economics: History, Concept, Nature, Scope and Principles. | 4 |
| 2 | | **THEORY AND METHOD** | **16** |
| | 1 | Central Theoretical Cores in Heterodox Economics: Social Provisioning- Social Surplus Approach-Accumulation-Effective Demand-Theory of Monetary Production. | 4 |
| | 2 | A brief outline of Heterodox Micro, Macro, Development and International Economics. | 4 |
| | 3 | Methodology of Heterodox Economics: Philosophical foundation-Pluralism- Evolutionary Perspective-Institutional base-Critical Realism-Epistemological Relativism-Ontology. | 4 |
| | 4 | Teaching (heterodox) Economics. | 2 |
| | 5 | Challenges to Heterodox Economics. | 1 |
| | 6 | Future of Heterodox Economics | 1 |
| 3 | | **HETERODOX ECONOMICS: EARLY AND NEW PERSPECTIVES (BRIEF OVERVIEW)** | **14** |
| | 1 | Early perspectives- Marxian Economics-Institutional Economics. | 3 |
| | 2 | Keynesian Economics- Post-Keynesian economics. | 3 |

| | | | |
|---|---|---|---|
| | 3 | Basic Contributions of Piero Sraffa- Michael Kalecki- Joan Robinson- Hyman Minsky-and Frederic Steve Lee to economic theory. | 3 |
| | 4 | New Heterodox Economic Perspectives: Evolutionary Economics- Social Economics-Complexity Economics -Experimental Economics- Behavioural Economics- Feminist Economics– Ecological Economics- Radical Political Economics- Humanistic Economics- Green Economics. | 5 |
| **4** | **INDIAN HETERODOX ECONOMICS** | | **10** |
| | 1 | Indian Heterodox Economics: History and Growth- | 2 |
| | 2 | Some Leading Indian heterodox Economists and their contributions: | 8 |
| | | a)Amartya Sen-Sukhamoy Chakravarthy-Krishna Bharadwaj-Amiya Kumar Bagchi- | |
| | | b)Meghanad Desai-Amit Bhaduri-Ajit Singh-Prabhat Patnaik. | |
| | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions* | | |
| | *Note: Students may be encouraged to prepare and submit Seminar Papers and Assignments/Book Reviews largely based on the contributions/ writings of Karl Marx, Thorstein Veblen, J M Keynes, Michael Kalecki, Piero Sraffa, Joan Robinson, Hyman Minsky and F S Lee* | | |

**Essential Readings:**


1. Dequech, David (2008) Neo-classical, Mainstream, Orthodox and Heterodox Economics, ***Journal of Post-Keynesian Economics*****,** Vol.30, No.2 (Winter 2007-2008) pp.279-302.
2. Dequech, David (2012) Post-Keynesianism, Heterodoxy and Mainstream Economics, ***Review of Political Economy***, April, 2012, Vol.24, No.2, pp. 353-368
3. Lawson, Tony (2006) The Nature of Heterodox Economics, in ***Cambridge Journal of Economics***, Vol30. No.2, pp.483-507.
4. Lawson, Tony (2004) A Conception of ontology, Mimeo. University of Cambridge. Availableat http://www.csog.group.cam.ac.uk/A Conception of Ontology.pdf
5. Estey, James Arthur (1936) Orthodox Economic Theory: A Defence, ***The Journal of Political Economy***, XLIV (6)pp. 791-802, Diciembre de
6. Lee, F. (2009). A History of Heterodox Economics: Challenging the Mainstream in the Twentieth Century. Routledge.
7. Jo, T. H., Chester, L., & D'Ippoliti, C. (Eds.). (2017). The Routledge Handbook of Heterodox Economics. London. Part I and II pp 3-145 and part IV pp. 513-533
8. Albelda, R (2016). Alternatives to Economic Orthodoxy: Reader in Political Economy: Routledge.
9. Lawson, Tony (1997) Economics and Reality. London: Routledge
10. Goldstein Jonathan P and Michael G Hillard (2009) Heterodox macroeconomics: Keynes, Marx and Globalisation, Routledge. Ch 4 Methodology and Heterodox Economics, pp 54-65
11. Mearman, A., Berger, S., & Guizzo, D. (2019). What is Heterodox Economics? Conversations with Leading Economists. Routledge.
12. Fischer, L., Hasell, J., Proctor, J. C., Uwakwe, D., Perkins, Z. W., & Watson, C. (Ed.2017).Rethinking Economics: An Introduction to Pluralist Economics. Routledge.

13. Jo, T. H., Chester, L., & D'Ippoliti, C. (Eds.). (2017). The Routledge Handbook of Heterodox Economics. London.
14. Lee, Frederic Steve (2014) Microeconomic Theory: A Heterodox Approach, London: Routledge
15. Lee, F S and T.H Jo (2011) Social Surplus Approach and Heterodox Economics, **Journal of Economic Issues** 45(4) pp. 857-875
16. Jo, T. H., & Lee, F. (Eds.). (2015). Marx, Veblen, and the Foundations of Heterodox Economics: Essays in Honour of John F. Henry. Routledge.
17. Ashokan, A (2021) An Introduction to Heterodox Economics, Kairali Books, Kannur
18. . Mearman, A., Berger, S., & Guizzo, D. (2019). What is Heterodox Economics? Conversations with Leading Economists. Routledge.
19. Heilbroner, R. L. (2011). The Worldly Philosophers: The Lives, Times and Ideas of the Great Economic Thinkers. Simon and Schuster.
20. Lavoie, Mark (2014) Introduction to Heterodox and Post-Keynesian economics, University of Ottava
21. Shackleton, J A and Locksley Gareth (Ed.1981) Twelve Contemporary Economists, Palgrave, Macmillan.
22. Slaughter, Cliff (2000) Marx and Marxism, Orient Longman
23. Sen, Sunanda (2016) Evolution of Heterodox Economics Ideas in India
24. Ashokan, A (2024) Indian Heterodox Economics: History and Growth (Forthcoming).
25. Reardson, Jack (2009) The Handbook of Pluralistic Economics Education, London: Routledge (chapters: 1, 4, 5 &7)

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1.1 | 1,2,5 | |
| | 1.2 | 13, 14 | |
| | 1.3 | 3,6, 7, 8,18 | |
| **2** | 2.1 | 9,11,13,15 | |
| | 2.2 | 14,17 | |
| | 2.3 | 10,13,17 | |
| | 2.4 | 4,7,9,10,25(ch:7) | |
| | 2.5 | 7,8 | |
| | 2.6 | 7,8 | |
| **3** | 3.1 | 16,19,21 | -- |
| | 3.2 | 20 | -- |
| | 3.3 | 17,21 | -- |
| | 3.4 | 17,19 | |
| **4** | 4.1 | 17,23,24 | -- |
| | 4.2 | 17,23,24,25 | -- |

**Suggested Readings:**

1. Edward Fullbrook (Ed. 2009) Ontology and Economics. London: Routledge (Chapters 3, 5, 6)
2. Hausman, Daniel(1984) The Philosophy of Economics: An Anthology, Cambridge University Press(Chapters 4,5,15,22 & 23)

**Assessment Rubrics:**

| Evaluation Type | Marks |
|---|---|

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

## KU5DSCECO303: STATISTICAL TOOLS FOR ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSC | 300 - 399 | KU5DSCECO303 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course aims to equip students with the essential statistical tools and techniques for understanding and analysing economic phenomena. The course covers a range of topics such as correlation, regression, index numbers and time series analysis with a focus on applications in economics. The course also covers topics such as probability, sampling distribution and hypothesis testing.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Understand the fundamental statistical concepts discussed in the course | R, U |
| 2 | Analyse the relationship between variables using the techniques of correlation and regression | An |
| 3 | Estimate index number using appropriate method | U, A |
| 4 | Understand the concept of probability and solve problems | U, A |
| 5 | Comprehend the basics of hypothesis testing | R, U |

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

| **Mapping of Course Outcomes to PSOs** | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO | 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 | **CORRELATION AND REGRESSION** | | **10** |
| | 1 | Meaning and types of correlation - Measures of correlation (Graphical, Karl Pearson's coefficient and rank correlation coefficient)- Properties of correlation coefficient- Use examples from economics for computation. | 5 |
| | 2 | Meaning and types of regression- Methods of estimation (Scatter diagram & methods of lest square). Estimating simple regression function using examples from economics (Consumption function, saving function, production function etc.). Relationship between correlation and regression. | 5 |
| 2 | **INDEX NUMBERS AND TIME SERIES** | | **15** |
| | 1 | Meaning and types of index numbers-Uses of index number- Problems in the construction of index number | 2 |
| | 2 | Laspeyre's, Paasche's, Marshall-Edgeworth, Bowley's and Fisher's indices. Tests of index numbers. Shifting the base and splicing. Consumer Price Index (CPI), Wholesale Price Index (WPI), Index of Industrial Production (IIP). | 5 |
| | 3 | Meaning and definition of time series- Components of a time series- Approaches to time series analysis | 3 |
| | 4 | Methods of estimating trend and seasonal variation | 5 |
| 3 | **THEORY OF PROBABILITY** | | **15** |
| | 1 | Basic concepts of probability- Random experiment, outcome, discrete and continuous random variable, sample point, sample space, sample events and types- Permutations and combinations. | 3 |
| | 2 | Classical, relative frequency and subjective approaches to defining probability | 2 |
| | 3 | Additive, conditional probability and multiplication rules of probability and problems based on the rules. Bayes' theorem and problems. | 6 |
| | 4 | Conceptual introduction of Binomial, Poisson and Normal distribution- Standard normal curve and its properties. | 4 |

| | | | |
|---|---|---|---|
| **4** | **SAMPLING DISTRIBUTION AND BASICS OF HYPOTHESIS TESTING** | | **10** |
| | 1 | Population and sample- Sampling- Need for sampling -Random and non-random sampling methods- Sampling and non-sampling errors. | 4 |
| | 2 | Parameter and statistic- Meaning and definition of sampling distribution- Sampling distribution of mean- Central limit theorem. | 3 |
| | 3 | Meaning and definition of hypothesis- Null and alternative hypothesis- Level of significance, Degrees of freedom, Type I &II error, one tailed and two tailed tests, p- value- Procedure of hypothesis testing. | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions:* Works based on analytical questions at the end of the modules from any of the essential reading suggested in the syllabus. | | |
| | The module would be preferably set by giving emphasise to exercises on the modules in the syllabus or any other theme which would make learning the course better experience to the learners. | | 10 |

**Essential Readings:**


1. Doane, D. P., & Seward, L. E. (2022). Applied statistics in business and economics. McGraw Hill.
2. Freedman, D., Pisani, R., & Purves, R. (2007). *Statistics*. W.W. Norton & Company.
3. Hooda, R. P. (2013). *Statistics for business and economics*. Vikas Publishing House.
4. Whitte, R. S., & Whitte, J. S. (2017). *Statistics*. Wiley.


**Reference Distribution:**

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

**Suggested Readings:**

1. Aczel, A. D., & Sounderpandian, J. (2008). *Business statistics*. McGraw Hill.
2. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cocharan, J. J. (2018). Statistics for business & economics. Cengage.
3. Gupta, S. C., & Kapoor, V. K. (2020). *Fundamentals of mathematical statistics*. Sultan Chand & Sons.
4. Spigel, M. R., & Stephens, L. J. (2008). *Schaum's outline of theory and problems of statistics*. McGraw-Hill.

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment-(2) | 10 |
| d) | Seminar | 8 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| g) | Field Report | - |
| **Total** | | **100** |

## KU5DSEECO301: CONTOURS OF ECONOMIC IDEAS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSE | 300-399 | KU5DSEECO301 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

The course endeavours to offer students a comprehensive understanding of the progression of economic thought, aiding them in comprehending the analytical principles and ideological frameworks established by prominent economists over time. It enables learners to grasp the nuanced ebb and flow within dominant paradigms Through an exploration of these scholars' works, students can glean valuable insights into the varied perspectives that have influenced both economic theory and policy over the years.

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Evaluate similarities and differences across the schools/paradigms and Identify the main ideas of classical political economy | R,U,E |
| CO 2 | Develop a comprehensive understanding of alternative economic theories and their critiques of classical political economy | C, U |
| CO 3 | Analyze ideas of Neo-Classical Economics to scrutinize current economic phenomena and policy debates .. | An, A |
| CO 4 | Evaluate Keynesian policies in light of post-Keynesian economic theory advancements.. | An, E |
| CO 5 | Assess the merits and limitations of contemporary economics in addressing major economic and social questions | E,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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | | **THE PRE-HISTORY OF POLITICAL ECONOMY AND CLASSICAL ECONOMIC THOUGHT** | **12** |
| | 1 | Significance of the study of economic Thought, Timescale of economic ideas, The pre-history of political economy. | 2 |
| | | a) Mercantilism -Major tenets. | 1 |
| | | b) Physiocracy- Major tenets -Quesnay's Tableau Economique. | 1 |
| | 2 | The Classical School -. | 2 |
| | | Adam Smith -Wealth of Nations- The Economic laws of a Competitive economy-Division of labour-The harmony of interest and Limited government -Economic Development. | |
| | 3 | Thomas Robert Malthus- Population Theory –Theory of profit and rent-Theory of market gluts. | 1 |
| | 4 | David Ricardo- Theory of value-Comparative advantage- Money and taxation -theory of Income Distribution and growth. | 2 |
| | 5 | John Stuart Mill-Principles of Political Economy- reciprocal demand. | 1 |
| | 6 | J B Say – Say's law of markets. | 2 |
| 2 | | **CRITICS OF CLASSICISM :MARXIAN POLITICAL ECONOMY , MARGINALISM AND NEO –CLASSICISM-I** | **15** |
| | 1 | Marxian Political Economy. | 3 |
| | | a) Marx's Critique of Classical Economics The Marxian methodology .The critique of capitalism and exploitation- Accumulation and expanded reproduction. | |
| | | b) The laws of motion of capitalist society- The transformation of labour values into prices of production- A critical assessment. | |
| | 2 | Marginalism and Neo –Classicism | 3 |

| | | | |
|---|---|---|---|
| | | a) The 'Marginalist revolution': an overview-classicism versus neo-classicism. | |
| | 3 | William Stanley Jevons- subjective theory of value- Real cost and opportunity cost- notion of capital. | 2 |
| | 4 | The Austrian school- Carl Menger- Value Theory-Economic Methodology-Friedrich Von Wieser- Exchange value and Natural value-Opportunity Cost - B¨ohm-Bawerk- Theory of Capital and Interest. | 5 |
| | 5 | Leon Walras- General equilibrium .Wilfredo Pareto-Law of Income Distribution,-Ordinal Utility,Pareto's Optimality. | 2 |
| **3** | **NEO-CLASSICISM-II, KEYNESIAN AND POST-KEYNESIAN SCHOOLS** | | **15** |
| | 1 | Alfred Marshall- Partial Equilibrium Analysis -Utility and Demand-Distribution of Income- -Internal versus External economies-Retunes to Scale. | 2 |
| | 2 | A.C Pigou-Divergence between private and social cost and benefits-Economic welfare- Irving Fisher-Theory of Interest-Quantity Theory of Money. | 2 |
| | 3 | Institutionalism – Major Tenets -Thornstein Veblen – Theory of Leisure Class- Overview of new Institutionalism. | 2 |
| | 4 | Keynesian Revolution – Keynesian theory of Employment, Effective Demand, Underemployment equilibrium, Concept of Multiplier. | 5 |
| | 5 | Post Keynesian Developments: Monetarism, New -Classical Economics, -New-Keynesian Economics. | 4 |
| **4** | **CONTRIBUTIONS OF INDIAN ECONOMISTS AND LATEST NOBEL LAUREATES** | | **8** |
| | 1 | Amartya Sen, contributions to welfare economics-social choice .inequality. | 2 |
| | 2 | Abhijit Banerjee-Experimental Approach to Alleviating Global Poverty. | 2 |
| | 3 | Jagadish Bhagavathi- International trade theory and economic development. | 2 |
| | 4 | Koushik Basu – Major economic ideas- contributions to economic development. | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions* | | |
| | **1,**What causes Economic Crises? Neoclassical and New Keynesian interpretations/ Standard interpretation using Keynes/ Marxian theories of crisis/ Alternative Interpretations of the Crisis- Seminar/<br><br>2 Mainstream & Heterodox Economics-group discussion/<br>3. The Role of the State in Economics; Role of the state in historical perspective-Smith, Mill, Pigou, Coase, Keynes, Marx-Debate/ | | |

| | | |
|---|---|---|
| | 4, What are the Causes of Unemployment - Neoclassical explanation for unemployment-Keynes and involuntary unemployment-Marx's reserve army labour-.Is full employment possible? Assignment/<br>5.Indian Economists: PrepareTaxonomy(classifying contemporary Indian economists based on various criteria such as their theoretical frameworks, areas of specialization, policy perspectives, or contributions to economic thought and practice)<br>6. Discussion-Latest Nobel Laureates- (very brief description) David Card, Joshua Angrist (2021) Philip H. Dybvig, Douglas W. Diamond, Ben S. Bernanke (2022)Claudia Goldin(2023)-give core ideas | |

**Essential Readings:**


1. Stanley L Brue and Randy R Grant (2007) The history of economic thought, 7th edition, Thomson
2. Roncaglia A.( 2006)The Wealth of Ideas. A History of Economic Thought. Cambridge University Press
3. Pressman, S. (2006) Fifty Major Economists. London ; New York: Routledge.
4. Hunt, E.K., & Lautzenheiser, M. (2011). History of Economic Thought: A Critical Perspective (3rd ed.).
5. Routledge. Olken, Benjamin A. "Banerjee, Duflo, Kremer, (July 2020)the Rise of Modern Development Economics." Scandinavian Journal of Economics 122, 3: 853-878
6. Koushik Basu(2010), Beyond the Invisible Hand: Groundwork for a New Economics, Princeton University Press, Princeton,.Penguin edition for South Asia region, 2011
7. Bhaduri, Amit. (2010). A Contribution to the Theory of Financial Fragility and Crisis. Levy Economics Institute, The, Economics Working Paper Archive. 35. 10.2139/ssrn.1605151
8. Bhagwati, Jagdish N. and Panagariya, Arvind(2013)Why Growth Matters: How Economic Growth in India Reduced Poverty and the Lessons for Other Developing Countries, Faculty Books. 279.
9. https://www.nobelprize.org/prizes/lists/all-prizes-in-economic-sciences>
10. Ernesto Screpanti and Stefano Zamagni(2005) ,An outline of history of economic thought, Oxford University Press


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential reading1,2 | |
| | 2 | Essential reading 1,2 | |
| | 3 | Essential reading 1,2 | |
| | 4 | Essential reading1,3,4 | |
| | 5 | Essential reading1,3,4 | |
| | 6 | Essential reading 3,10 | |
| 2 | 1 | Essential reading 1 ,2 | |
| | 2 | Essential reading 2 | |
| | 3 | Essential reading 2 | |
| | 4 | Essential reading 3 ,1 | |
| | 5 | Essential reading 1,3 | |
| 3 | 1 | Essential reading 1,10 | |
| | 2 | Essential reading 1 | |

| | | | |
|---|---|---|---|
| | 3 | Essential reading 1,3 | |
| | 4 | Essential reading 1,2,8 | |
| | 5 | Essential reading 2,4 | |
| **4** | 1 | Essential reading 1 | |
| | 2 | Essential reading 5 | |
| | 3 | Essential reading 8 | |
| | 4 | Essential reading 6 | |
| | 5 | Essential reading 7 | |
| | 6 | Essential reading 9 | |

**Suggested Readings:**

1. Backhouse, R. (2024). The Ordinary Business of Life: A History of Economics from the Ancient World to the Twenty-First Century. (New Edition ed.) Princeton University Press. http://www. hetwebsite.net/het/.
2. Niall Kishtain, "A Little History of Economics" (Yale University Press, 2017)
3. Roger Backhouse and Keith Tribe(2017) , "The History of Economics" ,Agenda Publishing, USA.
4. http://www.nobel.se/economics/index.html

**Assessment Rubrics:**

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

## KU5DSEECO302: ECONOMIC GEOGRAPHY

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSE | 300-399 | KU5DSEECO302 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course provides an in-depth exploration of Economic Geography, examining the spatial dimensions of economic activities, resource utilization, regional development, globalization, and contemporary issues shaping today's economic landscape. Through a blend of theoretical frameworks, case studies, and practical applications, students will gain a holistic understanding of how geography influences economic systems, patterns, and trends.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Gain a clear understanding of the definition, scope, and importance of economic geography | R, U |
| 2 | Explore the relationship between economic geography, economics, and other geographic subfields | R, U |
| 3 | Understand the spatial distribution of economic activities and the factors influencing their location. | R, U |
| 4 | Assess the impact of globalization on regional economies and strategies for promoting sustainable development | R, U, An |

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

**Mapping of Course Outcomes to PSOs**

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO 4 | ✓ | ✓ | | | ✓ | | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS60 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO ECONOMIC GEOGRAPHY** | 10 |
| | 1 | Definition, Scope, and importance of economic geography | |
| | 2 | Key concepts and approaches to economic geography | |
| | 3 | Relationship with economics and other geographic subfields. | |
| | 4 | Classification of Economic Activities – Primary, Secondary and Tertiary | |
| 2 | | **RESOURCES AND ECONOMIC ACTIVITY** | 15 |
| | 1 | Location of Economic Activity | |
| | 2 | Geographical bases of economic activities: Systematic and spatial | |
| | 3 | Agricultural Location theory of Von Thunen | |
| | 4 | Industrial Location Theory of A. Weber | |
| | 5 | Dynamic concept of Resource | |
| | 6 | Types of Resources (Natural, Manmade and Human). | |
| | 7 | Classification of Resources- Biotic & Abiotic, Renewable, Exhaustible & Inexhaustible | |
| | 8 | Resource utilization - Patterns and problems | |
| 3 | | **REGIONAL DEVELOPMENT AND GLOBALIZATION** | 15 |
| | 1 | Spatial inequalities and regional disparities | |
| | 2 | Theories of economic development and growth models (Limits to growth theory, core-periphery model). | |
| | 3 | The impact of globalization on regional economies | |
| | 4 | Strategies for promoting sustainable development and inclusive development | |
| 4 | | **CONTEMPORARY ISSUES IN ECONOMIC GEOGRAPHY** | 10 |
| | 1 | Transportation and Communication Infrastructure in Economic Development | |
| | 2 | The digital divide and its economic implications | |
| | 3 | Climate change and its impact on economic activity | |
| | 4 | The rise of knowledge-based economies and the role of innovation | |
| | 5 | Geographic Information Systems (GIS) | |
| | 6 | The future of work in a globalized world (automation, skills gap). | |

| | | |
|---|---|---|
| **5** | **TEACHER SPECIFIC MODULE**<br>This module can include a combination of lectures, discussions, case studies, and practical exercises to engage students and deepen their understanding of economic geography concepts and issues. Additionally, incorporating real-world examples and current events can help illustrate the relevance of economic geography in today's globalized world. | **10** |

**Essential Readings:**


1. Smith, Neil J. (2016). *Economic Geography.* Seventh Edition. Routledge.
2. Dicken, Peter. (2017). World Economic Geography. Third Edition. Oxford University Press
3. Sher Singh Parmar (2003) Geography, Economics and Economic Geography


**Reference Distribution:**

| Module | Reference | Remarks |
|---|---|---|
| **1** | • Smith, Neil J. (2016). *Economic Geography.* Seventh Edition. Routledge. | - |
| | • Dicken, Peter. (2017). World Economic Geography. Third Edition. Oxford University Press | - |
| | • Harvey, David. (2006). The Geography of Economics. Third Edition. University of Pennsylvania Press | - |
| | • Sher Singh Parmar (2003) Geography, Economics and Economic Geography | - |
| **2** | • Beauregard, Robert A. (2016). Place and the Economic Order. Routledge. | - |
| | • Clark, Gordon L., Michael T. Feldman, and Martha Louise Crone. (2011). | - |
| | • Smith, Neil J. (2016). Economic Geography. Seventh Edition. Routledge.Dicken, | - |
| | • Peter. (2017). World Economic Geography. Third Edition. Oxford University Press | - |
| | • Scott, Allen J. (1998). *Foundations of Location Theory.* Edward Elgar Publishing | - |
| | • Sher Singh Parmar (2003) Geography, Economics and Economic Geography | - |
| **3** | • Smith, Neil J. (2016). Economic Geography. Seventh Edition. Routledge | - |
| | • Dicken, Peter. (2017). World Economic Geography. Third Edition. Oxford University Press | - |
| | • Sher Singh Parmar (2003) Geography, Economics and Economic Geography | - |
| **4** | • Susan L. Bryant (2002)The Geography of the Digital Divide "Bridging the Digital Divide: A Global Perspective" by The International Telecommunication Union (ITU) (2021 report) (https://www.itu.int/en/mediacentre/Pages/PR-09-2021-P2C-Bridging- | - |

| | | |
|---|---|---|
| | Digital-Divide.aspx) | |
| | • "The Economic Risks of Climate Change" by The World Bank (2021report)(https://www.worldbank.org/en/topic/climatechange/overview) | - |
| | • "How Countries Can Harness Innovation for Inclusive Growth" by The Organisation for Economic Co-operation and Development (OECD)(2019 reporhttps://www.oecd.org/education/innovationeducation/1825293.pdf) | - |
| | • "The Future of Jobs Report 2020" by The World Economic Forum (WEF) (https://www.weforum.org/publications/the-future-of-jobs-report-2020/) | - |

**Suggested Readings:**


1. Aishwarya Jain (2021) Economic Geography: A Contemporary Introduction
2. H M Saxena (2012) Economic Geography
3. T C Sharma (2013) Economic Geography of India
4. IEA Annual Conference (2011) Economic Geography and Development
5. Yuko Aoyama, James T Murphy, Susan Hanson (2010) Key Concepts in Economic Geography


**Assessment Rubrics:**

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

## KU5DSEECO303: AGRICULTURAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSE | 300-399 | KU5DSEECO303 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

This course provides an overview of Agricultural Economics, focusing on its meaning, scope, and the role of agriculture in economic development. It delves into various models of agricultural development and production economics, examining production functions, supply and demand behaviour, decision-making under risk and uncertainty, and the technological and institutional changes in Indian agriculture. Additionally, it analyses the agricultural scenario in the specific context of Kerala, including performance, income trends, organic farming, and the impact of globalization on agrarian distress. At the end of the course the students will be equipped with analytical skills to assess and address challenges in agricultural production, management, and policy formulation.

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Students will gain a deep understanding of agricultural economics, including its meaning, scope, and the pivotal role agriculture plays in economic development. | U |
| 2 | Analyse and compare various models of agricultural development proposed by prominent scholars, enabling them to understand the complexities of agricultural transformation and growth. | An |
| 3 | Develop proficiency in production economics, including the analysis of production functions, supply-demand behaviour, and decision-making under conditions of risk and uncertainty in agricultural settings. | A, An, E |
| 4 | Evaluate the impact of technological advancements and institutional changes on Indian agriculture, enabling them to assess the effectiveness of policies and interventions aimed at promoting agricultural development. | E |
| 5 | Gain insights into the specific agricultural challenges and | U, An E |

| | | |
|---|---|---|
| | opportunities present in Kerala, including trends in agricultural income, the impact of globalization, and the importance of organic farming. | |

***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:**

| ***MODULE*** | **UNIT** | **DESCRIPTION** | **HOURS 60** |
|---|---|---|---|
| **1** | | **INTRODUCTION TO AGRICULTURAL ECONOMICS** | **14** |
| | 1 | Themes in Agricultural Economics | 4 |
| | | a) Meaning, Nature and Scope of Agricultural Economics | |
| | | b) Role of Agriculture in economic development | |
| | | c) Linkage between Agriculture and other sectors | |
| | 2 | Models of Agricultural Development | 10 |
| | | a) Von Thunen's theory of Agricultural Location | |
| | | b) Schultz's Thesis of transforming traditional agriculture | |
| | | c) Mellor's theory of agricultural development | |
| | | d) Boserup's theory of agricultural development | |
| | | e) Lewis model of economic development | |
| | | e) Fei-Ranis model of agricultural development | |
| **2** | | **AGRICULTURAL PRODUCTION ECONOMICS** | **16** |
| | 1 | Production Function in Agriculture | 6 |
| | | a) Law of Diminishing Returns | |
| | | b) Cobb Douglas Production Function | |
| | 2 | Supply and Demand Behaviour | 6 |
| | | a) Determinants of supply and demand behaviour | |
| | | b) Cob-Web Theorem | |
| | | c) Nerlovian Model of Supply | |

| | | | |
|---|---|---|---|
| | 3 | Decision making in an Environment of Risk and uncertainty in Agriculture | |
| | | a) Sources of risk and measures to manage farm risk | 4 |
| | | a) Types of uncertainty in agriculture | |
| | | b) Strategies for Dealing with Risk and Uncertainty | |
| **3** | **AGRICULTURAL DEVELOPMENT IN INDIA** | | **10** |
| | 1 | Technological changes in Indian agriculture | |
| | | a) White Revolution | |
| | | b) Green Revolution | 4 |
| | | c) Evergreen Revolution. | |
| | | d) ICT and Agriculture | |
| | 2 | Institutional Changes in Indian Agriculture | 3 |
| | | a) Agrarian and credit institutions | |
| | | b) Contract and corporate farming | |
| | | c) Agro-Processing and Value Addition | |
| | 3 | The New Economic policy and Indian Agriculture | |
| | | a) WTO agreements on Indian agriculture | 3 |
| | | a) Trade liberalisation and Agricultural Exports | |
| 4 | 1 | AGRIBUSINESS MANAGEMENT | 10 |
| | | a) The Key Functions of Management in Agribusiness | 2 |
| | | b) Marketing management | 2 |
| | | c) Financial management | 2 |
| | | d) Supply chain management for agribusiness-objectives, Functions, forecasting demand | 3 |
| | | e) Managing human resources in agribusiness-Scope and Functions | 1 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *This module may focus on to*<br>• *E*xplore current trends and practices in sustainable agriculture,<br>• The impact of climate change on agricultural production, crop yields, and food security<br>• Explore the role of technology in modern agriculture, including precision farming techniques, remote sensing, and agricultural drones.<br>• The teacher can incorporate hands-on exercises, case studies, guest lectures from industry experts, and opportunities for students to apply their knowledge through research projects or data analysis assignments. | | |

**:**

**Essential Readings and Reference Distribution:**

| Module | Unit | Reference No. |
|---|---|---|
| **1** | 1 | • Soni, R.N. (2013). *Leading Issues in Agricultural Economics*. Vishal Publishing Co. |
| | | • Lekhi, R.K., & Singh, J. (2015). Agricultural Economics: An Indian Perspective. Kallyani Publishers |
| | | • Kapila, Uma (2018). Indian Economy Performance and Policies. Academic Foundation, New Delhi. |
| | 2 | • Kapila Uma (2018). Indian Economy Performance and Policies. Academic Foundation, New Delhi. |
| | | • Soni, R.N. (2013). *Leading Issues in Agricultural Economics*. Vishal Publishing Co. |
| | | • Lekhi, R.K., & Singh, J. (2015). *Agricultural Economics: An Indian Perspective*. Kallyani Publishers |
| | | • Schultz, T. W. (1965) *Transforming Traditional Agriculture*, New Haven, Yale University Press, London. |
| **2** | 1 | • David L. Debertin (2002). Agricultural Production Economics. Second Edition. Macmillan |
| | 2 | • Subba Reddy, S., Raghu Ram, P., Neelakannta Sastry, T.V., & Bhavani Devi, I. (2004). *Agricultural Economics*. Oxford & IBH Publishing Co. Pvt. Ltd. |
| | | • Soni, R.N. (2013). *Leading Issues in Agricultural Economics*. Vishal Publishing Co. |
| | 3 | • Lekhi, R.K., & Singh, J. (2015). *Agricultural Economics: An Indian Perspective*. Kallyani Publishers. |
| | | • David L. Debertin (2002). Agricultural Production Economics. Second Edition. Macmillan |
| **3** | 1 | • Puri, V.K., & Misra, S.K. (2013). Indian Economy-Its Development Experience. Himalaya Publishing House. Latest Edition Second Green Revolution "Growth Engine for Transformation". |
| | 2 | • Suresh Pal, Mruthyunjaya, Joshi, P. K., & Saxena Raka. (Ed). Institutional Change in Indian Agriculture. National Centre for Agricultural Economics and Policy Research. |
| | 3 | • Puri, V.K., & Misra, S.K. (2013). Indian Economy-Its Development Experience. Himalaya Publishing House. Latest Edition |
| | | • Soni, R.N. (2013). *Leading Issues in Agricultural Economics*.Vishal Publishing Co. |
| 4 | 1 | • Freddie L. Barnard., John Foltz., Elizabeth A. Yeager & Brady Brewer |

| | | |
|---|---|---|
| | | (2021) Agribusiness Management. Sixth Edition, Routledge Taylor & Francis Group, New York. |

**Suggested Readings:**

1. Economic Review. Kerala State Planning Board, Government of Kerala.
2. Oommen, M. A. (Ed.). (1999). *Rethinking Development, Kerala's Development Experience*

**Assessment Rubrics:**

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

## KU5DSEECO304: ECONOMICS OF GROWTH AND DEVELOPMENT

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | DSE | 300-399 | KU5DSEECO304 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course provides an in-depth exploration of the fundamental concepts, theories, and policies related to economic growth and development. Students will engage with the key distinctions between growth and development, examining the various determinants and measurements used to assess these phenomena. The course also delves into classical and contemporary theories of growth, offering a comprehensive understanding of both historical and modern perspectives. Additionally, it addresses the role of human resources, including the impact of education, health, and gender on economic development, and evaluates various policy approaches to promote sustainable growth.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Demonstrate familiarity with some central themes and issues of economic development | R, U |
| 2 | Demonstrate the difference between economic growth and development and the major growth theories. | R, U |
| 3 | Assess the potential effectiveness of various policies in combating economic development. | R, E |
| 4 | Explain the theories and factors in the Development process | R, U |
| 5 | Identify the role of education and health in economic development | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **INTRODUCTION TO GROWTH AND DEVELOPMENT** | | 10 |
| | 1 | Distinction between Growth and Development | |
| | 2 | Determinants of Growth and Development | |
| | 3 | Measurement of Growth and Development – PQLI; HDI; Gender Development Index; Gender Empowerment Index; Global Hunger Index | |
| | 4 | Sen's Capability Approach | |
| 2 | **THEORIES OF GROWTH AND DEVELOPMENT** | | 18 |
| | 1 | Theories of Adam Smith, David Ricardo and Malthus | |
| | 2 | Marx's stages of Growth and Marxian theory of economic development | |
| | 3 | Schumpeter's theory | |
| | 4 | Rostow's stages theory | |
| | 5 | Big push theory | |
| | 6 | Critical minimum effort theory | |
| | 7 | Nelsons low level equilibrium trap theory | |
| | 8 | Lewi's model of unlimited supply of labour | |
| | 9 | Theories of Nurkse, Vakil and Brahmananda | |
| | 10 | Balanced and Unbalanced growth theories | |
| | 11 | Harrod –Domar Growth models | |
| | 12 | Solow - Swan Growth models | |
| 3 | **POLICIES FOR DEVELOPMENT** | | 12 |
| | 1 | Role of monitory and Fiscal policies in economic development | |
| | 2 | Inward and outward oriented foreign trade policies and its impact on development | |
| | 3 | Role of industrial and agricultural policies on development | |
| | 4 | Role of foreign aid and foreign capital on economic development | |
| 4 | **HUMAN RESOURCE AND DEVELOPMENT** | | 10 |

| | | | |
|---|---|---|---|
| | 1 | Man power planning | |
| | 2 | Role of education and health in economic development | |
| | 3 | Education and health as joint investment for development | |
| | 4 | Gender and development | |
| | 5 | Women in the labour force | |
| | 6 | Optimum theory of population | |
| | 7 | Theory of demographic transition | |
| **5** | **Teacher Specific Module**<br>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.<br>Incorporate current events and policy decisions to make the subject matter relevant. | | **10** |

**Essential Readings:**


1. Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson Education. (Stuvia)
2. Ray, D. (2012). *Development economics*. Oxford University Press.
3. Thirlwall, A. P. (2006). *Growth and development: With special reference to developing countries* (8th ed.). Palgrave Macmillan.
4. Kapila, U. (2017). *Indian economy: Performance and policies* (17th ed.). Academic Foundation.
5. Misra, S. K., & Puri, V. K. (2023). *Economics of development and planning: Theory and practice* (19th ed.). Himalaya Publishing House. (himpub.com)


**Reference Distribution:**

| Module | Reference | Remarks |
|---|---|---|
| • **1** | • Thirlwall, A. P. (2006). *Growth and development: With special reference to developing countries* (8th ed.). Palgrave Macmillan. (WorldCat. | • |
| | • Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson Education. | • |
| | • Misra, S. K., & Puri, V. K. (2023). *Economics of development and planning: Theory and practice* (19th ed.). Himalaya Publishing House. | • |
| • **2** | • Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson Education. | • |
| | • Misra, S. K., & Puri, V. K. (2023). *Economics of development and planning: Theory and practice* (19th ed.). Himalaya Publishing House. | • |

| | | |
|---|---|---|
| | • Ray, D. (2012). Development economics. Oxford University Press.. | |
| • **3** | • Todaro, M. P., & Smith, S. C. (2020). *Economic development* (13th ed.). Pearson Education. | • |
| | • Misra, S. K., & Puri, V. K. (2023). *Economics of development and planning: Theory and practice* (19th ed.). Himalaya Publishing House. | • |
| | • Ray, D. (2012). Development economics. Oxford University Press | • |
| • **4** | • Todaro and Smith, Economic Development, Pearson Education, New Delhi. | • |
| | • Debraj Ray, Development Economics. Oxford University Press, NewDelhi. | • |
| | • Kapila, U. (2017). Indian economy: Performance and policies (17th ed.). Academic Foundation. | • |

**Suggested Readings:**


1. Agarwal, R. C. (2018). *Economics of development and planning: Theory and practice*. Lakshmi Narain Agarwal Educational Publishers.
2. Higgins, B. H. (1968). *Economic development : Principles, problems and policies*. Universal Book Stall.
3. Meier, G. M., & Rauch, J. E. (2005). *Leading issues in economic development* (8th ed.). Oxford University Press.


**Assessment Rubrics:**

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

## KU5SECECO301: EXPERIENCING INDIAN STOCK MARKET

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | **SEC** | 300-399 | **KU5SECECO301** | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | **1.5** |

**Course Description:**

The course aims to equip the participants with necessary practical application expertise along with theoretical understanding in stock market analysis. Students can apply the same for wealth creation through investment in equity markets and also for research purposes. The course introduces students to capital market, equity analysis and investment. It will equip them to: understand the risk-return profiles of various asset classes, set financial goals, do asset allocation and implement the appropriate asset allocation strategies. It will equip the students with the competence to make good investment decisions. This course will give students a brief, but broad introduction to the capital markets - the primary and secondary markets, investors, intermediaries, regulators, securities traded, trading mechanism, risk and return, fundamental and technical analysis etc.

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| **CO** 1 | Evaluate the structure and function of the stock market, including primary and secondary markets, and synthesize knowledge of Indian stock market exchanges (NSE, BSE, MCX) and SEBI regulations. | An, E |
| **CO** 2 | Critically analyze company financial statements and valuation methods to assess company performance and investment potential | An, E |
| **CO** 3 | Analyze technical indicators, including lagging (moving averages, ADX) and leading (momentum, RSI) indicators, and synthesize these interpretations to guide trading decisions. | An, E |
| **CO** 4 | Assess and apply market analysis software tools, participate in simulated trading sessions, and conduct real-world analysis guided by industry and stock market experts. | An, E |

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

**-Mapping of Course Outcomes to PSOs**

| CO - | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
|---|---|---|---|---|---|---|---|
| CO 1 | ✔ | ✔ | ✔ | | | | |
| CO 2 | | ✔ | ✔ | ✔ | | | |
| CO 3 | | ✔ | ✔ | | | ✔ | |
| CO 4 | | ✔ | | ✔ | ✔ | ✔ | |

## COURSE CONTENT

Contents for Classroom Transaction

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **BASICS OF PRACTICAL GUIDANCE TO STOCK MARKET** | **9** |
| | 1 | a) What is stock market: Primary and secondary market, Indian stock marketes (NSE BSE, MCX), Regulatory framework (SEBI rules) - | 4 |
| | | b) Financial instruments: Equity shares, bonds, mutual funds, exchange traded funds (ETFs), derivatives | |
| | 2 | STOCK MARKET TERMINOLOGIES | 5 |
| | | : Bid, Ask/Offer, Spread, Broker, Yield, Volatility, Lot size, Bull and bear market, IPO, Market capitalization, Portfolio, Dividends, Short selling, Intraday trading, Delivery, Market order, Limit order, Stop-loss order, Demat account, Listing of securities | |
| 2 | | **FUNDAMENTAL ANALYSIS (**including practical sessions) | **14** |
| | 1 | Economic and Industry analysis | 6 |
| | | Company analysis and valuation-- Understanding financial statements ( balance sheet, cash flow statement etc) | |
| | 2 | a) Analysis of important financial ratios with interpretation-- price-earning ratio-- price book ratio --return on capital employed-- return onequity--dividend yield( numerical problems and case analysis) | 8 |
| | | b) Introduction to mutual funds ,hedge funds and insurance | |
| | | **TECHNICAL ANALYSIS (**including practical sessions) | **17** |
| | 1 | a) Principles of technical analysis--Chart types( line charts, bar charts,candle stick charts) and patterns ( reversal, | 9 |

| | | | |
|---|---|---|---|
| **3** | | consolidation and trend patterns) with interpretation | |
| | | b) Technical indicators: lagging indicators such as moving averages and Average directional index (ADX)--- leading indicators (oscillators ) such as momentum, Relative strength index (RSI) with interpretation | |
| | 2 | a) Volume analysis-- volume and trends--volume and chart pattern--volume interpretation | 8 |
| | | b) Trading psychology including biases ( anchoring bias, overconfidence bias, confirmation bias , loss aversion and herd instinct) and risk management - Numerical problems and Case analysis wherever possible | |
| **4** | **TRADING MECHANISM AND PRACTICAL APPLICATION** | | **10** |
| | 1 | Depositories, NSDL, CDSL-Clearing and settlement process - Construction of Stock market indices-- SP BSE index, CNX Nifty index - Market analysis software tools such as NSE--Simulated trading sessions--Real world analysis ( classes by industry and stock market experts) | |
| **5** | | **Teacher Specific Module**<br>**Directions** | 10 |
| | | • Visual Aids: Show live data from NSE/BSE websites<br>• Students simulate an IPO process or track stock prices for a week.<br>• Discuss articles Financial newspapers (The Economic Times, Business Standard)<br>• **Case Discussion:** Compare two industries (e.g., FMCG vs IT) using Porter's model.<br>• **Practical Exercise:** Students analyze financial statements from company annual reports | |

**Essential Readings:**


1. Pilbeam, K. (2018). *Finance and financial markets* (4th ed.). Bloomsbury Academic / Red Globe Press. (for unit 1.1 and 1.2)
2. Galagedera, D. U. A. (2007). A review of capital asset pricing models. *Managerial Finance, 33*(10), 821-832. doi: 10.1108/03074350710779269 (for 1.3 )
3. NSE Academy. (2024). *Study material (E-workbook & LMS) for NCFM modules*


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1, 2 | |
| | 2 | | |
| 2 | 1 | Essential Reading 1, 2, 3 | |

| | | | |
|---|---|---|---|
| | 2 | | |
| 3 | 1 | Essential Reading 1,2,3 | |
| | 2 | | |
| 4 | 1 | Essential Reading 1, 2, 3 | |

**Suggested Readings:**


1. Macedo, L. M. L. (2018). *An Inquiry into the Validity of Technical Analysis in Financial Markets with the Use of Evolutionary Techniques* (Doctoral dissertation, Universidade de Coimbra (Portugal)).
2. Lo, A. W., Mamaysky, H., & Wang, J. (2000). Foundations of technical analysis: Computationalalgorithms, statistical inference, and empirical implementation. *The journal of finance*, *55*(4), 1705-1765.


**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation Theory | | **35** |
| End Semester Evaluation-Practical | | **15** |
| End Semester Evaluation-Total | | **50** |
| Continuous Evaluation Theory | | **15** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | 5 |
| d) | Seminar | |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| Continuous Evaluation-Practical Field/ Practical Report | | 10 |
| **ContinuousEvaluation-Total** | | **25** |
| **Total** | | **75** |

## KU5SECECO302: LOGISTICS AND SUPPLY CHAIN MANAGEMENT

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | **SEC** | 300-399 | **KU5SECECO302** | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | **1.5** |

**Course Description:**

This course provides an overview of logistics management principles and practices. It covers the fundamental concepts, tools, and techniques necessary for effective management of logistics operations in various industries. Topics include supply chain management, inventory control, transportation management, warehousing, and distribution.

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learnin g Domain s |
|---|---|---|
| 1 | Basic concepts in logistics and supply chain management | U |
| 2 | Analysing of different modes of transport and its cost efficiency | An, E |
| 3 | Analytical skills for solving real-world logistics problems | An, E |
| 4 | Ability to apply and evaluate industry best practices for sustainable logistics management | An, E |

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

**-Mapping of Course Outcomes to PSOs**

| CO s- | 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 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO LOGISTICS MANAGEMENT AND SUPPLY CHAIN MANAGEMENT** | 15 |
| | 1 | Introduction to Logistics Management and Supply Chain Management - Definition and scope of logistics management - Key functions and objectives of logistics - | |
| | 2 | Understanding the supply chain - Supply chain integration and coordination - Role of technology in supply chain management – Ease of doing business – National Logistics Policy | |
| 2 | | **INVENTORY MANAGEMENT & TRANSPORTATION MANAGEMENT** | 15 |
| | 1 | Inventory Management & Transportation Management - Inventory types and classification - Inventory costs and trade-offs - Inventory control techniques (ABC analysis, EOQ, etc.) - | |
| | 2 | Modes of transportation (road, rail, air, sea) - Logistics costing - Transportation cost analysis - Routing and scheduling - First-in Fist out - Just-in-time concept | |
| 3 | 1 | **WAREHOUSING AND DISTRIBUTION** | 20 |
| | | a) Warehouse functions and types- Warehouse layout and design- Distribution strategies and channel management - | |
| | | b) Logistics Performance Measurement and Optimization Key performance indicators (KPIs) in logistics- Continuous improvement | |

| | | | |
|---|---|---|---|
| | | and optimization techniques- Case studies and real-world examples | |
| | **2** | **SUSTAINABILITY IN LOGISTICS** | |
| | | a) Environmental impact of logistics operations - Green logistics practices- Regulatory compliance and corporate social responsibility – | |
| | | b) E- commerce logistics - Internet of Things (IoT) in logistics – Case Studies and Industry Applications - Analysis of real-world logistics challenges - Best practices and lessons learned from industry cases | |
| 5 | **TEACHER SPECIFIC MODULE** | | 10 |
| | | • Supply Chain Mapping Project A visual supply chain map and a short written report (2–3 pages).<br>• Inventory Optimization and Transportation Simulation Using sample data, students perform **ABC analysis and EOQ calculations**,<br>• Warehouse Layout Design Case Study Students design a **warehouse layout plan** (either manually or using software like SketchUp/Excel grid The design must consider space utilization, material flow, and safety standards)<br>• . Green Logistics and E-commerce Case Analysis<br>• Students will analyze a real-world company (e.g., Amazon, DHL, or Maersk) implementing **green logistics**<br>• **Student go for one day visit in local Logistics companies and prepare reports** | |

**Essential Readings and Reference Distribution:**


1. Chopra, S., & Meindl, P. (2013). *Supply chain management: Strategy, planning, and operation* (5th ed.). Pearson Education.
2. Christopher, M. (2016). *Logistics and supply chain management* (5th ed.). Pearson Education.
3. Coyle, J. J., Novack, R. A., Gibson, B., & Bardi, E. J. (2014). *Transportation: A supply chain perspective* (8th ed.). South-Western College Publishing.
4. Ghiani, G., Laporte, G., & Musmanno, R. (2013). *Introduction to logistics systems management* (2nd ed.). John Wiley & Sons.
5. Harrison, A., & van Hoek, R. (2019). *Logistics management and strategy: Competing through the supply chain* (6th ed.). Pearson Education.
6. McKinnon, A. C., Browne, M., Whiteing, A., & Piecyk, M. (2015). *Green logistics: Improving the environmental sustainability of logistics* (3rd ed.). Kogan Page.
7. Richards, G. (2021). *Warehouse management: A complete guide to improving efficiency and minimizing costs in the modern warehouse* (3rd ed.). Kogan Page.


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| | 1 | | |

| | | | |
|---|---|---|---|
| 1 | | Essential Reading 1, 2 | |
| | 2 | | |
| 2 | 1 | Essential Reading 1, 2, 3 | |
| | 2 | | |
| 3 | 1 | Essential Reading 5, 6 | |
| | 2 | | |
| 4 | 1 | Essential Reading 4, 6, 7 | |

**Suggested Readings:**


1. Agrawal, D. K. (2003). *Textbook of logistics and supply chain management*. Macmillan Publishers India Ltd. (Google Books)
2. Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2003). *Designing and managing the supply chain: Concepts, strategies and case studies*. McGraw-Hill. (Google Books)
3. Altekar, R. V. (2005). *Supply chain management: Concepts and cases*. Prentice Hall of India. (Barnes & Noble)


**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation Theory | | **35** |
| End Semester Evaluation Practical | | **15** |
| Continuous Evaluation Theory | | **15** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | |
| d) | Seminar | 5 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| Continuous Evaluation Practical | | |
| a) | Field/Practical Report | 10 |
| **Total** | | **75** |

## KU5SECECO303:READING ECONOMIC SURVEY AND UNION BUDGET

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| V | SEC | 300-399 | KU5SECECO303 | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | 1.5 |

**Course Description**:

The course seeks to familiarise students with basic concepts related to the Economic Survey and Union Budget. It aims to equip students with sufficient knowledge and skills to analyse these documents. This course also aim to equip students a competent participants in economic decision-making.

**Course Prerequisite:**

Previous knowledge about various governments functioning in national, state and local level.

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Develop the capability to understand government policies. | R, U |
| 2 | Understand and evaluate the process behind economic decision making by various levels of governments. | R, U,E |
| 3 | Analyse the Economic Survey and review documents. | A,An |
| 4 | Able to understand and apply the Union and State budget documents. | R, U |

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

| Mapping of Course Outcomes to PSOs | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |
| CO 1 | ✓ | | | ✓ | | | |
| CO 2 | | ✓ | | | ✓ | | |
| CO 3 | | | ✓ | | | | ✓ |
| CO 4 | | | ✓ | | | ✓ | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **UNION BUDGET -BASIC CONCEPTS** | | **18** |
| | 1 | a) Fiscal policy - Capital and revenue expenditure; plan and non-plan expenditures | |
| | | b) Deficits ( fiscal, primary, revenue), impact of fiscal deficits on the economy | |
| | | c) Capital receipts, revenue receipts; tax and non-tax revenue; direct and and indirect taxes | |
| | | d) Actual, revised and budget estimates | |
| | | e) Fiscal devolution and center-state financial relations | |
| 2 | **THE INDIAN ECONOMIC SURVEY** | | **14** |
| | 1 | Analysis of current report | |
| | | a) State of the economy | |
| | | b) Specific sectors – Agriculture, Industry, Service External Sector etc. | |
| 3 | **THE UNION BUDGET** | | **12** |
| | 1 | the process of budget making in India | |
| | | a) Major heads of revenue in latest Union budget | |
| | | b) Major expenditure heads in latest Union budget and sectors that have received higher/lower shares of expenditure. | |
| 4 | **KERALA ECONOMIC REVIEW** | | 6 |
| | | a) Recent Trends in Macro-Economic Aggregates, State Finances | 2 |
| | | b) Initiatives for social inclusion | 2 |
| | | c) Kerala Infrastructure Investment Fund Board (KIIFB) | 2 |
| 5 | **TEACHER SPECIFIC MODULE** | | 10 |
| | • Visit to **State Planning Board**, **Budget Office**, or **KIIFB(-practical component)** and present report – maximum 3 days of journey<br>• **Mock Budget Exercise:** Students act as Finance Ministry teams preparing a "mini budget."<br>• Role Play: Centre–State negotiation on tax devolution.<br>• Conduct data interpretation sessions using *Economic Survey* or *Union Budget* tables. | | |
| | • Data-based projects using RBI, MOSPI, and Budget data. - | | |

**Essential Readings:**

1. Sury, M. M. (1997). *Government budgeting in India* (2nd ed.). Indian Tax Institute.

2. Chakraborty, P. (2015). Intergovernmental fiscal transfers in India: Emerging trends and realities. In P. Patnaik (Ed.), *Macroeconomics*. Oxford University Press
3. Ministry of Finance. (2025). *Economic Survey 2024–25*. Government of India. (https://www.indiabudget.gov.in/economicsurvey/ The Hindu Centre+2India Budget+2 (Latest )
4. Ministry of Finance. (2024). *Union Budget 2024–25*. Government of India. (Latest )https://www.indiabudget.gov.in/budget2024-25/ India Budget+2India Budget+2
5. Kerala State Planning Board. (latest). *Economic Review*. Thiruvananthapuram, Kerala, India. https://dspace.kila.ac.in/items/588db19f-05e2-4024-a196-fc8a01bccadb

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1 & 2 | |
| **2** | 1 | Essential Reading 3 | |
| | 1 | Essential Reading 4 | -- |
| 3 | 1 | Essential Reading 4 | -- |
| 4 | 1 | Essential Reading 5 | |

**Suggested Readings:**

1. URL: https://www.cbgaindia.org/publications
2. Ministry of Finance. Finance commission report (latest). URL: https://fincomindia.nic.in/commission-reports-fifteenth
3. Ministry of Finance. Economic and social classification of the budget. URL: https://dea.gov.in/other-reports/economic-and-functional-classification-central-government-budget

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation Theory | | **35** |
| End Semester Evaluation Practical | | **15** |
| Continuous Evaluation Theory | | **15** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | |
| d) | Seminar | 5 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| Continuous Evaluation Practical Field Report | | 10 |
| **Total** | | **75** |

## KU6DSCECO304: DEVELOPMENT ISSUES OF INDIAN ECONOMY I

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSC | 300-399 | KU6DSCECO304 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description**:

This course offers a comprehensive exploration of the Indian economy, examining its dynamic sectors, critical development issues, and future prospects. It begins with an overview of the Indian economy, analyzing its historical development, current structure (including agriculture, industry, and services), and its role in the globalized world. The course investigates the intricate relationship between population dynamics and economic growth, exploring how population size, age distribution, and geographic patterns influence national economic development.

**Course Prerequisite: NIL**

**Course Outcomes:** By the end of this course, students will be able to:

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Understand the features of Indian economy and evaluate the economic policies implemented by the government since independence. | R,U |
| CO 2 | Learn the complex relationship between population and economic development. Analyze the demographic transition and its impact on economies | U, An |
| CO 3 | Analyze the factors influencing agricultural modernization and its impact on developing economies. Understand the challenges faced by Indian farmers, including land tenure issues, market access, and climate change. | A,An |

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| | | |
|---|---|---|
| CO 4 | Evaluate the historical evolution of the industrial sector and its impact on economic development. .Analyse the rise of the service sector and its implications for industrial development. | E,An,A |
| CO 5 | Analyze the performance of various sectors in Kerala economy | E 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:**

| MODULE | UNIT | DESCRIPTION | HOURS60 |
|---|---|---|---|
| 1 | ECONOMIC DEVELOPMENT SINCE INDEPENDENCE | | 12 |
| | 1 | Features of Indian Economy at the time of independence- | |

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| | | | |
|---|---|---|---|
| | 2 | Alternative development strategies since independence- , | |
| | | a) Import substitution,export promotion and protection, strategies of five year Plans-brief note | |
| | 3 | Economic crisis of Indian economy during 1990s | |
| | 4 | The post-1991 globalization strategies based on stabilization and structural adjustment packages | |
| | | a) LPG strategies | |
| **2** | POPULATION AND HUMAN DEVELOPMENT | | 12 |
| | 1 | Demographic features and trends- Size and growth rates of population, trends in birth and death rates, | |
| | 2 | Density of population, Age and Sex Composition, Population as a factor of economic development, Demographic Dividend; | |
| | 3 | National Population Policy; Human Development in India- | |
| | 4 | Human Development indicators, Human Development Index, India‟s human Development record in global perspective. | |
| **3** | INDIAN AGRICULTURE | | 12 |
| | 1 | Nature, importance and trends in agricultural production and productivity in India | |
| | 2 | Evaluation of Land reforms in India | |
| | 3 | Food security and PDS in India | |
| | 4 | Green revolution and its impacts on Indian agriculture | |
| | 5 | Problems faced by Indian agriculture. | |
| **4** | INDUSTRIAL AND SERVICE SECTOR | | 14 |
| | 1 | Industrial policies of India-1948,1956,1977,1991 | |

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| | | | |
|---|---|---|---|
| | | | |
| | | a) Industrial licensing policies - MRTP Act, FERA and FEMA | |
| | 2 | Role of MSME in India, Problems faced by SSIs in India | |
| | 3 | Growth and contribution of service sector to GDP of India | |
| | | a) New educational policy of India, **The Growth of Knowledge-Based Services:** The role of technology and innovation. | |
| **5** | TEACHER SPECIFIC MODULE | | 10 |
| | *Directions-Indian Economy – data –RBI –Data-analyse* | | |
| | Give assignments/seminar and group discussion/ to students about the performance of various sectors of Kerala economy-<br>Compare economy of Kerala with other states | | |

**Essential Readings:**


1. Dutt, R., & Sundharam, K. P. M. (2018). *Indian economy*. New Delhi, India: S. Chand & Company Ltd.
2. Government of India, Ministry of Finance. (2024). *Economic survey of India 2023–24*. New Delhi, India: Author.
3. Kapila, U. (Ed.). (2021). *Indian economy since independence* (Rev. ed.). New Delhi, India: Academic Foundation.
4. Dhingra, C. (2017). *Indian economic problems*. New Delhi, India: S. Chand & Company Ltd.
5. Mishra, J. K., & Puri, V. K. (2019). *Indian economy: The development experience*. Mumbai, India: Himalaya Publishing House.
6. Organisation for Economic Co-operation and Development (OECD). (2004). *Innovation in the knowledge economy: Implications for education and learning*. Paris, France: OECD Publishing.


**Reference Distribution:**

| Module | Unit | Reference No. | Page Nos. | Remarks |
|---|---|---|---|---|
| **1** | 1 | Essential reading 4 | 32-49 | |
| | 2 | Essential reading 5 | 303-310 | |
| | 3 | Essential reading | 810-813 ,780- | |

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| | | | | |
|---|---|---|---|---|
| | | 5,1 | 784 | |
| | 4 | Essential reading 3 | 457-460 | |
| **2** | 1 | Essential reading 4 | 136-142 | |
| | 2 | Essential reading 5 | 128-154 | |
| | 3 | Essential reading 4,1 | 136-142 ,526-527 | |
| | 4 | Essential reading 5 | 294-312 | |
| **3** | 1 | Essential reading 5 | 313-320 | -- |
| | 2 | Essential reading 5,1 | 321-328 ,566-579 | -- |
| | 3 | Essential reading 1 | 534-546 | -- |
| | 4 | Essential reading 5 | 339-361 | |
| | 5 | Essential reading 5 | 294-312 | |
| **4** | 1 | Essential reading 5 | 489-502 | -- |
| | 2 | Essential reading 4 | 434-446 | -- |
| | 3 | Essential reading 5 | 793-799 | -- |
| | | Essential reading , 6 | 176 | |

**Suggested Readings:**

1. Thirlwall, A. P. (1994). Growth and Development: With Special Reference to Developing Economies, Macmillan International Higher Education.
2. Desai. B, (2008) Industrial Economy in India, Himalaya Publishing House, Mumbai.
3. Basu, K. (Ed.). (2004). India's Emerging Economy: Performance and Prospects in the 1990s and Beyond. MIT press

**Assessment Rubrics:**

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

## KU6DSCECO305: MATHEMATICAL TOOLS FOR ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSC | 300-399 | KU6DSCECO305 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course aims to equip students with the essential mathematical tools and techniques for understanding and analysing economic phenomena. The course covers the topics like indices, series, matrices and differentiation. The emphasis is on developing problem-solving skills and mathematical reasoning relevant to economic modelling and analysis.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Understand and apply the concepts of indices, arithmetic and geometric progressions. | U, A |
| 2 | Solve future and present values applying appropriate formula. | U, A |
| 3 | Describe different types of matrices and the properties of matrix operations. | U, A |
| 4 | Understand and apply the concept and the rules of differentiation. | U, A |
| 5 | Understand and apply the concept of differentiation in the problems of economics | U, A |

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

**Mapping of Course Outcomes to PSOs**

| CO | 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 | **SERIES, INDICES AND LOGARITHMS** | | **10** |
| | 1 | Meaning of series- Types of sequences. | 2 |
| | 2 | Arithmetic and geometric progression- nth term and the sum of n terms of an AP and GP. | 2 |
| | 3 | Meaning and concept of indices- Laws of indices- Problems based on the laws of indices. | 3 |
| | 4 | Logarithms- Common and natural logarithms - Rules of logarithm- Using logarithm to evaluate. | 3 |
| 2 | **FINANCIAL MATHEMATICS** | | **9** |
| | 1 | Basics of simple interest- Finding principal, rate and time. | 2 |
| | 2 | Compound interest- Comparison between simple interest and compound interest-Finding compound interest using formula. Shorter compounding periods. | 3 |
| | 3 | Future value of a single amount and annuity. Concept and calculation. | 2 |
| | 4 | Present value of a single amount and annuity. Equated monthly instalment (EMI). | 2 |
| 3 | **MATRICES** | | **13** |
| | 1 | Meaning and definition of matrix- Presentation of cases in matrix form- Types of matrices | 3 |
| | 2 | Addition, subtraction, scalar multiplication and multiplication of two matrices- Properties of matrix addition and multiplication. Transpose of a matrix. | 4 |
| | 3 | Meaning and definition of determinants- Finding determinant of a square matrix of order up to 3. Properties of determinants. | 3 |
| | 4 | Minors, cofactors and adjoints- Inverse of a matrix- Solving systems of linear equations using matrix inversion and Cramer's rule. | 3 |
| 4 | **DIFFERENTIATION** | | **18** |
| | 1 | a) Limit of a function: Rules of limit- Left hand limit and right-hand limit<br>b) Continuous function: Properties of continuous functions- Point continuity and interval continuity. | 4 |
| | 2 | a) Meaning of differentiation and derivative-Conditions for differentiation- Rules of differentiation– Problems based on the rules of differentiation (Sum and difference rule, Product rule, quotient rule, power function rule, chain rule, implicit function rule and logarithmic differentiation rule).<br>b) Higher order differentiation- L'Hôpital's Rule. | 8 |

| | | | |
|---|---|---|---|
| | 3 | Partial derivatives- First and higher order partial derivatives. | 2 |
| | 4 | Application of derivatives in economics- Finding slope of economic functions, marginal functions (marginal utility, marginal product, marginal revenue, marginal expenditure, etc) elasticity of demand and supply and optimum value of economic functions. | 4 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions:* Constraint and unconstraint optimisation | | |
| | The module would be set to make students learn constraint and unconstraint optimisation using any of the books from the essential reading list. | | |

**Essential Readings:**


5. Barnett, R. A., Ziegler, M. R., & Byleen, K. E. (2019). *College mathematics for business, economics, life sciences and social sciences*. Pearson.
6. Dowling, E. T. (1993). *Schaum's outline of mathematical methods for business and economics*. McGraw Hill.
7. Jacques, I. (2006). *Mathematics for economics and business*. Pearson Education Limited
8. Monga, G. S. (2019). *Mathematics and statistics for economics*. Vikas.
9. Sydsaeter, K., & Hammond, P. (2016). *Essential mathematics for economic analysis*. Pearson.


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential reading 4 | |
| | 2 | Essential reading 4 | |
| | 3 | Essential reading 3 | |
| | 4 | Essential reading 3 | |
| **2** | 1 | Essential reading 1 | |
| | 2 | Essential reading 1, 3 | |
| | 3 | Essential reading 1 | |
| | 4 | Essential reading 1, 2 | |
| **3** | 1 | Essential reading 2, 5 | |
| | 2 | Essential reading 2, 5 | |
| | 3 | Essential reading 2 | |
| | 4 | Essential reading 2 | |
| **4** | 1 | Essential reading 2 | |
| | 2 | Essential reading 2, 5 | |
| | 3 | Essential reading 2 | |
| | 4 | Essential reading 2 | |
| **5** | - | Essential reading 1 - 5 | Preferably |

**Suggested Readings:**


1. Asano, A. (2013). *An introduction to mathematics for economics.* Cambridge University Press.

2. Baruah, S. (2011). *Basic mathematics & its application in economics*. Macmillan.
3. Bergin, J. (2015). *Mathematics for economists with applications*. Routledge.
4. Rosser, M., & Lis, P. (2016). Basic mathematics for economists. Routledge.
5. Simon, C. P., & Blume, L. (1994). *Mathematics for economists*. W.W. Norton & Company.
6. Veerachamy, R. (2008). *Quantitative methods for economists*. New Age International.

**Assessment Rubrics:**

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

## KU6DSCECO306: INTRODUCTORY ECONOMETRICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSC | 300-399 | **KU6DSCECO306** | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

This course offers a comprehensive introduction to econometrics, focusing on essential tools and techniques for empirical economic analysis. Students will explore the fundamentals of econometric model building, data types, measurement levels, and the distinction between correlation and causation. Key topics include the simple regression model, Ordinary Least Squares (OLS) estimation, hypothesis testing, and various functional forms of regression models. The course also addresses multiple linear regression models and common violations of classical linear regression assumptions, such as multicollinearity, autocorrelation, and heteroscedasticity, providing detection and remedy techniques. This course equips students with robust analytical skills for economic research and practical applications.

**Course Prerequisite:** Economic Theory, Statistics (basic ideas of these disciplines and some elementary mathematics)

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Define econometrics and explain its significance as a distinct discipline within economics | R,U |
| 2 | Estimate simple and multiple linear regression coefficients using the method of Ordinary Least Squares (OLS). | A,An |
| 3 | Understand and apply the assumptions of CLRM and interpret the significance of the stochastic disturbance term. | U,A |
| 4 | Compute and interpret standard errors, confidence intervals, and conduct hypothesis testing using p-values. | C,E |
| 5 | Interpret the coefficient of determination ($R^2$) and adjusted $R^2$ in the context of model fit. | A,An |

| | | |
|---|---|---|
| 6 | Detect and remedy issues of multicollinearity, autocorrelation, and heteroscedasticity and identify their consequences | C,U |
| 7 | Understand the various functional form for regression models – log-linear, log-lin, lin-log, reciprocal, and polynomial models. | U 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 | ✓ | ✓ | | ✓ | | ✓ | |
| CO 6 | ✓ | ✓ | | ✓ | | ✓ | |
| CO 7 | ✓ | ✓ | | ✓ | | | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS60 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO ECONOMETRICS** | **10** |
| | 1 | Defining Econometrics<br>a) Importance as a Distinct Discipline<br>b) Types of Econometrics | 2 |
| | 2 | Structure of Econometric Model Building | 2 |
| | 3 | Data for Economic Analysis<br>a) Nature and Sources of Data<br>b) Types of Data | 2 |
| | 4 | Measurement Levels in Econometrics | 1 |
| | 5 | Correlation and Causation | 2 |
| | 6 | Limitations of Econometrics | 1 |
| 2 | | **SINGLE EQUATION REGRESSION MODELS** | **13** |
| | 1 | The Simple Regression Model<br>a) Population Regression Function (PRF) and Sample Regression | 3 |

| | | | |
|---|---|---|---|
| | | Function (SRF)<br>b) Linearity in Parameters and Variables | |
| | 2 | The Role of the Stochastic Disturbance Term | 1 |
| | .3 | Assumptions of the Classical Linear Regression Model (CLRM) | 1 |
| | 4 | Estimating via Ordinary Least Squares (OLS) | 1 |
| | 5 | Properties of OLS Estimators<br>a) BLU Estimators – The Gauss–Markov Theorem<br>b) Standard Errors of Estimates | 2 |
| | 6 | The Coefficient of Determination ($R^2$) | 2 |
| | 7 | Interval Estimation and Hypothesis Testing<br>Confidence Intervals<br>a) Significance Tests and p-values<br>b) Concepts of the Individual and Overall significance | 2 |
| | 8 | Interpreting Regression Coefficients | 1 |
| **3** | **FUNCTIONAL FORMS OF REGRESSION MODELS** | | **13** |
| | 1 | Selecting the Appropriate Functional Form<br>a) Log-Linear (Double Log) Models<br>b) Log-Lin (Growth) Models<br>c) Lin-Log Models<br>d) Reciprocal Models<br>e) Regression through Origin Models<br>f) Polynomial Regression Models | 6 |
| | 2 | Interpreting Regression Coefficients in different functional forms. | 2 |
| | 3 | Basics of regression diagnostics<br>a) Error Normality test<br>b) Tests for Linearity<br>c) Model Adequacy tests | 5 |
| **4** | **MULTIPLE LINEAR REGRESSION MODELS AND VIOLATIONS OF CLRM** | | **14** |
| | 1 | Multiple Linear Regression Analysis<br>a) Basic Form, Assumptions, and Estimation<br>b) OLS Estimation and interpretation of co-efficients<br>c) $R^2$ and Adjusted $R^2$ | 3 |
| | 2 | Testing of individual and overall significance | 2 |
| | .3 | Multicollinearity<br>a) Perfect vs. Imperfect Multicollinearity<br>b) Consequences, Detection, and Remedies | 3 |
| | .4 | Autocorrelation<br>a) Pure vs. Impure Autocorrelation<br>b) Consequences, Detection, and Remedies | 3 |
| | 5 | Heteroscedasticity<br>a) Pure vs. Impure Heteroscedasticity | 3 |

| | | | |
|---|---|---|---|
| | | b) Consequences, Detection, and Remedies | |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *(The teachers can design a practical module for the topics covered under the previous four modules)* | | |
| | Teachers can preferably assign students to harness household level quantifiable variables and assign them to prepare data in excel format. Essential econometric exercises with excel may be carried out. | | |

**Essential Readings:**


1. Gujarati, D. N., & Sangeetha, N. (2007). Basic econometrics (4th ed.). New Delhi, India: Tata McGraw-Hill Education.
2. Wooldridge, J. M. (2016). Introductory econometrics: A modern approach (6th ed.). Boston, MA: Cengage Learning.
3. Maddala, G. S., & Lahiri, K. (1992). *Introduction to econometrics*, New York: Macmillan.


**Reference Distribution:**

| Module | Reference | Chapters |
|---|---|---|
| **1** | • Gujarati, D. N., & Sangeetha. (2007). *Basic econometrics* (4th ed.). New Delhi, India: Tata McGraw-Hill Education. | Introduction & chapter 1 |
| | • Wooldridge, J. M. (2006). *Introductory econometrics: A modern approach* (3rd ed.). Mason, OH: Thomson South-Western. | 1 |
| | • Maddala, G. S., & Lahiri, K. (1992). *Introduction to econometrics* (2nd ed.). New York, NY: Macmillan Publishing Company. | 1 &3 |
| **2** | • Gujarati, D. N., & Sangeetha. (2007). *Basic econometrics* (4th ed.). New Delhi, India: Tata McGraw-Hill Education. | 2,3,4 & 5 |
| | • Wooldridge, J. M. (2006). *Introductory econometrics: A modern approach* (3rd ed.). Mason, OH: Thomson South-Western. | 2 |
| | • Maddala, G. S., & Lahiri, K. (1992). *Introduction to econometrics* (2nd ed.). New York, NY: Macmillan Publishing Company. | 3 |
| **3** | • Gujarati, D. N., & Sangeetha. (2007). *Basic econometrics* (4th ed.). New Delhi, India: Tata McGraw-Hill Education. | 6 |
| **4** | • Gujarati, D. N., & Sangeetha. (2007). *Basic econometrics* (4th ed.). New Delhi, India: Tata McGraw-Hill Education. | 8,10,11 &12 |
| | • Wooldridge, J. M. (2006). *Introductory econometrics: A modern approach* (3rd ed.). Mason, OH: Thomson South-Western. | 3, 4, 5 & 6 |
| | • Maddala, G. S., & Lahiri, K. (1992). *Introduction to econometrics* (2nd ed.). New York, NY: Macmillan Publishing Company. | 4,5,6 & 7 |

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 10 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | 2 |
| **Total** | | **100** |

**Employability for the Course:** On completion of this course, students will attain strong quantitative and analytical abilities which prepares students for roles such as data analysts, economic analysts, and financial analysts. Students also gain expertise in regression analysis, hypothesis testing, and diagnostics, making them valuable for evaluating public policies and market interventions. This course opens up diverse career opportunities across industries like finance, consulting, government, and technology, as well as advanced research positions in academia and research institutions.

## KU6DSEECO305: GENDER ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSE | 300-399 | KU6DSEECO305 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course critically examines how gender impacts economic structures and outcomes, offering students a deep understanding of gender-specific economic roles and contributions. In a world where gender disparities significantly influence economic opportunities and policy decisions, this course provides the analytical tools to assess and address these issues. Students will explore how economic theories and practices can perpetuate gender biases and learn to advocate for inclusive policies that promote gender equality. Through contemporary case studies and real-world applications, the course emphasises the importance of integrating gender perspectives into economic analysis and policy-making. By the end of the course, students will be well-prepared to contribute to discussions and initiatives aimed at achieving gender equity in economic systems, making the course highly relevant to current global economic challenges and societal shifts.*

**Course Prerequisite:**

1. ***Introductory Microeconomics****: Understanding of consumer behaviour, market structures, and the role of government in the economy.*

2. ***Introductory Macroeconomics****: Knowledge of economic indicators and economic growth models.*

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Gain a thorough understanding of how gender dynamics shape economic behaviours, structures, and outcomes at the micro and macro levels. | R, U |
| 2 | Develop the ability to critically analyse economic policies and frameworks from a gender perspective, identifying biases and proposing inclusive solutions. | R, U, An |
| 3 | Equip the students to advocate for gender-responsive economic policies, utilising evidence-based arguments and contemporary case studies. | R, U |
| 4 | Learn the interdisciplinary nature of gender economics, integrating | R, U, A |

| | | |
|---|---|---|
| | insights from sociology, politics, and economics to address complex gender issues. | |
| 5 | Analyse the economic value of unpaid work and its impact on household decision-making | An, 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| **1** | **INTRODUCTION TO GENDER ECONOMICS** | | **14** |
| | 1 | Basics of Gender Economics | 8 |
| | | a) Definitions of gender economics | |
| | | b) Interdisciplinary nature of gender economics | |
| | | c) Importance of gender economics | |
| | 2 | Basic Concepts | 3 |
| | | a) Gender, Sex – LGBTQ+ and their problems | |
| | | b) Gender Equality and Equity | |
| | | c) Gender Mainstreaming | |
| | | d) Productive & Reproductive Work | |
| | | e) Gender Discrimination | |
| | | f) Gender stereotyping | |
| | | g) Patriarchal and Matriarchal families | |
| | | h) Gender effect | |
| | | i) Gender roles | |
| | 3 | Approaches of Gender Development | 3 |
| | | a) WID | |
| | | b) WAD | |
| | | c) GAD | |
| **2** | **HOUSEHOLD ECONOMICS AND GENDER STATUS** | | **10** |
| | 1 | Introduction to Household Economics | 3 |

| | | | |
|---|---|---|---|
| | | a) Definition of household economics | |
| | | b) Household production possibility frontier | |
| | | c) Household as an economic unit | |
| | 2 | Division of Labour in the Household | |
| | | a) Gendered division of labour: paid vs. unpaid work | |
| | | b) The economic value of unpaid work: estimation | 4 |
| | | c) Time poverty: definition and measurement | |
| | | d) Work-life balance and care insurance | |
| | 3 | Gender status in India | |
| | | a) Demography of female population in India: Sex ratio, Mortality, Morbidity and life expectancy.<br>b) Gender inequalities in education Health and nutrition | 3 |
| **3** | **GENDER IN THE LABOUR MARKET** | | **12** |
| | 1 | Discrimination in the Labour Market | |
| | | a) Overview of gender disparities in labour markets | |
| | | b) Labour force (employed + unemployed) | 5 |
| | | c) Decent work: definition & measurement | |
| | | d) Missing women mystery - Amartya Sen's view | |
| | 2 | Women and Labour market | |
| | | a) Female work participation rate | |
| | | b) Paid and unpaid work | |
| | | c) Visible and invisible work | 4 |
| | | d) Triple role of women | |
| | | e) Occupational segregation | |
| | | f) Feminization of poverty | |
| | 3 | Causes & Policy Solutions for Inequalities in the Labour Market | |
| | | a) Causes of gender inequalities in the labour market | 3 |
| | | b) Labour market policies for gender equality | |
| **4** | **GENDER AND ECONOMICS** | | **14** |
| | 1 | Feminist Economics | 2 |
| | | a) Historical evolution & definition | |
| | 2 | Gendered Measures of Well-Being | |
| | | a) Gender Development Index (GDI) | |
| | | b) Gender Inequality Index (GII) | 6 |
| | | c) Gender Volnurability Index (GVI) | |
| | | d) Gender Empowerment Measures (GEM) | |
| | 3 | Gender Responsive Budgeting (GRB) | |
| | | a) Gender budget statement | 3 |
| | | b) Importance of Gender Responsive Budgeting (GRB) | |
| | | c) Gender Planning | |
| | 4 | Women Empowerment | 3 |
| | | a) Women empowerment programmes in India with special reference to *Kudumbasree* in Kerala. | |
| | | b) NGOs and Self Help Groups in Women Empowerment | |

| | | | |
|---|---|---|---|
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | | **Directions:** Practical Applications and Hypothetical Scenarios | |
| | | This module will be a practical, work-based module designed to reinforce conceptual foundations from the theoretical modules (1 to 4). Using hypothetical scenarios and data tables, students will engage in exercises to apply gender economic theories and analyses. | |
| | 1 | ***Gender-Responsive Budgeting Exercise:*** Students will work with hypothetical budget data to create gender-responsive budgets, identifying gender biases and proposing equitable allocations. | 2 |
| | 2 | ***Household Economics Case Study:*** Using case studies, students will analyse intra-household bargaining scenarios, estimating the economic value of unpaid work and its impact on household decision-making. | 2 |
| | 3 | ***Labor Market Analysis:*** Students will examine gender disparities in a hypothetical labour market, using provided data to calculate and analyse gender wage gaps, employment rates, and occupational segregation. | 2 |
| | 4 | ***Macroeconomic Policy Review:*** Students will critique and propose revisions to a hypothetical country's macroeconomic policies, incorporating gender-aware perspectives and addressing identified biases. | 2 |
| | 5 | ***Well-Being Index Calculation:*** Using hypothetical data, students will calculate various gendered measures of well-being (HDI, GDI, GII), interpreting the results and discussing policy implications. | 2 |

**Essential Readings:**


1. Eswaran, M. (2014). *Why gender matters in economics*. Princeton University Press.
2. Jacobsen, J. (2007). *The economics of gender.* Nineteenth Edition. McGraw Hills Irwin.
3. Benería, L., Berik, G., & Floro, M. (2003). The study of Women and Gender in Economics. *L. Bene-ria, Gender, Development and Globalization, Routledge*, 31-6.
4. İzdeş Terkoğlu, Ö., İlkkaracan, İ., Memiş, E., & Yücel, Y. (2017). *The UN Women gender and economics training manual*.
5. Becchio, G. (2019). *A history of feminist and gender economics*. Routledge.


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings 1 | - |
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 3 | - |
| | 4 | Essential Readings 4 | - |
| | 5 | Essential Readings 5 | - |
| **2** | 1 | Essential Readings 1 | - |

| | | | |
|---|---|---|---|
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 4 | - |
| | 4 | Essential Readings 5 | - |
| **3** | 1 | Essential Readings 1 | - |
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 4 | - |
| **4** | 1 | Essential Readings 1 | - |
| | 2 | Essential Readings 4 | - |
| **5** | - | Essential Readings 4 | Preferably |

**Suggested Readings:**


1. Agarwal, B. (1988). Who sows? Who reaps? Women and land rights in India. *The Journal of Peasant Studies*, *15*(4), 531-581.
2. Agarwal, B. (2003). Gender and land rights revisited: Exploring new prospects via the state, family and market. *Journal of agrarian change*, *3*(1 2), 184-224.
3. Antonopoulos, R., & Hirway, I. (Ed.) (2010). *Unpaid work and the economy* (Chapters 1, 2, 7 & 11). New York: Palgrave MacMillan.
4. Balakrishnan, R., McGowan, L., & Waters, C. (2016). *Transforming women's work: Policies for an inclusive economic agenda*. New York: Solidarity Centre, AFL-CIO and Center for Women's Global Leadership.
5. Becker, G. S. (2010). *The economics of discrimination*. University of Chicago press.
6. Benería, L., Berik G., & Floro, M.S. (2016). Paid and Unpaid Work: Meanings and Debates. In *Gender, development and globalisation: Economics as if all people mattered*. New York: Routledge.
7. Bulow, J. I., & Summers, L. H. (1986). A theory of dual labor markets with application to industrial policy, discrimination, and Keynesian unemployment. *Journal of labor Economics*, *4*(3, Part 1), 376-414.
8. Campbell, J., & Gillespie, M. (2016). *Feminist economics and public policy*. Taylor & Francis.
9. Elson, D. (1994). Micro, meso, macro: Gender and economic analysis in the context of policy reform. In Bakker, I. (Ed.), *The strategic silence: Gender and economic policy*. London: ZED Books and the North-South Institute.
10. Folbre, N. (1982). Exploitation comes home: a critique of the Marxian theory of family labour. *Cambridge Journal of Economics*, *6*(4), 317-329.
11. Folbre, N. (2006). *Measuring care: Gender, empowerment and the care economy*. Journal of Human Development, 14(2), 183-200.
12. Mincer, J. (1962). Labour force participation of married women: A study of labour supply. In *Aspects of labour economics* (pp. 63-105). Princeton University Press.
13. Nussbaum, M. C. (2000). *Women and human development: The capabilities approach* (Vol. 3). Cambridge university press.
14. Robeyns, I. (2003). Sen's capability approach and gender inequality: selecting relevant capabilities. *Feminist economics*, *9*(2-3), 61-92.

15. Sen, A. (1987). Gender and cooperative conflicts. In *Persistent Inequalities: Women and World Development.* In I. Tinker (Ed.), Oxford University Press, New York, pp. 123–149.
16. Sen, A. (2017). More than 100 million women are missing. In *Gender and Justice* (pp. 219-222). Routledge.

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 4 |
| d) | Seminar | 4 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report/work/ Practical Applications | - 10 |
| **Total** | | **100** |

## KU6DSEECO306: MANAGERIAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSE | 300-399 | KU6DSEECO306 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course is essential for understanding how economic principles guide managerial decision-making. This course aims to make students understand how managers make decisions, explore how firms are organized, and grasp the dynamics of industries. It enables students to earn advanced pricing strategies and techniques for firms with market power. From setting goals to navigating real-world scenarios, this course offers a comprehensive view of applying economic principles in managerial roles.*

**Course Prerequisite:** Introductory microeconomics and intermediate microeconomics

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Develop a foundational grasp of managerial economics principles to tackle real-world business challenges effectively. | R,U |
| 2 | Acquire insight into organizational dynamics to navigate managerial roles with proficiency. | R,U |
| 3 | Gain understanding of industry dynamics to inform strategic decision-making in business environments. | U,E |
| 4 | Master advanced pricing strategies to optimize profitability and competitiveness in market-driven economies. | U,A ,An |

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

| **Mapping of Course Outcomes to PSOs** | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PSO 1 | PSO 2 | PSO 3 | PSO 4 | PSO 5 | PSO 6 | PSO 7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO 1 | ✓ | | ✓ | | | | |
| CO 2 | ✓ | | | | ✓ | | |
| CO 3 | ✓ | | ✓ | | ✓ | | |
| CO 4 | ✓ | | ✓ | | | | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **THE FUNDAMENTALS OF MANAGERIAL ECONOMICS** | **10** |
| | 1 | The manager and managerial economics. | 1 |
| | 2 | Goals and constraints of managers. | 1 |
| | 3 | Nature and importance of profits<br>a) Economic versus accounting profits<br>b) The role of profits<br>c) Profit measurement and opportunity cost | 2 |
| | 4 | Incentives | 1 |
| | 5 | Sources of market rivalry<br>a) Consumer–Producer rivalry<br>b) Consumer–Consumer rivalry<br>c) Producer–Producer rivalry | 3 |
| | 6 | Managerial decisions<br>a) Discrete decisions<br>b) Continuous decisions<br>c) Incremental decisions | 2 |
| 2 | | **THE ORGANIZATION OF THE FIRM** | **16** |
| | 1 | Methods of procuring inputs: spot exchange, contracts, vertical integration | 1 |
| | 2 | Transaction costs | 1 |
| | 3 | Specialized investments<br>a) Site specificity<br>b) Physical-asset specificity<br>c) Dedicated assets<br>d) Human capital | 2 |
| | 4 | Implications of specialized investments in transaction cost | 3 |

| | | | |
|---|---|---|---|
| | | a) Costly bargaining | |
| | | b) Underinvestment | |
| | | c) Opportunism | |
| | | d) "Hold-up problem" | |
| | 5 | Optimal input procurement | |
| | | a) Spot exchange | 3 |
| | | b) Contracts | |
| | | c) Vertical integration | |
| | | d) The economic trade-off | |
| | 6 | Forces that discipline managers | |
| | | a) Incentive contracts | 3 |
| | | b) External incentives | |
| | | c) Reputation | |
| | | d) Takeovers | |
| | 7 | The manager–worker principal–agent problem | |
| | | a) Solutions to the manager–worker principal–agent problem | |
| | | b) Profit sharing | 3 |
| | | c) Revenue sharing | |
| | | d) Piece rates, time clocks and spot checks | |
| **3** | **THE NATURE OF INDUSTRY** | | **10** |
| | 1 | Market structure | |
| | | a) Firm size | 1 |
| | | b) Industry concentration | |
| | 2 | Measures of industry concentration | |
| | | a) Four-firm concentration ratio | 2 |
| | | b) Herfindahl-Hirschman index (HHI) | |
| | 3 | Limitations of concentration measures | 1 |
| | 4 | Industry demand and market conditions | 2 |
| | | a) Rothschild index, potential for entry | |
| | 5 | Differences in conduct of firms | 2 |
| | | a) Pricing behaviour and Lerner index | |
| | 6 | Integration and merger activity | |
| | | a) Vertical integration | 2 |
| | | b) Horizontal integration | |
| | | c) Conglomerate mergers | |
| **4** | **PRICING STRATEGIES OF FIRMS WITH MARKET POWER** | | **14** |
| | 1 | Basic pricing strategies | 4 |
| | | a) Basic rule of profit maximization | |
| | | b) Pricing rule for monopoly and monopolistic competition | |
| | | c) Pricing rule for Cournot oligopoly | |
| | 2 | Methods of extracting surplus from consumers | 3 |
| | | a) Price discrimination | |

| | | | |
|---|---|---|---|
| | | b) Two-part pricing | |
| | | c) Block pricing | |
| | | d) Commodity bundling | |
| | 3 | Pricing strategies for special cost and demand structures | 3 |
| | | a) Peak-load pricing | |
| | | b) Cross-subsidies | |
| | | c) Transfer pricing | |
| | 4 | Pricing strategies in markets with intense price competition | 4 |
| | | a) Price matching | |
| | | b) Inducing brand loyalty | |
| | | c) Randomized pricing | |
| **5** | | **TEACHER SPECIFIC MODULE** | **10** |
| | | This module aims at learning real-world business scenarios through case studies. Case studies may include | |
| | | a) Pricing strategy and market power (eg: to explores how Apple sets pricing for its iPhone models) | |
| | | b) Market structure and competitive dynamics(eg: comparing the market structure and competitive dynamics of the traditional taxi industry with Uber's disruptive business model) | |
| | | c) Decision-making under constraints (eg: Tesla's challenges in balancing innovation with production constraints). | |
| | | d) Strategic pricing and competitive advantage(eg: rivalry between Coca-Cola and PepsiCo) | |

**Essential Readings:**

1. Baye, Michael R., Prince, Jeffrey T. (2022). Managerial Economics and Business Strategy (Tenth Edition). McGraw Hill Education.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1-6 | Essential Readings: | - |
| **2** | 1-7 | Essential Readings: 1 | - |
| **3** | 1-6 | Essential Readings: 1 | - |
| **4** | 1-4 | Essential Readings: 1 | - |

**Suggested Readings:**

1. Keat, P. G., & Young, P. K. (2017). Managerial Economics: Economic Tools for Today's Decision Makers (Fifth edition). Pearson.
2. Maurice, S. C., & Thomas, C. (2018). Managerial Economics: Foundations of Business Analysis and Strategy (Twelfth edition). Pearson.
3. Salvatore, D. (2018). Managerial Economics in a Global Economy (Eighth edition). Oxford University Press.

4. Froeb, L. M., McCann, B. T., & Shor, M. (2017). Managerial Economics: A Problem-Solving Approach (Fifth edition). Cengage Learning.
5. Samuelson, W. F., & Marks, S. G. (2017). Managerial Economics (Nineth edition). Wiley.
6. Hirschey, M. (2016). Fundamentals of Managerial Economics (Seventh edition). Cengage Learning.

**Assessment Rubrics:**

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

## KU6DSEECO307: ADVANCED MATHEMATICAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSE | 300-399 | KU6DSEECO307 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

This course aims to equip students with essential mathematical tools and techniques necessary for economic analysis. It begins with a thorough exploration of multivariate differentiation, followed by the study of integration techniques. Linear equation analysis is then introduced to provide foundational skills in modelling economic relationships. The course also delves into applications of matrix algebra and linear programming techniques, emphasizing their relevance in optimizing economic decisions and analyzing complex economic systems.

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Apply multivariable differentiation for analysing economic phenomenon | A, An |
| 2 | Explain the concept of integration and apply them for understanding economic phenomenon | A, An |
| 3 | Solve systems of linear equations using various methods | A, An |
| 4 | Evaluate optimum conditions using matrix concepts. | E |
| 5 | Apply linear programming technique for optimum solution. | 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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **MULTI-VARIABLE DIFFERENTIATION** | | **14** |
| | 1 | Review of major rules of differentiation. | 2 |
| | 2 | Partial derivatives- First and higher order partial derivatives. | 2 |
| | 3 | Total differential and total derivative - Higher order derivatives and differentials. Homogeneous function and its properties. Euler's Theorem. | 5 |
| | 4 | Application of multivariable differentiation in economics: Marginal analysis, partial elasticities and optimisation of multivariable function - Constrained optimization with Lagrange multipliers. | 5 |
| 2 | **INTEGRATION** | | **13** |
| | 1 | Concept of integration –Indefinite integration- Rules of indefinite integrals. | 2 |
| | 2 | Integration by substitution, parts and partial fraction –Applications of indefinite integration in economics. | 5 |
| | 3 | Definite Integral-Properties of definite integration. | 2 |
| | 4 | Applications of definite integration in Economics: Area under curve and area between curves- consumer's surplus and producer's surplus. | 4 |
| 3 | **MATRICES** | | **11** |
| | 1 | Review of basic concepts and rules of matrix. Determinant, inverse and solving linear equation. | 3 |
| | 2 | Meaning and definition of rank of a matrix. Rank of the matrix from its echelon matrix. | 2 |
| | 3 | Characteristic equation, Eigen values and Eigen vectors. Cayley Hamilton Theorem. | 3 |
| | 4 | Discriminants and Sign definiteness of quadratic functions. Hessian and higher order Hessian matrix. Optimization conditions of quadratic forms subject to linear constraints. | 3 |
| 4 | **LINEAR PROGRAMMING** | | **12** |
| | 1 | Terminology- Basic assumptions- Formulation of LPP. | 2 |
| | 2 | Graphical solutions to maximisation and minimisation problems. | 2 |
| | 3 | Simplex method- Solutions to problems using simplex method. | 4 |
| | 4 | Duality in LPP – Formulation of dual – Characteristics – Economic interpretation of dual – Applications and limitations of linear programming. | 4 |
| 5 | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Direction:* Input- Output analysis | | |
| | The module would preferably set on the theme of input-output analysis with special emphasis on analytical exercises. | | |

**Essential Readings:**

1. Anthony, M., & Harvey, M. (2012). *Linear algebra. Concepts and methods*. Cambridge University Press.

2. Chiang, A. C., & Wainwright, K. (2013*). Fundamental methods of mathematical economics*. McGraw Hill.
3. Dowling, E. T. (2012). *Schaum's outline of introduction to mathematical economics*. McGraw Hill.
4. Jacques, I. (2006). Mathematics for economics and business. Pearson Education Limited.
5. Sydsaeter, K., & Hammond, P. (2012). *Essential mathematics for economic analysis*. Pearson.
6. Taha, H. A. (2017). *Operations research*. *An introduction*. Pearson.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential reading 3, 4, 5 | |
| | 2 | Essential reading 3, 4, 5 | |
| | 3 | Essential reading 2, 3, 5 | |
| | 4 | Essential reading 2, 3 | |
| **2** | 1 | Essential reading 4, 5 | |
| | 2 | Essential reading 5 | |
| | 3 | Essential reading 4, 5 | |
| | 4 | Essential reading 4, 5 | |
| **3** | 1 | Essential reading 1, 3, 4, 5 | |
| | 2 | Essential reading 1, 2, 3 | |
| | 3 | Essential reading 1 | |
| | 4 | Essential reading | |
| **4** | 1 | Essential reading 6 | |
| | 2 | Essential reading 6 | |
| | 3 | Essential reading 6 | |
| | 4 | Essential reading 6 | |
| 5 | | Essential reading 1 - 6 | Preferably |

**Suggested Readings:**

1. Baruah, S. (2011). *Basic mathematics & its application in economics*. Macmillan.
2. Hillier, F. S., & Lieberman, G. J. (2010). *Introduction to operations research*. McGraw Hill.
3. Monga, G. S. (2019). *Mathematics and statistics for economics*. Vikas.

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 8 |
| b) | Test Paper-2 | 8 |
| c) | Assignment | 8 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report | |
| **Total** | | **100** |

## KU6DSEECO308: INSTITUTIONAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSC | 300-399 | **KU6DSEECO308** | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course gives an introduction to Institutional Economics with special emphasis on New Institutional Economics. It gives an understanding of the role of institutions in shaping economic behaviour, transactions and outcome. Through a combination of theoretical frameworks, historical case studies, and contemporary examples, this course will also enable students to understand how institutions influence economic systems, governance structures and development process.*

. **Course Prerequisite: NIL**

**Course Outcomes:**

**Upon completion of this course, students are expected to be able to:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Understand analytical framework of Institutional Economics and New Institutional Economics and apply it in different areas in which institutions may affect outcomes | U, A, An |
| 2 | Understand the role of transactions, old and new institutional economics and growth process in economics | R, U, An |
| 3 | Comprehend and use principles of New Institutional Economics to analyse markets, firms and the state | A, An, E |
| 4 | Understand and apply the principles of NIE to property rights and contracts | U, A, An, E, 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 | ✔ | ✔ | ✔ | ✔ | ✔ | | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **INTRODUCTION TO INSTITUTIONAL ECONOMICS** | | **10** |
| | 1 | Coordinating transactions in a complex world- examples of Origin of financial crisis of 2008 in USA, Watchdogs and Boycotts, Microsoft, Protectionism and Global Warming. | 3 |
| | 2 | Coordinating Transactions and Role of Institutions: | 3 |
| | | a) Meaning of Institutions- Difference between formal and informal institutions- Institutional Environment-Institutionalisation as a process | |
| | | b) Effectiveness of Institution- Institutions enable and constrain- Economic Systems and governance structures | |
| | 3 | Introduction to Theoretical Framework I | 4 |
| | | a) Meaning of Institutional Economics | |
| | | b) Original Institutionalism and New Institutionalism-Differences and important people associated with each school -Veblen and Commons and Institutionalism -Douglas C. North, Ronald Coase, Elinor Ostrom, and Oliver Williamson and New Institutional Economics (very brief concept only) | |
| 2 | **INTRODUCTION TO THEORETICAL FRAMEWORK II** | | **10** |
| | 1 | **Introductory concepts and how they work in Institutional Economics:** Transactions (Market Transaction- Managerial Transaction and Political Transaction)- Optimizing behaviour and Opportunism- Risks and uncertainties- Perfect Competitions and efficiency- Market Imperfections (Imperfect information, market power, pure public goods, externalities and (de)merit goods, and natural monopolies-Transaction cost (Brief concept on each only) | 3 |
| | 2 | **Subject matter of institutional economics**- Static efficiency and static vested interest approaches- dynamic efficiency and dynamic vested interest approach | 3 |
| | 3 | Institutions matter (Concept by Douglas C. North)- Institutions and Development | 2 |
| | 4 | Case Study Example of Pirate Economy based on Pirates of the Caribbean movie | 2 |
| 3 | **STATIC AND DYNAMIC APPROACHES TO INSTITUTIONS** | | **17** |
| | 1 | Static Approach to Institutions | |
| | | a) Property Rights Theory (Assigning Property Rights, Enforcing Property Rights | 2 |
| | | b) Contract Theories (Agency Theory: Principal- Agent Theory: Moral Hazard and Adverse Selection; Implicit Contract Theory) (brief concepts only) | 5 |

| | | | |
|---|---|---|---|
| | | c) Transactions Cost Theory of Governance Structures (Transaction Cost Economics and Governance structures) | 2 |
| | | d)The Vested Interest Appraoch (Property Rights, Agency, Governance Structures) (brief concepts only) | 2 |
| | 2 | Dynamic approach to institutions | |
| | | a) Drivers of institutional change (Exogenous drivers of change, Motivations of change: efficiency and vested interests) | |
| | | b) The evolutionary approach toward the dynamics of institutions (institutions as an equilibrium: history matters, Darwinian evolution, Path Dependence, Gradual Change and 'Puncutuated Equilibria'; Cumulative Causation) (brief concepts only) | 4 |
| | | c) The design approach towards dynamics of institutions (Designing efficient institutions: the NIE approach, Designing effective institutions: the OIE approach) | 2 |
| **4** | **PRIVATE GOVERNANCE STRUCTURES AND PUBLIC GOVERNANCE STRUCTURES** | | **13** |
| | 1 | PRIVATE GOVERNANCE STRUCTURES | |
| | | a) MARKETS: The static efficiency approach to markets- The static vested interest approach to markets- The dynamic efficiency approach to markets, The dynamic vested interest approach to markets | 3 |
| | | b) FIRMS: The static efficiency approach to firms- The static vested interest approach to firms- The dynamic efficiency approach to firms, The dynamic vested interest approach to firms | 4 |
| | **2** | PUBLIC GOVERNANCE STRUCTURES | |
| | | a) State Intervention to Protect the Public Interest (The static approach to state intervention- The Dynamic Approach to State intervention) | 3 |
| | | b) Government Failures (The static approach to government failures, The dynamic approach to government failures) - Arrow's Impossibility Theorem | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions* | | |
| | Case Studies given in the textbook Institutional Economics: An Introduction by John Groenewegen, Antoon Spithoven, Annette Van den Berg can be used extensively to understand and analyse concepts<br>Case studies in Indian contexts such as **Kudumbashree, COVID 19, Nipah** etc can be discussed. Assignments, seminar and presentations could be given based on examples from India with special focus on Kerala | | |

**Essential Readings:**


1. Groenewegen, J., Spithoven, A., & Van den Berg, A. (2010). *Institutional economics: An introduction*. Bloomsbury Academic / Red Globe Press. Bloomsbury+1
2. Furubotn, E. G., & Richter, R. (2005). *Institutions and economic theory: The contribution of the new institutional economics* (2nd ed.). University of Michigan Press. press.umich.edu+1
3. North, D. C., Coase, R. H., Ostrom, E., & Williamson, O. E. (n.d.). *Contributions of Douglas C. North,Ronald H. Coase,Elinor Ostrom,andOliver E. Williamson*. https://core.ac.uk/download/pdf/52809172.pdf


**Reference Distribution:**

| Module | Reference No. | Remarks |
|---|---|---|
| **1** | Essential Reading 1,2,3 | |
| **2** | Essential Reading 1,2,3 | |
| **3** | Essential Reading1,2,3 | |
| **4** | Essential Reading 1,2,3 | |

**Suggested Readings:**

1. Ménard, C., & Shirley, M. M. (Eds.). (2005). *Handbook of new institutional economics*. Springer.
2. Brousseau, É., & Glachant, J.-M. (Eds.). (2008). *New institutional economics: A guidebook*. Cambridge University Press.

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 6 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | 3 |
| f) | Viva-Voce | 3 |
| g) | Field Report | |
| **Total** | | **100** |

**KU6DSEECO309: LABOUR ECONOMICS**

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | DSE | 300-399 | KU6DSEECO309 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

## Course Description

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

**COURSE OUTCOMES**

**Course Learning Outcomes: At the end of the Course, the Student will be able to -**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| **1** | Understand various concepts related to labour, work and theory of development | R, U |
| **2** | Able to explain and understand rural and urban divide in wage structure and composition of labour market. | An, E |
| **3** | Students able to understand, analyse, and apply various theories of labour economics | U,A, An |
| **4** | Students will also able to evaluate how the social constructs like gender , class and caste impacts labour | An, E |
| **5** | Able to evaluate, interpret, critically assess and write articles based on empirical results, survey reports, and scientific papers in labour economics. | E, C |

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

**-Mapping of Course Outcomes to PSOs**

| COs | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 | PSO6 | PSO7 |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CO1** | √ | | √ | | | | |
| **CO2** | √ | | √ | | | √ | |
| **CO3** | √ | | √ | √ | | √ | |
| **CO4** | √ | √ | √ | √ | | √ | |
| **CO5** | √ | √ | √ | √ | √ | √ | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **LABOUR MARKET – BASIC CONCEPTS** | | **13** |
| | 1 | Labour and Workforce - Concepts, types and measurement of labour force | 3 |
| | 2 | workforce participation rate- Casualisation of workforce- Choice between work and leisure | 3 |
| | 3 | Demand and Supply of Labour- labour supply/demand schedule and functions-income effect, substitution effect- factors affecting supply and demand for labour- wage elasticity of demand for labour | 3 |
| | 4 | Labour market equilibrium - wage structure in different markets- components of wage- efficiency wage- wage distribution and inequality of wage- minimum wages-objectives, principles- social security aspects of labour market | 4 |
| 2 | **THEORIES OF LABOUR MARKET** | | **13** |
| | 1 | Classical theory of supply and demand for labour- Say's law of market- Division of Labour and Specialisation- Marxian theory of labour- implications, | 5 |
| | 2 | Marginal productivity theory of labour - implication -Keynesian theory of labour market- implications | 2 |
| | 3 | Backward bending labour supply curve - Dual and segmented market theories- Lewis theory- Harris -Todaro model | 3 |
| | 4 | Human Capital theory- Search and Matching theory - DMP Model- Institutional theory | 3 |
| 3 | **EMPLOYMENT AND UNEMPLOYMENT** | | **12** |
| | 1 | Meaning of employment, unemployment and under employment- classification- Labor Market Flexibility and Precarious Work – labour mobility- Employment and unemployment scenario in India | 4 |

| | | | |
|---|---|---|---|
| | 2 | Indicators of unemployment and underemployment; measuring rural and urban unemployment- employment statistics- labour surveys and reports | 3 |
| | 3 | Causes of unemployment- measures to reduce unemployment in India- - employment policy under the five year plans- evaluation of employment policy in India. | 2 |
| | 4 | Recent trends in employment and unemployment issues- structural change-employment opportunities- education and training - skills mismatch- Educated unemployment –entrepreneurship development and startups – Impact of technology and AI | 3 |
| **4** | **CONTEMPORARY ISSUES IN LABOUR MARKET -INDIAN AND GLOBAL CONTEXT** | | **12** |
| | 1 | Characteristics of Indian labour market, types and sectoral wise division of labour market in India - labour in urban and rural India- farm and non-farm workers- organized and unorganized workers | 2 |
| | 2 | Wage policies- labour union and labour laws- labour market reforms in India- recent trends in Kerala labour market | 2 |
| | 3 | Labour issues related to age, class, caste and gender- child labour- violation of labour rights- labour market discrimination- feminization of work- work life balance – contribution of Claudia Goldin | 5 |
| | 4 | Globalisation and informalisation of labour-Global labour market challenges- Labour migration- | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Cases study* | | - |
| | This module would preferably be set as case study-based on current labour economics literature | | |

**Essential Readings**


1. C R Mc Connell and S L Brue: Contemporary Labour Economics- McGraw Hill, 1986.
2. Ehrenberg, R. G. and Smith, R. S. (2018): Modern Labour Economics: Theory and Public Policy, Routledge.
3. Ronald G. Ehrenberg and Robert Smith (2005): Modern Labour Economics, 5th Edition. New York: McGraw-Hill.
4. Reynolds, Lloyd G (1951).The Structure of Labour Markets- Yale University Press, New haven
5. Lester, Richard Allen (1964). Economics of Labour- Macmillan publication
6. Rees, Albert (1978). Economics of Work and Pay, Harper & Row, Labour Economics
7. Borjas, George J (2016). Labor Economics (Ed. 7th). New York: McGraw Hill.
8. Smith, Stephen (2003). Wage Determination and Inequality in Labour Economics 2nd edition, Routledge, London and New York.
9. Marx, K. (1976). Wage, Labour and Capital & Value, Price and Profit, International Publishers, NewYork. 6.
10. Shapiro, Carl and Joseph, Stiglitz (1986). Equilibrium Unemployment as a Worker Discipline Device in Akerlof, G. A and J. L. Yellen (eds.), Efficiency Wage Models of

the Labour Market. Cambridge University Press.
11. Keynes, J. M. (1935). Changes in Money Wages (Chapter 19) in The General Theory of Employment, Interest and Money. Atlantic Publishers and Distributors (P) Ltd, New Delhi, India.
12. Osterman, P. (1984). Internal Labor Markets. MIT Press
13. Harris, J. R., & Todaro, M. P. (1970). Migration, Unemployment and Development: A Two-Sector Analysis. The American Economic Review, 60(1), 126-142.
14. Becker, G.S., Human Capital (1994) Human Capital-A Theoretical and Empirical Analysis, with Special Reference to Education .University of Chicago press.
15. Mortensen, D. T., & Pissarides, C. A. (1994). Job Creation and Job Destruction in the Theory of Unemployment. Review of Economic Studies, 61(3), 397-415.
16. Khera, R (2011). The Battle for Employment Guarantee, Oxford University Press, New Delhi.
17. Deshpande, L K, Brahmanand P R and Robinson E A G (1983) Employment Policy in Developing Economy- Macmillan.
18. Das, N (1960). Unemployment, Full Employment and India- Asia Publishing House
19. Ehrenberg, Ronald G., Smith, Robert S.. (2015). Modern labor economics : theory and public policy / Ronald G. Ehrenberg ; Robert S. Smith (12th ed). Harlow: Pearson Education.
20. Pierre Cahuc & Stéphane Carcillo & André Zylberberg & William Mccuaig, (2014). Labor Economics, Sciences Po publications
21. Bruce E. Kaufman (1994), The Economics of Labor Markets, the University of Michigan , Dryden Press, 1994
22. Freeman, Richard B (1982) The Youth Labor Market Problem (Hardcover),The University of Chicago Press, Chicago, IL
23. Patnaik, Utsa (1983). "On the Evolution of the Class of Agricultural Labourers in India", Social Scientist, 11(7).
24. Dreze, J. (2011). Employment Guarantee and the Right to Work, in Khera (ed.) The Battle for Employment Guarantee, Oxford University Press, New Delhi
25. Sanyal, Kalyan and Bhattacharya, Rajesh (2009). "Beyond the Factory: Globalisation, Informalisation of Production and the New Locations of Labour", Economic and Political Weekly, 44(22).
26. Roy, Satyaki (2014). "Informality' and Neo-liberalism: Changing Norms and Capital's Control" in Kannan et al (eds.) Labour and Development: Essays in Honour of Professor T. S. Papola, Academic Foundation, New Delhi215-234.
27. Goldin, Claudia and Loy, Mary Blair (2017) Gender in the Workplace: A Case Study Approach, Polity Press

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1-4 | Essential Reading 1-7 | |
| | | | - |
| **2** | 1-4 | Essential Reading 8-15 | - |
| **3** | 1-4 | Essential Reading 16-23 | - |
| **4** | 1-4 | Essential Reading 24-28 | - |

**Suggested Readings**

1. Abraham, K.G. and R.B. Mckersie (1991), New Developments in Labour Market: Toward a New Institutional Paradigm, MIT Press.
2. Verma, Anil et al (1995), Employment Relations in the Growing Asian Economics, Routledge.
3. Bagchi, A.K., (1994), New Technology and the Workers'Response, Sage Publications.
4. Banerjee, D. and Goldfield, M. (eds.) (2007). Labour, Globalisation and the State: Workers, Women and Migrants Confront Neoliberalism. Routledge, London and New York.
5. Card, D., and Ashebfelrer, O. (2011): Handbook of Labour Economics, Vol.4 A&B, Elsevier

**Assessment Rubrics:**

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

## KU6SECECO304: GOODS AND SERVICES TAX

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | **SEC** | 300-399 | **KU6SECECO304** | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | **1.5 hours** |

**Course Description:**

This course helps the students to understand GST which has immense career opportunities both in the private and public sector. Students are able to find a career as GST professionals in small and medium enterprises. The course covers major aspects of GST laws, procedures and accounts. This course also provides practical sessions on registration and return filing provisions under GST.

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learnin g Domain s |
|---|---|---|
| **CO** 1 | Critically analyze the key aspects and implications of GST laws in India | An, E |
| **CO** 2 | Proficiently apply the procedures for GST registration and return filing | An, E |
| **CO** 3 | Integrate advanced accounting principles with GST regulations | An, E |
| **CO** 4 | Independently implement GST registration and return filing provisions | An, E |

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

**-Mapping of Course Outcomes to PSOs**

| CO s- | 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 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO GST** | **13** |
| | 1 | a) Constitutional Background of introduction of GST – Characterization of Indian GST - | |
| | | b) Central Goods and Services Tax, (CGST), | |
| | | c) State Goods and Services Tax (SGST) | |
| | 2 | Integrated Goods and Services Tax (IGST), Definitions - Levy and Collection of Tax, Composition Scheme - Registration. Input Tax Credit, Tax Invoice | |
| 2 | | **PLACE OF SUPPLY OF GOODS** | **13** |
| | | a) Place of supply of goods, Place of supply of services - Filing of Returns & Payment of Tax, Tax Deduction at Source & Tax Collection at Source, - | |
| | | b) Refund Mechanism - Assessment, Audit, Advance Ruling - GST Rates and use of HSN Code/SAC | |
| | | c) Performance of GST in India | |
| 3 | | **ACCOUNTING FOR GST** | **24** |
| | 1 | Book-keeping & Accounting - Business Transactions- Invoice & Vouchers | 5 |
| | 2 | Double Entry Principle - Debit & Credit - Journal - Ledger - Bank Reconciliation Statement | 4 |
| | **3** | PRACTICAL SESSIONS | **15** |
| | | Registration – Composition - Input Tax Credit - Tax Invoice - Return filing - Payment of Tax – Refund - e-way Bill. - e-invoicing | |
| 4 | | **TEACHER SPECIFIC MODULE** | **10** |
| | | Directions:<br>• Case example showing how a single transaction is split between CGST and SGST.<br>• Map illustration of inter-state supply with IGST flow<br>• Simple exercise: Calculate GST under regular and composition schemes.<br>• **Group Exercises** for collaborative understanding<br>• Practical Worksheet on Refund, Assessment & HSN Code Usage<br>• Case Study on Place of Supply and Tax Liability<br>• Journal Entries and Ledger Posting under GST<br>To make students experience a **complete GST workflow** — from registration to filing returns — using sample data. | |

**Essential Readings:**

1. Govinda Rao M (2019) Goods & Service Tax in India: Progress, Performance and Prospects, Deepak & Neera Raj Centre on Indian Economic Policies. Columbia

University Working Paper No 2019-02
2. GoI. 2019. Report of the Comptroller and Auditor General of India for the year ended March 2018. Department of Revenue. Available at https://cag.gov.in/uploads/download_audit_report/2019/Report_No_11_of_2019_Compliance_Audit_of_Union_Government_Department_of_Revenue_Indirect_Taxes_Goods_and_Services_Tax.pdf
3. Nayyar, A., & Singh, I. (2018). A comprehensive analysis of Goods and Services Tax (GST) in India. Indian Journal of Finance, 12(2), 57-71. Available at https://www.indianjournaloffinance.co.in/index.php/IJF/article/view/121377
4. Gulati Institute of Finance and taxation. 2021. Report on GST Compensation in India State Level Experience and the Way Forward. September. Available at https://www.gift.res.in/ofk_im/extra/Report_on_GST_Compensation.pdf
5. Joseph, K. J., & Kumary, L. A. (2023). India's GST Paradigm and the Trajectory of Fiscal Federalism: An Analysis with Special Reference to Kerala. The Indian Economic Journal, 71(1), 187-203. https://doi.org/10.1177/00194662221146640
6. Goods and Service Tax Counsil. (n.d). Brief History of GST in India Available at https://gstcouncil.gov.in/brief-history-gst

**Reference Distribution:**

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

**Suggested Readings:**

1. **Mahlawat, S. (2018).** *Goods and Services Tax and Indian retail sector: Issues and challenges.* In *Indian Economy: Tales of Transformation* (p. 52)..
2. Mahajan, P. (2015). E-Way Bill: A Digital Approach toward GST in India.

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation theory | | **35** |
| End Semester Evaluation practical | | **15** |
| Continuous Evaluation theory | | **15** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | 5 |
| d) | Seminar | |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| Continuous Evaluation – Practical Field/Practical Report | | 10 |
| **Total** | | **75** |

s

## KU6SECECO305: FINANCE AND TECHNOLOGY

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | **SEC** | 300-399 | **KU6SECECO305** | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | **1.5(Hours)** |

**Course Description:**

This course introduces the sunrise sector of Fintech to the students. It provides the ways in which new technologies are disrupting the financial services industry. The course will explore the basic difference between the traditional and modern financial sector while dealing with therole of innovation and technology in business models, products, applications and customer user interface. The course will detail how technologies such as AI, ML, deep learning, blockchain, and open APIs are reshaping the financial sector. Finally, the various fintech sectors in India will be elaborated.

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| **CO** 1 | Evaluate and articulate the differences between traditional finance and Fintech | An, E |
| **CO** 2 | Assess the roles of various technologies in the Fintech sector | An, E |
| **CO**3 | Synthesize the roles of AI, ML, deep learning, blockchain, and open APIs in Fintech | An, E |
| **CO**4 | Critically analyze case studies in various sectors of Fintech in India | 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 | ✓ | | ✓ | | | ✓ | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| **MODU** | **UNI** | **DESCRIPTION** | **HOURS** |
|---|---|---|---|

| L E | T | | |
|---|---|---|---|
| 1 | **INTRODUCTION OF FINTECH AND FINANCE SECTOR** | | **12** |
| | 1 | Fintech and the Finance sector - Innovation and Disruption in Finance | |
| | 2 | Introduction to the Fintech landscape - Applications of FinTech | |
| 2 | **FINTECH ARCHITECTURE AND FINTECH TECHNOLOGIES** | | **7** |
| | 1 | Overview of FinTech architecture - Introduction to Blockchain integration in FinTech | |
| | 2 | Introduction to Open Application Programming Interfaces (APIs) - Exploring the applications of AI and ML in finance | |
| 3 | **INDIA'S FINTECH SECTOR - PART 1** | | **15** |
| | 1 | Overview of various fintech sectors in India: The regulatory framework for fintech in India & Regulatory compliance issues in the Indian fintech space | |
| | 2 | Trends in FinTech and the Fintech landscape in India - Examining key players, institutions, innovations, and challenges. | |
| 4 | **INDIA'S FINTECH SECTOR - PART 2 - CASE STUDIES** | | **16** |
| | 1 | Real Time Payments and Neo Banking - Wealthtech and Insurtech - Lending and Blockchain - The impact of Fintech on the Financial Inclusion and broader economy | |
| 5 | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions***)* | | **-** |
| | This module would preferably be set as work based one. Contents would be preferably based on the modules in the current syllabus or any other theme which would make learning the course more effective. | | |

**Essential Readings:**


1. Phadke, Sanjay. 2023. Fintech Future: The Digital DNA of Finance Paperback – 23 September. Atlantic
2. Singh, Jaspal. 2022. Financial Technology (FinTech) and Digital Banking in India Hardcover – 1 November.
3. Chishti, S., & Barberis, J. (2016). The Fintech book: The financial technology handbook for investors, entrepreneurs and visionaries. John Wiley & Sons.
4. Gyorfi, L., Ottucsak, G., & Walk, H. (Eds.). (2012). *Machine learning for financial engineering* (Vol. 8). World Scientific.
5. Harvey, C. R., Ramachandran, A., & Santoro, J. (2021). *DeFi and the Future of Finance*. John Wiley & Sons.
6. Kube, N. (2018). Daniel Drescher: Blockchain basics: a non-technical introduction in 25 steps: Apress, 2017, 255 pp, ISBN: 978-1-4842-2603-2.
7. Moilanen, J., Niinioja, M., Seppänen, M., & Honkanen, M. (2019). *API economy 101: changes your business*. BoD-Books on Demand.
8. Realini, C., & Mehta, K. (2015). *Financial Inclusion at the Bottom of the Pyramid*. FriesenPress.
9. Sironi, P. (2016). *FinTech innovation: from robo-advisors to goal based investing and gamification*. John Wiley & Sons.
10. Cevik, S. (2024). Is Schumpeter Right? Fintech and Economic Growth.
11. Baporikar, N. (2021). Fintech challenges and outlook in India. In *Innovative strategies for implementing FinTech in banking* (pp. 136-153). IGI Global.
12. Chugh, B. (2019). Financial Regulation of Consumer-Facing Fintech in India: Status Quo

and Emerging Concerns. *Available at SSRN 3520473*.
13. Kamuangu, P. K. (2024). Advancements of AI and Machine Learning in FinTech Industry (2016-2020).
14. Migozzi, J., Urban, M., & Wójcik, D. (2023). "You should do what India does": FinTech ecosystems in India reshaping the geography of finance. *Geoforum*, 103720.
15. Nelaturu, K., Du, H., & Le, D. P. (2022). A review of blockchain in fintech: taxonomy, challenges, and future directions. *Cryptography*, *6*(2), 18.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1, 2, 3 4 | |
| | 2 | | |
| 2 | 1 | Essential Reading 1, 4, 5, 6, 7 | |
| | 2 | | |
| 3 | 1 | Essential Reading 8, 9, 10 | |
| | 2 | | |
| 4 | 1 | Essential Reading 11, 12, 13, 14, 15 | |

**Suggested Readings:**

1. Premchand, A., & Choudhry, A. (2018, February). Open banking & APIs for transformation in banking. In *2018 international conference on communication,computing and internet of things (IC3IoT)* (pp. 25-29). IEEE.
2. Rajeswari, P., & Vijai, C. (2021). Fintech industry in India: the revolutionized financesector. *Eur. J. Mol. Clin. Med*, *8*(11), 4300-4306.
3. Renduchintala, T., Alfauri, H., Yang, Z., Pietro, R. D., & Jain, R. (2022). A survey of blockchain applications in the fintech sector. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(4), 185.
4. Rafay, A. (Ed.). (2019). *FinTech as a Disruptive Technology for Financial Institutions*.IGI Global.

**Assessment Rubrics:**

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

## KU6SECECO306: DATABASES AND BASIC COMPUTATIONAL TECHNIQUES FOR DATA ANALYSIS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | **SEC** | 300-399 | **KU6SECECO306** | | 3 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 2 | 2 | 0 | 25 | 50 | 75 | **1.5 (Hours)** |

**Course Description:**

The course intends to provide the students the benefits of secondary data and introduces the secondary sources of socio-economic data in India and the world. The various socio-economic databases will be introduced along with hands on training on how to derive the data and do basic data analysis using Gretl, R, Ms and various Spreadsheet software.

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

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Critically evaluate and compare various databases on the Indian economy, including national income, public finance, money, banking, stock markets, and external sector data | An, E |
| 2 | Synthesize techniques for data extraction and interpretation for comprehensive economic research | An, E |
| 3 | Interpret and analyze various economic indexes and price data relevant to India | An, E |
| 4 | Use scatter plots to visualize and analyze relationships between economic variables, measuring association through covariance and correlation | An, E |

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

**-Mapping of Course Outcomes to PSOs**

| CO s- | 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 |
|---|---|---|---|
| 1 | | **INTRODUCTION TO SECONDARY DATA** | 12 |
| | 1 | Databases on the Indian Economy – National Income – Public Finance – Money, Banking and Stock Markets - BoP & External Sector - RBI databases – Government of India, Ministry of Statistics and Programme Implementation Reports | |
| | 2 | Economic Survey – Use of Administrative Data - Cross country databases - World Bank Indicators - UN data sets – Penn World Tables Weather and Spatial Data | |
| 2 | | **INTRODUCTION TO UNIT LEVEL DATABASES** | 12 |
| | | Census – Economic Census – Agricultural Census - Government of India, Ministry of Statistics and Programme Implementation | |
| | | Methods of extraction of Unit Level Data - NSSO – ASI – CMIE - Data sources on Kerala – Economic Review – Kerala Migration Surveys | |
| 3 | | **BASIC COMPUTATIONAL TECHNIQUES FOR DATA ANALYSIS** | 13 |
| | 1 | Data collection from secondary sources – Data entry & Data Cleaning in Microsoft Excel, Google Spread Sheets, Gretl and R – Time Series, Cross section and Panel data data | |
| | 2 | Basic Arithmetic Operations - Graphical analysis of data Percentages – Measures of Central tendencies – Growth – Index and Splicing – Output and Prices - Indexes of India | |
| 4 | | **COMPUTATIONAL TECHNIQUES FOR DATA ANALYSIS WITH EXCEL** | 13 |
| | 1 | Measures of Dispersion – Use of Scatter plot – Range – Standard deviation – Co-efficient of Variation – Skewness – Kurtosis – Interest rate Calculation – EMI calculation – Measures of association – Covariance and Correlation – Regression analysis- Linear regression – Interpretation of coefficients – Hypothesis testing using ***t***-statistics, ***p*** value and confidence interval. | |
| 5 | | **TEACHER SPECIFIC MODULE** | 10 |
| | | This module aims at engaging students through simple practical and interactive learning activities. | |

**Essential Readings:**

1. 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.

2. Reserve Bank of India. 2017. Database on the Indian Economy. https://dbie.rbi.org.in/DBIE/doc/Brochure%20on%20DBIE%20-2017%20English.pdf
3. Reserve Bank of India. 2020. Handbook of Statistics on Indian Economy. https://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy
4. World Bank. 2021. World Development Report 2021 : Data for Better Lives. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/35218
5. Narayana., Ranjan and Tyagi. 2021. Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel. Sage India.
6. Government of India. 2011. District Census Handbook. https://censusindia.gov.in/2011census/dchb/DCHB.html
7. Government of India. 2021, Economic Census. http://mospi.nic.in/all-india-report-sixth-economic-census
8. Government of India. 2016. Agricultural Census 2015-16. https://agcensus.nic.in/document/ agcen1516/ac_1516_report_final-220221.pdf
9. Government of India. Data on Migration. https://censusindia.gov.in/2011census/migration.html
10. Government of Kerala. 2020. Economic Review 2020 | State Planning Board, Thiruvananthapuram, Kerala, India
11. Government of Kerala. Publications. http://www.ecostat.kerala.gov.in/index.php/agricultures
12. Narayana, Ranjan and Tyagi. 2021. Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel. Sage India.
13. McLennan, W. 1999. A Guide to the Consumer Price Index. Australian Bureau Of Statistics. https://www.ausstats.abs.gov.au/ausstats/free.nsf/0/EC37AE985DB7EB75CA256ADC000C35C6/$File/64400_1998.pdf
14. Government of India. 2010. Manual on Consumer Price Index. MOSPI. http://mospi.nic.in/sites/default/files/publication_reports/manual_cpi_2010.pdf
15. Narayana, Ranjan and Tyagi. 2021. Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel (2nd edition). Routledge.
16. Gujarati and Porter. 2009. Basic Econometrics. Tata McGraw Hill. Available online at https://cbpbu.ac.in/userfiles/file/2020/STUDY_MAT/ECO/1.pdf

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1, 2, 3, 4, 5 | |
| | 2 | | |
| 2 | 1 | Essential Reading 6, 7, 8, 9, 10, 11 | |
| | 2 | | |
| 3 | 1 | Essential Reading 12, 13, 14 | |
| | 2 | | |
| 4 | 1 | Essential Reading 15, 16, 17 | |

**Suggested Readings:**

1. Reserve Bank of India. 2017. Database on the Indian Economy. https://dbie.rbi.org.in/DBIE/doc/Brochure%20on%20DBIE%20-2017%20English.pdf

2. Reserve Bank of India. 2020. Handbook of Statistics on Indian Economy. https://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20Economy
3. World Bank. 2021. World Development Report 2021: Data for Better Lives. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/35218

**Assessment Rubrics:**

| Evaluation Type | | MARKS |
|---|---|---|
| End Semester Evaluation-Theory | | **35** |
| Continuous Evaluation Theory | | **15** |
| a) | Test Paper- 1 | 5 |
| b) | Test Paper-2 | 5 |
| c) | Assignment | 5 |
| d) | Seminar | |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| End Semester Evaluation - Practical | | **15** |
| Continuous Evaluation - Practical Field/Practical Report | | **10** |
| **Total** | | **75** |

## KU6INTECO301: INTERNSHIP

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VI | **INTERNSHIP** | 300-399 | **KU6INTECO301** | | 2 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| | 4 | 0 | 15 | 35 | 50 | -- |

**Course Description:**

A course requiring students to participate in professional employment- related activity or work experience, or cooperative education activity with an entity external to the education institution, normally under the supervision of an employee of the given external entity. A key aspect of the internship is induction into actual work situations. Internships involves working with local industry, businesses, agriculture, health and allied sectors, Local Government institutions, State Planning Board, State Councils/ Boards, elected representatives to the parliament/state assembly/panchayath, media organizations, artists, crafts persons, etc .These opportunities will enable the students to actively engage with the practical aspects of their learning and to improve their employability

I. **Mandatory Participation:** All students are required to undertake a 2-credit internship within the first six semesters of their program..

II. **Purpose:** The internship serves two primary purposes: enhancing the employability of the student and fostering research aptitude.

III. **Scope:** The internship may encompass various activities such as hands-on training in specific skills, equipment, or software. It can also involve the completion of a short project focused on a particular problem or area of study.

IV. **Supervision:** A designated faculty member, scientist, or instructor from the respective institution where the student is undertaking the internship will serve as the supervisor throughout the duration of the internship.

### INTERNSHIP GUIDELINES:

1. **Internship Requirement:** All students are required to participate in either an internship or apprenticeship. This may take place in a firm, industry, organization, or within laboratory

settings, either at their own institution or at other Higher Educational Institutions (HEIs) or research institutions.

2. **Credit Allocation:** For internships, one credit equates to a two-hour engagement per week. In a semester lasting 15 weeks, two credits translate to 60 hours of engagement.
3. **Continuation and Academic Impact:** Students engaged in internships may continue their placements provided their academic commitments, including attendance and assignments, are maintained. Opportunities to extend internships into summer and winter breaks may be available if necessary.
4. **Internship Objectives:** The internship aims to achieve the following:
    a) Developing problem-solving skills for real-world challenges.
    b) Cultivating an understanding of research ethics, professional conduct, and accountability.
    c) Enhancing academic productivity through improved writing, reading, and critical thinking skills, contributing to societal and economic issues.
    d) Fostering adaptability, flexibility, teamwork, and collaboration.
    e) Improving prospects for future employment and clarifying career goals.
    f) Instilling strong work ethics, time management, and professionalism in a professional setting.
5. **Role of Internship Coordinator:**
    a) An internship coordinator, nominated by the Department Council (DC), will monitor and supervise students during their internship period.
    b) The internship supervisor from the host institution will ensure the intern's regularity at the workplace. Upon completion, the student must submit a project report, evaluated by a faculty member designated by the department council.
6. **Selection of Organizations and Mentors:** Students may choose from various organizations and mentors, including HEIs, research organizations, industries, media companies, retail service providers, government agencies, NGOs, and international institutions.
7. **Guidelines for Internship Report:**
    a) The internship certificate, endorsed by the Head of the Institution, should include the student's name, internship course details, institute name, type of work, and duration.
    b) The internship report should be 3000-5000 words, typed in Times New Roman, size 12, with 1.5 spacing, double-sided, and neatly soft-bound. It must be submitted to the relevant department before the VI Semester university exam notification.
    c) The report should include:
        - Title page with internship details.
        - Declaration.
        - Certificate signed by the Head of the Institution.
        - Index.
        - Content covering introduction, nature of work, methodology, outcomes, limitations, and suggestions.

**INTERNSHIP EVALUATION**

Internship evaluation will be conducted internally, employing a continuous assessment approach by a committee formed within the Department Council of the student's college where they are enrolled in the UG (Honours) program. The allocation of credits and marks for the Internship will occur solely upon completion of semester 6. This evaluation system encompasses continuous assessment throughout the internship period and culminates in an end-semester viva-voce examination, focusing on the submitted report.

**Evaluation Components for Internship and their Weightage**

| Sl. No. | Components | Marks for Internship | Credits Weightage |
|---|---|---|---|
| 1 | Continuous evaluation through interim presentations and reports by the committee internally constituted by the Department Council | 15 | 30% |
| 1.1 | Acquisition of skill set | 5 | |
| 1.2 | Interim Presentation | 5 | |
| 1.3 | Punctuality | 5 | |
| 2 | ,End Semester Evaluation- Practical | **35** | |
| 2.1 | Report of Institute Visit/ Study Tour | 10 | 20% |
| 2.2 | (End-semester viva-voce examination to be conducted by the committee internally constituted by the Department Council)<br>Evaluation of day-to-day records, the report of internship supervisor, and final report submitted for the end semester viva–voce examination before the committee internally constituted by the Department Council | 25 | 50% |
| | Total Marks | 50 | |

**Assessment Rubrics**:

| Evaluation Type | | | MARKS |
|---|---|---|---|
| 1.Continuous Evaluation - Practical | | | **15** |
| | 1.1 | Acquisition of skill set | 5 |
| | 1.2 | Interim Presentation | 5 |
| | 1.3 | Punctuality | 5 |
| 2.End Semester Evaluation- Practical | | | **35** |
| 2.1 | Report of Institute Visit/ Study Tour | | **10** |
| 2.2 | Evaluation of the report | | **25** |
| | a)Evaluation of day-to-day records | | 5 |
| | b)the report of internship supervisor | | 5 |
| | c)final report submitted | | 10 |
| | d)viva–voce examination | | 5 |
| **Total** | | | **50** |

## KU7DSCECO401: ADVANCED MICROECONOMICS I

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VII | DSC | 400-499 | KU7DSCECO401 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course enables the students to travel through more advanced theoretical developments int the branch of microeconomics. The course would experience the students to widen their theoretical understanding and would provide strong micro foundations for other disciplines of economics. The course starts with the consumer behaviour analysis under uncertainty conditions. More advanced theoretical developments in production, cost and technology are explored in the subsequent module. This is followed by analysis of developments in game theory and applications of game theory to the oligopoly markets. In brief the course widens the theoretical understanding of an undergraduate student of economics by exposing them to more advanced theoretical developments in the branch of microeconomics*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| **CO** 1 | Analyse the behaviour of a consumer under uncertainty conditions in the light of sound theories | An, E |
| **CO** 2 | Analyse conditions of production, cost and technology in the light of given theories | An, E |
| **CO** 3 | Evaluate the dynamics of game theory as a tool for understanding market conditions like oligopoly | An, E |
| **CO** 4 | Analyse oligopoly market by applying tools and techniques from game theory | An, E |
| **CO** 5 | Analyse and demonstrate real world scenarios and cases in the light of sound microeconomic theories | 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** |
|---|---|---|---|
| **1** | **UNCERTAINTY AND CHOICE** | | **15** |
| | 1 | The expected utility analysis | 4 |
| | | a) St. Petersburg paradox and Bernoulli's solution to the paradox, | |
| | | b) Neumann – Morgenstern Theorem and expected utility maximization | |
| | 2 | Different preference towards risk | 3 |
| | | a) Risk aversion, risk loving and risk neutral | |
| | | b) Risk aversion and fair bets | |
| | | c) Risk aversion and insurance | |
| | 3 | The demand for risky assets | 2 |
| | | Trade-off between risk and return | |
| | 4 | The portfolio or investor's choice problem | 2 |
| | | Choice between risk and return | |
| | 5 | The state preference approach to 'choice under uncertainty' | 4 |
| | | Risk aversion under state preference model | |
| **2** | **PRODUCTION, COST AND TECHNOLOGY** | | **10** |
| | 1 | Production functions: fixed proportions, Cobb Douglas and CES production functions (properties) | 3 |
| | 2 | Production function with two outputs: Economies of scope | 1 |
| | | a) Degree of economies of scope | |
| | 3 | Technical progress: Measurement | 2 |
| | | a) Growth accounting | |
| | | b) Technical progress in Cobb-Douglas production function: input augmenting technical progress | |
| | 4 | Cost functions: properties of cost functions – Fixed Proportions, Cobb-Douglas and CES cost functions | 2 |

| | | | |
|---|---|---|---|
| | 5 | Input substitution: Elasticity of Substitution | 1 |
| | 6 | Dynamic changes in cost: The Learning curve | 1 |
| **3** | **GAME THEORY AND ECONOMIC BEHAVIOUR** | | **15** |
| | 1 | Gaming and strategic decisions – Co-operative Vs Non-co-operative games | 1 |
| | 2 | Dominant strategies | 2 |
| | 3 | Nash Equilibrium<br>a) The product choice problem | 2 |
| | 4 | Maxi-mini strategies | 2 |
| | 5 | Mixed strategies: The battle of sexes | 3 |
| | 5 | Repeated game: Tit for tat strategy,<br>a) Finite and infinitely repeated games | 3 |
| | 6 | Commitment and credibility: bargaining strategy<br>a) Entry deterrence | 2 |
| **4** | **OLIGOPOLY WITH GAME THEORY** | | **10** |
| | 1 | Equilibrium in oligopoly – Cournot Model and the Cournot Nash Equilibrium | 3 |
| | 2 | Stackelberg Model and first mover advantage | 2 |
| | 3 | Bertrand's Equilibrium and the Nash equilibrium in prices | 2 |
| | 4 | Competition Vs Collusion: The prisoner's dilemma<br>a) Implication of prisoner's dilemma for oligopoly pricing: Game theoretic approach to price rigidity and kinked demand curves | 3 |
| **5** | **Teacher Specific Module** | | **10** |
| | **Directions:** *Illustrations and cases from textbooks of Advanced Level Microeconomics* | | - |
| | This module would preferably be set as a case study-based module keeping standard textbooks of Microeconomics as basic reference [To site a few - (1) Microeconomics by ***Pindyck, R. S., Rubinfeld, D. L., & Mehtha P L*** (2) Principles of Microeconomics by ***Mankiv. G***, (3) Microeconomics by ***Krugman, P & Wells, R.***]. Contents would be preferably based on the modules in the current syllabus or any other topic so as to give better learning experience of the course at the advanced level. | | 10 |

**Essential Readings:**


1. Nicholson, W., & Snyder, C. M. *Microeconomic Theory Basic Principles and Extensions*. Cengage Learning. Latest Edition
2. Pindyck, R. S., Rubinfeld, D. L., & Mehtha P L. *Microeconomics*. Pearson Education. Latest Edition, 437 - 463

3. Mankiw. G, Principles of Microeconomics, Cengage-MindTap, Latest Edition
4. Krugman, P & Wells, R. Microeconomics, Worth Publishers, Latest Edition

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| | 2 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| | 3 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 4 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| | 5 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| **2** | 1 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 2 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| | 3 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 4 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 5 | Essential Reading 1 | - |
| | | Essential Reading 2 | - |
| | 6 | Essential Reading 2 | - |
| | | Essential Reading 1 | - |
| **3** | 1 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 2 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 3 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 4 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 5 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 6 | Essential Reading 2 | - |
| | | Essential Reading 1 | - |
| **4** | 1 | Essential Reading 2 | - |
| | | Essential Reading 1 | - |
| | 2 | Essential Reading 2 | - |

| | | | |
|---|---|---|---|
| | | Essential Reading 1 | |
| | 3 | Essential Reading 2 | - |
| | | Essential Reading 1 | - |
| | 4 | Essential Reading 2 | |
| | | Essential Reading 1 | |
| **5** | - | Essential Reading 2, 3 and 4 | Preferably |

**Suggested Readings:**


1. Salvatore. D, Principles of Microeconomics, Oxford International, Latest Edition
2. Baumol, W. J. (1951). The Neumann-Morgenstern Utility Index--An Ordinalist View. *Journal of Political economy*, *59*(1), 61-66.
3. Machina, M. J. (1990). Expected utility hypothesis. *Utility and probability*, 79-95.
4. Hirshleifer, J. (1966). Investment decision under uncertainty: Applications of the state-preference approach. *The Quarterly Journal of Economics*, *80*(2), 252-277.
5. Barro, R. J. (1999). Notes on growth accounting. *Journal of economic growth*, *4*, 119-137.
6. Panzar, J. C., & Willig, R. D. (1981). Economies of scope. *The American Economic Review*, *71*(2), 268-272.
7. Leonard, R. J. (1994). Reading Cournot, reading Nash: The creation and stabilization of the Nash equilibrium. *The Economic Journal*, *104*(424), 492-511.
8. Hirata, D., & Matsumura, T. (2010). On the uniqueness of Bertrand equilibrium. *Operations research letters*, *38*(6), 533-535.


**Assessment Rubrics:**

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

## KU7DSCECO402: ADVANCED MACROECONOMICS I

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VII | DSC | 400-499 | KU7DSCECO402 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This paper presents a macroeconomic picture of an economy in a bit depth. The first module focuses on the presentation of an economy through Aggregate demand and Aggregate supply. Theoretical advances in demand and supply of money are dealt in the second module. Developments in the theories of consumption and investments are presented in the third module and the three sector ISLM model is presented in the last module"*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CONo. | Expected Outcome (Short Version) | Learning Domain |
|---|---|---|
| **CO 1** | Recall key macroeconomic concepts and theories (Keynesian, IS-LM, Monetarist, etc.). | Remember (R) |
| **CO 2** | Understand interactions among consumption, investment, and policies in macroeconomics. | Understand (U) |
| **CO 3** | Apply IS-LM and investment models to real economic data and policy analysis. | Apply (A) |
| **CO 4** | Analyse data and models to identify patterns and evaluate macroeconomic policy effectiveness. | Analyse (An) |
| **CO 5** | Evaluate the relevance and effectiveness of major macroeconomic theories and policies. | Evaluate (E) 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:**

| MODULE | UNIT | DESCRIPTION | HOURS 60 |
|---|---|---|---|
| 1 | **BEHAVIOURAL FOUNDATIONS OF MACRO ECONOMICS** | | **13** |
| | 1 | Keynesian consumption function and its properties, | 2 |
| | 2 | Empirical findings regarding consumption function – Kuznets consumption puzzle | 2 |
| | 3 | Alternative theories – Permanent income hypothesis, Absolute income hypothesis, Life cycle hypothesis and Relative income hypothesis. | 6 |
| | 4 | Keynesian theory of investment – The marginal efficiency of investment | 1 |
| | 5 | Marginal efficiency of capital (MEC) and Net present value (NPV) criterion of investment | 1 |
| | 6 | Accelerator Theory of Investment | 1 |
| 2 | **NEO-CLASSICAL AND KEYNESIAN SYNTHESIS** | | **12** |
| | 1 | Hicks-Hansen ISLM Model- IS and LM curves in two sector model general Equilibrium | 3 |
| | 2 | Factors determining slope and shifts in IS and LM curves | 2 |
| | 3 | Relative Effectiveness of Monetary and Fiscal Policies-Keynesian and Classical Versions | 2 |
| | 4 | Extension of ISLM model with Labour market and flexible prices– Unemployment and labour market | 3 |
| | 5 | Three sector macro model– Keynesian and Neo-classical versions | 2 |
| 3 | **CONTROVERSIES IN MACRO ECONOMICS** | | **13** |
| | 1 | Walrasian General equilibrium- Walrasian law, Walrasian Auctioneer | 3 |
| | 2 | Money and time, production and exchange in Walrasian model | 3 |
| | 3 | The reinterpretation of Keynes as non Walrasian equilibrium model | 3 |
| | 4 | Dual decision distinction | 1 |
| | 5 | Neo-Keynesian quantity constrained model | 3 |
| 4 | **THE MONETARIST COUNTER REVOLUTION** | | **12** |
| | 1 | Monetarist Propositions | 1 |
| | 2 | The Reformulation of the Quantity Theory of Money: Friedman's Restatement of the Quantity Theory | 2 |
| | 3 | Output, Inflation, and Unemployment: The Natural Rate Theory | 3 |
| | 4 | Monetary Policy, Output, and Inflation: Friedman's Monetarist View | 2 |
| | 5 | A Keynesian View of the Output–Inflation Trade-Off | 2 |
| | 6 | The Phillips Curve: A Keynesian Interpretation | 2 |

| | | |
|---|---|---|
| 5 | **TEACHER SPECIFIC MODULE** | **10** |
| | *Directions:* Discuss how behavioural economics informs the design of more effective macroeconomic policies, particularly in areas such as fiscal policy, monetary policy, and regulatory interventions. | |

**Essential Readings:**


1. Mankiw, N. G. (2010). *Elementary macroeconomics* (7th ed.). Worth Publishers.
2. Dwivedi, D. N. (2006). *Macroeconomics: Theory and policy*. Tata McGraw-Hill Publishing Company.
3. Froyen, R. T. (n.d.). *Macroeconomic theories and policies*. Pearson Education, Inc.
4. Levacic, R., & Rebman, A. (1986). *Macroeconomics* (2nd ed.). Macmillan.
5. Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
6. Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton University Press.
7. Camerer, C., Loewenstein, G., & Rabin, M. (Eds.). (2011). *Advances in behavioral economics*. Princeton University Press.


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Readings 1 | |
| | 2 | Essential Readings 1 | |
| | 3 | Essential Readings1/2 | |
| | 5 | Essential Readings1 | |
| | 6 | Essential Readings1 | |
| 2 | 1 | Essential Readings3/4 | |
| | 2 | Essential Readings3/4 | |
| | 3 | Essential Readings3/4 | |
| | 4 | Essential Readings3/4 | |
| | 5 | Essential Readings3/4 | |
| 3 | 1 | Essential Readings3/4 | -- |
| | 2 | Essential Readings3/4 | -- |
| | 3 | Essential Readings3/4 | |
| | 4 | Essential Readings3/4 | |
| | 5 | Essential Readings3/4 | |
| 4 | 1 | Essential Readings4 | -- |
| | 2 | Essential Readings4 | -- |
| | 3 | Essential Readings4 | |
| | 4 | Essential Readings4 | |
| | 5 | Essential Readings4 | |
| | 6 | Essential Readings4 | -- |

**Suggested Readings:**


1. Ahuja, H. L. (2014). *Macroeconomics: Theory and policy*. S. Chand.
2. D'Souza, E. (2009). *Macroeconomics*. Pearson Education.
3. Froyen, R. T. (n.d.). *Macroeconomic theories and policies*. Pearson Education, Inc.
4. Mankiw, N. G. (2010). *Elementary macroeconomics* (7th ed.). Worth Publishers.
5. Mukherjee, S. (2013). *Macroeconomics: A global text*. New Central Book Agency (P) Ltd.

6. Mukherjee, S. (2021). *Analytical macroeconomics: From Keynes to Mankiw*. New Central Book Agency (P) Ltd.
7. Stonier, A. W., & Hague, D. C. (n.d.). *A textbook of economic theory*. Longman Group.

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 6 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | 3 |
| f) | Viva-Voce | 3 |
| g) | Field Report | |
| **Total** | | **100** |

## KU7DSCECO403: ADVANCED QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VII | DSC | 400-499 | KU7DSCECO403 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course aims to equip students with the statistical tools and quantitative techniques for economic analysis. The course starts with probability distributions followed by detailed account of sampling distributions. Students are then exposed to the construction of confidence intervals for population parameter. Then estimation and hypothesis testing procedure are explained.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Apply the concept of probability distribution in analysing economic phenomenon | A, An |
| CO 2 | Explain and demonstrate the idea of sampling distribution | An |
| CO 3 | Construct confidence interval for population parameter and apply it for analysing economic phenomenon | An |
| CO 4 | Explain and demonstrate the hypothesis testing procedure | An |
| CO 5 | Test hypothesis using appropriate procedure and apply the same for analysing economic phenomenon | A, An |

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

**Mapping of Course Outcomes to PSOs**

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CO 3 | ✓ | | ✓ | | | ✓ | |
| CO 4 | ✓ | ✓ | ✓ | | ✓ | | |
| CO 5 | ✓ | | ✓ | | | | ✓ |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **PROBABILITY DISTRIBUTION** | | **14** |
| | 1 | Review of major probability concepts and rules. | 3 |
| | 2 | Random Variables-Mathematical expectation and variance with properties- Moments-Probability distribution. | 2 |
| | 3 | Discrete probability distribution: Binomial and Poisson distribution and their properties. | 4 |
| | 4 | Continuous probability distribution: Uniform probability distribution-Normal probability distribution and log normal distributions-Exponential probability distribution. | 5 |
| 2 | **SAMPLING DISTRIBUTION** | | **12** |
| | 1 | Review of sampling concepts and sampling methods | 2 |
| | 2 | Law of large numbers-Central limit theorem-Sampling distribution of mean and proportion- Sampling distribution of difference of means and difference of proportion. | 4 |
| | 3 | Chi-square distribution and its properties- F distribution and its properties- Student's t distribution and its properties. | 4 |
| | 4 | Distribution in regression and correlation. | 2 |
| 3 | **ESTIMATION AND TESTING OF HYPOTHESIS** | | **10** |
| | 1 | Terms and concepts of statistical estimation-Point estimation-Properties of a good estimator- Methods of estimation- Interval estimation. | 3 |
| | 2 | Estimation of means, difference of means, population proportion and difference of proportions- Estimation in regression and correlation | 3 |
| | 3 | Basic concepts of statistical testing- Null and alternative hypothesis, Type I and II errors, level of significance, one tail and two tail tests, critical regions, p-value etc. | 2 |
| | 4 | Hypothesis testing procedure- Parametric and non-parametric tests-Basic difference and relative merits. | 2 |
| 4 | **HYPOTHESIS TESTING** | | **14** |
| | 1 | Small sample and large sample tests – Test for mean, equality of | 5 |

| | | | |
|---|---|---|---|
| | | means, paired t test, test for proportion, equality of proportions, test for significance of correlation coefficient, test for significance of regression coefficient. | |
| | 2 | F test- one way and two-way ANOVA. | 3 |
| | 3 | Chi Square test- Tests of goodness of fit, independence of attributes and homogeneity. | 3 |
| | 4 | Sign test, Wilcoxon Signed Rank test - Mann Whitney U Test- Kruskal-Wallis H test. | 3 |
| **5** | **Teacher Specific Module** | | **10** |
| | *Directions:* Exercises based on sample analytical questions at the end of the modules from any of the essential reading suggested in the syllabus. | | |
| | The module would be preferably set as exercise based one on the modules in the syllabus or any other theme which would enhance learning experience of the course. | | |

**Essential Readings:**


1. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., & Cocharan , J. J. (2018). *Statistics for business & economics*. Cengage.
2. Doane, D. P., & Seward, L. E. (2022). *Applied statistics in business and economics*. McGraw Hill.
3. Hogg, R. V., Tannis, E. A., & Zimmerman, D. L. (2018). *Probability and statistical inference*. Pearson.
4. Hooda, R. P. (2013). Statistics for business and economics. Vikas Publishing House.
5. Whitte, R. S., & Whitte, J. S. (2017). *Statistics*. Wiley.


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Reading 1, 2, 3, 4, 5 | |
| | 2 | Essential Reading 3, 4 | |
| | 3 | Essential Reading 1, 3, 4 | |
| | 4 | Essential Reading 1, 2, 3, 4 | |
| **2** | 1 | Essential Reading 1, 3 | |
| | 2 | Essential Reading 1, 2, 4, 5 | |
| | 3 | Essential Reading 4 | |
| | 4 | Essential Reading 4 | |
| **3** | 1 | Essential Reading 1, 4, 5 | |
| | 2 | Essential Reading 4 | |
| | 3 | Essential Reading 4 | |
| | 4 | Essential Reading 1, 2, 4, 5 | |
| **4** | 1 | Essential Reading 1, 2, 3, 4, 5 | |
| | 2 | Essential Reading 1, 2, 3, 5 | |
| | 3 | Essential Reading 1, 2, 3, 4, 5 | |
| | 4 | Essential Reading 2, 4, 5 | |
| 5 | - | Essential Reading 1 - 5 | Preferably |

**Suggested Readings:**


1. Aczel, A. D., & Sounderpandian, J. (2008). *Business statistics*. McGraw Hill.
2. Freedman, D., Pisani, R., & Purves, R. (2007). *Statistics*. W.W. Norton & Company.
3. Gupta, S. C., & Kapoor, V. K. (2018). *Fundamentals of applied statistics*. Sultan Chand & Sons.
4. Gupta, S. C., & Kapoor, V. K. (2020). *Fundamentals of mathematical statistics*. Sultan Chand & Sons.
5. Gupta, S. P. (2012). *Statistical methods*. Sultan Chand & Sons.
6. Lind, D. A., Marchel, W. G., & Wathen, S. A. (2006). *Basic statistics for business and economics*. Mc Graw Hill.
7. Spigel, M. R., & Stephens, L. J. (2008). *Schaum's outline of theory and problems of statistics*. McGraw-Hill.
8. Stephens, L. J. (1998). *Beginning statistics*. McGraw-Hill.
9. Triola, M. F. (2019). *Essentials of statistics*. Pearson.


**Assessment Rubrics:**

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

## KU7DSCECO404: DEVELOPMENT ISSUES OF INDIAN ECONOMY II

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VII | DSC | 400-499 | KU7DSCEECO404 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | - 0 | -0 | 30 | 70 | 100 | 2 |

**Course Description**:

This course provides a deep investigation into the complexities of the Indian economy, one of the world's fastest-growing major economies. It transcends introductory concepts to explore current challenges, policy debates, and future prospects. Specifically, the course examines the role of taxation and public debt in financing the Indian government, as well as the impact of the World Trade Organization (WTO) on the Indian economy. Core principles of the WTO are explored, along with analysis of key agreements and an assessment of the opportunities and challenges presented by globalization for India. Additionally, the course explores into contemporary methods and theoretical foundations for comparing countries and international actors, examining various aspects of international relations, economics, politics, and social development through a comparative lens.

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Identify and analyze the key development challenges faced by the Indian economy, including poverty, unemployment, inequality etc | R,U |
| CO 2 | Apply economic concepts and theories to understand the causes and consequences of development issues. | A,An |
| CO 3 | Analyze the core principles of the WTO, such as non-discrimination and free trade. Evaluate the impact of trade liberalization on different sectors of the Indian economy. | E,A |
| CO 4 | Examine different types of taxes in India, including direct taxes and indirect taxes.Evaluate different debt management strategies employed by the Indian government. | U,C |

| | | |
|---|---|---|
| CO 5 | Develop critical thinking skills for evaluating international phenomena. Understand the theoretical frameworks used for international comparisons. | |

***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 | **ISSUES OF DEVELOPMENT** | | **10** |
| | 1 | Unemployment-Nature and types of unemployment in India, Magnitude, Changing dimensions of unemployment and employment, Causes of unemployment, Government policies and measures | 2 |
| | 2 | Poverty- Concept and Incidence of Poverty in India, Poverty estimates, Growth and Poverty, Strategy of Poverty Alleviation; | 2 |
| | 3 | Inequality-Income inequality in India: Magnitude and Nature, Growth and Inequality, Causes of income inequality, Government policies and measures. | 2 |
| | 4 | Growth and extend of Black money in India, Demonetization and its impacts on Indian economy | 2 |

| | | | |
|---|---|---|---|
| | 5 | INSTITUTIONAL RE-STRUCTURING -NITI AYOK | 2 |
| | | Problems of States Resources and Indebtedness- | |
| **2** | **FISCAL ECONOMICS OF INDIA** | | **12** |
| | 1 | Fiscal Policy, Budget, : Meaning and Components, Financial Sector Reforms, FRBM Act and its challenges | 2 |
| | 2 | Sources of public revenue- Taxation- Types of Taxes - Direct Taxes and indirect taxes - Tax Reforms and GST – Tax Revenue and its devolution to states- issues | 3 |
| | 3 | Public Expenditure- Public Expenditure Management in India- Social Sector Expenditure in India | 2 |
| | 4 | Public Debt in India, its magnitude -Public Debt Management in India - Impact of Public Debt on Economic Growth and Inflation. | 2 |
| | 5 | Principles of Fiscal Federalism- Fiscal Federalism in India- Centre-State Financial Relations | 3 |
| **3** | **INTERNATIONAL RELATIONS AND INDIAN ECONOMY** | | **14** |
| | 1 | Indias economic interaction with the world economy, A comparative assessment of India's development experience with high performing Asian economies- Singapore, South Korea and China and Malaysia | 3 |
| | 2 | Introduction to International Comparisons: Theoretical Frameworks and Methodologies | 2 |
| | 3 | Different rounds of trade negotiations and trade agreements - Core Principles of the WTO: Most-Favored-Nation Treatment, National Treatment, and Non-discrimination | 3 |
| | 4 | Understanding Key WTO Agreements: GATT, GATS, TRIPS, and TBT | 4 |
| | 5 | Impact of WTO agreements on Indian agriculture and industries | 2 |
| **4** | **RECENT DEVELOPMENTS AND ISSUES** | | **14** |
| | 1 | Digital Economy and E-Governance- Growth of digital payment systems (UPI, digital wallets) - Role of technology in governance (e-Governance initiatives) - Impact of digitalization on traditional business models. | 3 |

| | | | |
|---|---|---|---|
| | 2 | Climate Change and Sustainable Development - India's climate change policies and international commitments - Renewable energy initiatives and transition from fossil fuels - Sustainable urban development and smart cities. | 3 |
| | 3 | Public Health Economics - Economic implications of healthcare policies - Role of public health infrastructure in economic development - Impact of health crises on the economy. | 3 |
| | 4 | Innovation and Entrepreneurship - Startup ecosystem and innovation hubs in India - Government policies promoting entrepreneurship - Case studies of successful Indian startups. | 3 |
| | 5 | Economic Impact of COVID-19 and Recovery Measures - Analysis of the economic downturn caused by the pandemic - Government stimulus packages and their effectiveness Sectoral impacts and recovery trajectories. | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions* | | |
| | Teacher can assign different topics related with Kerala economy like performance of agriculture and industry in Kerala, food security and PDS in Kerala etc | | |

**Essential Readings:**


1. Agrawal, A. N. (2015). *Indian economy.* New Age International Pvt.
2. Anjum, Z. (2014). *Startup capitals: Discovering the global hotspots of innovation.* Random House India.
3. Caprio, G., Beck, T., & Claessens, S. (2021). *The long shadow of the global financial crisis: Public interventions in the financial sector*. Cambridge University Press.
4. Dhingra, C. (n.d.). *Indian economic problems.* S. Chand & Company.
5. Dhingra, I. C. (2023). *Sustainable development in India and South-East Asia.* Routledge.
6. Dutt, R., & Sundharam, K. P. M. (n.d.). *Indian economy.* S. Chand & Company Ltd.
7. Government of India. (Current year). *Economic survey.* Ministry of Finance.
8. Kapila, U. (Ed.). (n.d.). *Indian economy since independence* (Rev. ed.). Academic Foundation.
9. Kulkarni, P. M., & Ladhe, M. S. (Eds.). (2018). *Public health in India: Technology, governance and service delivery.* Springer.
10. Mishra, J. K., & Puri, V. K. (n.d.). *Indian economy: The development experience.* Himalaya Publishing House.
11. Murty, M. N., Kumar, S., & James, A. J. (2015). *Sustainable development: An Indian perspective.* Springer.
12. Panda, P. K. (2020). *Health economics in India.* Sage Publications.
13. Rahman, A., & Tiwari, N. (2021). *Development, governance and gender in South Asia.* Springer.
14. Rao, M. G. (2022). *Studies in Indian public finance.* Oxford University Press.

15. Sadler, T. R. (2020). *Pandemic economics.* Routledge.
16. Śledziewska, K., & Włoch, R. (2021). *The economics of digital transformation: The disruption of markets, production, consumption, and work.* Routledge.
17. Shah, R., Sharma, A., & Mironko, A. (Eds.). (2014). *Innovation, entrepreneurship, and the economy in the US, China, and India.* Springer.
18. Kumar, R. (2019). *Digital India: Understanding information, communication and social change.* Oxford University Press.
19. Dubash, N. K. (Ed.). (2012). *Climate change and India: A reader.* Oxford University Press.

**Reference Distribution: Reference number taken from essential readings**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | **Essential readings** 2,3 | |
| | 2 | **Essential readings** 1,5 | |
| | 3 | **Essential readings** 2 ,4 | |
| | 4 | **Essential readings** 2 .6 | |
| | 5 | **Essential readings** 1-6 | |
| **2** | 1 | **Essential reading**1 | |
| | 2 | **Essential readings** 9,3 | |
| | 3 | **Essential readings** 9,3 | |
| | 4 | **Essential readings** 10-14 | |
| | 5 | **Essential readings** 10-14 | |
| **3** | 1 | **Essential readings** 2,4, | -- |
| | 2 | **Essential reading** 2 | -- |
| | 3 | **Essential readings** 4,5 | -- |
| | 4 | **Essential reading** 5 | |
| | | **Essential readings** 3-8 | |
| **4** | 1 | **Essential reading** 8 | -- |
| | 2 | **Essential reading** 7 | -- |
| | 3 | **Essential readings** 15-19 | |
| | 4 | **Essential readings** 15-19 | |
| | 5 | **Essential readings** 15-19 | -- |

**Suggested Readings:**

1. Thirlwall, A. P. (1994). Growth and Development: With Special Reference to Developing Economies, Macmillan International Higher Education.
2. Desai. B, (2008) Industrial Economy in India, Himalaya Publishing House, Mumbai.
3.Basu, K. (Ed.). (2004). India's Emerging Economy: Performance and Prospects in the 1990s and Beyond. MIT press

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 5 |
| d) | Seminar | 5 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report/ | 8 |
| **Total** | | **100** |

## KU7DSCECO405: READINGS IN POLITICAL ECONOMY

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VII | DSC | 400-499 | KU7DSCECO405 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*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.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Examine the subject of Political Economy | A, An |
| 2 | Evaluate the theories of value and its importance in economic thought | An, E |
| 3 | Examine critically the various schools of political economy | An, E |
| 4 | Examine critically the various economic systems | An, E |
| 5 | Explain the crises of capitalism | An, E |

***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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **INTRODUCTION TO POLITICAL ECONOMY** | **12** |
| | 1 | Introduction to Political Economy | 2 |
| | 2 | Pre-Classical schools of thought | 3 |
| | 3 | Classical Political Economy | 4 |
| | 4 | Value theory and distribution | 3 |
| 2 | | **MARXIAN POLITICAL ECONOMY** | **14** |
| | 1 | Marxian theory of value | 4 |
| | 2 | Economic Class, Class consciousness, Class Conflicts | 3 |
| | 3 | Mode of Production, Production relations and Materialism | 3 |
| | 4 | Capitalism, its origin and Crisis | 4 |
| 3 | | **POST MARXIAN POLITICAL ECONOMY** | **12** |
| | 1 | Marginalism, Neo-classical Political Economy Keynesian Political Economy | 3 |
| | 2 | Economic systems, Types of capitalism and Crises of Capitalism | 4 |
| | 3 | Human Psychology, Animal Spirits, Accumulation and Global Capitalism | 3 |
| | 4 | Rise of Neoliberalism | 2 |
| 4 | | **FEATURES OF GLOBAL AND INDIAN POLITICAL ECONOMY** | **12** |
| | 1 | The contemporary global economy | 3 |
| | 2 | Institutions, Human Capital and Development | 3 |
| | 3 | Rising Inequality and Capital in the Twenty-First Century | 3 |
| | 4 | Political Economy of India | 3 |
| 5 | | **TEACHER SPECIFIC MODULE** | **10** |
| | | **Directions:** *Analytical work based on global data sets on inequality and politics* | - |
| | | The teacher needs to introduce preferably two global datasets pertaining to inequality and politics to the students and assign tasks based on the data available. It can be data analysis or readings available in the websites. Links are as follows;<br>1.1 https://wid.world/<br>1.2 https://wpid.world/ | 10 |

**Essential Readings:**

1. Heilbroner, R. L. (1999). *The worldly philosophers: The lives, times, and ideas of the great economic thinkers.* Retrieved from http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the_wordly_philosophers.pdf
2. Fogarty, M., & Senior Sophister. (1996). *A history of value theory.* Retrieved from https://www.tcd.ie/Economics/assets/pdf/SER/1996/Martin_Fogarty.html
3. Ruccio, D. (2022). *Marxian economics: An introduction.* Wiley.
4. Caporaso, J. A., & Levine, D. P. (1992). *Theories of political economy.* Cambridge University Press.
5. Dobb, M. (1962). *Capitalism yesterday and today.* Monthly Review Press.
6. Caporaso, J. A., & Levine, D. P. (1992). *Theories of political economy.* Cambridge University Press.
7. Wallerstein, I. (2004). *World-systems analysis: An introduction.* Duke University Press.
8. Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism.* Princeton University Press.
9. Harvey, D. (2005). *A brief history of neoliberalism.* Oxford University Press.
10. Chang, H.-J. (2010). *23 things they don't tell you about capitalism.* Penguin Books.
11. Acemoglu, D., Gallego, F. A., & Robinson, J. A. (2014). Institutions, human capital, and development. *Annual Review of Economics, 6*, 875–912. https://doi.org/10.1146/annurev-economics-080213-041119
12. Piketty, T., & Goldhammer, A. (Trans.). (2014). *Capital in the twenty-first century.* Harvard University Press.
13. Basu, K. (2018). *A short history of India's economy* (WIDER Working Paper No. 124). UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2018/562-3

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1, 2 | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| 2 | 1 | Essential Reading 3, 4, 5 | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| 3 | 1 | Essential Reading 6, 7, 8, 9 | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| 4 | 1 | Essential Reading 10, 11, 12, 13 | |
| | 2 | | |
| | 3 | | |
| | 4 | | |
| **5** | - | 1.1 https://wid.world/<br>1.2 https://wpid.world/ | Preferably |

**Suggested Readings:**

1. *Schools of thought.* (n.d.). *History of Economic Thought Website.* Retrieved from https://www.hetwebsite.net/het/thought.htm
2. Fine, B., & Milonakis, D. (2009). *From political economy to economics: Method, the social and the historical in the evolution of economic theory.* Routledge.
3. Caporaso, J. A., & Levine, D. P. (1992). *Theories of political economy.* Cambridge University Press.
4. Heilbroner, R. L. (1999). *The worldly philosophers: The lives, times, and ideas of the great economic thinkers.* Retrieved from 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.). Routledge.
6. Dobb, M. (2010). *Theories of value and distribution since Adam Smith: Ideology and economic theory* (Chapter 6). Cambridge University Press.
7. Heinrich, M. (2004). *An introduction to the three volumes of Marx's Capital.* Retrieved from http://digamo.free.fr/heinrich.pdf
8. Luxemburg, R. (1913). *The accumulation of capital.* Retrieved from https://www.marxists.org/archive/luxemburg/1913/accumulation-capital/accumulation.pdf
9. Wallerstein, I. (1974). The rise and future demise of the world capitalist system: Concepts for comparative analysis. *Comparative Studies in Society and History, 16*(4), 387–415. Retrieved from http://bev.berkeley.edu/ipe/readings/Wallerstein.pdf
10. Tribe, K. (1981). *Genealogies of capitalism.* Macmillan Press.
11. Friedman, M. (1962). *Capitalism and freedom.* University of Chicago Press.
12. Harvey, D. (2005). *A brief history of neoliberalism.* Oxford University Press.

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 5 |
| d) | Seminar | 5 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| g) | Field Report/Data analysis | - 8 |
| **Total** | | **100** |

## KU8DSCECO406: ADVANCED MICROECONOMICS II

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSC | 400-499 | KU8DSCECO406 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | - | - | 30 | 70 | 100 | 2 |

**Course Description:**

*This course enables the students to equip with advanced theoretical developments int the branch of microeconomics. The course would enable the students to widen their theoretical understanding and provide strong micro foundations for other disciplines of economics. The course starts with analysis of markets with asymmetric information. More advanced analysis of competitive markets is dealt in the subsequent module. This is followed by modern theories of firm and analysis of factor markets. In nutshell, this course also widens the theoretical understanding of an undergraduate student of economics by exposing them to more advanced theoretical developments in the branch of microeconomics*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Analyse and assess the working of markets under conditions of asymmetric information | An, E |
| 2 | Analyse and appraise efficiency dynamics of competitive market applying analytical tools from welfare economics | An, E |
| 3 | Analyse and judge possible changes in market outcomes when market becomes imperfect by applying analytical tools from welfare economics | An, E |
| 4 | Analyse and assess the dynamics of joint stock firms and their pricing strategies in the light of alternative pricing theories | An, E |
| 5 | Analyse and evaluate the working of factor market with competitive and imperfect market elements | An, E |

***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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **MARKET WITH ASYMETRIC INFORMATION** | | **12** |
| | 1 | Efficiency of the competitive markets<br>a) Why markets fail: Market power, externalities, public goods, incomplete information and information asymmetry | 1 |
| | 2 | Quality, uncertainty and the market for lemons: market for used cars | 2 |
| | 3 | Implications of asymmetric information: adverse selection, market for insurance and market for credit | 1 |
| | 4 | Market signalling: model of job market signalling | 2 |
| | 5 | Principal-Agent problem | 2 |
| | 6 | Moral hazard and hidden actions model | 2 |
| | 7 | Asymmetric information in the labour markets: efficiency wage theory | 2 |
| 2 | **COMPETITIVE MARKET AND ECONOMIC EFFICIENCY** | | **14** |
| | 1 | Competitive price system<br>a) Economic efficiency and welfare analysis: consumer surplus and producer surplus approach | 2 |
| | 2 | The first fundamental theorem of welfare economics<br>a) Pareto efficiency and simple general equilibrium model | 3 |
| | 3 | Equity and Efficiency<br>a) Distributional dilemma and second fundamental theorem of welfare economics: exchange with initial endowments | 2 |
| | 4 | Partial and general equilibrium framework<br>a) Walras' Law: Walras' proof of the existence of general equilibrium | 3 |

| | | | |
|---|---|---|---|
| | | price | |
| | 5 | Departure from competitive assumptions: Theory of second best | 4 |
| | | a) Inefficiency and Dead Weight Loss | |
| **3** | **ANALYSIS OF FACTOR MARKETS** | | **14** |
| | 1 | Competitive factor markets | 2 |
| | | a) Demand for factor with one variable input | |
| | | b) Market demand and supply of inputs | |
| | 2 | Income and substitution effect of a change in wage rate: Backward bending supply curve for labour | 3 |
| | | a) Slutsky's equation of labour supply | |
| | 3 | Competitive labour market equilibrium | 3 |
| | | a) Marginal productivity theory and adding up controversy | |
| | | b) Economic rent in the labour market | |
| | 4 | Imperfections in the factor market – Monopsony in labour market | 2 |
| | | a) Pricing in a Monopsony labour market | |
| | 5 | Monopoly power in the labour market | 4 |
| | | a) labour unions and equilibrium with union's goals | |
| | | b) Modelling wage discrimination: Unionized Vs Non-unionized worker | |
| **4** | **ALTERNATIVE THEOROES OF PRICING AND FIRM** | | **10** |
| | 1 | Marginalist controversy – Hall and Hitch report and the Full Cost Pricing principle | 2 |
| | | a) Average cost pricing and mark-up rule | |
| | 2 | Barriers to entry: Bain's limit-pricing model | 4 |
| | | a) Sylos-Labini Model | |
| | | b) Predatory Pricing and entry deterrence | |
| | 3 | Theories of the Firm: Firm as an organisational construct | 4 |
| | | a) Baumol's sales revenue maximization hypothesis | |
| | | b) Williamson's model of managerial discretion | |
| | | c) Marris' model of managerial enterprise | |
| **5** | **Teacher Specific Module** | | **10** |
| | **Directions:** *Cases from textbooks of Advanced Level Microeconomics* | | - |
| | This module would preferably be set as case study-based one with some standard textbooks of Microeconomics as basic reference [To give an open-ended list - (1) Microeconomics by ***Pindyck, R. S., Rubinfeld, D. L., &*** | | 10 |

| | | |
|---|---|---|
| | ***Mehtha P L*** (2) Principles of Microeconomics by ***Mankiv. G***, (3) Microeconomics by ***Krugman, P & Wells, R.***]. Contents would be preferably based on the modules in the current syllabus or any other theme without overlapping contents in Advanced Microeconomics I. | |

**Essential Readings:**


1. Pindyck, R. S., Rubinfeld, D. L., & Mehtha P L. *Microeconomics*. Pearson Education. Latest Edition, 437 – 463
2. Nicholson, W., & Snyder, C. M. *Microeconomic Theory: Basic Principles and Extensions*. Cengage Learning. Latest Edition
3. Mankiw. G, Principles of Microeconomics, Cengage-MindTap, Latest Edition
4. Krugman, P & Wells, R. Microeconomics, Worth Publishers, Latest Edition
5. Koutsoyiannis, Modern Microeconomics, Mac Millan, Latest Edition


**Reference Distribution:**

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

| | | | |
|---|---|---|---|
| | | Essential Reading 2 | |
| | 2 | Essential Reading 2 | - |
| | | Essential Reading 1 | |
| | 3 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 4 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| | 5 | Essential Reading 1 | - |
| | | Essential Reading 2 | |
| 4 | 1 | Essential Reading 5 | |
| | 2 | Essential Reading 5 | |
| | 3 | Essential Reading 5 | |
| **5** | - | Essential Reading 1, 3 and 4 | Preferably |

**Suggested Readings:**


1. Salvatore. D, Principles of Microeconomics, Oxford International, Latest Edition
2. Bator, F. (1995). *The anatomy of market failure* (pp. 129-158). Macmillan Education UK.
3. Akerlof, G. A. (1978). The market for "lemons": Quality uncertainty and the market mechanism. In *Uncertainty in economics* (pp. 235-251). Academic Press.
4. Stiglitz, J. E. (1984). *Theories of wage rigidity* (No. w1442). National Bureau of Economic Research.
5. Lipsey, R. G., & Lancaster, K. (1956). The general theory of second best. *The review of economic studies*, *24*(1), 11-32.
6. Blaug, M. (2007). The fundamental theorems of modern welfare economics, historically contemplated. *History of political economy*, *39*(2), 185-207.
7. Miller, P. W. (1985). Female labour supply in Australia: Another example of a backward-bending labour supply curve. *Economics Letters*, *19*(3), 287-290.
8. Manning, A. (1987). An integration of trade union models in a sequential bargaining framework. *The Economic Journal*, *97*(385), 121-139.
9. Manning, A. (2013). *Monopsony in motion: Imperfect competition in labor markets*. Princeton University Press.
10. William J. Baumol, Economic Theory and Operations Analysis, Prentice Hall of India Pvt. Ltd., 2000, Chapter-24.
11. Hall, R. L., & Hitch, C. J. (1939). Price theory and business behaviour.
12. Bain, J. S. (1949). A note on pricing in monopoly and oligopoly. *The American Economic Review*, 448-464.
13. Elzinga, K. G., & Mills, D. E. (2000). Predatory pricing and strategic theory. *Geo. LJ*, *89*, 2475.
14. Baron, D. P. (1973). Limit pricing, potential entry, and barriers to entry. *The American Economic Review*, *63*(4), 666-674.


**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 5 |
| d) | Seminar | 5 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report/case study | - 8 |
| **Total** | | **100** |

## KU8DSCECO407: ADVANCED MACROECONOMICS II

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSC- | 400-499 | KU8DSCECO407 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | - 0 | -0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course delves into advanced macroeconomic theories and their applications in an open economy in the initial module. It covers the IS-LM analysis, foreign exchange market mechanisms, and balance of payments, examining equilibrium, disequilibrium, and related phenomena like depreciation and the J-curve effect. The curriculum explores the theoretical underpinnings of New Classical Economics, Real Business Cycle models, and New Keynesian Economics, including sticky prices, efficiency wages, and the Overlapping Generations Model. Additionally, it provides an in-depth look at theories of money demand and supply, highlighting approaches like the inventory theoretic model and the liquidity preference theory.*

**Course Prerequisite: NIL**

**Course Outcomes:**

| CO No | Expected Outcome | Learning Domains |
|---|---|---|
| CO 1 | Understand various macroeconomic concepts and theories and comprehend the dynamics of the foreign exchange market, including the determination of exchange rates and the implications of different exchange rate regimes. | Understand (U) |
| CO 2 | Critically analyse the IS-LM framework in an open economy, assessing its implications for monetary and fiscal policy. Evaluate the impacts of depreciation, appreciation, revaluation, and devaluation on an economy, including the J-curve effect. | Analyse (An) |
| CO 3 | Apply macroeconomic models to real-world situations, such as predicting the effects of monetary and fiscal policies in open economies. | Apply (A) |

| | | |
|---|---|---|
| CO 4 | Recall key concepts and models from New Classical Economics, including the policy ineffectiveness proposition and the rational expectations hypothesis. | Remember (R) |
| CO 5 | Assess the effectiveness of different exchange rate regimes and the consequences of pegging a currency versus allowing flexible exchange rates. | Evaluate (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 60 |
|---|---|---|---|
| 1 | **MACRO ECONOMICS IN AN OPEN ECONOMY** | | **12** |
| | 1 | ISLM Analysis in an open economy 1 | 2 |
| | 2 | Foreign Exchange Market– Determination of Exchange Rates: Fixed Vs Flexible– Pegging of the currency | 1 |
| | 3 | Balance of Payment - Accounts equilibrium, disequilibrium in BOP | 1 |
| | 4 | Depreciation, Appreciation, Revaluation, Devaluation, J-curve Effect | 2 |
| | 5 | BOP in Keynesian Analysis and Marshal-Lerner condition | 3 |
| | 6 | Money and Capital Flows in an Open Economy– Mundell-Fleming Model | 3 |
| 2 | **NEW CLASSICAL ECONOMICS AND REAL BUSINESS CYCLE** | | **13** |

| | | | |
|---|---|---|---|
| | 1 | The New Classical Economics: new classical policy ineffectiveness proposition, | 3 |
| | 2 | The Rational Expectations Concept and Its Implications | 2 |
| | 3 | Output and employment in new classical mode | 2 |
| | 4 | Real Business Cycles: Central Features of Real Business Cycle Model | 2 |
| | 5 | A Simple Real Business Cycle Model | 2 |
| | 6 | Effects of a Positive Technology Shock | 2 |
| **3** | **NEW KEYNESIAN ECONOMICS AND SUPPLY SIDE ECONOMICS** | | **13** |
| | 1 | New Keynesian Economics, | 2 |
| | 2 | Sticky Price (Menu Cost) Models | 2 |
| | 3 | Efficiency Wage theory | 1 |
| | 4 | Insider–Outsider Models and Hysteresis | 2 |
| | 5 | Overlapping Generations Model | 2 |
| | 6 | Diamond model of search and unemployment | 2 |
| | 7 | Supply side economics | 2 |
| **4** | **THEORIES OF MONEY DEMAND AND SUPPLY** | | **12** |
| | 1 | Inventory Theoretic Approach (William Baumol) | 3 |
| | 2 | Liquidity Preference as Behaviour Towards Risk (James Tobin) | 2 |
| | 3 | The Buffer Stock Notion (David Laidler). | 2 |
| | 4 | Behavioural Model of Money Supply | 2 |
| | 5 | Financial innovations, near money and its impact on monetary aggregates | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *Directions:* | | |
| | *students may be directed to review various articles related to application of macroeconomics principles and conduct discussion in the classroom* | | |

**Essential Readings:**

1. Levacic, R., & Rebmann, A. (1986). *Macroeconomics* (2nd ed.). Macmillan.
2. Froyen, R. T. (Year unavailable). *Macroeconomics: Theories and policies.* Macmillan Publishing Company.
3. Dornbusch, R., Fischer, S., & Startz, R. (Year unavailable). *Macroeconomics.* McGraw-Hill.
4. Williamson, S. D. (2018). *Macroeconomics* (6th ed., Global ed.). Pearson Education.
5. Barro, R. J., & Sala-i-Martin, X. (2004). *Economic growth* (2nd ed.). MIT Press.
6. Mankiw, N. G. (Year unavailable). *Macroeconomics* (5th ed.). Worth Publishers.
7. Backus, D. K., Kehoe, P. J., & Kydland, F. E. (1992). International business cycles: Theory and evidence. *Journal of International Economics, 33*(3–4), 357–374. https://doi.org/10.1016/0022-1996(92)90006-6

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**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Readings 1 | |
| | 2 | Essential Readings 1 | |
| | 3 | Essential Readings 1 | |
| | 4 | Essential Readings 1 | |
| | 5 | Essential Readings 1 | |
| | 6 | Essential Readings 1 | |
| **2** | 1 | Essential Readings 2 | |
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 2 | |
| | 4 | Essential Readings 2 | |
| | 5 | Essential Readings 2 | |
| | 6 | Essential Readings 2 | |
| **3** | 1 | Essential Readings 2 | |
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 2 | |
| | 4 | Essential Readings 2 | |
| | 5 | Essential Readings 5 | |
| | 6 | Essential Readings 4 | |
| | 7 | Essential Readings 2/3 | |
| **4** | 1 | Essential Readings 2 | |
| | 2 | Essential Readings 2 | |
| | 3 | Essential Readings 6 | |
| | 4 | Essential Readings 1 | |
| | 5 | Essential Readings 2,7 | |

**Suggested Readings:**

1. Kahneman, D. (2011). *Thinking, Fast and Slow*. Farrar, Straus and Giroux.
2. Akerlof, G. A., & Shiller, R. J. (2009). *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*. Princeton University Press.
3. Camerer, C., Loewenstein, G., & Rabin, M. (Eds.). (2011). *Advances in Behavioral Economics*. Princeton University Press.

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 5 |
| d) | Seminar | 5 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report/case studies/ | 8 |
| **Total** | | **100** |

## KU8DSCECO408: APPLIED ECONOMETRICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSE | 400-499 | **KU8DSCECO408** | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

This course provides an extensive exploration of advanced econometric techniques, focusing on the use of dummy explanatory variables, time series econometrics, and simultaneous equation models. Students will learn to construct and interpret regression models that incorporate categorical data and interaction effects ANOVA, ANCOVA models, and models for qualitative dependent variables, including linear probability, logit, and probit models. In time series econometrics, students will gain proficiency in understanding time series as stochastic processes, testing for stationarity, and implementing ARIMA models for forecasting. Advanced topics include co-integration analysis, error correction mechanisms, and volatility modeling using ARCH and GARCH models. The course covers an in-depth study of simultaneous equation models, addressing issues like identification and endogeneity, and employing advanced estimation techniques such as 2SLS, 3SLS, and SUR models.

**Course Prerequisite:**

Economic Theory, Statistics (basic ideas of these disciplines and some elementary mathematics)

**Course Outcomes:**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Learn the basic structural form of regression models that include dummy variables and how these models differ from standard linear regression models | R,U |
| 2 | Learn how to use Analysis of Variance (ANOVA) models to compare means across multiple groups. | A,C |
| 3 | Understand the characteristics of time series data (trends, seasonality, and cyclical patterns) | U A |
| 4 | Conduct tests for stationarity, including the Augmented Dickey-Fuller (ADF) test and non-parametric Phillips-Perron (PP) test. | E,C |
| 5 | Obtain a basic understanding of the structure of AR, MA, ARMA, ARIMA, VAR, ARCH, GARCH models | U A |
| 6 | autocorrelation functions (ACF) and partial autocorrelation functions (PACF) to analyze time series data. | 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 | ✓ | ✓ | | ✓ | | ✓ | |
| CO 6 | ✓ | ✓ | | ✓ | | ✓ | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | | **QUALITATIVE RESPONSE MODELS** | **12** |
| | 1.1 | Regression with dummy explanatory variables<br>a) Major applications and basic structural form<br>b) ANOVA and ANCOVA models<br>Interpretation of Slope and Intercept in Dummy Variable Regression<br>a) Interaction Effects<br>b) Dummy variable trap | |
| | 1.2 | Models with qualitative dependent variable<br>a) Linear Probability Model –logit and probit models<br>b) Multinomial Logit and Ordered Probit Models<br>c) Truncated and Censored Regressions – Tobit model | |
| 2 | | **BASICS OF TIME SERIES ECONOMETRICS** | **12** |
| | 2.1 | Introduction to time series models<br>a) Time series as a stochastic process | |
| | 2.2 | Basics of time series regression model<br>a) CLRM assumptions underlying a time series model<br>b) interpretation of OLS estimates | |
| | 2.3 | Stationarity and non-stationarity<br>c) Trend Stationarity<br>d) Differencing For Stationarity<br>e) Non-Stationarity and Spurious Regression<br>f) Deterministic and Stochastic Trends | |
| | 2.4 | Random walk and unit root<br>Random walk with drift | |
| | 2.5 | Testing stationarity | |

| | | | |
|---|---|---|---|
| | | a) Correlogram<br>b) ACF and PACF<br>c) Augmented Dicky-Fuller test<br>d) Non-parametric PP test | |
| **3** | **ADVANCED TIME SERIES ECONOMETRICS** | | **14** |
| | 3.1 | Co-integration analysis –<br>a) Meaning of co-integration<br>b) Testing co-integration<br>c) Engel-Granger two-step procedure | |
| | 3.2 | Error Correction Mechanism<br>a) Vector Error Correction Mechanism (Basic steps and concepts without derivation)<br>b) VAR model – structure and uses. | |
| | 3.3 | AR model, MA model, ARMA model, ARIMA model<br>a) basic structure and uses<br>b) significance of lag selection<br>c) Akaike and Bayesian Information criteria | |
| | 3.3 | Volatility analysis<br>a) ARCH and GARCH models<br>b) structure and estimation<br>c) Interpretation of ARCH and GARCH terms | |
| **4** | **SIMULTANEOUS EQUATION MODELS** | | **12** |
| | 4.1 | simultaneous equation system simultaneous equation bias<br>a) Variables entering to the Simultaneous Equation System<br>b) Structural and reduced form equations | |
| | 4.2 | Identification problem<br>a) Under identification<br>b) Just or Exact Identification<br>c) Over Identification<br>d) Rank and order conditions for Identification | |
| | 4.3 | Endogeneity Problem<br>a) Test of Endogeneity -Hausman Specification Test | |
| | 4.4 | Estimation of simultaneous equation system<br>a) Recursive methods and OLS<br>b) Indirect Least Squares<br>c) 2 SLS and 3 SLS<br>d) Seemingly unrelated regression (SUR) model | |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | *(The teachers can design a practical module for the topics covered under the previous four modules)* | | |

**Essential Readings:**


1. Gujarati, D. N., & Sangeetha, N. (2007). *Basic econometrics* (4th ed.). Tata McGraw-Hill.
2. Johnston, J. (1984). *Econometric methods* (3rd ed.). McGraw-Hill International Editions.
3. Maddala, G. S., & Lahiri, K. (1992). *Introduction to econometrics.* Macmillan.

4. Stock, J. H., & Watson, M. W. (2020). *Introduction to econometrics* (4th ed.). Pearson.
5. Wooldridge, J. M. (2003). *Introductory econometrics: A modern approach* (3rd ed.). South-Western College Publishing.

**Reference Distribution:**

| Module | Reference | Chapters |
|---|---|---|
| **1** | 1. Damodar N. Gujarati & Sangeetha, Basic Econometrics | 9 and 15 |
| | 2. Wooldridge, Jeffrey M. "Introductory Econometrics: A Modern Approach 3rd ed." (1996). | 7 and 17 |
| | 3. Maddala, G. S., & Lahiri, K. (1992). Introduction to econometrics, New York: Macmillan. | 8 |
| | 4. J Johnston, Econometric Methods, McGraw-Hill International Editions | 6.3 |
| **2** | 1. Wooldridge, Jeffrey M. "Introductory Econometrics: A Modern Approach 3rd ed." (1996). | 10, and 11 |
| | 2. Stock, J. H., & Watson, M. W. (2020). Introduction to econometrics. Pearson. | 14 |
| | 3. Maddala, G. S., & Lahiri, K. (1992). Introduction to econometrics, New York: Macmillan. | 12 |
| | 4. Damodar N. Gujarati & Sangeetha, Basic Econometrics | 21 |
| **3** | 1. Wooldridge, Jeffrey M. "Introductory Econometrics: A Modern Approach 3rd ed." (1996). | 11, and 12 |
| | 2. Stock, J. H., & Watson, M. W. (2020). Introduction to econometrics. Pearson. | 16 |
| | 3. Maddala, G. S., & Lahiri, K. (1992). Introduction to econometrics, New York: Macmillan. | 14 |
| | 4. Damodar N. Gujarati & Sangeetha, Basic Econometrics | 21 and 22 |
| **4** | 1. Damodar N. Gujarati & Sangeetha, Basic Econometrics | 18, 19 and 20 |
| | 2. Wooldridge, Jeffrey M. "Introductory Econometrics: A Modern Approach 3rd ed." (1996). | 15 and 16 |
| | 3. Maddala, G. S., & Lahiri, K. (1992). Introduction to econometrics, New York: Macmillan. | 9 |
| | 4. J Johnston, Econometric Methods, McGraw-Hill International Editions | 11 |

**Assessment Rubrics:**

| Evaluation Type | Marks |
|---|---|
| End Semester Evaluation | **70** |
| Continuous Evaluation | **30** |

| | | |
|---|---|---|
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 8 |
| d) | Seminar | 5 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | |
| g) | Field Report/Data analysis | -5 |
| **Total** | | **100** |

- **Employability for the Course:** On completion of this students gain strong quantitative and analytical skills, essential for roles such as data analyst, economic analyst, and financial analyst. Proficiency in statistical software and advanced modeling techniques prepares them for technical positions in data science and business strategy. Specialized knowledge in areas like volatility modeling, policy evaluation, and market research makes graduates competitive for roles in financial markets, government agencies, and consulting firms. This course provides a robust foundation for careers in finance, public policy, market analysis, and beyond, meeting the high demand for skilled econometricians in diverse sectors.

## KU8DSCECO409: ADVANCEMENTS IN ECONOMIC RESEARCH

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSC | 400-499 | KU8DSCECO409 | | 4 | 75 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 3 | 2 | 0 | 35 | 65 | 100 | 1.5 |

**Course Description:**

The syllabus outlines a comprehensive exploration of the philosophy of social science, covering topics such as individualism, collective agency, social norms, power, causality, and evolutionary approaches. It progresses into methods of data collection, emphasizing observational and survey techniques, questionnaire design, qualitative research, and secondary data usage, with a focus on the Indian statistical system. The course further delves into data preparation and analysis, including univariate, bivariate, and multivariate methods, and the integration of qualitative and quantitative tools. Finally, it addresses academic writing, guiding students on outlining, presenting quantitative and qualitative results, and interpreting findings.

**Course Prerequisite: NIL**

**Course Outcome**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Students will gain a comprehensive understanding of key philosophical concepts in social science, including individualism, collective agency, social norms, power dynamics, causality, institutions, and evolutionary approaches. | RU |
| 2 | Students will become proficient in various data collection methods, such as observational techniques, survey research, and questionnaire construction. | RUA |
| 3 | Students will develop skills in data preparation and analysis, including editing, coding, and performing univariate, bivariate, and multivariate analyses. They will understand variable relationships and effectively apply statistical procedures. | A, An |
| 4 | Students will be capable of integrating qualitative and quantitative research tools, enhancing their ability to conduct comprehensive | A, An, C |

| | | |
|---|---|---|
| | and robust research utilizing diverse data sources and methodologies. | |
| 5 | Students will learn to develop structured research outlines, present quantitative and qualitative research results clearly, and interpret findings effectively. | 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 | | | | ✔ | | | |
| CO 5 | ✔ | | | ✔ | ✔ | | |

## COURSE CONTENTS

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **PHILOSOPHY OF SOCIAL SCIENCE** | | **15** |
| | 1. | Individualism, Collective Agency and The Micro-Macro Relation | 3 |
| | 2. | Social Minds | 1 |
| | 3. | Rules, norms and commitments | 3 |
| | 4. | power and social class in twenty first century | 2 |
| | 5. | Causality, Casual models and social mechanism | 2 |
| | 6. | Institutional approach | 3 |
| | 7. | Evolutionary approach | 1 |
| **2** | **DATA COLLECTION** | | **20** |
| | 1 | Observational Method | 4 |
| | | a) Type of Observation | |
| | | b) interferences from observation | |
| | 2 | Survey Research | 4 |
| | | a) Personal Interview | |
| | | b) Telephonic interview | |

| | | | |
|---|---|---|---|
| | 3 | Questionnaire construction | 4 |
| | | a) Type and format of questions | |
| | | b) sequences of questions | |
| | | c) Bias in questionnaire construction | |
| | 4 | Qualitative research | 5 |
| | | a) Field Survey, Ethnography, Case studies, Focus Group discussion | |
| | | b)Secondary Data- | |
| | | - Role of Secondary data | |
| | | - Searching and sourcing of secondary Data | |
| | | -Problems in using Secondary data source | |
| | 5 | Indian Statistical system | 3 |
| | | a) National Account statistics (NAS), Database on Indian economy RBI(DBIE), Census | |
| **3** | **DATA PREPARATION AND ANALYSIS** | | **17** |
| | 1 | Editing, coding and cleaning | 3 |
| | 2 | Univariate Analysis | 2 |
| | 3 | Bivariate analysis | 4 |
| | | a) concept of Relation | |
| | | b) Nominal, Ordinal and Interval Relation | |
| | 4 | Multivariate analysis | 4 |
| | | a) Relationship Variables | |
| | | b) Statistical procedure | |
| | 5 | Combining Qualitative and Qualitative Tool | 4 |
| **4** | **ACADEMIC WRITING** | | **11** |
| | 1 | Developing Outline | 1 |
| | 2 | Presenting Results in Quantitative Research | 4 |
| | | a) Bivariate, inferential and multivariate analysis | |
| | 3 | Presenting Results in Qualitative Research | 3 |
| | 4 | Presentation and interpretation of findings | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **12** |
| | *Directions* | | |
| | 1. Develop Skills in data collection methods, preparation and analysis including conducting survey, using secondary data, editing, coding, and performing univariate, bivariate, and multivariate analyses.<br>2.Students will learn how to create organized research outlines, present research results clearly using quantitative and qualitative methods, and interpret findings effectively | | |

**Essential Readings:**


1. Outhwaite, W., & Turner, S. P. (2007). *The SAGE handbook of social science methodology*. Sage Publications.
2. Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. Sage Publications.
3. Adu, P., & Miles, D. A. (2024). *Dissertation research methods: A step-by-step guide to writing up your research in the social sciences*. Routledge.
4. Kumar, R. (1999). *Research methodology: A step-by-step guide for beginners*. Sage Publications.

5. Benton, T., & Craib, I. (2011). *Philosophy of social science: The philosophical foundations of social thought*. Palgrave Macmillan.
6. Frankfort-Nachmias, C., Nachmias, D., & DeWard, J. (2015). *Research methods in social science*. Macmillan.
7. Ellen Perecman& Sara R. Curran(2006), A handbook for Social Science Field Research, Sage Publication New Delhi
8. https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1 | |
| | 2 | Essential Reading 1 | |
| | 3 | Essential Reading 1 | |
| | 4 | Essential Reading 1 | |
| | 5 | Essential Reading 1 | |
| | 6 | Essential Reading 1 | |
| | 7 | Essential Reading 1 | |
| 2 | 1 | Essential Reading 6 | |
| | 2 | Essential Reading 6 | |
| | 3 | Essential Reading 7&6 | |
| | 4 | Essential Reading 7&6 | |
| | 5 | Essential Reading 8 | |
| 3 | 1 | Essential Reading 3&4 | |
| | 2 | Essential Reading 3 | |
| | 3 | Essential Reading 3 | |
| | 4 | Essential Reading 3 | |
| | 5 | Essential Reading 7 | |
| 4 | 1 | Essential Reading 4 | |
| | 2 | Essential Reading 3 | |
| | 3 | Essential Reading 3 | |
| | 4 | Essential Reading 3 | |

**Suggested Readings:**

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation Theory | | **50** |
| End Semester Evaluation Practical | | **15** |
| Continuous Evaluation Theory | | **25** |
| a) | Test Paper | 5 |
| b) | Test Paper | 5 |
| c) | Extracting Data from Secondary source | 5 |
| d) | Assignment- Term Paper-1 | 5 |
| e) | Seminar | 5 |
| f) | Book/ Article Review | - |
| g) | Viva-Voce | - |
| h) | Field Report | - |
| Continuous Evaluation Practical | | 10 |
| a) | Term Paper-II (Introduction, Brief Review of Literature, Statement of Problem, Data and Methodology, Analysis, interpretation of Results | |

| | | |
|---|---|---|
| | and Conclusion) | |
| **Total** | | **100** |

- **Employability for the Course:** Research Assistant, Research Associate, Data Analysis

## KU8DSCECO410: BEHAVIORAL ECONOMICS

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSC | 400-499 | KU8DSCECO410 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*This course delves into the realm of a sophisticated branch of economics, called behavioural economics. It equips students with a comprehensive understanding of the intricacies of behavioural economics as an independent discipline. The course not only provides an introduction to behavioural economics but also delves into advanced theoretical developments within this field. Commencing with a foundational overview, the course proceeds to analyse economic behaviour under conditions of uncertainty, employing various behavioural theories. Subsequently, it delves into the dynamics of choice under bounded rationality conditions in a subsequent module. The concluding section of the course explores emerging themes within the realm of behavioural economics. In essence, this course takes students on a journey to the forefront of theoretical advancements in economics through the lens of behavioural analysis.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Learn different contours of the discipline of behavioural economics and apply them in widening their understanding of economic behaviour | U, A |
| 2 | Analyse economic behaviour under uncertainty conditions using behavioural theories | An, E |
| 3 | Analyse economic behaviour under the conditions of bounded rationality | An, E |

| | | |
|---|---|---|
| 4 | Evaluate the nuances of the emerging themes in the behavioural economics | An, E |
| 5 | Widen the theoretical tool box out of the neoclassical framework for analysing economic behaviour under various conditions | An |

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

**-Mapping of Course Outcomes to PSOs**

| CO s- | 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 | **INTRODUCTION TO BEHAVIOURAL ECONOMICS** | | **10** |
| | 1 | Economics and the behavioural economics | 3 |
| | 2 | Placing Behavioural Economics | 7 |
| | | a) Behavioural economics and the economic man | |
| | | b) Are preferences exogenous and stable? | |
| | | c) Are humans selfish? | |
| | 3 | The Concept of Nudge | |
| 2 | **ECONOMIC BEHAVIOUR UNDER UNCERTAINTY** | | **15** |
| | 1 | Lotteries and expected utility | 2 |
| | 2 | Expected utility paradoxes | 3 |
| | | a) Allais Paradox | |
| | | b) Ellsberg Paradox | |
| | 3 | The prospect theory | 2 |
| | | a) value function and the reference point | |
| | | b) decision weight function | |
| | 4 | The concept of mental accounting | 3 |
| | 5 | Endowment Effect | |
| 3 | **CHOICE UNDER BOUNDED RATIONALITY** | | **15** |
| | 1 | Concept of Bounded rationality | 3 |
| | | a) Beauty contest game | |

| | | | |
|---|---|---|---|
| | 2 | The concept of 'deliberation cost' | 3 |
| | | a) infinite regress problem (concept only) | |
| | 3 | Intuitive judgement and biases | 6 |
| | | a) Heuristics and Representativeness | |
| | | b) Anchoring effect and Framing effect | |
| | 4 | Social preference behaviour | 3 |
| | | a) The Public goods game | |
| **4** | **EMERGING THEMES IN BEHAVIOURAL ECONOMICS** | | **10** |
| | 1 | The economics of happiness | 4 |
| | | Three concepts of wellbeing – emotional happiness, life satisfaction and eudaimonia | |
| | | Altruistic behaviour and happiness | |
| | | happiness index | |
| | 2 | Culture, identity and economic behaviour | 4 |
| | | Cultural economics | |
| | 3 | Neuroeconomics | 2 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Mind Game Illustrations from* ***Misbehaving: The Making of Behavioural Economics*** *by Richard H Thaler* | | - |
| | This module would preferably be set as illustrative exercise module based on the mind games from ***Misbehaving: The Making of Behavioural Economics*** by Richard H Thaler. Contents would be preferably based on the modules in the current syllabus or any other theme which would make learning the course better experiencing and engaging to the learners. | | 10 |

**Essential Readings:**


6. Ogaki M & Tanaka, S. C. (2017). *Behavioural Economics: Toward a New Economics by Integration with Traditional Economics*. Springer.
7. Thaler, R. H. (2015). *Misbehaving: The making of behavioural economics*. WW Norton & Company.
8. Thaler, R. H. (2016). Behavioural economics: Past, present, and future. *American economic review*, *106*(7), 1577-1600.
9. Musikanski. L (2017) Happiness Index Methodology. Journal of Social Change. Walden University. Vol. 9. Issue 1. Pp 4 - 31


**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1 | Essential Reading 1,2 | - |
| | 2 | Essential Reading 1,2 | - |
| | 3 | Essential Reading 2,3 | - |
| **2** | 1 | Essential Reading 1,2 | - |
| | 2 | Essential Reading 1.2 | - |
| | 3 | Essential Reading 1,2 | - |
| | 4 | Essential Reading 1,2 | - |
| | 5 | Essential Reading 1,2 | - |
| **3** | 1 | Essential Reading 1,2 | - |
| | 2 | Essential Reading 1,2 | - |

| | | | |
|---|---|---|---|
| | 3 | Essential Reading 1,2 | - |
| | 4 | Essential Reading 1,2 | - |
| 4 | 1 | Essential Reading 1,4 | |
| | 2 | Essential Reading 1,2 | |
| | 3 | Essential Reading 1,2 | |
| **5** | - | Essential Reading 2 | Preferably |

**Suggested Readings:**

15. Nick Wilkinson and Matthias Klaes (2012), An Introduction to Behavioural Economics, 2nd Edition
16. Palgrave Macmillan · Sanjit Dhami, "The Foundations of Behavioural Economic Analysis", Oxford University Press (2016).
17. M. Altman, Handbook of Contemporary Behavioural Economics: Foundation and Developments (2007), Prentice Hall India

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 6 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | |
| f) | Viva-Voce | - |
| g) | Field Report/Exercises mind games from ***Misbehaving: The Making of Behavioural Economics*** by Richard H Thaler. | - 6 |
| **Total** | | **100** |

**KU8DSEECO401- ECONOMICS OF HEALTH AND EDUCATION**

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSE | 400-499 | KU8DSEECO401 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

## Course Description

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. The Economics of Education course provides an in-depth exploration of the economic principles and theories that underpin the educational sector. 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. The course integrates economic analysis with educational policy considerations to foster a comprehensive understanding of the challenges and opportunities within the field of education.

**COURSE OUTCOMES**

**Course Learning Outcomes: At the end of the Course, the Student will be able to -**

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| **CO 1** | Outline the dimensions of health and education | R, U |
| **CO 2** | Identify the occupational health hazards and its linkages | U, A |
| **CO 3** | Analyze economics of public health and education | A, An |
| **CO 4** | Measure burden of disease and future challenges and Construct the production function with respect to health. | A, An, E |
| **CO 5** | Able to evaluate and analyse existing higher education policies | An, E |

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

**-Mapping of Course Outcomes to PSOs**

| COs | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 | PSO6 | PSO7 |
|---|---|---|---|---|---|---|---|
| **CO1** | √ | | | | √ | √ | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CO2** | | | √ | | | √ | |
| **CO3** | √ | √ | √ | | √ | √ | |
| **CO4** | √ | √ | √ | √ | √ | √ | √ |
| **CO5** | | √ | √ | √ | √ | √ | |

**COURSE CONTENTS**

**Contents for Classroom Transaction:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **HEALTH AND DEVELOPMENT– BASIC CONCEPTS** | | **13** |
| | 1 | a) Definition and Dimensions of Health<br>b) Meaning and Importance of Health Economics | 3 |
| | 2 | a) Determinants of Health<br>**b)** Input and Output Indicators of Health | 3 |
| | 3 | a) Income and Health Linkages<br>b) Concept of Wellbeing PQLI and HDI<br>c) Poverty and Health | 3 |
| | 4 | a) Occupational Health Hazards<br>b) Fertility, Morbidity, Mortality and Life Expectancy<br>c) Nutrition and Health – Mal –Nutrition – Under Nutrition. | 4 |
| 2 | **HEALTH AS INVESTMENT** | | **13** |
| | 1 | a) Economics of public Health<br>b) Education and Health | 3 |
| | 2 | a) Concept of Health Education<br>b) Capital Formation in Health Care | 3 |
| | 3 | a) Demand for health services<br>b) Preference for health care and health cure | 3 |
| | 4 | a) Income and price effects – Physician as a price Discriminating monopolist<br>b) Health production Function with Illustration. | 4 |
| 3 | **EDUCATION AND ECONOMIC DEVELOPMENT** | | **12** |
| | 1 | a) Introduction to Economics of Education<br>b) Human capital theory<br>c) Job competition, Screening, and Signaling hypothesis, Education, earnings and national wellbeing, | 4 |
| | 2 | a) Education and employment<br>b) segmented labour market theories,<br>c) Rate of return to education: cost-benefit analysis, cost-effectiveness | 4 |

| | | | |
|---|---|---|---|
| | | analysis | |
| | 3 | a) Education and Economic Development<br>b) Contribution of education to economic growth,<br>c) Denison's growth accounting Contribution of labour<br>d) Endogenous Growth Theories | 4 |
| **4** | **EDUCATION AND PUBLIC FINANCE** | | **12** |
| | 1 | a) Role of State in Financing Education<br>b) Principles of financing education: Equity, Efficiency, Adequacy | 3 |
| | 2 | a) Education and distribution, inequality<br>b) Distribution of public spending on education; Importance of public expenditure on education; its impact on development<br>c) Determinants of expenditure on education – Public Household | 3 |
| | 3 | a) Methods of Financing Education: Sources of funding: Public, Private; Public funding of education: Taxes – General, Earmarked; Grants, Vouchers; Fee as a source of finances; scholar loans | 3 |
| | 4 | a) Mobilisation of Resources for Education Private sector, community contributions; External aid. –<br>b) Role of School Resources -Role of Teachers -Role of Incentives. | 3 |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Cases study* | | - |
| | This module would preferably be set as case study-based on latest trend in economics of health and education | | 10 |

## Essentail Readings


1. Harinder Singh (2009), Health, Nutrition and Economic Development, Regal Publication (New Delhi).
2. N.K. Anand and Shikha Goel (2006), Health Economics, AITBS Publishers (India).
3. Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.
4. Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.
5. Turshen. M .1989.The Politics of Health. London: Zed Books Ltd.
6. Monica Das Gupta, Chen. L.C and Krishnan T. N. 1996. Heath, Poverty and Development in India. New Delhi: OUP.
7. Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.
8. Lee, Kenneth and Anne Mills ed. 1985.The economics of Health in Developing Countries. OUP: Oxford.
9. Baru, R, V. 1998. Private Health Care in India: Social Characteristics and Trends. New Delhi: Sage publications.
10. Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.
11. Carnoy, M., ed. (1995) International Encyclopaedia of Economics of

Education. Oxford.

12. Pergamon Johnes, G and Johnes, J., eds. International Handbook on the Economics of Education.
13. Psacharopoulos, G., ed. (1987) Economics of Education. New York: Pergamon.
14. Bowman M.J., et al: eds. Readings in Economics of Education. UNESCO, 1962.
15. Schultz, T.W. (1971) Investment in Human Capital. New York: Free Press Vaizey
16. John (1962): Economics of Education. London: Faber & Faber Eric A. Hanushek (From the Handbook of Economics of Education, Hanushek

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| **1** | 1-4 | Essential Reading 1-5 | |
| | | | - |
| **2** | 1-4 | Essential Reading 610 | - |
| **3** | 1-3 | Essential Reading 1113 | - |
| **4** | 1-4 | Essential Reading 1416 | - |

**Suggested Readings**

1. Alistair McGuire, John Henderson and Gavin Mooney (1988), The Economics of Health Care: An Introductory Text. (Routledge and Kegan Paul London ad 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. Indian Councial of Social Science, Research and Indian Council of Medical Research (1981), Health for All 2002 A.D. (ICSSR, Delhi).
5. Michall H. Cooper and Antony J. Culyer (1973), Helath Economics (Balsimore, Penquin Books Inc).
6. 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, Chulalonglorn University )
7. William Jack (1999), Principles of Health Economics for Developing Countries, WBI Development Studies (The World Bank, Washington.D.C).
8. 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.
9. W. Steven Barnett, "Benefit-Cost Analysis of the Perry Preschool Program and Its

Policy Implications" Educational Evaluation and Policy Analysis, 7 (4), pp. 3

10. 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).

**Assessment Rubrics:**

| **Evaluation Type** | | **Marks** |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 6 |
| d) | Seminar | 6 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |
| g) | Field Report/case study report | 6- |
| **Total** | | **100** |

## KU8DSEECO402: PROJECT MANAGEMENT

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSE | 400-499 | **KU8DSEECO402** | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*The course aims to provide a comprehensive base in approaches to project management by exposing the learners to the fundamental theories and concepts that underpin project management. The course covers major theoretical, technical and managerial aspects of economic projects. The course starts with giving sound conceptual foundations in the discipline of project management. The course moves on to explore the aspects of strategy and resource allocation in project planning. Technical and market demand analysis of economic projects are explored in the subsequent module. Finally, the course also exposes learners to the nuances of financial estimations and projections.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Apply the concepts of projects management for analysing investment decisions in the corporate world. | A, An |
| 2 | Analyse the role of strategy in resource allocation and management for better outcomes in the implementation of various projects | An, E |
| 3 | Evaluate and measure technical feasibility of economic projects in the modern corporate world | An, E |
| 4 | Measure and analyse demand side of economic projects by applying sophisticated demand analysis and forecasting tools. | An, E |
| 5 | Analyse financial side of economic projects by applying financial estimation and projection techniques | 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 |
|---|---|---|---|
| 1 | **CONCEPTUAL FOUNDATIONS OF PROJECT MANAGEMENT** | | **10** |
| | 1 | Capital investment: concept, importance and difficulties<br>a) Types of capital investments<br>b) Key issues in investment decisions | 3 |
| | 2 | Phases of capital budgeting<br>a) Objective of capital budgeting | 2 |
| | 3 | Levels of decision making | 1 |
| | 4 | Facets of project analysis – market, technical, financial, economic and ecological analysis | 3 |
| | 5 | Common weaknesses in capital budgeting | 1 |
| 2 | **STRATEGY AND RESOURCE ALLOCATION** | | **20** |
| | 1 | Conceptualising strategy – Grand strategy<br>a) Diversification debate – diversification as mixed bag<br>b) Diversification and value creation | 4 |
| | 2 | Tools of Portfolio strategy<br>a) BCG Matrix<br>b) Stoplight matrix<br>c) McKinsey Matrix<br>d) Enhancing effectiveness of portfolio management | 4 |
| | 3 | Business level strategies<br>a) Cost leadership, differentiation, focus, network effect strategy, sustenance of competitive advantage | 3 |
| | 4 | Generation and screening of project ideas | 3 |

| | | | |
|---|---|---|---|
| | | a) Generation of ideas, monitoring business environment, corporate appraisal | |
| | 5 | Tools for identifying investment opportunities | 4 |
| | | a) Porter model of profit potential of industries, Life cycle approach and experience curve | |
| | 6 | Scouting for project ideas | 1 |
| | 7 | Project Rating Index | 1 |
| **3** | **TECHNICAL AND MARKET DEMAND ANALYSIS** | | **10** |
| | 1 | Market demand analysis | 6 |
| | | a) Situational analysis and specification of objectives | |
| | | b) Collection of secondary information | |
| | | c) Conduct of market survey | |
| | | d) Characterisation of the market | |
| | | e) Demand forecasting - Bass Diffusion Model, Econometric Method | |
| | 2 | Technical analysis - Manufacturing technology | 4 |
| | | a) Technical arrangements | |
| | | b) Material inputs and utilities | |
| | | c) Product mix, plant capacity and location and site | |
| | | d) Machinery and equipment, structures and civil works and environmental aspects | |
| | | e) Project layout and project implementation | |
| **4** | **FINANCIAL ESTIMATES AND PROJECTIONS** | | 10 |
| | 1 | Financial estimates | 5 |
| | | a) Estimates of cost of project | |
| | | b) Means of finance | |
| | | c) Production and sales | |
| | | d) Profitability projections | |
| | 2 | Time Value of Money | 2 |
| | | a) Future Value of a Single Asset and Present Value of a Single Amount | |
| | | b) Future Value of an Annuity and Present Value of an Annuity | |
| | | c) Intra-year Compounding and Discounting | |
| | 3 | Investment Criteria | 3 |
| | | a) Net Present Value, Modified Net Present Value | |

| | | | |
|---|---|---|---|
| | | b) Benefit Cost Ratio | |
| | | c) Internal Rate of Return | |
| | | d) Accounting Rate of Return | |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Illustrations in Appendix of* **Projects: Planning, Analysis, Selection, Financing, Implementation and Review** *by Prasanna Chandra (Latest Edition)* | | - |
| | This module would preferably be set as work based one using **Projects: Planning, Analysis, Selection, Financing, Implementation and Review** *by Prasanna Chandra (Latest Edition)*. Contents would be preferably based on the modules in the current syllabus or any other theme which would make learning the course more effective.<br>• Visit industrial area inside Kerala maximum for 3 days and prepare reports | | |

**Essential Readings:**


10. Prasanna Chandra. ***Projects: Planning, Analysis, Selection, Financing, Implementation and Review,*** McGraw Hill Publications, *Latest Edition*
11. Albert Lester. ***Project Management, Planning and Control***, Butterworth-Heinemann, Elsevier, Latest Edition


**Reference Distribution:**

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

**Suggested Readings:**


18. Joseph Heagney, Fundamentals of Project Management, AMACOM, Latest Edition
19. Robert K Wysocki. Effective Project Management. WILEY, John Wiley and Sons, Inc. Indiana
20. Erik W Larson and Clifford F Gray. Project Management: The Managerial Process. McGraw-Hill Publications. Latest Edition
21. Russ J Martinelli, Dragan Z. Milosevic. Project Management Tool Box. Wiley Publications. Latest Edition
22. Richard Newton. Project Management. Pearson Publications. Latest Edition


**Assessment Rubrics:**

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

## KU8DSEECO403: ECONOMICS OF INNOVATION

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | DSE | 400-499 | KU8DSEECO403 | | 4 | 60 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 4 | 0 | 0 | 30 | 70 | 100 | 2 |

**Course Description:**

*The primary objective of this course is to provide a comprehensive introduction to the fundamental theories and concepts that underpin the cutting-edge field of the economics of science, technology, and innovation. The course covers major theoretical perspectives on technology and innovation, offering insights into the foundational views of the innovation process. Additionally, it delves into the discourse on innovation diffusion, examining the historical context and its impact on the spread of innovation. The course also incorporates recent discussions on the innovation system approach, providing students with a holistic understanding of the intricate dynamics within the realm of science, technology, and innovation.*

**Course Prerequisite: NIL**

**Course Outcomes:**

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

| CO No. | Expected Outcome | Learning Domains |
|---|---|---|
| 1 | Apply the theoretical concepts of innovation for analysing the effects upon growth and development | A, An |
| 2 | Analyse the role of intellectual property rights in addressing the issue of market failure | An, E |
| 3 | Evaluate and measure innovation in the light of different indicators of innovation | An, E |
| 4 | Measure productivity at the firm, industry and economy level and evaluate its role in the overall growth process of an economy | An, E |
| 5 | Analyse innovation process in the light of various theories of innovation and approaches to innovation like innovation systems | An, E |

***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:**

| MODULE | UNIT | DESCRIPTION | HOURS |
|---|---|---|---|
| 1 | **NATURE AND SIGNIFICANCE OF INNOVATION** | | **12** |
| | 1 | Placing 'Economics of Innovation' – innovation as key driver of economic growth and prosperity | 1 |
| | 2 | Conceptualising innovation<br>a) Product and process innovation, institutional and organisational innovation, drastic and incremental innovation, disruptive innovation | 3 |
| | 3 | Defining 'knowledge' and 'technology' | 1 |
| | 4 | Stages in the innovation process – innovation, adoption and diffusion | 1 |
| | 5 | Microeconomic effects of innovation<br>a) Effects of product and process innovations | 4 |
| | 6 | Role of producer and user of innovation in innovation process | 2 |
| 2 | **INNOVATION, MARKET FAILURE AND INTELLECTUAL PROPERTTY RIGHTS** | | **15** |
| | 1 | Innovations and market failure<br>a) Is new knowledge a public good?<br>b) Are there externalities from innovative activities? | 4 |
| | 2 | Solution to market failure by restoring incentives to innovate<br>a) Public provision of a public good – R & D Investments<br>b) Pigouvian subsidy<br>c) Club provision of a local public good<br>d) Definition of property rights | 6 |
| | 3 | Role of IPR<br>a) Why are IPR awarded?<br>b) classification of IPR – patents, trademarks, designs and utilities and copy rights | 5 |
| 3 | **MEASUREMENT OF INNOVATION AND PRODUCTIVITY** | | **10** |

| | | | |
|---|---|---|---|
| | 1 | Measurement of innovation | 5 |
| | | a) Input and output measures | |
| | | b) Innovation surveys | |
| | | c) Innovation index: Global Innovation Index | |
| | 2 | Measurement of productivity | 5 |
| | | a) Productivity at the firm, industry and aggregate level – partial productivity and Total Factor Productivity | |
| | 3 | TFP and growth accounting | |
| | | a) Difficulties in the measurement of Total Factor Productivity | |
| **4** | **THEORETICAL DEVELOPMENTS IN INNOVATION PROCESS** | | **13** |
| | 1 | Neoclassical linear model of innovation | 2 |
| | 2 | Schumpeter theory of innovation – Mark I and Mark II Model | 2 |
| | 3 | Theory of diffusion by Roggers | 2 |
| | 4 | Innovation Systems Approach | 7 |
| | | a) National System of Innovation (NSI) – evolution of the concept, components, role of institutions | |
| | | b) Sectoral System of Innovation (SSI) – concept, actors and institution | |
| | | c) Agricultural Innovation Systems (AIS) – concept, actors and institution | |
| **5** | **TEACHER SPECIFIC MODULE** | | **10** |
| | **Directions:** *Box Cases from Innovation, Intellectual Property and Economic Growth by* **Christine Greenhalgh and Mark Rogers** | | - |
| | This module would preferably be set as case study based one using ***Innovation, Intellectual Property and Economic Growth*** by Christine Greenhalgh and Mark Rogers. Contents would be preferably based on the modules in the current syllabus or any other theme which would make learning the course a novel experience. | | |

**Essential Readings:**


12. Christine Greenhalgh and Mark Rogers, *Innovation, Intellectual Property and Economic Growth*, Prinston University Press, Latest Edition
13. Lundvall, B. Å. (2007). National innovation systems—analytical concept and development tool. *Industry and innovation*, *14*(1), 95-119.
14. Lundvall, B. Å., Johnson, B., Andersen, E. S., & Dalum, B. (2002). National systems of production, innovation and competence building. *Research policy*, *31*(2), 213-231.
15. Malerba, F. (2002). Sectoral systems of innovation and production. *Research policy*, *31*(2), 247-264.
16. Hall, A., Mytelka, L., & Oyeyinka, B. (2005). Innovation systems: Implications for agricultural policy and practice.

17. Ziemnowicz, C. (1942). Joseph A. Schumpeter and innovation. *Socialism and Democracy*, *2*(1), 2-4.
18. Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In *An integrated approach to communication theory and research* (pp. 432-448). Routledge.
19. Kline, S. J., & Rosenberg, N. (2010). An overview of innovation. *Studies on science and the innovation process: Selected works of Nathan Rosenberg*, 173-203.

**Reference Distribution:**

| Module | Unit | Reference No. | Remarks |
|---|---|---|---|
| 1 | 1 | Essential Reading 1 | |
| | 2 | Essential Reading 1 | |
| | 3 | Essential Reading 1 | |
| | 4 | Essential Reading 1 | |
| | 5 | Essential Reading 1 | |
| | 6 | Essential Reading 1 | |
| 2 | 1 | Essential Reading 1 | |
| | 2 | Essential Reading 1 | |
| | 3 | Essential Reading 1 | |
| 3 | 1 | Essential Reading 1 | |
| | 2 | Essential Reading 1 | |
| | 3 | Essential Reading 1 | |
| 4 | 1 | Essential Reading 8 | |
| | 2 | Essential Reading 6 | |
| | 3 | Essential Reading 7 | |
| | 4 | Essential Reading 2, 3, 4 & 5 | |
| **5** | - | Essential Reading 1 | Preferably |

**Suggested Readings:**

23. Edquist, C. (2013). *Systems of innovation: technologies, institutions and organizations*. Routledge.
24. Edquist, C. (2001). *Systems for Innovation for Development (SID)*. Tema, University
25. Lundvall, B. Å. (2016). National innovation systems and globalization. *The learning economy and the economics of hope*, *351*.
26. Johnson, B., Edquist, C., & Lundvall, B. Å. (2003, November). Economic development and the national system of innovation approach. In *first Globelics conference* (pp. 3-6).

**Assessment Rubrics:**

| Evaluation Type | | Marks |
|---|---|---|
| End Semester Evaluation | | **70** |
| Continuous Evaluation | | **30** |
| a) | Test Paper- 1 | 6 |
| b) | Test Paper-2 | 6 |
| c) | Assignment | 4 |
| d) | Seminar | 4 |
| e) | Book/ Article Review | - |
| f) | Viva-Voce | - |

| | | |
|---|---|---|
| g) | Field Report/ Case study | 10 |
| **Total** | | **100** |

## KU8RPHECO401: PROJECT (IN HONOURS PROGRAMME)

| **Semester** | **Course Type** | **Course Level** | **Course Code** | | **Credits** | **Total Hours** |
|---|---|---|---|---|---|---|
| **VIII** | **RPH** | **400-499** | **KU8RPHECO401** | | **8** | **240** |
| **Learning Approach (Hours/ Week)** | | | **Marks Distribution** | | | **Duration of ESE (Hours)** |
| **Lecture** | **Practical/ Internship** | **Tutorial** | **CE** | **ESE** | **Total** | |
| **0** | **- 16** | **-0** | **60** | **140** | **200** | **--------** |

## KU8RPHECO402: RESEARCH PROJECT (IN HONOURS WITH RESEARCH PROGRAMME)

| Semester | Course Type | Course Level | Course Code | | Credits | Total Hours |
|---|---|---|---|---|---|---|
| VIII | RPH | 400-499 | **KU8RPHECO402** | | 12 | 360 |
| Learning Approach (Hours/ Week) | | | Marks Distribution | | | Duration of ESE (Hours) |
| Lecture | Practical/ Internship | Tutorial | CE | ESE | Total | |
| 0 | 24 | -0 | 90 | 210 | 300 | - |

### .1. PROJECT IN HONOURS PROGRAMME

a) In Honours programme, the student has the option to do a Project of 8-credits instead of two Core Courses in Major in semester 8.

b) The Project can be done in the same institution or any other higher educational institution (HEI) or research centres.

c) A faculty member of the respective institution, where the student does the Project, should be the supervisor of the Project.

## 2. PROJECT IN HONOURS WITH RESEARCH PROGRAMME

a) Students who secure 75% marks and above (equivalently, CGPA 7.5 and above) cumulatively in the first six semesters are eligible to get selected to Honours with Research stream in the fourth year.

b) In Honours with Research programme, the student has to do a mandatory Research Project of 12-credits in semester 8.

c) The approved research centres of Kannur University can offer the Honours with Research programme. The departments in the affiliated colleges under Kannur University which are not the approved research centres of the University, should get prior approval from the University to offer the Honours with Research programme. Such departments should have minimum one faculty member with Ph.D., and they should also have the necessary infrastructure to offer Honours with Research programme.

d) A faculty member of the University/ College with a Ph.D. degree can supervise the research project of the students who have enrolled for Honours with Research. One such faculty member can supervise maximum four students in Honours with Research stream.

### A. GUIDELINES FOR THE PROJECT IN HONOURS PROGRAMME AND HONOURS WITH RESEARCH PROGRAMME

1. Project can be done in topics related to Economics.
2. Project should be done individually.
3. Project work can be of experimental/ theoretical/ analytical in nature.
4. There should be minimum 240 hrs. of engagement from the student in the Project work in Honours programme.
5. There should be minimum 360 hrs. of engagement from the student in the Project work in Honours with Research programme.
6. The various steps in project works are the following:
    - Wide review of a topic.
    - Investigation on a problem in systematic way using appropriate techniques.
    - Systematic recording of the work.
    - Reporting the results with interpretation in a standard documented form.
    - Presenting the results before the examiners.

7. A hard copy of the report should be kept for reference at the department. A soft copy of the report should be submitted in pdf format for external evaluation well in advance.
8. It is desirable, but not mandatory, to publish the results of the Project in a peer reviewed journal.
9. The project report shall have declaration from the student and certificate from the research supervisor for originality of the work, stating that the work has not been submitted for the award of any other degree/ diploma in the same institution or any other institution.
10. Plagiarism check report has to be incorporated in the project report after the declaration of the student.
11. The project proposal, institution at which the project is being carried out, and the project supervisor should be prior-approved by the Department Council of the college where the student has enrolled for the UG (Honours) programme.
12. Structure of the Project
    - Cover Page and Front Page
        a) Title of the project
        b) Degree for which project is submitted.
        c) Name of the Candidate & University Register Number
        d) Name of the College
        e) Month and year of the project report submission
    - Contents
        a) Declaration by the student
        b) Plagiarism check certificate
        c) Certificate of the supervising teacher countersigned by the head of the department.
        d) Acknowledgement.
        e) Table of Contents
        f) List of Tables
        g) List of Figures
        h) Introductory Chapter
        i) Analysis Chapters
        j) Concluding Chapter
        k) Bibliography

l) Appendix

- Contents of the Introductory Chapter
  a) Introduction
  b) Review of literature
  c) Research Gap
  d) Statement of the problem
  e) Significance of the study
  f) Scope of the study
  g) Statement of objectives
  h) Hypotheses (optional)
  i) Methodology
     - Data sources
     - Tools of analysis (quantitative and qualitative)
     - Conceptual Framework-Optional (specification of terms and concepts)
  j) Limitations of the study
  k) Chapter outlines.
- Style of Report
  a) Report Length: 50 to 70 pages excluding Appendix and Certificates
  b) Alignment: Justify
  c) Font: Times New Roman
  d) Font size: 12
  e) Line spacing: 1.5
  f) Bibliography: APA style

**B. . EVALUATION OF PROJECT**

a) The evaluation of Project will be conducted at the end of the eighth semester by both internal and external modes.

b) The Project in Honours programme will be evaluated for 200 marks. Out of this, 60 marks is from internal evaluation and 140 marks, from external evaluation.

c) The Project in Honours with Research programme will be evaluated for 300 marks. Out of this, 90 marks is from internal evaluation and 210 marks, from external evaluation.

d) The internal evaluation of the Project work shall be done through continuous assessment mode by a committee internally constituted by the Department Council of the college

where the student has enrolled for the UG (Honours) programme. 30% of the weightage shall be given through this mode.

e) The remaining 70% shall be awarded by the external examiner appointed by the University.

f) The scheme of continuous evaluation and the end-semester viva-voce of the Project shall be as given below:

**COMPONENTS OF EVALUATION OF PROJECT**

| Components of Evaluation of Project | Marks for the Research Project (Honours with Research) | Marks for the Optional Project (Honours) | Weightage |
|---|---|---|---|
| | 12 Credits | 8 Credits | |
| 1. Continuous evaluation of project work through interim presentations and reports by the committee internally constituted by the Department Council | 90 | 60 | 30% |
| 2. End-semester viva-voce examination to be conducted by the external examiner appointed by the University | 150 | 100 | 50% |
| 3. Evaluation of the day-to-day records and project report submitted for the end-semester viva–voce examination conducted by the external examiner | 60 | 40 | 20% |
| Total Marks | 300 | 200 | |

| **INTERNAL EVALUATION OF PROJECT** | | | |
|---|---|---|---|
| Sl. No | Components of Evaluation of Project | Marks for the Research Project (Honours with Research programme) 12 credits | Marks for the Optional Project (Honours programme) 8 credits |
| 1 | Skill in doing project work | 30 | 20 |
| 2 | Interim Presentation and Viva-Voce | 20 | 15 |
| 3 | Punctuality and continuity of the work | 20 | 15 |
| 4 | Scheme/ Organization of Project Report | 20 | 10 |

| | | | |
|---|---|---|---|
| Total Marks | | 90 | 60 |

| **EXTERNAL EVALUATION OF PROJECT** | | | |
|---|---|---|---|
| Sl. No | Components of Evaluation of Project | Marks for the Research Project (Honours with Research programme) 12 credits | Marks for the Optional Project (Honours programme) 8 credits |
| 1 | Content and relevance of the Project, Methodology, Quality of analysis, and Innovations of Research | 50 | 40 |
| 2 | Presentation of the Project | 50 | 30 |
| 3 | Project Report (typed copy) and References | 60 | 40 |
| 4 | Viva-Voce | 50 | 30 |
| | Total Marks | 210 | 140 |